
APPENDIX H

**TEXAS COASTAL MANAGEMENT PROGRAM
CONSISTENCY DETERMINATION
COMPLIANCE WITH GOALS AND POLICIES – DREDGING AND
DREDGED MATERIAL DISPOSAL AND PLACEMENT
BRAZOS ISLAND HARBOR
CHANNEL IMPROVEMENT PROJECT
CAMERON COUNTY, TEXAS**

U.S. Army Corps of Engineers, Galveston District
2000 Fort Point Road
Galveston, Texas 77550

July 2014

Appendix H

**Compliance with Goals and Policies – Section 501.25 (a)–(i)
Dredging and Dredged Material Disposal and Placement
Brazos Island Harbor Channel Improvement Project
Environmental Assessment
Cameron County, Texas
Texas Coastal Management Program**

INTRODUCTION

To achieve navigation efficiency and safety objectives, the U.S. Army Corps of Engineers (USACE) plans to extend the Brazos Island Harbor (BIH) Entrance Channel to a depth of -54 feet mean lower low water (MLLW) and width of 300 feet, deepen the existing BIH Entrance Channel to -54 feet MLLW at an existing width of 300 feet, deepen the existing BIH Jetty Channel to -54 feet MLLW at an existing width of 300 feet, deepen the Brownsville Main Channel to a depth of -52 feet MLLW at existing widths ranging from 250 to 400 feet, and maintain the existing depth of -42 feet MLLW and width of 325 feet from station 84+200 to 86+000, and maintain the existing depth of -36 feet MLLW and widths ranging from 325 to 1200 feet from station 86+000 through the end of the channel and turning basin at station 89+500. No channel widening is proposed and channel side slopes would remain the same as the existing project – one foot vertical over six feet horizontal in the Entrance and Jetty Channels; one foot vertical over three feet horizontal from station 0+000 to 35+000 and one foot vertical over two and one-half feet horizontal from station 35+000 through 89+500 in the Main Channel. The actual dredging depth would be up to 4 feet deeper in the Entrance and Jetty Channels due to 2 feet of advance maintenance (AM) and 2 feet of allowable overdepth (AO), and up to 3 feet deeper in the Main Channel due to 2 feet of AM and 1 foot of AO. No improvements are proposed for the existing jetties. If the project is authorized, the three-year construction period could begin in fiscal year 2018.

Construction of the proposed project would generate approximately 14.1 million cubic yards (mcy) of dredged material. Maintenance of the deepened and widened channel would generate a total of 61.7 mcy of maintenance-dredged material over the 50-year evaluation period. Material dredged from the Entrance and Jetty channels during construction would be placed in the new work Ocean Dredged Material Disposal Site (ODMDS), and the remainder of the new work material would be placed in dredged material placement areas (PAs) 2, 4B, 5A, 5B, 7, and 8. Several alternatives were analyzed including a No Action Alternative and the USACE Tentatively Selected Plan (TSP).

The existing Brownsville Ship Channel 42-Foot Project was authorized by the Water Resources Development Act of 1986, providing for an Entrance Channel of 44-foot depth and 300-foot

width from the Gulf to offshore end of the jetties, for the Jetty channel of 44-foot depth and 300 to 400-foot width to the Laguna Madre, and the main channel of 42-foot depth and 250 to 400-foot width from the Laguna Madre to the Turning Basin Extension. The Turning Basin Extension was authorized to a depth of 42 feet transitioning to 36-foot depth with widths transitioning from 400 feet to 325 feet into the Turning Basin at the 36-foot depth and widths ranging from 325 to 1,200 feet. The waterway traverses 19.4 miles with no bridges or obstructions and is operated for one-way traffic only.

The Port of Brownsville is the only deep-draft port available to industry along the U.S. – Mexico border. Brownsville is primarily a bulk commodity port covering both liquid and dry cargo handling. The increased traffic is a direct result of NAFTA (North American Free Trade Agreement) in that a majority of the increased commodity traffic is to meet industrial needs in Mexico. The current dimensions of the ship channel limit the efficient movement of commodities by vessels travelling the waterway. As vessels increase in draft, the restrictive depth of the waterway would prevent vessels from entering with full loads or prevent larger vessels from utilizing the waterway. One-way traffic limitations do not appear to be an issue with the existing channel and are not expected to become a concern in the future. Additionally, the current channel dimensions limit the ability for oil drilling rig fabrication, maintenance, and repair at the Port of Brownsville.

