Corpus Christi Beach Association April 20, 2000

David Krams and Paul Carangelo met with the Corpus Christi Beach Association on April 20, 2000. The Association meets on the third Thursday of each month at 4:00 PM at the Breakers Condominium on North Beach. Betty Black is the current President and Paul and David were invited by Dearl Lance, member. Paul and Dearl met recently at the Texas Beach Association meeting in Houston, Texas where they are both members.

Paul Carangelo provided the audience of about 25 with copies of the August 1999 newsletter on the CCSC-CIP. Paul's briefing described the effort to authorize a major navigation feature; described the goals of the PCCA in the CCSC-CIP; and described BU opportunities associated with the project. David and Paul answered various questions about the CCSC-CIP.

The audience learned about the Rincon federal assumption and dredging schedule for 2000 and the possible use by the COE for the feeder berms for CC beach and for the bird rookery. They also learned about the upcoming BU forums. The association was interested in whether the materials from the CCSC-CIP might be suitable for CC beach. They made no mention about ship wakes and related damage. They were interested in future updates from the Port on the project. Dearl Lance will contact Paul from time to time to invite the Port for the update. The presentation with Q&A lasted about 35 minutes.

Tuesday, October 3, 2000 George's Restaurant, Flour Bluff

Representatives from the Port, CBBEP, and Olivarri & Associates, Inc. met with the Coastal Bend Guides Association at their regularly scheduled monthly meeting. CBGA Members in attendance were:

- Marvin Engel
- Don Miller
- Willard Allen
- Jerry Wellman
- Richard Gamewell
- Mark Lyons
- Barry Badders

- Ralph Elliott
- Warren Hart
- Don McTee
- W.A. Mayer
- Frank Duxstead
- Don Hand
- Randall Roquette

Presenters included:

- David Krams, Port of Corpus Christi
- Paul Carangelo, Port of Corpus Christi
- Leah Olivarri, Olivarri & Associates
- Kelly Billington, Olivarri & Associates

The presentation began with Captain Mark Lyons introducing Paul Carangelo. Mr. Carangelo thanked Capt. Lyons and the CBGA for allowing the Port and CBBEP to talk with them and gather input on the beneficial uses of dredged material. He introduced David Krams (Port) and Leah Olivarri and Kelly Billington (Olivarri & Associates, Inc.).

Mr. Carangelo said the Port is in the process of studying improvements for the Corpus Christi Ship Channel. In that project, they are trying to identify potential beneficial uses of dredged material. The CBBEP also identified maximizing beneficial uses of dredged material in their Estuary plan. The CBBEP was going to start an outreach program to begin contacting people about their ideas for dredged material and potential projects. Similarly, the Port was going to start an outreach program to get ideas and comments from the public in regard to the Ship Channel Project. So, instead of having two programs trying to reach the same audience, the Port and CBBEP joined together to collectively solicit ideas.

The Port is a contractor to the CBBEP to obtain the information. Once that information is obtained, Olivarri & Associates, Inc. will prepare a report that will be used as needed by the Port's Channel Improvement Project and the CBBEP. He asked Mr. Krams to talk about the existing system of the ship channel and the proposed improvements to the ship channel.

Mr. Krams said the existing system is about 38 nautical miles in length. The Entrance Channel is 47' deep and 700' wide. The main Ship Channel is 45' deep and 400' wide. La Quinta Channel is 45' deep and 400' wide, and the Corpus Christi Inner Harbor is 45' deep.

Mr. Krams noted that the proposed Channel Improvement Project is a federal project, with the U.S. Army Corps of Engineers (Corps) as the lead and the Port as the local sponsor. The project began with the local sponsor's decision to pursue the project. It was then sent to Congress for approval to investigate. After Congressional approval, the first part of a two-phase planning process began with a Reconnaissance Study by the Corps. That study was completed in 1994. The second phase, Feasibility Study and Environmental Impact Statement, is currently underway. It began with a cost sharing agreement signed in June 1999. If the results of the Feasibility Study show there is national interest or benefit, then it is sent to Congress for authorization and funding, then to engineering and design, construction, and finally operation and maintenance. The Feasibility Study is expected to be completed within three years.

Mr. Krams said there are three general improvements to the proposed Channel Improvement Project. The first is widening the channel across the Corpus Christi Bay and adding barge shelves. The second alternative is deepening the entire ship channel system to 50- or 52-feet. The third alternative is to extend the La Quinta Ship Channel and adding a turning basin for the proposed container terminal facility.

Mr. Carangelo stated that there is approximately 25-30 million cubic yards of new work material and 150 million cubic yards, over a 50-year period, of maintenance material that could result from this project. He identified the Port's existing Dredge Material Placement Areas (DPMAs). Some are located along both sides of the main channel in the open water of the Corpus Christi Bay and on the islands just south of the main channel between Live Oak Peninsula and Port Aransas. There are also DMPAs in the Inner Harbor Reach along both sides of the Inner Harbor.

Mr. Carangelo explained that seen from a global perspective, the beneficial uses of dredged material include engineered, agricultural, and environmental applications. Examples of engineered uses include land creation and land development uses such as levees, landfill capping, and strip mine reclamation, as well as dredged material reuse like construction quality materials, manufactured soils (building products), and commercial and industrial facilities. Examples of agricultural uses of dredged material include aquaculture use of confined placement sites and topsoil.

The most popularly recognized of the three types of beneficial uses of dredged materials are environmental uses. Examples of environmental uses include marsh wetland creation and restoration, aquatic and marine habitat enhancement (reef structures, seagrass beds, unvegetated shallow water habitat, and emergent mudflats habitat), gulf beach and bay beach nourishment, terrestrial habitats (rookery islands and recreational destinations and parks), shoreline erosion control, near shore sediment management (underwater berms/capping), and thin layering (ecological stimulation).

The Port and CBBEP are interested in public comment and input and have sought and continue to urge early participation. There has been intensive state and federal regulatory agency involvement since 1999. There have been a number of workgroups set up for the purpose of assisting the Port with developing the Environmental Impact Statement (EIS)

and the Dredged Material Management Plan (DMMP). There have been a number of feasibility study public meetings and updates, and Beneficial Uses Public Forums. Previous meetings were held at TAMU-CC Blucher Institute, Ingleside On The Bay, and in Port Aransas at UT-MSI. Others will be held in the Rockport and Kingsville areas.

Mr. Carangelo turned the meeting over to Leah Olivarri. She said that the purpose of the meeting was to solicit ideas and perceptions on Beneficial Uses of Dredged Materials. The Port's focus is on the Channel Improvement Project and the materials that can be used from that project. The CBBEP's focus is the entire estuary area. Ms. Olivarri noted handouts that included a map and corresponding list of suggested beneficial uses of dredged material that have been compiled from surveys by the CBBEP and previous public meetings held by the Port and CBBEP.

Verbal suggestions included:

- Waterfront development and beach nourishment and development in Aransas Pass at the old LDR facility, close to the Shrimporee Festival site, just west of Hampton's Landing.
- Concern for the boat wakes that might increase with the widening and deepening of the ship channel and increased ship traffic and how that will affect the current erosion problem on the north side of the bay.
- Slowing down the ships as they pass through La Quinta Junction, as the wakes the boats leave continue to erode the north side of the bay, in particular Ingleside On The Bay near the La Quinta Junction and Redfish Bay.
- Placement in open water DMPAs to reduce erosion at Ingleside Point.
- Pump it inland. Don't want sands and silt clouding the water.
- Shoreline protection behind Pelican Island.
- There are two spoil islands that are very good fishing areas in Rockport Cut. Would like to see more of those.
- More islands in the middle of Corpus Christi Bay.
- Concern with the circulation of the bay system.
- More seagrasses/seagrass protection in Redfish Bay.
- The weed bed areas at the La Quinta junction have good fishing. Additional areas similar to that would be good.
- Concern that more nesting areas will bring more predators.

Two written responses were received.

- Captain Mark Lyons suggested adding to the DMPA islands in order to reduce erosion at the Ingleside Point. Also, extending break waves to reduce shoreline erosion. He also noted at the west degauzing facility there is a high bank off the Welder property that might be taken out by the Navy. He would like to see other places like this. Relocation.
- Jerry Wellman wrote, "At the old LD Richards Barge Area adjacent to New Park

 Trailer Park Pier at old Aransas Pass Airport near Hampton's Landing.
 Remove all old barges and put in fill sand for a beach. Tie it to the Park and

Trailer Park with a boardwalk over habitat area, marsh area. Add a good boat dock with drive up dining, etc."

The Port of Corpus Christi Authority (Port) presented their Channel Improvement Project (CIP) update to 25 members of the Coastal Bend Guides Association (CBGA) at their regularly scheduled meeting on Tuesday, February 6, 2001 at the Olde Time Grille in Aransas Pass.

Paul Carangelo summarized the status of the CIP and various studies, providing detail on those related to dredged materials management. The draft dredged materials management/beneficial uses (DMM/BU) plan was reviewed in detail.

CBGA members in attendance were:

- Larry Ebest
- Mike Murphee
- Jerry Timmins
- George Herzog
- Walter Meier
- Art Weiss
- John Day
- Don McTee
- C.B. "Rusty" Haire
- Lloyd Dreyer
- Marvin Landers
- Terry Tracy
- Marvin Sessler

- Barry Badders
- Mark Lyons
- Kevin McCoy
- Jack Nelson
- Tom Hall
- Bill Haines
- Don Miller
- Jerry Wellman
- Don Hand
- Mark Rochester, III
- Richard Gamewell
- Joel Pruitt

Questions and comments from the CBGA members follow.

