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August 27, 2019

By U.S. Mail and

By Email: SWG201900067@usace.army.mil

District Engineer- Galveston District
U. S. Army Corps of Engineers - Regulatory Division, CESWG-RDP
2000 Fort Point Road Galveston, Texas 77550

Re: SWG-2019-00067

Dear Sir or Madam:

The Texas Chapter of the Coastal Conservation Association (CCA Texas) submits the following comments regarding permit application SWG-2019-00067, Channel Deepening Project ("CDP") within the Corpus Christi Ship Channel ("CCSC").

CCA Texas is a non-profit organization of 72,000 recreational anglers and outdoor enthusiasts. The mission of CCA Texas is to advise and educate the public on conservation of marine resources. The objective of CCA Texas is to conserve, promote and enhance the present and future availability of those coastal resources for the benefit and enjoyment of the general public.

The location of the CDP is within the CCSC, also known as the Aransas Pass tidal inlet. This pass is a vital connection between the Corpus Christi and Aransas Bay systems and the Gulf of Mexico. These major bay systems support the Nueces and Mission-Aransas Estuaries, home to numerous species of marine shrimp, crabs, finfish that utilize the varied habitat types offered including oyster reefs, seagrass beds, mud flats, hard structures, shoreline vegetation and unique intertidal mosaics of the aforementioned habitats.

The intent of the following comments is to highlight our concerns that the CDP may have on the fisheries and habitat of the coastal ecosystems within and adjacent to the proposed project.

As mentioned on page 11 of the permit application, the proposed dredging activities will have substantial adverse impacts on Essential Fish Habitat or federally managed fisheries in the Gulf of Mexico. The location of the CDP is immediately adjacent to key geographic resources including San Jose Island and the Redfish Bay State Scientific Area (RBSSA). Per Texas Parks and Wildlife, the RBSSA contains the northernmost extensive

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stands of seagrass on the Texas coast. This includes 14,000 acres of submerged seagrass beds with all five species of seagrass found in Texas. Seagrasses play essential roles in the estuary, providing nursery habitat for fishes, organic biomass for food webs, and processing agents for nutrient cycling. The RBSSA is a component of both the Aransas and Corpus Christi ecosystems and has about 50 square miles of prime fishing habitat. It contains a unique and fragile environment of not only seagrass beds but also oyster reefs, marshes, and mangroves while providing a feeding habitat for shrimp, crabs, gamefish, waterfowl, shorebirds and turtles. CCA Texas is highly concerned that dredging operations required for this project will increase water turbidity and reduce light penetration, negatively affecting seagrasses within RBSSA.

Corpus Christi Bay is a fringe bay system for oyster reefs. Of all the abiotic factors that can affect the biology on an estuarine organism such as *Crassostrea virginica*, the synergistic effects of temperature and salinity have the most profound effects, and long-term exposure to high salinities can be detrimental.¹ The projected increase in Corpus Christi Bay salinities in model runs, selected by the applicant, are as high as 0.53 parts per thousand (ppt) at various monitoring stations in the bay system. Additional increases in salinity have the potential to further hinder the production of oyster reefs by providing a favorable environment for predators (oyster drills), putting the oysters in an environment beyond their optimal salinity range (10-30ppt)², or both.

Over time, the CCSC has been artificially deepened to allow for ship traffic, increasing water flow through the inlet. The deepening of CCSC has resulted in decreased flow through nearby inlets, causing them to close due to sedimentation resulting in loss of access to nursery habitats for marine animals. As a result, the Aransas Pass Channel is now the primary conduit for larvae and early juvenile access from the Gulf of Mexico to their nursery areas in Texas' Coastal Bend region.

