

## REGULATED'S PERSPECTIVE — PORT OF HOUSTON AUTHORITY

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Thank you for permitting us to focus attention on a national crisis—the dredging of U.S. navigable waters. I am the Executive Director of the Port of Houston Authority and I welcome the opportunity to discuss the particular problems of dredging the Houston Ship Channel (HSC) and on a broader scale, the problems involved in the lengthy approval process for such projects.

It is no exaggeration to say that the Houston Ship Channel is one of the most important economic lifelines between our nation and the world. Houston's favorable geographic location provides easy access to the entire world business community through key ocean, land and air routes. Nearly 100 shipping lines connect Houston with more than 250 world ports. Four major railroads provide cargo distribution throughout the United States and more than 160 trucking lines service the rest of the nation via the Texas and Interstate Highway System.

These factors have made the Port of Houston a preferred gathering and distribution point for shippers transporting goods to and from the Midwestern and Western United States.

We are proud to report that last year a total of 5,280 ships flying the flags of 77 different nations called on the Port of Houston. In addition, approximately 40,000 barges navigated the waterway. The combined cargo of these vessels exceeded 125 million tons.

All of this has made the Port of Houston the number one U.S. port in foreign tonnage and the third busiest port in total tonnage. It is the eighth busiest port in the world and generates nearly \$3 billion a year in revenues. An estimated 29,000 people work in jobs that are directly related to Port of Houston activity and another 110,000 jobs are indirectly related to the port's activity. There is no doubt that the port has become a vital force in the commerce of the United States and the world.

I want to focus on two particular cases in our channel. One has been a long term battle that is still not resolved. The other, though now has reached a satisfactory conclusion, took much too long to accomplish at great costs to those involved.

### **Background - HSC Project**

1994 marks the 26th year since we began efforts to improve the Houston Ship Channel. While Houston is

one of our nation's busiest ports, we are also one of the narrowest deep draft channels. The channel was last improved in 1966 when it was deepened to 40 feet and widened to 400 feet.

As you can imagine, ships and shipping patterns have dramatically changed to meet the demands of world trade over the last 30 years. Likewise, for reasons of safety, environment, and economics, we believe that the Houston Ship Channel is long overdue to be improved.

As the local sponsor of the Houston Ship Channel, the Port of Houston Authority requested in 1967 that Congress authorize improvements to the ship channel. At that time the House Public Works Committee requested a review of previous reports on Galveston Bay navigation projects to determine if such improvements were advisable. On February 17, 1969, at a Corps of Engineers public hearing, the Port Authority requested modifications to the Houston Ship Channel and presented appropriate data to supplement the request. In 1970, the Corps began engineering and economic feasibility studies of the requested improvements. From 1970 to 1974 different stretches of the channel were added to the Corps report. On October 8, 1974, the Port Authority submitted a Houston Ship Channel Traffic Survey to the Corps which included data from the industry on the economic benefits of the Houston Ship Channel. In July 1976, the Port Authority presented to the Corps a study entitled "A Fifty-Year Program for the Disposal of Dredged Materials from Certain Inland Reaches of the Houston Ship Channel". In October of the same year, the Port Authority and members of private industry met with the Corps to further discuss the needs and justification for the channel improvements. In March of the following year, the Port Authority delivered additional information concerning the proposed 50-year dredged material disposal program. Two years later, Gulf South Research Institute, a consultant for the Corps, completed a comprehensive environmental inventory of Galveston Bay and the Houston Ship Channel. In July 1984, as a consultant to the Corps, Espey, Houston and Associates, Inc. completed a draft of the first stage of a two year study entitled "Galveston Bay Area Navigation Study, Texas" covering an economic analysis of several

alternative modifications of the Houston Ship Channel and its tributaries.