- Q: How far will the La Quinta extension reach? Will there be a turning basin? What is the extension for? How can silting be prevented in that area?
- A: Mr. Carangelo said the proposed extension of La Quinta would extend 8,000-feet past its current location. A new turning basin will be added at the end of the extension. It is for the proposed Container Terminal Facility that is planned for the land the Port owns between the Reynolds Plant and North Shore Country Club. There are several options being considered at this time to prevent silting in that area. We will discuss these options when we talk about the draft concept dredged materials management plan later in this presentation.
- Q: How much material will result from the La Quinta extension?
- A: Mr. Carangelo said the La Quinta extension at minus 45 foot would generate seven to eight million cubic yards of dredge material.
- Q: What are the dimensions of the La Quinta extension? Will the existing La Quinta Channel be widened? How close will it come to the shoreline?
- A: Mr. Carangelo said the extension is proposed to 45-feet deep and 400-feet wide. There will be no changes to the existing La Quinta Channel. The berthing area for

the container facility will come close to the shoreline. The extension channel will be at about the same distance from the shoreline as the existing channel in the area near Reynolds and there would be a turning basin like the one at Reynolds.

- Q: How deep is the existing Reynolds Channel?
- A: Mr. Carangelo said that by Reynolds Channel you mean the La Quinta Channel and that is 45-feet deep; the Reynolds dock is a 45-foot dock.
- Q: How deep is the area now where the proposed channel extension will be placed? Has that area been tested for toxins? That is a big area of concern because of the Reynolds plant.
- A: Mr. Carangelo said the current water depth of that area is between six and ten feet. An extensive study of the shoaling rate has been performed in that area and has been included in the proposed amounts of available materials. Sediment quality for contaminants has been checked there, and the area is actually very clean.
- C: It is hard to believe that after 30 years there is no toxicity in that area.
- A: Mr. Carangelo said the information we have is new and is the best we can get. We have also assembled and reviewed prior data collected in the same area in the past. If you want to get a more hands-on view of that data, we can arrange to meet and discuss it. It is very important information and we are willing to pass that information along to you.
- Q: Would Site C be an island?
- A: Mr. Carangelo said that Site C would be a submerged shallow flat from knee to chest deep with, possibly, a U-shaped breakwater like structure to protect it and the shoreline at Ingleside Point from wind waves and ship and vessel wakes. It would be shallow enough to grow sea grasses and receive light. The design is still in the idea stage at this point but to determine cost for the concept design. The Beneficial Uses Workgroup will assist development of the best way to do this and we will seek further public input on the design before we move too far along.
- Q: Site C is proposed as 175 acres. Is the old Ingleside Point Island the same size?
- A: Mr. Krams said the Ingleside Point Island is actually closer to 210 acres.
- Q: How is the entrance channel [at Port Aransas] dredged?
- A: Mr. Carangelo said a hopper dredge typically dredges the entrance channel.
- Q: About six years ago, material was placed on Pelican Island but there was no containment, so it all ran off the backside of the island. What does this do to the sea grasses?
- A: Mr. Carangelo said the conservation interests request that kind of maintenance material placement for certain types of birds that nest there. There was a time that people thought unconfined dredged material placement was bad and, in some

instances when it destroyed areas like seagrass flats or reef structure, it can be. So, a lot of people wanted it all placed on uplands or into confined placement areas. Now, people are seeing that they have created some good things by mistake with unconfined placement and have begun shifting their practice to begin using it for habitat creation and enhancement. Pelican Island is this kind of practice. The seagrass that occurs at pelican are in the cove between the two lobes and are unaffected by this activity; the addition of sediment to form sandbars may be providing it protection from wave attack.

- C: The run off of that material on Pelican Island causes the passage through Pelican Island and Point of Mustang to close up. The shrimpers have a hard time getting through there because it is so shallow on a low tide.
- A: Mr. Carangelo said this is a concern that the Port was not aware of that issue. The public's concerns should be heard and that is why we are here tonight.
- C: Mr. Carangelo noted that ideas from the meeting with the CBGA in October 2000 are included on the beneficial uses list (numbers 53 through 61) and were considered in the development of the draft plan. He referred the attendee to the materials and handouts.
- Q: What is the timeline for this project?
- A: Mr. Carangelo said they are looking for authorization through the Water Resources Development Act (WRDA) 2002. Construction could begin within one year following authorization if finances are available.
- Q: What is the timeline for the La Quinta extension?
- A: Mr. Krams said the La Quinta extension is dependent on securing a container terminal partner and the development schedule of the Container Terminal partner. It should take six to eight months to dredge the extension, depending on the contractor's schedule.
- Q: How long will the entire [CCSCCIP] project take to complete?
- A: Mr. Krams said it will probably be phased construction and the timing depends on financing and other variables. That question has not been answered yet because it is still a little too early, but an estimated time frame would be five to seven years.
- C: You will be stressing the system for a long time.
- Q: How far from the shoreline will the La Quinta extension be?
- A: Mr. Carangelo said 300-1,000 feet off the beach, similar to the zone between the existing La Quinta channel and the Reynolds and Oxychem area.
- C: Dredging kills fishing until the dredging is complete. How much material are you going to put in the bay?

- A: Mr. Carangelo said maybe 3.5 million cubic yards of new work material would be placed into the bay. The material would be placed the several sites outlined tonight.
- Q: There are 20 miles across the open bay with a predominant southeast wind seven months out of the year. A row of islands would stop the erosion at Portland.
- A: Mr. Carangelo said they agree. The proposed structures would be five to six feet above the water with low marsh and submerged flats behind them for shallow water habitat.
- Q: When the project is complete, how long will it take for the sea grasses to grow and the fish to move in?
- A: Mr. Carangelo said once dredged material is placed in an area, benthic recovery begins almost immediately and the fish move in to prey on these burrowing animals like worms and crabs. If seagrasses are planted and survive it would take one to three years for them grow in. If seagrasses are not planted, there is typically a very high rate of natural colonization of shoal grasses, especially if the areas are protected from wind and waves. If the sea grasses are not planted and are allowed to colonize naturally, it could take three to six years.
- Q: Is planting part of the project?
- A: Mr. Carangelo said there would probably be a plan to plant in some areas and not in others.
- Q: If seagrass is being destroyed in an area, you have to account for that.
- A: Mr. Carangelo said yes, they have to mitigate for impacts to sensitive environments like grassbeds. On the far western end of La Quinta, there is a grass bed there. We would have to mitigate for that; however, we are planning to create much more sensitive habitat that would be lost. We have not yet selected a plan so we do not know yet what might be impacted. But we the proposal would create about 800-1000 acres of new shallow water habitat by converting primarily deepwater bay bottom.
- Q: What can be done about ship speeds?
- A: Mr. Carangelo said anyone that has a complaint should call the Aransas Pilots Association and talk to Bill Parish. Mr. Parish is the President of the Aransas Pilots Association.
- Q: Who polices the dredging? You can watch leaks that last for days, then there are dead fish everywhere. On one occasion, we called Beau Hardegree (TPWD) and he came out and saw what was happening. He made a phone call and it was fixed immediately.
- A: Mr. Carangelo said public activism is the way to get things done.
- Q: Is there a "hot line" that we could call in instances like these?

A: Mr. Krams said the Corps is in charge of the dredging. He suggested calling the local Corps office at 884-3385 and reporting dredging problems when they occur. Mr. Carangelo added the COE project managers do not want these leaks to occur, but they need to know that it is happening. By your activism, we can make sure that this work is done properly.

At the end of the meeting, Mr. Krams clarified that the time frame he mentioned of five to seven years was for all the phases of the entire project. He did not mean to imply that actual dredging would be continuous during this period.

The Port of Corpus Christi Authority (Port) presented the Channel Improvement Project update to the Coastal Bend Bays Foundation (CBBF) at their regularly scheduled monthly meeting on Monday, January 8, 2001. David Krams and Paul Carangelo presented the project alternatives, study results to date, the beneficial use project with the Coastal Bend Bays & Estuaries Program (CBBEP), and discussed a detailed presentation on the draft Dredged Material Management/Beneficial Uses (DMM/BU) plan.

CBBF members in attendance were:

- Manuel Freytes, GLO
- Greg Brubeck, PCCA
- Terry Cody, TPWD
- Harry Martin, CBBF Member
- Frank White, CBLT
- Lois Huff, CBBF Member
- Rebecca Brooks, Naismith Eng.
- Robert Moore, OxyChem
- Patrick McGloin, McGloin & Sween
- Ty Harris, TAES
- Bob Wallace, CBBEP
- Richard Gonzales, New American Marketing

- Rebecca Brooks, NEI
- Cal Jennings, CCA
- Philippe Tissot, CBI
- Kirk Cammarata, TAMU-CC
- Henry Hildebrant, CBBF Member
- Teresa Carrillo, CBBF
- Frank Kelly, CBI
- Jim Bonner, CBI
- Brooke Sween-McGloin, McGloin & Sween
- Leo Trevino, CBBEP
- Jay Reining, City of Corpus Christi

Questions and comments from the CBBF members regarding the draft concept DMM/BU plan follow.