The location of the proposed project is the only major tidal inlet in the region; the narrowest point of the Bay-Gulf connection. An abundance of economically and ecologically important species depend upon the inlet for migration, recruitment, spawning, and other vital life processes. Flatfish, penaeid shrimp, red drum, blue crabs, Atlantic tarpon, and numerous other aquatic species utilize this pass on a seasonal basis to fulfill biological requirements within their life history. For example, swimming near the ocean floor, southern flounder utilize the pass annually during their fall migration to

¹ Kennedy, V.S., R.E Newell, and A. Eble. The Eastern Oyster, Crassostrea Virginica. Maryland Sea Grant College. Publication UM-SG-TS-96-01.

² Butler, P.A. 1954. Summary of our knowledge of the oyster in the Gulf of Mexico. Fish. Bull. 54:479-489.

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spawn in offshore waters, returning to the bays in late winter through early spring. Their offspring, also benthic-oriented, recruit into the bay systems through this pass in the spring as juveniles. Dredging operations and increased deep-draft ship traffic can have detrimental effects on southern flounder stocks during these seasonal migrations.

Additionally, the project location is also important to the local economy from revenues generated from recreational fishing trips. In 2016, Texas A&M Agrilife Extension and Sea Grant Texas published reports detailing the economic impacts of marine recreational fishing in the Corpus Christi and Aransas Bay systems.^{3,4} Marine recreational fishing in these bay systems supports a combined 1,249 jobs, and generates \$44.9 million in labor income, \$69.5 million in GDP contribution and \$122.7 million in total economic impact. Without healthy fisheries, the local economy supported by recreational fishing, birding, and tourism will suffer greatly.

Citing the reasons mentioned above, CCA Texas is opposed to the proposed project and respectively requests that the applicant reconsider their analysis of alternatives C and D in their Purpose and Need Document. These alternatives would allow for the Very Large Crude Carriers ("VLCCs") to be fully loaded offshore and eliminate the need to bring them into an ecologically sensitive region of the Gulf Coast.

CCA Texas understands that the U.S. Army Corps of Engineers will require the applicant conduct an Environmental Impact Statement ("EIS") prior to any further consideration of the project. In addition to the EIS, CCA Texas requests public hearings prior to and upon completion of the EIS to obtain information regarding potential fishery and habitat impacts.

Through the process of conducting public hearings and the EIS, CCA Texas expects that the following impacts would be analyzed before further consideration:

- Impacts of increased salinities in Corpus Christi Bay on sustainability of oyster reefs.
- Impacts of dredging on southern flounder during annual migration and seasonal larval recruitment.

³ Ropicki, A., D. Hanselka, and R. Dudensing, The Economic Impacts of Recreational Fishing in the Aransas Bay System, Texas A&M Agrilife Extension and Sea Grant Texas at Texas A&M University (Nov. 16, 2016).

⁴ Ropicki, A., D. Hanselka, and R. Dudensing, The Economic Impacts of Recreational Fishing in the Corpus Christi Bay System, Texas A&M Agrilife Extension and Sea Grant Texas at Texas A&M University (Nov. 16, 2016).

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- Timing of dredging in relationship to resident spawning populations of spotted seatrout and sheepshead.
- Impacts of dredging activities and increased channel depth on larval recruitment from offshore spawning populations of southern flounder, penaeid shrimp species, blue crabs, and red drum.
- Impacts of increased turbidity (reduced light penetration) on seagrasses.
- Impacts of increased saltwater intrusion.
- Impacts of decreased flow through nearby inlets.

In conclusion, the proposed Channel Deepening Project is a major infrastructure in an environmentally sensitive region of the Gulf Coast. Any disturbances in this ecological bottleneck can have significant impacts on numerous flora and fauna, so it is paramount that all direct and indirect impacts are fully understood. Alternatives exist to allow for the loading of VLCCs offshore, entirely avoiding the direct and indirect impacts mentioned. In the best interest of the region's coastal resources, we urge the applicant to reconsider this project and plans for a deep-water port at Harbor Island.

Sincerely,

Robby Byers Executive Director

CCA Texas

cc: Gaylord Chase, Chairman of CCA Texas Governmental Relations Committee (gaylord.chase@sunbeltsecurities.com)