Two years later, in March 1986, PHA representatives met with Corps representatives to discuss Corps staff's evaluation of the Espey, Houston study. In May of the same year, a public meeting was held to obtain information from the public on the upcoming draft report. In August 1986, the Draft Feasibility Report and Environmental Impact Statement were circulated for public review and comment. In November 1987, the Southwestern Division Engineer submitted the final report and Environmental Impact Statement (EIS) for Washington level review and public release, recommending a 50' x 600' project. This EIS was what the Port Authority hoped would be preparation for 1990 authorization. However, the issue of dredged material disposal prompted objections from state and federal resource agencies and environmental groups. An agreement was reached between the Corps, the Port and state and federal resource agencies to orchestrate a two-phase project. The first phase would construct a 45' x 530' channel, the second phase a 50' x 600' channel. Additionally, an Interagency Coordination Team (ICT) was established to oversee additional studies to address a wide range of environmental issues with particular focus on the problem of dredged material disposal. These studies would be the basis for a supplemental EIS with the intended completion of the studies in time for 1994 submission to Congress for authorization. The Port's role would include active participation and direct financial support of this environmental initiative.

The Interagency Coordination Team represents a board and diverse range of environmental interests including: Environmental Protection Agency (EPA); U.S. Fish and Wildlife Service (USFWS); National Marine and Fisheries Service (NMFS); Texas Parks and Wildlife Department (TPWD); Texas Water Commission (TWC); Texas General Land Office (GLO); Galveston Bay National Estuary Program; Texas Water Development Board; U.S. Corps of Engineers (USACE); U.S. Coast Guard; Soil Conservation Service; PHA; and Port of Galveston.

One of the prime concerns of the Interagency Coordination Team focused on the proposed dredged material disposal plan, which essentially called for confined upland disposal in the inland reaches of the channel and continuation of open bay unconfined disposal for the Galveston Bay reach. The willingness of the Port Authority to bear up to \$37 million in additional cost for development of beneficial uses of dredged material further reinforced the Interagency Coordination Team's ability to consider reducing adverse environmental impacts.

### **The Beneficial Uses Group (BUG)**

The Beneficial Uses Group was created as a subcommittee of the Interagency Coordination Team. Included as part of the Beneficial Uses Group are: U.S. Army Corps of Engineers; U.S. Fish and Wildlife Service; Environmental Protection Agency; National Marine and Fisheries Service; U.S. Soil Conservation Service (SCS); Texas Parks and Wildlife Department; Texas General Land Office; and Port of Houston Authority (Chair of the Beneficial Uses Group).

The formally adopted purpose of the Beneficial Uses Group was "to develop a disposal plan that utilizes dredged material in an environmentally sound and economically acceptable manner that incorporates, to the extent possible, other public benefits into its design." Most important was the committed objective that the final plan would have a net positive environmental effect over the life of the project.

### **Approach**

The approach utilized by the Beneficial Uses Group for Galveston Bay makes this effort unique and precedent setting. What was being attempted had never been done before.

The Beneficial Uses Group's efforts are unique in that:

1. The Beneficial Uses Group is an interagency group developing a preferred disposal plan—rather than reviewing a proposal in a regulatory setting.
2. The Beneficial Uses Group addressed one of the largest navigation projects in recent years (approximately 120 Million Cubic Yards (MCY) of new work material and an estimated 190 MCY of maintenance material over the next 50 years.
3. The Beneficial Uses Group committed to the objective that the final plan would have a net positive environmental effect over the 50 year life of the project.
4. The Beneficial Uses Group actively solicited beneficial use suggestions from environmental interests and user groups such as boating clubs, fishing associations, chambers of commerce, city council and others whose collective ideas were given full consideration during the development of the recommended plan.

### **Results**

In October 1992, the Interagency Coordination Team overwhelmingly approved the beneficial use plan for disposal of dredged material from the Houston Ship Channel project. The approval of the plan represents a

significant step forward for this important project and a commendation of the diligent work performed by the Beneficial Uses Group that developed the plan. Ultimately, the beneficial use plan approved by the Interagency Coordination Team will provide for the creation of almost 6,000 acres of marsh, together with bird islands, boater destination islands and shoreline erosion protection.

The efforts of the BUG have been guided from the outset by three basic principles:

1. Dredged material is a potentially valuable resource and should be considered and treated as such;
2. Development of an environmentally acceptable plan is intrinsic to the eventual approval of this project; and,
3. Any disposal plan adopted must have long-term environmental benefits for the Galveston Bay system.