The USACE and the Brownsville Navigation District (referred to as Port of Brownsville), as the non-Federal sponsor, propose to improve the navigation channels of Brazos Island Harbor as a Federal action by deepening the current channel alignment, starting at the 54-foot depth contour, and terminating at the Brownsville Turning Basin. This project is referred to as the Brazos Island Harbor Channel Improvement Project (BIHCIP).

COMPLIANCE WITH GOALS AND POLICIES

The following goals and policies of the Texas Coastal Management Program (TCMP) were reviewed for compliance:

§501.25 – Dredging and Dredged Material Disposal and Placement

- (a) *Dredging and the disposal and placement of dredged material shall avoid and otherwise minimize adverse effects to coastal waters, submerged lands, critical areas, coastal shore areas, and Gulf beaches to the greatest extent practicable. The policies of this section are supplemental to any further restrictions or requirements relating to the beach access and use rights of the public. In implementing this section, cumulative and secondary adverse effects of dredging and the disposal and placement of dredged material and the unique characteristics of affected sites shall be considered.*

Compliance: Deepening of the Entrance Channel to an authorized depth of -54 feet would extend the existing navigation channel an additional 4,000 feet (0.75 mile) and impact 27.5 acres of submerged lands. Dredged material will be placed in seven existing, upland, confined PAs, one nearshore Feeder Berm and two Ocean Dredged Material Disposal Sites (New Work and Maintenance ODMDSs). Placement within the ODMDSs would result in placement of dredged material within submerged lands, but the ODMDSs are dispersive by nature, have been previously used, and will likely revert to the in situ topography within a few months of their use. Maintenance material would also be placed by hopper dredge in the nearshore Feeder Berm Site 1A, located between 1.5 and 2.5 miles from the north jetty and from 0.4 to 0.9 miles from shore. Sediment removed by maintenance dredging would therefore be regularly placed back into the littoral system, available for cross shore and longshore sediment transport to the beaches of South Padre Island.

Dredging operations would alter benthic habitats through evacuation of bay bottom and dredged material placement; evacuation buries and removes benthic organisms and placement smothers or buries benthic communities. The impact to benthic organisms is likely to be confined to the immediate vicinity of the area dredged (Newell et al., 1998) and recovery of benthic macroinvertebrates following burial in the ODMDS and Feeder Berm is typically rapid (recovering within months rather than years) (VanDerWal et al., 2011; Wilber et al. 2006; Wilber and Clarke, 2001). No long-term impacts are expected in the area dredged or disposal areas.

Monitoring of material placed at the Feeder Berm has demonstrated that it moves toward the beach and disperses with the major movement being in the alongshore direction (McLellan et al. 1997; USACE 1989). No construction activities would occur on the adjacent Gulf shoreline; sediment would be moved by natural processes on the shoreline. With the exception of submerged lands, which would be temporarily impacted, all critical areas, shore areas, and Gulf beaches are avoided.

(1) Dredging and dredged material disposal and placement shall not cause or contribute, after consideration of dilution and dispersion, to violation of any applicable surface water quality standards established under §501.21 of this title.

Compliance: Samples have been taken from both maintenance and new work sediments in the project area and subjected to elutriate preparation and suspended particulate bioassays. No Texas Water Quality Standards or U.S. Environmental Protection Agency Water Quality Criteria were exceeded, and nothing in the results of the bioassays indicates any cause for concern. For all PAs, adequate dilution and dispersion occurs so that applicable surface water standards are not violated.

(2) *Except as otherwise provided in paragraph (4) of this subsection, adverse effects on critical areas from dredging and dredged material disposal or placement shall be avoided and otherwise minimized, and appropriate and practicable compensatory mitigation shall be required, in accordance with §501.23 of this title.*

Compliance: The TSP Alternative PAs, ODMDSs and Feeder Berm avoid adverse effects on critical areas.

(3) *Except as provided in paragraph (4) of this subsection, dredging and the disposal and placement of dredged material shall not be authorized if:*

(A) *there is a practicable alternative that would have fewer adverse effects on coastal waters, submerged lands, critical areas, coastal shore areas, and Gulf beaches, so long as that alternative does not have other significant adverse effects;*

Compliance: Several alternatives were analyzed including a No Action Alternative and a TSP Alternative; dredged material placement activities were confined to existing PA footprints, avoiding of detrimental impacts to coastal natural resources such as estuarine wetlands, oyster reefs, etc., to reduce impacts.