- Q: Regarding benthic recovery, is there a significant difference in the numbers and composition of species in the disposal areas and non-disposal areas along the ship channel?
- A: Mr. Carangelo said he couldn't authoritatively speak to the specific number of species involved, but in the placement areas the grain size is coarser because of the shell that winnows out after placement. It is that textural difference that causes the difference in the numbers of individuals of the species found in comparing the placement sites to the reference sites. He stated it was his understanding that the species composition was very similar between areas but the abundance of the species differed between areas. There is a lot of excellent data on this subject and you are welcome to review it.
- Q: Where is the information located?
- A: Mr. Carangelo said the benthic recovery study could be found on the WES web site. It is a very large file, but the Port has hard copies available, upon request. Mr. Brubeck suggested the Port try to get a link to the data on the Port site. Mr. Krams added there is also an interactive site at TWDB for the hydrodynamic

modeling for the bay system. The Port will also try to get a link to that data on their site as well.

- Q: Has the Port considered the re-dredging of Packery and the impacts of the hydrology to the bay system? Will the Packery project increase the dredging levels?
- A: Mr. Carangelo said Packery Channel has been included in the hydrodynamic and salinity model, at the request of the Corps. There is such a minor effect from a small project like Packery because the Ship Channel dominates all the flows in and out of our bay system.
- Q: How will the slight change of a tidal amplitude (a total 0.06 0.08 feet) impact the food source for shoreline birds?
- A: Mr. Carangelo said these changes referred to are the extreme values at certain points throughout the whole bay system, the values at the majority of areas were even less. The values of 0.06 0.08 feet is the total amplitude, so these are really minor changes, 0.03-0.04 feet at the top and the bottom. He noted the resource agencies have acknowledged this is a minor/no effect/no change situation. He stated that the real big changes to our bay system happened when the original 26-foot deep channel was opened back in the 190's through Turtle Cove connecting CC Bay to the Aransas Pass inlet.
- Q: After deepening and widening the channel, there will possibly be increased ship speed, and therefore, increased wake resulting in shoreline erosion. This is a concern. Was this considered as part of the hydrodynamic and salinity modeling?
- A: Mr. Carangelo said it was not part of the hydrodynamic and salinity modeling. However, it was included in the shoreline erosion study. Pacific International Engineering is looking at the ship sizes of today and of the future (to see if the typical vessel size using the channel will change) as well as ship speed, in relation to potential effect on shoreline erosion. The Port is very concerned about excessive speed in the Channel. If someone feels they need to report a problem, please call the Aransas Pilots and report the complaint. The pilots have a legal obligation to operate at sufficient speed to maintain safe steerage.
- Q: If you widen and deepen, it will reduce the current in the ship channel. Does the model pick this up?
- A: Mr. Carangelo said yes, the shoreline erosion model does pick this up. When the channel is widened, there is also an opportunity to dissipate the draw down effect, which occurs more prominently in a narrower channel. Pacific International Engineering is doing this work. That model and the resulting data will be available on their web site when completed.
- Q: Who are different players in this project?
- A: Mr. Carangelo said the players are the Port of Corpus Christi Authority, U.S. Army Corps of Engineers (including WES), PBS&J, Pacific International

Engineering, and Texas Water Development Board. Mr. Krams players also include said the technical Workgroups are also a very significant part of this project and are comprised of many regulatory agencies including Texas Parks and Wildlife, Texas General Land Office, EPA, TxDOT, US Fish and Wildlife, National Marine Fisheries Services, Texas Railroad Commission, and TNRCC. Another key player is the public.

- Q: Are any conservation groups or other public concerned groups directly involved in the Workgroups?
- A: Mr. Carangelo said there was no direct public "at the table" participation in the Workgroups at this time. However, the Port continues to provide extensive opportunities for public involvement and feedback through other avenues, like this meeting. There will also be a great opportunity for public involvement when the Draft EIS is prepared.
- Q: Are the piping plover and their habitat an issue?
- A: Mr. Carangelo said piping plover are an issue that is being considered in the context of critical habitat. There is an extensive piping plover survey underway throughout the project area. This issue is part of the threatened and endangered species studies.
- Q: What is involved in the shoreline erosion studies?
- A: Mr. Krams said the first task was to develop a GIS footprint of erosion. The second task is to look at the existing conditions and the percent contributions to shoreline erosion. Finally, model scenarios will be run to show effects.
- C: Texas Parks and Wildlife is interested in creating islands up into south Redfish Bay for shallow sea grass habitat.
- A: Mr. Carangelo said that has been evaluated as part of this project. The proposed beneficial uses plan reflects that idea and will be discussed further in this meeting.
- Q: What study has been done so far to result in the decision to place dredge material in open water areas in Corpus Christi Bay (Option No. 1, Site A, B, C)?
- A: Mr. Carangelo said no final decision has been made at this time. These management practices are being evaluated because of several factors including economics and environmental benefits. The proposed placement would primarily occur within existing dredge material placement sites. Mr. Brubeck added that the material available in that reach of the channel is very different than other areas. Mr. Carangelo said the material is very soft clay material and is extremely hard to hard to build with. In addition, the benthic recolonization studies have shown that any negative effects are temporary and spatially limited.
- Q: How much public input will go into the final decision of identifying the most beneficial use?

- A: Mr. Carangelo said there has been considerable public input and there will continue to be more public input solicited for this project than ever before for a navigation project in the Corpus Christi Bay area. The Port has gone well beyond the required amount of public input for such projects. The public has a lot of authority and power and will hold us responsible. We hope to settle on the vision for this project before the EIS is completed. We know we cannot please everyone, or meet all objectives totally, but we are trying to keep as many people the public involved throughout this process as possible.
- Q: At what time can the public review and comment on Workgroup activity?
- A: Mr. Carangelo said this meeting is an opportunity for that. This draft plan was developed through the Workgroups, however, the public input and ideas obtained over the last several months has been extensively incorporated into the Workgroup's product. At the public meeting planned for sometime in March or April of this year there will be yet another opportunity, even with the focus to discuss the results of the economic analysis. Mr. Krams added that it is better to get the public input early, often and now so that it is a part of the Corps' economic analysis. The Corps does not require this much public involvement, but it is the Port's position that the public must be involved from the beginning of the project, through the end, and beyond. Mr. Carangelo said the Port and the CBBEP went to the public to solicit beneficial use ideas. Many of these ideas were incorporated into this draft concept plan.
- Q: When the Estuary Program process first began, we received an anonymous call from the Corps in Washington. They wanted do a very large geo-textile tube demonstration project with our fine silts where we would actually build a 50-year container out in the bay and over time, fill it with fine silt material. Will that kind of venture work here?
- A: Mr. Carangelo said anything that is built in the middle of the bay is difficult due the materials and the economics. The geo-textile bag technology you refer to work best when filled with sandy material or even stiff clay material. When soft clay materials are used, it's more like a liquid and it takes more effort to fill the tubes because they have to be strained, and the bags do not perform well even if they are filled with that type material. They do have appropriate applications.
- Q: Can you use mitigation for the loss of sea grasses to do projects other than sea grass? Is it viable?
- A: Mr. Carangelo said we should be able to do that, but the regulatory agencies have to agree to it.
- Q: Is the Mitigation Workgroup considering beneficial uses options along with their mitigation work?
- A: Mr. Carangelo said the Mitigation Workgroup is not involved in the development of the beneficial use options, although there may be members of the Mitigation Workgroup that are also participants in the Beneficial Uses Workgroup. The

Mitigation Workgroup is likely to use the traditional project approach and look at the entire project, including the beneficial use footprint. They should determine impacts to existing habitats pre-project, even though the beneficial use/created habitat may be of a higher value habitat than that which existed before the project.

- Q: What is the schedule for the economics portion of this project?
- A: Mr. Carangelo said the results of the alternatives screening should be received by the second week of February.
- Q: When will the EIS be complete?
- A: Mr. Carangelo said the draft EIS is expected to be complete in the fall of 2001.
- Q: Can we get copies of this presentation?
- A: Mr. Carangelo said copies could be available, but noted this is a work in progress and therefore, is ever-changing. It is best to be involved in the next public meeting, which is planned for March or April.

The Port of Corpus Christi Authority (Port) presented their Channel Improvement Project update to the Ingleside Point Conservation Committee (IPCC) at their regularly scheduled meeting on Tuesday, January 23, 2001. David Krams and Paul Carangelo reviewed the channel project, presented the project alternatives, and discussed the draft DMM/BU plan.

IPCC members in attendance were:

- Rhoda & Don Poenisch
- Jay Loyetta Masterson
- Skip & Katie Hatch
- Steven Carion
- Keith & Carol Regnier
- Cindy Davis
- Janice Arnsdorff

- Billie & Clayton Poenisch
- Ann Hubby
- Marcella Arnsdorff
- Phil & Sherri McMullin
- Cynthia Foster
- Marie Counter
- Sarah Hudlow

There were other persons in the meeting that did not sign in or identify themselves.

Questions and comments from the IPCC members follow.

- Q: In looking at the contributions to erosion, are you taking note of the constant rate of ships? They do not travel at the speeds they are supposed to. They travel much faster.
- A: Mr. Carangelo said they are modeling the ships speed at 10 knots. Ship speed was monitored in several areas, including at a station in Ingleside Cove Sanctuary. Actual speeds of ships tracked ranged from about 8 to 12 knots.
- Q: Does the model include the bulkheading and back filling that is going on at Berry's Island or does the model have the original land?
- A: Mr. Carangelo said the model shows Berry's Island as it is proposed. He noted that in modeling, anything three-foot deep or shallower is considered dry land because mathematically it has the same effect on hydrodynamics. The small change in shoreline position will not affect the modeling. The hydrodynamic and salinity model is quite refined but a difference in 60-feet of shoreline will not affect the model or the quality of the output. The shoreline erosion study focused on specific areas of concern like Pelican Island, Ingleside Point, and others. That study is working to separate out the proportionate affects of shoreline erosion from the various conditions, and sources of energy, potentially causing erosion.
- C: There were lots of birds on the island just off our property when we first came here thirty years ago. The island across the channel has grown and there are not as many birds as there were. Also, there are a greater number of shells appearing on the beach. Something is happening. In the last five years, larger shells have been appearing.
- C: That shows they have just come back to this area and are reproducing. That is good.