These principles are reflected in the disposal plan adopted by the Interagency Coordination Team. In addition, the approach utilized by the BUG in developing the plan is particularly noteworthy on four accounts:

1. Public involvement in the identification of uses of dredged material: in point of fact, the community identified more beneficial uses than the material expected over the 50 year life of the project.
2. Utilization of sound scientific methods were used to examine alternative beneficial use plans, including:
  - a. hydrodynamic and salinity models;
  - b. analysis of physical data;
  - c. sediment containment studies; and
  - d. National Marine and Fisheries Service productivity studies to determine the most environmentally appropriate locations for marshes.
3. Additionally, the Port Authority itself has funded several studies, including:
  - a. Probes of the bay bottom to assess the best bottom conditions for citing beneficial uses (relative to other environmental constraints);
  - b. Construction of a 250 acre demonstration marsh (in process) to determine how to achieve the desired result out of the typical new work and maintenance material using typical dredge equipment;
  - c. Funding of National Marine and Fisheries Service to assist the Beneficial Uses Group in the development of design criteria and parameters for constructing ecological functioning marshes; and

- d. Construction of a five acre oyster reef with Houston Lighting and Power under an Environmental Protection Agency grant in order to determine large-scale feasibility using non-native material for clutch.

4. The plan addresses on the priority concerns identified by the Galveston Bay National Estuary Program—loss of wetland habitat.

It is most noteworthy that the Interagency Coordination Team has determined that its disposal plan, if properly implemented and managed, can actually achieve a net positive environmental effect for Galveston Bay.

The Beneficial Uses Group plan will have to undergo formal public and agency scrutiny through the NEPA process. In its current form, however, the Beneficial Uses Group's recommended plan has taken into consideration all of the public's ideas for beneficial uses in a unique and unprecedented approach. Though the ICT has completed this important two year task, not all the needed studies were completed in time to submit the required supplemental EIS to Congress for 1994 authorization. The Port was notified mid year 1993 of this additional delay. The project for widening and deepening of the Houston Ship Channel is now set to meet the 1996 window for authorization by Congress. While all parties agree that no further delays are evident, the Port Authority has been holding its breath on this project for 25 years. To say that this process is lengthy is a vast understatement. The Houston Ship Channel is a vital resource for commerce and must be improved for safety and to facilitate its continued success in augmenting the economy of this nation. To examine the numerous delays in accomplishing this improvement can only lead one to the conclusion that something must be done to streamline the process.

#### **Maintenance Dredging: Background on Bayport**

The problems with dredging issues are not confined to improvement projects such as the widening and deepening of the Houston Ship Channel. We have experienced lengthy delays in maintenance dredging that have been extremely costly to our customers. In the 1986 Water Resources Development Act Congress mandated that the Corps assume maintenance responsibility for dredging three stretches of the Houston Ship Channel—Barbours Cut, Greens Bayou and Bayport. The Fentress Bracewell Barbours Cut Container Terminal is the site of the containerized cargo load center in the Gulf of Mexico. The Barbours Cut

Channel was an authorized federal project that PHA modified to accommodate container ships. The PHA has spent over \$6 million to modify the channel and has invested over \$200 million in the most modern container terminal in the Gulf at this site.

The Greens Bayou Ship Channel is the site of the Port of Houston Authority's Bulk Materials Handling Plant. When the Houston Ship Channel was dredged to a depth of 40 feet, the Port Authority, at its expense, deepened the Greens Bayou Channel from 36' to 40' correspondingly and maintained that depth while seeking Congressional Authority for the Corps of Engineers to assume this maintenance responsibility. The Port Authority has invested over \$17 million in this terminal to provide a facility that accommodates dry bulk cargo for our regional market.

The Bayport Ship Channel was also constructed with local funds of over \$22.3 million in the early 1970s. It serves a major industrial complex comprised of over fifty companies who have invested more than \$2.2 billion in their facilities. As a major bulk-liquids terminal, Bayport has been a primary gateway for the increasing exports of petro-chemicals produced in the Houston area.