(B) *all appropriate and practicable steps have not been taken to minimize adverse effects on coastal waters, submerged lands, critical areas, coastal shore areas, and Gulf beaches; or*

Compliance: All practicable steps, including upland placement to the extent practicable, utilization of existing PAs, and minimum channel size to meet the project needs have been taken to minimize adverse affects on these resources.

(C) *Significant degradation of critical areas under §501.23(a)(7)(E) of this title would result.*

Compliance: Critical areas are avoided and degradation of such areas is not anticipated as a result of the TSP Alternative.

(4) *A dredging or dredged material disposal or placement project that would be prohibited solely by application of paragraph (3) of this subsection may be allowed if it is determined to be of overriding importance to the public and national interest in light of economic impacts on navigation and maintenance of commercially navigable waterways.*

Compliance: Dredging and placement is not precluded by paragraph (3).

(b) *Adverse effects from dredging and dredged material disposal and placement shall be minimized as required in subsection (a) of this section. Adverse effects can be minimized by employing the techniques in this subsection where appropriate and practicable.*

Compliance: There will be no adverse effects of dredging and disposal, as described in this DIFR-EA.

(1) *Adverse effects from dredging and dredged material disposal and placement can be minimized by controlling the location and dimensions of the activity. Some of the ways to accomplish this include:*

(A) *locating and confining discharges to minimize smothering of organisms;*

(B) *locating and designing projects to avoid adverse disruption of water inundation patterns, water circulation, erosion and accretion processes, and other hydrodynamic processes;*

(C) *using existing or natural channels and basins instead of dredging new channels or basins, and discharging materials in areas that have been previously disturbed or used for disposal or placement of dredged material;*

(D) *limiting the dimensions of channels, basins, and disposal and placement sites to the minimum reasonably required to serve the project purpose, including allowing for reasonable overdredging of channels and basins, and taking into account the need for capacity to accommodate future expansion without causing additional adverse effects;*

(E) *discharging materials at sites where the substrate is composed of material similar to that being discharged;*

(F) *locating and designing discharges to minimize the extent of any plume and otherwise control dispersion of material; and*

(G) *avoiding the impoundment or drainage of critical areas.*

Compliance: PAs have been selected to minimize impacts by using existing upland confined PAs or existing and previously authorized ODMDS. Dimensions of the proposed channel have been minimized to the greatest extent possible. Only negligible impacts to water circulation and salinity from channel improvements have been identified. Discharges will be confined with reinforced levees, where applicable. Only proper material will be used for certain substrates and uses. No impoundment or draining of critical areas will occur. No new channels are required to access existing or proposed PAs (upland and ODMDS).

(2) *Dredging and disposal and placement of material to be dredged shall comply with applicable standards for sediment toxicity. Adverse effects from constituents contained in materials discharged can be minimized by treatment of or limitations on the material itself. Some ways to accomplish this include:*

- (A) *disposal or placement of dredged material in a manner that maintains physiochemical conditions at discharge sites and limits or reduces the potency and availability of pollutants;*
- (B) *limiting the solid, liquid, and gaseous components of material discharged;*
- (C) *adding treatment substances to the discharged material; and*
- (D) *adding chemical flocculants to enhance the deposition of suspended particulates in confined disposal areas.*

Compliance: Sediments to be dredged from the TSP Alternative have been tested for a variety of chemical parameters, and there appears to be no cause for concern relative to placing these sediments in the ODMDSs, Feeder Berm or upland confined PAs.

(3) *Adverse effects from dredging and dredged material disposal or placement can be minimized through control of the materials discharged. Some ways of accomplishing this include:*

- (A) *use of containment levees and sediment basins designed, constructed, and maintained to resist breaches, erosion, slumping, or leaching;*
- (B) *use of lined containment areas to reduce leaching where leaching of chemical constituents from the material is expected to be a problem;*
- (C) *capping in-place contaminated material or, selectively discharging the most contaminated material first and then capping it with the remaining material;*
- (D) *properly containing discharged material and maintaining discharge sites to prevent point and nonpoint pollution; and*
- (E) *timing the discharge to minimize adverse effects from unusually high water flows, wind, wave, and tidal actions.*

Compliance: Discharges will be confined with reinforced levees where applicable. Analyses of water, sediment, and elutriate samples, combined with toxicity and bioaccumulation tests on sediments and suspended sediments, indicate no unacceptable negative impacts can

be expected to water quality or sensitive marine organisms during dredging or dredged material placement (SOL and Atkins, 2013).