- C: We cannot catch fish as big as we used to and there are no crabs anymore.
- A: Mr. Carangelo said the water and sediment quality has actually improved over the last 20 to 30 years in the bay and throughout the nearby areas.
- C: You can see the water breaking when the ships come by. The waves do not slow down one bit when they hit this beach.
- A: Mr. Carangelo said that is why we think Site C or Q should help. It is an attempt to reduce the waves coming across Corpus Christi Bay, from whatever source, from impacting the shoreline here. Site c or Q would be a partially submerged island with stone protection on the channel facing, high wave energy sides. It will mostly be underwater with shallow and sea grass habitat.
- Q: Can you explain what a geotube is?
- A: Mr. Carangelo said it is big tube or sausage shaped fabric bag made out of woven polyethylene or polypropolyene fabric that is may be six or eight feet in diameter. The geotube is hydraulically filled with sand or another suitable material. He said an example of a geotube is at the Navy degaussing facility west of Jewel Fulton Canal. The Navy put geotubes there to create seagrass habitat. They are used in submergent or above water settings, and can be used to protect shorelines and to contain dredged material. Geotubes are not as good as hard structures like armor rock for long-term performance. But they have appropriate applications in various settings such as with environmental projects. Mr. Krams added that geotubes are becoming more common. It is a fairly low cost, effective option.
- C: Mr. Krams noted this meeting was scheduled to give the people in this area the opportunity to tell the Port what they think of the draft DMM/BU plan and the specific site proposals. He urged the IPCC members to provide them with feedback on these sites.
- Q: Site Q makes this part of the channel a narrow environment. Will that have an adverse affect on our shoreline?
- A: Mr. Carangelo said we have found that the current velocities within the channel itself are not enough to mobilize that sediment in the channel. That source of energy by itself does not cause erosion. Any kind of structure like Option Q should help dissipate, block and absorb the wave energies. The reflected wave is typically much smaller and of less energy than the original. Mr. Krams added that the ships are another aspect of this. The wave that is created by the ship pressure field is really in the channel prism itself. As the ship passes through, the draw down creates the wave. The channel's shape determines how the waves dissipates and impacts the shoreline. The smaller the channel, the less the wave dissipates and the more erosion. Site Q would not block the water flows away from the channel and pressure fields will be able to spread out through the large area between Q and Berry Island.

- Q: If Site Q is effective, is Site P necessary? There is not much room between the existing shoreline and the slope of the channel. How close would the geotube be to the existing shoreline?
- A: Mr. Krams said Site P was proposed specifically for protecting the shoreline in this area. Mr. Carangelo said the geotubes would be close to the shoreline in certain areas such as down near the existing sheet pile bulkhead west near La Quinta Channel, but would also lie on the outer edges of the sea grass beds and thus be at a distance from the shoreline on the eastern end.
- Q: How do boats know where to go if geotubes are installed?
- A: Mr. Carangelo said there could be markers placed at the 50-foot gaps between the geotubes.
- Q: We need to conserve the shoreline here. Not too many years ago, you could drive your boat and trailer to the end of the Beach Club property and turn back onto the beach. The Beach Club has lost two acres of land. Can material be placed on that beach? Will a geotube placed in front of the beach make the beach fill in itself?
- A: Mr. Carangelo said trucked in material could be placed on the beach as a beneficial use renourishment. A geotube by itself may not do much good because may be no adequate supply of sand to fill in behind it.
- Q: Over the last 20 years, the tail on Berry's Island has grown by about 400-500 yards. Where does that material come from?
- A: Mr. Carangelo said the tail on Berry's island is coming from material eroding from the front of the island. There is quite a bit of sand in that area.
- Q: Mr. Krams asked if they generally liked the idea of the geotubes, Site P?
- A: There was general agreement from the group that the Site P was a good idea.
- C: The sea grass beds are washing away. Even if Option Q were there, corrosive surges would wash away the waterfront. The surges come in over the bulkheads now in certain circumstances. Geotubes or anything else that can break the surge and protect our shoreline in that area is good.
- C: Option Q would also help wind wave erosion.
- Q: How long would the geotubes be?
- A: Mr. Krams said they are costing a 2,800-foot geotube. The idea is for a total length of 3,000-foot with the 50 -75 foot gaps in between 500-foot geotube sections.
- C: Mr. Carangelo noted that funding might be available to IOB through the GLO grant program. The Coastal Erosion Response Planning Act has helped many communities get necessary funding. Mr. Carangelo suggested the community begin looking for these types of grants for beach nourishment, bulkhead repairs, shoreline and habitat protection, etc.

- Q: What do they attribute the higher water level to?
- A: Mr. Carangelo said the increasing higher water levels we have experienced over the last few decades could be attributed to a general warming trend, which could be due to natural variability of climate.
- C: The little yellow boats do the most damage.
- Q: What would be the elevation of Site Q?
- A: Mr. Carangelo said it would be mostly knee to waist to neck deep water and possibly some partially emergent up to five or six feet associated with the shore protection.

One comment form was received. Katie Hatch wrote, "Option 3A – Site Q is a good idea only if done one time – not for maintenance dredging. Site P – same map, if it would protect grasses – good idea. Maybe add sand/shell to beach at end of Beach Club."

Title: Dredged Materials Management/Beneficial Use Plan for the CCSC Channel Improvement Project

Presenters: David L. Krams, PE and Paul D. Carangelo, REM, Port of Corpus Christi Authority

Overview: The Port of Corpus Christi Authority is seeking authorization to construct the Corpus Christi Ship Channel Channel Improvement Project (CCSCCIP). The CCSCCIP, which is in the feasibility study phase, is a federal navigation project which proposes to deepen and widen the existing 45 foot MLT CCSC to 52 feet MLT and 530 feet respectively, construct barge lanes on both sides of the CCSC in the open bay reach, and extend the La Quinta Channel about 7200 feet west at a depth of 40 foot MLT. The CCSC will also be extended into the Gulf of Mexico approximately 10,000 feet to the 56 foot contour. Approximately 43 million cubic yards of new work material will be dredged during construction. Over the 50 year project life, about 150 million cubic yards will be maintenance dredged.

The feasibility study required a broad suite of complex investigations in order to understand the environmental effects of the proposal on the Corpus Christi Bay estuary. The presentation will provide a general overview of the planning efforts undertaken to address the numerous engineering and environmental studies necessary to plan and authorize the project. Details of the proposed dredge materials management – beneficial use plan (DMM/BU plan) will be provided.

A significant volume of the new work material is proposed for use to create or enhance aquatic coastal habitats. The proposed DMM/BU plan would result in the creation of approximately 1000 - 1200 acres of high value shallow water habitat in Corpus Christi Bay, and approximately 1700 acres of additional beneficial uses sites in the Gulf of Mexico. The development of the plan was the result of an extensive and open public involvement process in addition to continuous intensive coordination with numerous state and federal regulatory agency personnel.

A draft environmental impact statement is in preparation and should be available for public comment in late 2001.

SECTION 5:

PUBLIC COMMENTS



TEXAS HOUSE OF REPRESENTATIVES GENE SEAMAN

STATE REPRESENTATIVE, DISTRICT 32 Aransas, Calhoun, Jackson & Nueces Counties



December 11, 2001

Colonel Leonard Waterworth Department of the Army Galveston District Corps of Engineers P O Box 1229 Galveston, Texas 77553-1229

Re: Corpus Christi Ship Channel - Channel Improvement Project

Dear Colonel Waterworth:

Proposed improvements to the Corpus Christi Ship Channel are important to the continued growth and development of the Coastal Bend area as a major Texas deepwater port facility. As commercial and international trade increases in importance for Texas, it is critical that the Port of Corpus Christi has the ability to meet the volume of increased trade with improved transportation facilities. Improvements to the ship channel will allow the Coastal Bend region to fully benefit from new trade opportunities.

I support the proposal to widen and deepen the Corpus Christi Ship Channel and to make other improvements as proposed in the feasibility study for this project. These improvements will ensure that the Port of Corpus Christi provides a safe and efficient facility that can handle navigation traffic as it increases in both size and volume. These improvements to the ship channel will ensure increased trade at the Port of Corpus Christi and sustain future economic growth for the entire region and Texas.

If you have any questions, please feel free to contact me at 361-994-1996. Thank you for your time and attention to this important issue.

Sincerely,

Gene Seaman

State Representative

District 32

cc:

John LaRue, Port of Corpus Christi

One Shoreline Plaza 800 N Shoreline Suite 1300 South Corpus Christi TX 78401 Phone 361-882-7448 Fax 361-882-9930 www.ccredc.com

December 13, 2001

Colonel Leonard D. Waterworks

Department of the Army

P.O. Box 1229

Galveston, TX 77553-1229

Dear Colonel:

Please accept this letter as our letter of support for the proposed widening and deepening of the Corpus Christi Ship Channel. As you are aware, Corpus Christi has a long history of being one of the safest and cleanest ports in the world. This has been achieved while continuing to grow the Port into one of the nations busiest ports.