These three connecting channels are significant parts of the Houston Ship Channel navigation system. Congress recognized their importance by authorizing the Corps to assume responsibility for maintenance in PL99-662. These three channels were constructed or modified with non-federal funds to meet the needs of commerce. When Congress mandated in 1986 that the Corps assume maintenance responsibility, the problem of dredged material disposal once again reared its head and caused undue delay. Before the Corps can assume responsibility, a local cooperative agreement (LCA) must be executed between the local sponsor and the Corps. By 1990, this LCA had not been executed and we faced an emergency situation at Bayport with considerable shoaling creating severe draft restrictions. The Port Authority and the users of Bayport shared the cost to dredge the channel. Numerous meetings, drafts and redrafts of an LCA were non-conclusive and by 1992 we faced another dredging crisis at Bayport. Once again, the users of Bayport suffered from shortly curtailed channel depth and in some cases had to turn away business because of the lack of proper depth. Two of these companies reported losses of over \$500,000 each and one company a loss of over one and one-half million dollars in loss of revenues from transfer fees due to low draft.

The LCA for Bayport was executed in 1993, seven years after Congress mandated federal assumption of maintenance responsibility. To this date, the LCA's for Barbours Cut and Greens Bayou are still in progress.

## Conclusion

These case studies would rapidly age any Port Director. As a matter of fact, the Houston Ship Channel Improvement project has spanned the leadership of 5 port directors at Houston. The Port of Houston Authority recognizes and funds its environmental responsibilities. However, the public port industry is in a crisis situation when critical dredging projects experience such tedious delays. As Transportation Secretary Federico Peña has said, this is a national "dredging crisis." According to Secretary Peña: "Dredging is submerged in conflicting missions and mandates and among a number of federal agencies and a pyramid of federal rules and regulations, plus state and government laws, which make it a miracle every time a port dredging project is brought to fruition." We cannot continue to depend on miracles. The deep draft ports of our country handle over 95 percent of the nation's international trade, employ over 1.5 million Americans, and contribute over \$70 billion to the gross domestic product from cargo alone. In addition, our ports are vital to the national security. During the Gulf war, the Port of Houston's Barbours Cut Container Terminal was identified as a strategic site for national defense considerations. It was a primary port of embarkation for equipment and supplies for the United States war effort in the Persian Gulf.

Economic and national security benefits are curtailed when port access is limited by inadequate channel depths or projects are delayed because of regulatory gridlock. We believe that our experience with each of these projects provides valuable lessons for us locally and can offer some guidance to the larger issue of a National Dredge Policy.

The existing approach for permitting dredge projects involves working through the jungle of laws, rules, regulations, and agencies. The experience is one of redundant review and delay. All of this costs precious time and resources -- in our cases more than 25 years of effort and millions of dollars.

There is hope. In Houston we are meeting this challenge through the coordinated efforts of the ICT and the BUG. We believe that the inter-agency approach can work, but it requires the involvement of all affected entities and mutual acceptance of each other's stake and equity in addressing the issues and finding solutions to the problem. In addition, we recognize that the local sponsor must assert leadership and be prepared to commit the staff and economic resources necessary to get the job done.

We further believe that the Houston experience has implications for the broader national policy issue. If

dredging and port access issues are viewed and treated as a national priority, the Houston experience can be duplicated all over the country. Even as a national priority, effective implementation will require a "top-down" commitment to addressing the issues. Conversely, a "bottom-up" approach (at the local or regional level) is necessary to resolve concrete problems.

Dredged material disposal is a serious concern for public ports whose task it is to create jobs and facilitate international trade and thus augment the economy, while remaining environmentally sensitive. In fact, dredging and dredge material disposal has gained the attention of the American Association of Port Authorities who is actively seeking a National Dredging Policy. In short, the proposed policy urges the Administration to streamline permitting procedures by amending the Clean Water Act to expedite consideration of dredge disposal permits consistent with provisions of the Ocean Dumping Act; and, by amending the Water Resources Development Act to require a lead federal responsibility to pay for the beneficial use of dredged material, to pay for and assure availability of dredged material disposal, to provide additional funding for the beneficial use of dredged material that will facilitate the implementation of port dredging projects, and to increase the role of the local port sponsor at every stage of a dredging project.

The public port industry needs the help and understanding of Congress and entities such as the Transportation Research Board to establish a National Dredging Policy, which would aid U.S. public ports in keeping our federal waters open to navigation and competing in the world market.