(4) Adverse effects from dredging and dredged material disposal or placement can be minimized by controlling the manner in which material is dispersed. Some ways of accomplishing this include:

- (A) where environmentally desirable, distributing the material in a thin layer;*
- (B) orienting material to minimize undesirable obstruction of the water current or circulation patterns;*
- (C) using silt screens or other appropriate methods to confine suspended particulates or turbidity to a small area where settling or removal can occur;*
- (D) using currents and circulation patterns to mix, disperse, dilute, or otherwise control the discharge;*
- (E) minimizing turbidity by using a diffuser system or releasing material near the bottom;*
- (F) selecting sites or managing discharges to confine and minimize the release of suspended particulates and turbidity and maintain light penetration for organisms; and*
- (G) setting limits on the amount of material to be discharged per unit of time or volume of receiving waters.*

Compliance: All of the sites minimize or avoid adverse dispersal effects to the greatest extent practicable. At the ODMDS, studies indicate adequate dispersion and dilution would occur during discharge. Sequenced discharge points will be used to disperse material across the ODMDS. There are no sediments of concern.

(5) Adverse effects from dredging and dredged material disposal or placement operations can be minimized by adapting technology to the needs of each site. Some ways of accomplishing this include:

- (A) using appropriate equipment, machinery, and operating techniques for access to sites and transport of material, including those designed to reduce damage to critical areas;*
- (B) having personnel on site adequately trained in avoidance and minimization techniques and requirements; and*

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- (C) *designing temporary and permanent access roads and channel spanning structures using culverts, open channels, and diversions that will pass both low and high water flows, accommodate fluctuating water levels, and maintain circulation and faunal movement.*

Compliance: Where applicable, all sites in this project meet this requirement. Contracts will be written to ensure compliance with all standards. The ODMDS is accessed by offshore hopper dredging vessels and all upland PAs can be accessed by land-based equipment without damaging critical areas.

- (6) *Adverse effects on plant and animal populations from dredging and dredged material disposal or placement can be minimized by:*
- (A) *avoiding changes in water current and circulation patterns that would interfere with the movement of animals;*
 - (B) *selecting sites or managing discharges to prevent or avoid creating habitat conducive to the development of undesirable predators or species that have a competitive edge ecologically over indigenous plants or animals;*
 - (C) *avoiding sites having unique habitat or other value, including habitat of endangered species;*
 - (D) *using planning and construction practices to institute habitat development and restoration to produce a new or modified environmental state of higher ecological value by displacement of some or all of the existing environmental characteristics;*
 - (E) *using techniques that have been demonstrated to be effective in circumstances similar to those under consideration whenever possible and, when proposed development and restoration techniques have not yet advanced to the pilot demonstration stage, initiating their use on a small scale to allow corrective action if unanticipated adverse effects occur;*
 - (F) *timing dredging and dredged material disposal or placement activities to avoid spawning or migration seasons and other biologically critical time periods; and*
 - (G) *avoiding the destruction of remnant natural sites within areas already affected by development.*

Compliance: Proper coordination with the U.S. Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS), under the requirements of the Endangered Species Act, was implemented, and no impacts to endangered species or their habitats are

anticipated, except for potential impacts to sea turtles during hopper dredging. Impacts to sea turtles, a primary wildlife concern, will be avoided or minimized via: (1) hopper dredging will be limited to the cooler months, when possible, when sea turtle activity and abundance is lowest; (2) dredges will employ trawls to safely remove sea turtles before being adversely affected by dredge equipment; and (3) qualified turtle observers will be used to document any turtles that become entrained by the hopper dredge dragheads, and all information will be submitted accordingly to USFWS and NMFS. Additional conservation recommendations from USFWS have been adopted to minimize the potential, though low probability, of impacts to the piping plover, Aplomado falcon, jaguarundi, ocelot, and manatee.