Along with providing much of the United States with fuel and chemicals, the Port of Corpus Christi also provides the Regional with over 50,000 jobs, making it the largest economic engine in the South Texas. The jobs provided by the industries dependent on the Port tend to be very high wage and are quickly becoming very high tech.

If we are to insure the future of the region it is imperative that we both widen and deepen the Corpus Christi Ship Channel, the economic prosperity and the environmental quality of the region depend on it.

Thanks you for you consideration of this matter.

Sincerely yours,

Ronald R. Kitchens, CED

ZTOQ)

President / CEO



November 29, 2001

COL. Leonard Waterworth U.S. Army Corps of Engineers P.O. Box 1229 Galveston, TX 77553-1229

Dear COL. Waterworth:

The Corpus Christi Chamber of Commerce would like to express support of the Channel Improvement Project that proposes the deepening of the Corpus Christi Ship Channel from 45 feet to 50 feet in order to accommodate larger vessels, increase shipping efficiency, and enhance navigation safety. It is our understanding that after nearly two years of study, the Corps has recommended improvements that include:

- Widening the Corpus Christi Ship Channel across Corpus Christi and Redfish Bays to 530 feet;
- Deepening the Corpus Christi Ship Channel from 45 to 52 feet;
- Adding 200 feet wide barge shelves along both sides of the channel across Corpus Christi Bay;
- And extending La Quinta Channel approximately 7200 feet at a depth of 40 feet.

The Corpus Christi Chamber of Commerce recognizes that the Corpus Christi Ship Channel improvement project will produce positive socioeconomic impacts to the region. It is projected to have a high benefit-to-cost ratio with an average of \$40 million in annual benefits over the next 50 years. These benefits will surely include increased employment and revenue for the Port as well as the business community throughout the region.

We encourage your support of moving this project forward to reality.

Sincerely,

Tom Niskala, President / CEO

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City of Port Aransas

710 W. AVENUE A
PORT ARANSAS, TEXAS 78373-4128
361-749-4111
FAX 361-749-4723
e-mail: cityportaransas@centurytel.net

December 6, 2001

Colonel Leonard II. Waterworth
Department of the Army
Galveston District Corps of Engineers
P.O. Bex 1229
Galveston, Texas 77553-1229

RE: Comments relating to the Corpus Christi Ship Channel, Channel Improvement Project

Dear Colonel Waterworth:

The City of Port Aransas has had <u>concerns</u>, for many years, about <u>shoreline</u> erosion along the Corpus Christi Ship Channel, within the corporate limits of our city. One of our concerns has been the contemplated additional adverse erosion as a result of widening and deepening of that channel.

For the past eight or nine years, I have had periodic discussions with representatives of the Port of Corpus Christi Authority (POCCA) about the possible widening and deepening of the channel. POCCA representatives have always been cooperative in sharing information with me.

In recent years, the POCCA has worked with the City of Port Aransas toward resolving the shoreline erosion issue along the ship channel. They have joined as a partner with the City to include providing funds to assist in resolving the shoreline erosion. I anticipate the continued support of the Port of Corpus Christi Authority in continuing years to resolve the erosion issue in its entirety.

The Port Authority has become a good neighbor to the City of Port Aransas. As a result, the City does not have the concerns about the widening and deepening of the Corpus Christi Ship Channel

Page 2 December 6, 2001 Colonel Waterworth

as it has in prior years. At this time, I see no reason that the City of Port Aransas will have any objections to the widening and deepening of the Corpus Christi Ship Channel.

Sincerely,

THE CITY OF PORT ARANSAS

Tommy M. Brooks City Manager

TMB:pg

cc:

John LaRue, Executive Director Port of Corpus Christi Authority P.O. Box 1541

Corpus Christi, Texas 78403



December 13, 2001

Colonel Leonard D. Waterworth Department of the Army Galveston District Corps of Engineers P.O. Box 1229 Galveston, Texas 77553-1229

Dear Colonel Waterworth:

Laredo, Texas, is the most important inland port on the U.S.-Mexico border. It accounts for 40 percent of the total value of overland merchandise trade between the U.S. and Mexico. In 2000 alone, the Laredo Port of Entry accounted for \$84.2 billion in total imports and exports. Shipments moving through this port increased by 30 percent from the previous year.

As the next phase of NAFTA takes effect, we contemplate continued growth in international rail and truck cargo crossings. Laredo and Webb County are working hard to meet this challenge; yet, we realize that coordinated development of the region is vital to assure orderly growth. The Port of Corpus Christi will play a vital role in this development. Already the Texas Department of Transportation has approved the expansion of the Laredo-Corpus Christi corridor (U.S. 59 - 44), to allow for a faster and safer connection between these two cities. It is imperative that the port also prepare for expanded and more efficient service and prepare itself for the needs of the new century.

We support the proposed channel improvements as outlined in the study conducted by the U.S. Army Corps of Engineers. We believe this to be not only a benefit to the city of Corpus Christi but to the South Texas region as a whole.

Thank you.

Sincerely,

Migwel A. Conchas President/CEO

xc John La Rue, Executive Director, Port of Corpus Christi Authority

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P. O. Box 9911 • Corpus Christi, Texas 78469-9911 Telephone (361) 777-2326 FAX (361) 777-2666

December 13, 2001

Colonel Leonard D. Waterworth Department of the Army Galveston District Corps of Engineers P.O. Box 1229 Galveston, Texas 77553-1229

Re: Corpus Christi Ship Channel - Channel Improvement Project

Dear Sir:

Our industrial operation on the LaQuinta Channel typically handles a volume of 100 ships each year to provide raw materials for processing and product for our major customers in Canada.

We are very supportive of the initiative to extend the LaQuinta Channel to enhance subsequent responsible development of the vanishing deep-water access industrial property along the Gulf Coast.

We would also be a benefactor of the initiative to widen the Corpus Christi Ship Channel to 530 feet across Corpus Christi Bay and the construction of 200-foot wide barge lanes across Corpus Christi Bay. Prevailing winds and our proximity to this main channel makes us particularly vulnerable to a marine incident as well other cities along the north side of Corpus Christi Bay.

We would defer comment on the deepening of Corpus Christi Ship Channel to those industries primarily served by this resource.

Finally, as a board member of the Corpus Christi Bays and Estuary Program representing industry it is noted that beneficial use of dredge spoils is very much included in the scope of this substantial project.

Frans Devoluncy

Respectfully,

SHERWIN ALUMINA, L.P.

Frank N. Newchurch, III

Plant Manager

FNN:cs

CC: Mr. John LaRue, Executive Director Port of Corpus Christi Authority P.O. Box 1541 Corpus Christi, Texas 78403

(ShipChannelImpProject/Stone)



Equistar Chemicals, LP

1501 McKinzie Road P.O. Box 10940

Corpus Christi, Texas 78460-0940 Phone: 512 242 8000

Phone: 512.242.8000 Fax: 512.242.8051

December 18, 2001

Colonel Leonard D. Waterworth

Department of the Army

Galveston District Corps of Engineers

P.O. Box 1229

Galveston TX 77553-1229

Dear Colonel Waterworth:

As Plant Manager of Equistar Chemicals, LP, Corpus Christi Complex, I would like to express my support for the Port of Corpus Christi's channel improvement project. In particular, Equistar should benefit from the widening of the barge lanes since this can reduce shipping delays and increase safety. Although there is no immediate benefit for Equistar expected from the deeper channel, it is recognized that this is a project focused on the long term economic development of the area for which Equistar remains supportive.

Sincerely,

Plant Manager

MDW/dgg

CC: John LaRue, Port of Corpus Christi Authority



HARDY McCULLAH/MLM ARCHITECTS, INC.

December 17, 2001

Department of the Army Galveston District, Corps of Engineers P.O. Box 1229 Galveston, TX 77553-1229

Dear Sirs:

I would like to address a current project in which you are currently involved. I have several concerns, but desire to address the following.

Proposition:

That current plans for widening and deepening the Corpus Christi ship channel include solving the problem of sand deposition at the intersection of the Corpus Christi ship channel and Piper channel at Island Moorings in Port Aransas. Such deposition is, for the most part, caused by the movement of large vessels transitting the ship channel. Since larger vessels will transit when this planned project is completed, this problem will get worse if not corrected.

Points:

- We have been told that the agencies involved are not concerned with wake damage. At the same time these same agencies are going to spend millions to build rock jetties to protect birds and sea grass from wake damage. It seems that damage suffered by people is a poor third to grass and birds. This is particularly galling to residents of Island Moorings since the cost to mitigate our problem would be less than one per cent of the total cost for this project.
- 2. Monetary and lifestyle damage is being suffered by the residents of Island Moorings due to the sand deposition in the mouth of Piper channel. It should occur to the current planners of this project that we are part of the program.
- 3. The people living in Island Moorings would like to see some effort to solve this problem addressed in the planning stages.

A response would be appreciated.

Singerely,

DY MCCULLAH/MLM ARCHITECTS, INC.

2221 Merit Drive Suite 280 Dallas, TX 75251

Phone: 972-385-1900 Fax: 972-385-1937 hardy1@airmail.net 284 Marina Drive

Port Aransas, TX 78373

cc:

Ron Cone 356 Blue Heron

Port Aransas, TX 78373

Ray Rump 322 Blue Heron

Port Aransas, TX 78373

Fort Worth Office Metro: 817-577-1270

F:\OFFICE\GUYS\HARDY\MARINA12 17L

Monte N. Swetnam 420 Marina Drive Port Aransas, Texas 78373

December 15, 2001

Olivarri & Associates, Inc. 719 South Shoreline Drive, Suite 200 Corpus Christi, Texas 78401

> Re: Corpus Christi Ship Channel Improvement Project

Gentlemen:

I have lived, or kept a boat, in Island Moorings since 1990. Until the last few years, the Piper Channel, which serves the community and co-located marina, has provided safe and reliable marine access to the Corpus Christi Ship Channel (CCSC) and points beyond. This access required no more than routine, periodic maintenance by the community to remain functional.

During the past few years, however, shipping tonnage has increased substantially in the CCSC along with activity at the Port of Corpus Christi. Problems in maintaining the Piper Channel at its intersection with the CCSC have increased in apparent lockstep. In order to maintain a viable waterway, the community has dramatically increased their dredging activities and has installed geotube and sheet pile breakwaters to mitigate the damage caused by the increased shipping activity. Regardless of the community's diligent maintenance, the Piper Channel now provides only three feet of depth at its entrance. In addition, bank erosion within the same general stretch of the CCSC has resulted in a major bulkheading project to be undertaken by the city of Port Aransas. All of this, plus untold damage to the marine environment, has resulted from the increased shipping in the CCSC and its accompanying hydraulic erosion.

Given this background, it seems unconscionable that the Port of Corpus Christi, or any other entity, would consider deepening the CCSC or in any way increasing the number or tonnage of ships using the waterway. Instead, immediate steps should be taken to mitigate the existing problems. Only when these problems are solved should the thought of facilitating increased traffic be entertained. One has only to stand at the shoreline as a large ship passes to observe the tons of sand which are swept along with its wake; eroding shorelines, filling channels and destroying wetlands.

I ask that any environmental assessment of the proposed improvements to the CCSC examine in detail the damage to the environment and related facilities caused by the <u>existing</u> channel as well as the potential for even more significant problems caused by the desired changes.

Very truly yours,

Monte N. Swetnam

cc: Port of Corpus Christi CCSC-CIP

P.O. Box 1541

Corpus Christi, TX 78403

Montel) Suetran

Dept. of the Army
Galveston District
Corps of Engineers
P.O. Box 1229
Galveston, TX 77553-1229

Environmental Protection Agency Region 7 Fountain Place, 12th. Floor, Suite 1200 1445 Ross Avenue Dallas, TX 75202-2733

Airport and Channel Corporation 1305 South Alister Port Aransas, TX 78373 Attn: Bob Roberts Richard L. Daerr 2475 Underwood St. #267 Houston, Texas 77030-3535

19 December 2001

Olivarri & Associates Inc 719 S. Shoreline Blvd.,Suite 200 Corpus Christi, Texas 78401

RE: Wake Damage to Piper Channel

Gentlemen and Ladies:

I have owned property for a number of years at Island Moorings. A major cost each year born by the owners of property at Island Moorings has been damage caused to Piper Channel by the wake of large vessels transiting the Corpus Christi ship channel. Since inception the homeowners and Marina have spent well in excess of \$1 million dealing with this problem created by the wake damage. As the widening and deepening of the ship channel is being contemplated, out problem needs to be addressed as part of the ship channel project, as it will only get worse as the ship channel project is completed. I agree with the proposition presented to you by some of my neighbors at Island Moorings, namely:

<u>Proposition</u>: That current plans for widening and deepening the Corpus Christi ship channel include solving the problem of sand deposition at the intersection of the Corpus Christi ship channel and Piper channel at Island Moorings in Port Aransas. Such deposition is, for the most part, caused by the movement of large vessels transiting the ship channel. Since larger vessels will transit when this planned project is completed, this problem will get worse if not corrected.

Points:

- 1. Island Moorings owners have been told that the Agencies involved with the ship channel project are not concerned with the wake damage to Piper channel. Yet it is our understanding that these same Agencies contemplate spending millions of dollars to build rock jetties to protect birds and sea grass from wake damage. Surely wake damage to individual property owners deserves the same consideration.
- It would be much better to solve this wake damage problem in the process of dealing with the expansion of the ship channel than subsequent legal proceeding that may have to be initiated by the Island Moorings owners to protect themselves from the damage to

Olivarri & Associates Inc 19 December 2001 page 2

Piper channel and to protect their individual property interest caused by the wake damage to Piper channel.

This is an important problem that affects a lot of people. I appreciate you taking the time to consider it.

Best Regards,

Richard L. Daerr

CC: Corpus Christi Port Authority
Corps of Engineers/Galveston District

Anderson-Beale

31 Hackberry Lane Houston, Texas 77027-5603 Home Phone 713 621-1488

DEC 2 1 2001

December 18, 2001

To: Olivarri & Associates 719 Shoreline Dr., Suite 200 Corpus Christi, TX 78401

U.S. Corps of Engineers PO Box 1229

Galveston, TX 77553

Port of Corpus Christi

CCSC-CIP PO Box 1541

Corpus Christi, TX 78403

Subject: Damage to Piper Channel in Corpus Christi Ship Channel

We are property owners in Island Moorings Subdivision, Port Aransas, Texas, at 458 Blue Heron Drive. We understand that the Corpus Christi Port Authority is currently in the planning stages of a project to deepen and widen the ship channel from Port Aransas to Corpus Christi. We understand the importance of this project, but are concerned about the on-going damage to Piper Channel from ships passing through the Ship Channel. We were very surprised to hear that this issue was not addressed at the Corps of Engineers meeting on November 29, even though it affects an entire community.

We urge your organizations to include in your construction and feasible studies, a realistic plan to address the depositions damage to Piper Channel. As you are aware, Piper Channel is the only entrance to Island Moorings, a subdivision which generates considerable tax base for Nueces County and the local communities, both Port Aransas and Corpus Christi. The channel is already suffering extreme silting and erosion from ship traffic, and continued damage to the channel from deeper and wider ships will ultimately depress property values, reduce tax revenue and adversely affect a vibrant community.

Melele Beace

We look forward to hearing your plans.

Sincerely,

cc: Nueces County Judge and Commissioners

December 16, 2001

Olivarri & Associates, Inc 719 S. Shoreline Blvd., Suite 200 Corpus Christi, Texas, 78401

Dear Sirs:

RE: Deepening and Widening of Corpus Christi Ship Channel

I fear that I have missed the deadline for these comments to be included in the EIS, however, I request that you consider my concerns for this project.

The maintenance of the Piper Channel at the Corpus Christi Ship Channel intersection has always been a financial burden on our property owners. I believe that our maintenance cost increases over the last five years can be directly correlated to increased ship traffic bound for the Port of Corpus Christi over this same time period. Surely, the deepening and widening of the ship channel will exacerbate an already untenable problem, due to the increased draft and displacement of the transit vessels.

I respectfully request that any plan to alter the Corpus Christi Ship Channel consider and mitigate the damage which is caused to our spur channel by each passing vessel.

The city of Port Aransas has successfully accessed Federal Monies to defend the erosion of its real estate along the ship channel. Unfortunately, these monies are not available to individual property owners. We must rely, therefore, on your sound engineering, planning, and judgment to mitigate our loss.

Thank you in advance for your thoughtful consideration.

Ronald J. Skewis

361 Bahia Mar

Port Aransas, Texas, 78373

Tel. (361)749-3303

E-Mail skewis4@2fords.net

CC: Corpus Christi Port Authority
Army Corps of Engineers

Rosald Execus

Monte N. Swetnam 420 Marina Drive Port Aransas, Texas 78373

January 7, 2002

Mr. David L. Krams, P.E. Senior Project Engineer The Port of Corpus Christi P.O. Box 1541 Corpus Christi, TX 78403

Re: Piper Channel Issues

Dear Mr. Krams:

Thank you for your letter of January 3, 2002. It was quite thorough and informative and I appreciate your time and effort to respond in such a manner.

You and I can find much to agree on concerning the Piper Channel (PC) and the existing operation of the Corpus Christi Ship Channel (CCSC). Unfortunately, there are some significant differences in the manner in which either of us would deal with the existing problems. To suggest that the City of Port Aransas and the residents of Island Moorings should support any plan that would "though not expected to be noticeable ... slightly increase (the erosive effect) with the construction of the Channel Improvement Project" is wrong. Until the Port of Corpus Christi Authority (PCCA) moves to remedy the problems its actions have already created, nothing should be done which would permit them to exacerbate the situation.

As part of the immediate action that the PCCA should undertake, I suggest the following:

- 1. Significantly reduce the speed of any large displacement vessel transiting the Port Aransas / Ingleside reach thereby reducing the hydraulic surge associated with their passage. Provide tugboats or other support as needed.
- 2. Bulkhead the same area to stop the ongoing destruction of shoreline and environment.
- 3. Recognize that economic development for Corpus Christi cannot come at the expense of the surrounding communities and then become proactive in mitigating these problems.

While not a member of the Airport & Channel Committee, I would like to express my thanks for the courtesy that the PCCA has shown them and their representatives. I sincerely hope that a way can be found for the two entities to work together to solve their respective problems. The PCCA must know however, that the problems which currently exist at the junction of the PC and

the CCSC have a significant economic impact on the property owners of Island Moorings and the City of Port Aransas: we cannot allow them to persist.