(7) Adverse effects on human use potential from dredging and dredged material disposal or placement can be minimized by:

- (A) selecting sites and following procedures to prevent or minimize any potential damage to the aesthetically pleasing features of the site, particularly with respect to water quality;*
- (B) selecting sites which are not valuable as natural aquatic areas;*
- (C) timing dredging and dredged material disposal or placement activities to avoid the seasons or periods when human recreational activity associated with the site is most important; and*
- (D) selecting sites that will not increase incompatible human activity or require frequent dredge or fill maintenance activity in remote fish and wildlife areas.*

Compliance: Only existing PAs are proposed for use to avoid additional impacts to resources. Temporary and minor adverse effects to fisheries may result from altering or removing productive fishing grounds and interfering with fishing activity near or in the ODMDS and within the project area during construction and maintenance.

(8) Adverse effects from new channels and basins can be minimized by locating them at sites:

- (A) that ensure adequate flushing and avoid stagnant pockets; or*
- (B) that will create the fewest practicable adverse effects on CNRAs from additional infrastructure such as roads, bridges, causeways, piers, docks, wharves, transmission line crossings, and ancillary channels reasonably likely to be constructed as a result of the project; or*

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- (C) *with the least practicable risk that increased vessel traffic could result in navigation hazards, spills, or other forms of contamination that could adversely affect CNRAs;*
- (D) *provided that, for any dredging of new channels or basins subject to the requirements of §501.15 of this title (relating to Policy for Major Actions), data and information on minimization of secondary adverse effects need not be produced or evaluated to comply with this paragraph if such data and information is produced and evaluated in compliance with §501.15(b)(1) of this title.*

Compliance: The TSP Alternative will not impact any CNRAs (except submerged lands at the ODMDSs and Feeder Berm, which are expected to return to ambient bathymetry since they are dispersive sites).

- (c) *Disposal or placement of dredged material in existing contained dredge disposal sites identified and actively used as described in an environmental assessment or environmental impact statement issued prior to the effective date of this chapter shall be presumed to comply with the requirements of subsection (a) of this section unless modified in design, size, use, or function.*

Compliance: All dredged material will be placed within existing contained upland PAs, the ODMDSs and the nearshore Feeder Berm. A new levee will be constructed along a portion of the southern boundary of PA 4B to provide protection between a loma to the south and the east and west cells of PA 4B. This new levee construction will occur within the boundaries of the existing, active PA.

- (d) *Dredged material from dredging projects in commercially navigable waterways is a potentially reusable resource and must be used beneficially in accordance with this policy.*

Compliance: Material from construction is expected to be primarily stiff clay, which can be used to reestablish appropriate intertidal elevations in existing open water areas prior to wetland restoration. However, areas suitable for this type of restoration are extremely limited near the BIH channel, and the potential for ancillary impacts to significant resources such as SAV and black mangroves is high. This material type is not conducive for the BU that is most important for this area (i.e., beach nourishment, which requires high sand content). However, material from maintenance dredging is expected to be comprised primarily of sand and silt. Sandy material from the Entrance and Jetty Channels and the first 11,000 feet of the Main Channel would be used beneficially. This material would generally be placed in the nearshore Feeder Berm Site 1A (USACE, 1988). Sediment removed by maintenance dredging

would therefore be regularly placed back into the littoral system, available for cross-shore and longshore sediment transport to the beaches of South Padre Island.

- (1) *If the costs of the BU of dredged material are reasonably comparable to the costs of disposal in a non-beneficial manner, the material shall be used beneficially.*
- (2) *If the costs of the BU of dredged material are significantly greater than the costs of disposal in a non-beneficial manner, the material shall be used beneficially unless it is demonstrated that the costs of using the material beneficially are not reasonably proportionate to the costs of the project and benefits that will result. Factors that shall be considered in determining whether the costs of the BU are not reasonably proportionate to the benefits include, but are not limited to:*
 - (A) *environmental benefits, recreational benefits, flood or storm protection benefits, erosion prevention benefits, and economic development benefits;*
 - (B) *the proximity of the BU site to the dredge site; and*
 - (C) *the quantity and quality of the dredged material and its suitability for BU.*
- (3) *Examples of the BU of dredged material include, but are not limited to:*
 - (A) *projects designed to reduce or minimize erosion or provide shoreline protection;*
 - (B) *projects designed to create or enhance public beaches or recreational areas;*
 - (C) *projects designed to benefit the sediment budget or littoral system;*
 - (D) *projects designed to improve or maintain terrestrial or aquatic wildlife habitat;*
 - (E) *projects designed to create new terrestrial or aquatic wildlife habitat, including the construction of marshlands, coastal wetlands, or other critical areas;*
 - (F) *projects designed and demonstrated to benefit benthic communities or aquatic vegetation;*
 - (G) *projects designed to create wildlife management areas, parks, airports, or other public facilities;*
 - (H) *projects designed to cap landfills or other waste disposal areas;*
 - (I) *projects designed to fill private property or upgrade agricultural land, if cost-effective public BUs are not available; and*