You indicated that you might attend the Island Moorings Homeowners Meeting on January 19th. I suspect it would be time well spent if you were able to do so. I look forward to meeting you at that time.

Best regards,

Monte N. Swetnam

Cc: Department of the Army
Galveston District
Corps of Engineers
POB 1229
Galveston, TX 77553-1229

Mark D Surman

Mr. Tom Brooks, City Manager City of Port Aransas 710 W Avenue A Port Aransas, TX 78373

Airport and Channel Corporation 1305 South Alister Port Aransas, TX 78373

Ron Cone via e-mail

Carolyn Chancellor via e-mail

Box 530 Port Aransas, Texas 78373 December 14, 2001

Department of the Army Galveston District Corps of Engineers P. O. Box 1229 Galveston, Texas 77553-1229

Gentlemen:

I have been a property owner in Island Moorings subdivision, a development in Port Aransas abutting the Corpus Christi Ship Channel, since 1985. Throughout the time that I have resided in Island Moorings the traffic in the ship channel has created a serious silting/erosion problem in Piper Channel leading into the Island Moorings development. It is my understanding that planning is underway to deepen the Corpus Christi Ship Channel in order to accommodate more and larger ships bound for the Port of Corpus Christi, with the result that greater damage would then be done to the entrance to Piper Channel unless steps are taken to address the erosion problem. As a property owner directly affected by the resultant devaluation of my property I am deeply concerned about this.

It has come to my attention that a Corps of Engineers meeting was held recently and that the issue of a correction of the Piper Channel erosion problem was not considered. Since all parties involved in the plan to deepen the Corpus Christi Ship Channel have been made aware of the Piper Channel erosion issue I am mystified as to why this matter was not addressed as a part of the improvement project.

I am very concerned that the proposed improvements to the Corpus Christi Ship Channel will result in even graver damage to Piper Channel, and that this would ultimately affect the value of my home. I strongly urge all involved in the planning of the proposed improvements to address a solution to the Piper Channel erosion issue without delay.

Thank you for your immediate attention to this matter.

Sincerely,

Jo Leta Gavit

Olivarri & Assoc. Inc. 719 S. Shoreline Blvd., Ste 200 Corpus Christi, Tx. 78401

To whom it may concern,

Proposition: That current plans for widening and deepening the Corpus Christi ship channel include solving the problem of sand deposition at the intersection of the Corpus Christi ship channel and Piper channel at Island Moorings in Port Aransas. Such deposition is, for the most part, caused by the movement of large vessels transitting the ship channel. Since larger vessels will transit when this planned project is completed, this problem will get worse if not corrected.

Points:

- 1. We have been told that the agencies involved are not concerned with wake damage. At the same time these same agencies are going to spend millions to build rock jetties to protect birds and sea grass from wake damage. It seems that damage suffered by people is a poor third to grass and birds. This is particularly galling to residents of Island Moorings since the cost to mitigate our problem would be less than one per cent of the total cost for this project.
- 2. Monetary and lifestyle damage is being suffered by the residents of Island Moorings due to the sand deposition in the mouth of Piper channel. It should occur to the current planners of this project that the cost of future litigation due to wake damage would be much more than fixing the problem during construction. The only real winners would be attorneys.
- In short the people living in Island Moorings would like to see some effort to solve this problem at the best time to solve the problem, namely, during construction.

Thanking you in advance,

Ray Rump

PO Box 177 [322 Blue Heron Dr.]

Port Aransas Tx. 78373

CC: Corpus Christi Port Authority

Corps of Engineers

Olivarri & Associates 719 S. Shoreline Dr., ste. 200 Corpus Christi, Texas 78401

To whom it may concern:

PROPOSITION: That current plans for widening and deepening the Corpus Christi ship channel includes solving the problem of sand deposition at the intersection of the Corpus Christi ship channel and Piper channel at Island Moorings in Port Arkansas. Such deposition is, for the most part, caused by the movement of large vessels transiting the ship channel. Since larger vessels will transit when this planned project is completed, this problem will get worse if not corrected

POINTS: 1. We have been told that the agencies involved are not concerned with wake damage. At the same time these same agencies are going too spend millions to build rock jetties to protect birds and sea grass from wake damage. It seems that damage suffered by people is a poor third to grass and birds. This is particularly galling to residents of Island Moorings since the cost to mitigate our problem would be less than one per cent of the total cost for this project.

- 2. Monetary and lifestyle damage is being suffered by the residents of Island Moorings due to the sand deposition in the mouth of Piper channel. It should occur to the current planners of this project that the cost of future litigation due to wake damage would be much more than fixing the problem during construction. The only real winners would be the attorneys.
- 3. In short the people living in Island Moorings would like to see some effort to solve this problem at the best time to solve the problem, namely, during construction.

Thanking you in advance,

Jim & Shirley Holland P.O. Box 1713 (413 Piper Blvd.) Port Aransas, Texas 78373 361-749-4977

CC: Corpus Christi Port Authority Corps of Engineers January 2, 2002

Port of Corpus Christi Authority CCSC-CIP P.O. Box 1541 Corpus Christi, TX 78403

LANCER.

Gentlemen,

It is my understanding that the Port of Corpus Christi Authority together with the Corps of Engineers is planning to deepen and widen the ship channel from Port Aransas to Corpus Christi. As a resident of Island Moorings, I cannot support such a plan unless it provides for a permanent solution to the Piper Channel problem. More and larger ship channel traffic will complete the destruction that is currently taking place due to existing traffic. Not only does the traffic damage the Piper Channel but also the flats and grass adjoining the Piper Channel.

Your and your clients use of the ship channel is the cause of the damage to Piper Channel. I believe you should fix the problem <u>now</u> or at the least commit to fixing the problem during the construction stage of widening and deepening the ship channel.

I would appreciate a reply regarding my comments and request for repair of the damage to Piper Channel.

Sincerely,

Jud Schroeder

cc: Olivarri & Associates

719 S. Shorline Dr. Suite 200 Corpus Christi, Tx 78401

Dept. of the Army Galveston District Corps of Engineers P.O. Box 1229 Galveston, Tx 77553-1229 Planning Section
Galveston District,
Corps of Engineers
PO Box 1229
Galveston, TX 77553-1229

November 16, 2001

Dear Sir,

I am writing to object to plans for the beneficial use of dredged material west of the CCSC/La Quinta Channel intersection located by Ingleside on the Bay. This area receives considerable recreational use by sail boats, shrimpers, sports fishermen, jet skis, and windsurfers. Many boats leave the nearby marina and cut across the proposed spoil placement area as a shortcut across the bay. Placement of dredged material would necessitate all boats having to stay in the channel and travel a longer distance.

I am an avid windsurfer and sail from Ingleside on the Bay about 80 days a year. The proposed breakwaters for the beneficial use site would eliminate my use of the site since windsurfers basically are made to sail perpendicular to the wind with little maneuverability to sail around barriers. All my other sailing options require more than twice the driving time and would greatly cut down on my ability to get in a sailing session after work. About 6 people sail at this location, including private residents launching from their homes along the water. I must stress the importance of this site to my quality of life - this matter is of utmost importance to me.

Although the proposed beneficial use site is designed to improve fishery values, the success of this proposal is not certain. I have talked to fisheries biologists and they question whether the material will stay in place and how vegetation might respond in the substrate. I think it is wrong to eliminate current recreational users of a site in only the hopes of making improvements for others. I have expressed these same concerns to Paul Carangelo.

I hope you will consider other dredge material placement options and NOT use the area west of the CCSC/La Quinta Channel intersection. I am also concerned that the La Quinta extension will create additional dredge material volumes in future years and there is already a shortage of dredge material sites. Planners should provide a 100-year plan with associated costs for placement of dredged material to fully assess the proposed channel extension.

Thank you.

Tom Stehn

1613 S. Saunders

Aransas Pass, TX 78336

Jom Stehn

(h) 361-758-2354

STATE of TEXAS HOUSE of REPRESENTATIVES

CAPITOL OFFICE

P.O. BOX 2910 AUSTIN, TEXAS 78768-2910 TELEPHONE (512) 463-0512 FAX (512) 463-8388

DISTRICT OFFICE

P.O. BOX 541 PORTLAND, TEXAS 78374 TELEPHONE (361) 643-4755 FAX (361) 643-2704 Judy Hawley

STATE REPRESENTATIVE

COMMITTEES: TRANSPORTATION, VICE CHAIR ENERGY RESOURCES HOUSE ADMINISTRATION

December 7, 2001

Colonel Leonard Waterworth Department of the Army Galveston District Corps of Engineers P.O. Box 1229 Galveston, Texas 77553-1229

Re: Corpus Christi Ship Channel - Channel Improvement Project

Dear Colonel Waterworth:

I was unable to attend your meeting on November 29, 2001 to update the public on the status of the Feasibility Study for proposed improvements to the Corpus Christi Ship Channel. I strongly support this project and the economic and environmental benefits that have been identified throughout this study process and request that this letter be included with project documentation.

The Port of Corpus Christi and allied industries are vital to the economic stability of this area and the entire state of Texas. Deepening the channel to 52-feet from the Gulf of Mexico to the Viola Turning Basin, widening the channel across Corpus Christi Bay, constructing barge lanes across the Corpus Christi Bay and extending the La Quinta Channel from the existing channel westward will ensure that commercial navigation is safely and efficiently served. The extension of La Quinta is also critical to the development of the La Quinta Cargo Terminal, which is important for the future of the Port and our region.