(J) *projects designed to remediate past adverse impacts on the coastal zone.*

Compliance: New work material will be comprised primarily of stiff clays which are not suitable for beneficial use. Material from maintenance dredging is expected to be comprised primarily of sand and silt. Sandy material from the Entrance and Jetty Channels and the first 11,000 feet of the Main Channel would be used beneficially. This material would generally be placed in the nearshore Feeder Berm Site 1A (USACE, 1988). Sediment removed by maintenance dredging would therefore be regularly placed back into the littoral system, available for cross-shore and longshore sediment transport to the beaches of South Padre Island.

(e) *If dredged material cannot be used beneficially as provided in subsection (d)(2) of this section, to avoid and otherwise minimize adverse effects as required in subsection (a) of this section, preference will be given to the greatest extent practicable to disposal in:*

(1) *contained upland sites;*

(2) *other contained sites; and*

(3) *open water areas of relatively low productivity or low biological value.*

Compliance: New work and future maintenance dredged material whose sediment characteristics preclude being used beneficially will be placed in either the ODMDS or the existing upland confined PAs.

(f) *For new sites, dredged materials shall not be disposed of or placed directly on the boundaries of submerged lands or at such location so as to slump or migrate across the boundaries of submerged lands in the absence of an agreement between the affected public owner and the adjoining private owner or owners that defines the location of the boundary or boundaries affected by the deposition of the dredged material.*

Compliance: All dredged material will be placed within the existing ODMDS, Feeder Berm and upland PAs. No new PAs will be constructed.

(g) *Emergency dredging shall be allowed without a prior consistency determination as required in the applicable consistency rule when:*

(1) *there is an unacceptable hazard to life or navigation;*

(2) *there is an immediate threat of significant loss of property; or*

(3) *an immediate and unforeseen significant economic hardship is likely if corrective action is not taken within a time period less than the normal time needed under*

standard procedures. The council secretary shall be notified at least 24 hours prior to commencement of any emergency dredging operation by the agency or entity responding to the emergency. The notice shall include a statement demonstrating the need for emergency action. Prior to initiation of the dredging operations the project sponsor or permit-issuing agency shall, if possible, make all reasonable efforts to meet with council's designated representatives to ensure consideration of and consistency with applicable policies in this subchapter. Compliance with all applicable policies in this subchapter shall be required at the earliest possible date. The permit-issuing agency and the applicant shall submit a consistency determination within 60 days after the emergency operation is complete.

Compliance: The project would comply with section (g) in the event that emergency dredging is necessary.

- (h) *There will be no mining of sand, shell, marl, gravel, or mudshell for project purposes. Dredged new work and maintenance material will be placed within ODMDSSs, which are located within submerged lands, and shall be prohibited unless there is an affirmative showing of no significant impact on erosion within the coastal zone and no significant adverse effect on coastal water quality or terrestrial and aquatic wildlife habitat within any CNRA.*

Compliance: Use of the ODMDSSs would have no significant impact on erosion, water quality or aquatic wildlife habitat within any CNRA. The effects of the ODMDSSs have been evaluated and are discussed in the DIFR-EA. With the exception of submerged lands, which would be temporarily impacted, all CNRAs are avoided.