I appreciate the efforts that have been made to reduce environmental impacts and the proposed beneficial use of dredged material to develop shallow water habitat. This project has developed into a win-win proposition the environment and commercial interests and can serve as a model for mutual benefit.

Sincerely,

Judy Hawley
District 31

cc: John LaRue, Port of Corpus Christi

Texas House of Representatives



December 7, 2001

Leonard D. Waterworth
Department of the Army
Galveston District Corps of Engineers
P O Box 1229
Galveston, Texas 77553-1229

Dear Colonel Waterworth:

Re: Corpus Christi Ship Channel – Channel Improvement Project

Please consider this letter to indicate my support for proposed improvements to the Corpus Christi Ship Channel. These improvements are important to the continued growth and development of this area as a major Texas deepwater port. As commercial and international trade increases in importance for Texas, it is critical that transportation facilities be improved to allow us to fully benefit from opportunities that will come to this area.

The economic and environmental benefits that have been identified throughout the study process show it to be a project that will improve navigational safety and efficiency and utilize dredged material in a beneficial manner for development of shallow water habitat.

I strongly support this project and appreciate your consideration Should you have any questions, or if I may be of any assistance, please feel free to contact my Capitol office at (512) 463-0484.

Sincerely,

Vilma Luna

vl/lr

CC: John LaRue, Executive Director

Port of Corpus Christi

TEXAS HOUSE OF REPRESENTATIVES

P.O. Box 2910
AUSTIN, TEXAS 78768-2910
(512) 463-0462
FAX (512) 463-9545
E-MAIL: JAIME.CAPELO@HOUSE.STATE.TX.US



P.O. Box 23065
Corpus Christi, Texas 78403
(361) 882-2277
Fax (361) 882-2881
E-Mall: Bert.guintanilla@house.state.tx.us

JAIME CAPELO

December 10, 2001

Colonel Leonard D. Waterworth Department of the Army Galveston District Corps of Engineers P.O. Box 1229 Galveston, Texas 77553-1229

Dear Colonel Waterworth:

I write you in support of the proposed deepening of the Corpus Christi Ship Channel from its present 45 feet to 52 feet from the Gulf of Mexico to Viola Turning Basin. The Port of Corpus Christi and the Corps of Engineers have been studying this project since 1990.

The proposal offers economic, safety and environmental benefits to the region by accommodating larger vessels into the Port of Corpus Christi, widening the navigation lanes for increased maneuverability, reducing waiting times and allowing for the utilization of the La Quinta Terminal, a containerized cargo facility proposed for the channel on Port property in San Patricio County. The beneficial reuse of the dredged material to increase marine habitat offers the opportunity to increase the important ecological tourism in the area. This is a very important project for the continued economic growth in the region.

Thank you for your consideration. Please feel free to contact me for additional support for the channel deepening project.

Sincerely,

Jaime Capelo

CC: John LaRue

State of the A

Nueces County District 34 Public Health&Judicial Affairs



JOSEPHINE W. MILLER

December 17,2001

County Judge
Courthouse, Room 109
400 West. Sinton Street
Sinton, Texas 78387
Office: 361/364-6120
Fax: 361/364-6118

Colonel Leonard Waterworth
Department of the Army
Galveston District Corps of Engineers
P O Box 1229
Galveston, Texas 77553-1229

Re: Corpus Christi Ship Channel - Channel Improvement Project

Dear Colonel Waterworth:

I would like to express my support for the Channel Improvement Project that proposes to deepen and widen the Corpus Christi Ship Channel and provide other improvements to this important navigation corridor. This project is vital to the continued growth and development of this region as a vital link in the commercial and international trade infrastructure for Texas.

Of special interest to San Patricio County is the proposal to extend La Quinta Channel. This extension will allow for the utilization and development of La Quinta Terminal providing new jobs and spurring increased revenue for communities and businesses throughout the region.

We also appreciate the beneficial uses that have been identified for dredged material. The proposal to develop significant shallow water habitat at several locations throughout the Corpus Christi Bay system and the proposals to protect existing habitat are models for effective use of these materials.

Sincerely,

Josephine Miller

Judge of San Patricio County

Copy to: John LaRue, Executive Director Port of Corpus Christi (P O Box 1541 - Corpus Christi 78403)

RUBÉN HINOJOSA

15TH DISTRICT, TEXAS

COMMITTEES:

EDUCATION AND THE WORKFORCE

SUBCOMMITTEES: EDUCATION REFORM

21st Century Competitiveness

FINANCIAL SERVICES

SUBCOMMITTEES:
CAPITAL MARKETS, İNSURANCE, AND
GOVERNMENT-SPONSORED ENTERPRISES

Domestic Monetary Policy, Technology, and Economic Growth

FINANCIAL INSTITUTIONS AND CONSUMER CREDIT

January 3, 2001

Congress of the United States House of Representatives

Washington, DC 20515-4315

WASHINGTON OFFICE:

1535 LONGWORTH HOUSE OFFICE BUILDING
WASHINGTON, DC 20515
PHONE: (202) 225–2531
FAX: (202) 225–5688
E-MAIL ADDRESS
REP.HINOJOSA@MAIL.HOUSE.GOV

DISTRICT OFFICE:

311 North 15th McAllen, TX 78501 Phone: (956) 682–5545 Fax: (956) 682–0141

BEEVILLE OFFICE:

107 S. St. Mary's Beeville, TX 78102 Phone: (361) 358–8400 Fax: (361) 358–8407

Colonel Leonard D. Waterworth Department of the Army Galveston District Corps of Engineers P.O. Box 1229 Galveston, Texas 77553-1229

Dear Colonel Waterworth:

I am inquiring about the status of the Corpus Christi Ship Channel Improvement Project. I have learned that the Army Corps of Engineers has been working with the Port of Corpus Christi since 1990 to investigate the possibility of deepening the Corpus Christi Ship Channel. The channel improvements will undoubtedly improve the marine safety and efficiency of the area by enabling the Port of Corpus Christi to accommodate larger vessels, increase shipping efficiency, and reduce waiting time. Along with these benefits, this project will prove instrumental in generating jobs and revenue for the region and help ensure that the area is a major participant in commercial and international trade.

I thank you in advance for your attention to this request. If you should have questions regarding the nature of my inquiry, please do not hesitate to contact me or my McAllen District Office for clarification at (956) 682-5545. Thank you in advance for your immediate attention to this request.

Sincerely,

Rubén Hinojosa Member of Congress

Culin Hingisa

RH:ms



UNITED STATES DEPARTMENT OF COMMERCE National Oceanic and Atmospheric Administration

NATIONAL MARINE FISHERIES SERVICE Southeast Regional Office 9721 Executive Center Drive North St. Petersburg, FL 33702 (727) 570-5312; FAX (727) 570-5517

F/SER3:EGH

JUL -5 2002

Lloyd H. Saunders, Ph.D. Chief, Planning, Environmental and Regulatory Division Galveston District Corps of Engineers P.O. Box 1229 Galveston, TX 77553-1229

Dear Dr. Saunders:

This responds to your June 28, 2002, letter; Draft Feasibility Report and Draft Environmental Impact Statement for the Corpus Christi Ship Channel, Channel Improvement Project, June 2002 ("Draft EIS"); and Biological Assessment for Impacts to Endangered and Threatened Species Relative to the Corpus Christi Ship Chanel Improvements Project in Nueces and San Patricio Counties, Texas (BA). Your letter requested concurrence with the Corps of Engineers' (COE) BA determination of "not likely to adversely effect," or alternatively, preparation of a National Marine Fisheries Service (NOAA Fisheries) biological opinion on any potential adverse effects of Galveston District's proposed Channel Improvement Project, Corpus Christi Ship Channel (CCSC), Texas, to federally listed species under NOAA Fisheries purview. This letter continues formal coordination between our agencies pursuant to section 7 of the Endangered Species Act (ESA), first initiated on May 18, 2001, for this project. We have assigned consultation number F/SER/2002/00731 to this proposed action; please refer to it in future correspondence on this project.

NOAA Fisheries has evaluated the Draft EIS and May 2002 BA prepared by PBS&J submitted as Appendix C of the document. The selected plan includes deepening of the CCSC from Viola Basin in the Inner Harbor to the end of the jetties in the Gulf of Mexico to -52 ft from -45 ft mean low tide (MLT) plus advanced maintenance and allowable overdepth; deepening of the remainder of the channel into the Gulf of Mexico to 54 ft (depths will be increased roughly 10,000 ft into the Gulf of Mexico to the -56 ft isobath); widening of the Upper Bay and Lower Bay reaches (from Port Aransas to the Harbor Bridge) to 530 ft (existing widths are 500 ft between Port Aransas and La Quinta Junction and 400 ft between La Quinta Junction and the Harbor Bridge); construction of 200-ft wide barge shelves (-12 ft MLT) on both sides of the ship channel from La Quinta Junction to the Harbor Bridge, across the Upper Bay portion of the CCSC; and extending the La Quinta Channel 7,200 ft to a depth of -40 ft MLT and a width of 400 ft and include a turning basin. It is estimated that approximately 40 million cubic yards of new work material would require seven separate dredging contracts to complete. Dredged material management incorporates the use of existing placement areas, as well as newly designated placement areas including several beneficial use (BU) sites. BU sites will be constructed to create several hundred acres of shallow water habitat throughout the bay system. The environmental restoration portion of the selected plan consists of the construction of two breakwaters to protect and enhance existing habitat. The work is estimated to begin in April 2003 and be completed by January 2008.