- (i) *The GLO and the SLB shall comply with the policies in this section when approving oil, gas, and other mineral lease plans of operation and granting surface leases, easements, and permits and adopting rules under the Texas Natural Resources Code, Chapters 32, 33, and 51 - 53, and Texas Water Code, Chapter 61, for dredging and dredged material disposal and placement. TxDOT shall comply with the policies in this subchapter when adopting rules and taking actions as local sponsor of the Gulf Intracoastal Waterway under Texas Transportation Code, Chapter 51. The TCEQ and the RRC shall comply with the policies in this section when issuing certifications and adopting rules under Texas Water Code, Chapter 26, and the Texas Natural Resources Code, Chapter 91, governing certification of compliance with surface water quality standards for Federal actions and permits authorizing dredging or the discharge or placement of dredged material. The TPWD shall comply with the policies in this section when adopting rules at Chapter 57 of this title (relating to Fisheries) governing dredging and dredged material disposal and placement. The TPWD shall comply with the policies in subsection (h) of*

this section when adopting rules and issuing permits under Texas Parks and Wildlife Code, Chapter 86, governing the mining of sand, shell, marl, gravel, and mudshell.

Compliance: This project does not pertain to oil, gas, and other mineral lease plans of operation and granting surface leases, easements, and permits; *section (i)* is not applicable.

References

- McLellan, T.N. et al. 1997. A Decade of Beneficial Use, Brazos Island Harbor, Dredging. Paper presented at the 21st Western Dredging Association Conference and 33rd Texas A&M dredging seminar Special Permanent International Association of Navigational Congress Session. Available on the internet at http://coastal.tamug.edu/am/a_decade_of_beneficial_use_brazos_island_harbor_dredging/
- Newell, R.C., L.J. Seiderer, and D.R. Hitchcock. 1998. The impact of dredging works in coastal waters: a review of the sensitivity to disturbance and subsequent recovery of biological resources on the sea bed. *Oceanography and Marine Biology: An Annual Review* Vol. 36. 127-78.
- SOL Engineering Services, LLC, and Atkins. 2013. Draft Brazos Island Harbor-Entrance Channel Contaminant Assessment. Contract W912HY-11-D-0003. Delivery Order 0011. 56 pp not including appendices.
- U.S. Army Corps of Engineers (USACE). 1975. Final Environmental Impact Statement – Maintenance Dredging, Brazos Island Harbor. U.S. Army Engineer District, Galveston.
- _____. 1988. Environmental Assessment, Brazos Island Harbor Underwater Feeder Berm Construction. U.S. Army Engineer District, Galveston, Texas.
- _____. 1989. Coastal Engineering Technical Note – Physical Monitoring of Nearshore Sand Berms. CETN-II-20, U.S. Army Engineer Waterways Experiment Station, Vicksburg.
- VanDerWal, D., R.M. Forster, F. Rossi, H. Hummel, T. Ysebaert, Fr. Roose, and P. Herman. 2011. Ecological evaluation of an experimental beneficial use scheme for dredged sediment disposal in shallow tidal waters. *Marine Pollution Bulletin* 62(1): 99–108.
- Wilber, D.H., and D.G. Clarke. 2001. Biological effects of suspended sediments: a review of suspended sediment impacts on fish and shellfish with relation to dredging activities in estuaries. *North American Journal of Fisheries Management* 21:855–875.
- Wilber, D.H., D.G. Clarke, and S.I. Rees. 2006. Responses of benthic macroinvertebrates to thin-layer disposal of dredged material in Mississippi Sound, USA. *Marine Pollution Bulletin*. doi:10.1016/j.marpolbul.2006.08.042.



March 10, 2014

Colonel Richard P. Pannell
District Commander
U.S. Army Corps of Engineers, Galveston District
P.O. Box 1229
Galveston, TX 77553-1229

**Re: Consistency Determination for the Brazos Island Harbor Channel Improvement Project,
Cameron County, Texas
CMP#: 14-1310-F2**

Dear Colonel Pannell:

Pursuant to Title 31 Natural Resources and Conservation, Part 16 Coastal Coordination Council rules, the project referenced above has been reviewed for consistency with the Texas Coastal Management Program (CMP).

It has been determined that there are no significant unresolved consistency issues with respect to the project. Therefore, this project is consistent with the CMP goals and policies.

Please note that this letter does not authorize the use of Coastal Public Land. No work may be conducted or structures placed on State-owned land until you have obtained all necessary authorizations, including any required by the General Land Office and the U.S. Army Corps of Engineers.

If you have any questions or concerns, please contact me at (512) 475-3624 or at ray.newby@glo.texas.gov

Sincerely,

Ray Newby, P.G.
Coastal Geologist
Coastal Resources
Texas General Land Office

email cc: Janelle Stokes, USACE