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JEFF R. BRANICK
County Judge

February 18, 2025

Texas Trustee Implementation Group
U.S. Fish and Wildlife Service
1875 Century Boulevard
Atlanta, GA 30345

Re: Jefferson County Public Comment on Draft Restoration Plan/Environmental Assessment #3

Dear Members of the Texas Trustee Implementation Group,

The public comment below must begin with a heartfelt thank you to the Texas Trustee Implementation Group (Texas TIG) on behalf of the Jefferson County Commissioners Court and our conservation partners for your prior 2017 contribution of $15 million to help restore the McFaddin National Wildlife Refuge beach and dune system.

The Texas TIG has already played a most significant leadership role in conserving and preserving the coastal marshes in the Texas Chenier Plain and Jefferson County.

Secondly, the Jefferson County Commissioners Court strongly supports the Texas TIG's **Draft Restoration Plan/Environmental Assessment #3** that guides a critically important next step in Texas coastal restoration by funding two beneficial use of dredge material projects at Willow Lake in the McFaddin National Wildlife Refuge and at Texas Point National Wildlife Refuge.

The impressive scope of the Texas TIG's over 300-page analysis focused on the Texas Dredged Material Planning for Wetland Restoration makes a compelling case for utilizing BP Deepwater Horizon Natural Damage Assessment funding for beneficial use of dredge material on two projects in Jefferson County and six other

preferred projects along the Texas coast including one each in adjacent Orange and Chambers counties within the Texas Chenier Plain.

All eight projects were selected after thorough review and scoring formulas described in the Draft Restoration Plan/Environmental Assessment #3.

In Jefferson County, the **Willow Lake Terraces** wetland restoration project and the **Texas Point** project are both within national wildlife refuges that are part of the Texas Chenier Plain National Wildlife Refuge Complex which is an internationally significant ecological area as acknowledged by all biological assessments.

The recently advanced U.S. Army Corps of Engineers' Jefferson County Ecosystem Restoration Project called our coast "the most important bird area in the world" in promoting beneficial use of dredge material to the U.S. Congress.

The Willow Lake Terraces project target area is within the McFaddin National Wildlife Refuge which at 58,861 acres contains 42% of the Salt Bayou Watershed, a rich but vulnerable wetland complex that comprises the largest contiguous coastal wetland in Texas.

Willow Lake's expansion because of marsh die-off on the lake edge that becomes open water threatens the ecological viability of the surrounding marshes and plant communities. Projects of the type that the Texas TIG proposes have been prioritized for extensive marsh restoration investments since the Salt Bayou Watershed Plan got underway 25 years ago in 2000.

The nearby Texas Point project is within the 8,972-acre Texas Point National Wildlife Refuge that is bordered on the east by the Sabine Neches Water Way, by the Gulf coast to the south, Sea Rim State Park to the west and the City of Sabine Pass to the north.

Similar to the Salt Bayou Watershed, this corner of marshland where Texas begins is both fragile and under rising threats from saltwater intrusion, wave action, hurricanes and tropical storms.

Again, the Jefferson County Commissioners Court strongly endorses the Texas TIG's Draft Restoration Plan/Environmental Assessment #3. The materials below my signature are part of this public comment and provided to underscore

some details of what is now a twenty-five year effort that we share with Texas TIG members.

Sincerely,

Jeff R Branick
County Judge
Jefferson County

ADDENDUM MATERIALS BELOW INCLUED IN THE JEFFERSON COUNTY DRAFT RESTORATION PLAN/ENVIRONMENTAL ASSSESSMENT #3

1. * Willow Lake Project Summary Draft Restoration Plan/Environmental Assessment#3 and Comparison with goals of the Salt Bayou Watershed Plan
   * Texas Point Project Summary Draft Restoration Plan/Environmental Assessment#3
   * Texas Chenier Plain Natural Resources and Human Benefits excerpts from Draft Restoration Plan/Environmental Assessment#3

2. Jefferson County Department of Defense Assets including Ready Reserve Fleet Homeport and Strategic Petroleum Reserve

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1. The Willow Lake Project Summary below is excerpted from the Texas TIG's Draft Restoration Environmental Assessment Plan #3

"The project site is located in the McFaddin NWR managed by the USFWS. The restoration site boundaries were based on a previous effort to regenerate marsh using terraces within subtidal open water areas surrounding Willow Lake.

"The addition of dredge material to the terraced area would restore up to **218 acres of intertidal marsh habitat.**

"The predominant wetland habitats near the McFaddin NWR are characterized as salt and brackish marsh and estuarine open water.

"The combination of rising sea levels, subsidence, and reduced sediment supplies have resulted in significant loss of wetlands by rapidly converting emergent marsh to open water. This project is consistent with regional efforts to combat land and habitat loss through dune restoration, hydrology enhancements, and estuarine marsh restoration.

"The overarching goal of the project is to restore and conserve wetlands and coastal habitats in Willow Lake by beneficially using dredged material to create a viable, vegetated, wetland habitat for fish and wildlife. In addition, rebuilding the wetlands contributes to coastal resiliency by creating buffers that protect adjacent natural areas from storm surge damage.

"The primary objective of this project is to restore shallow open water habitat in Willow Lake to reference marsh elevations to support habitat restoration and revegetation with native vegetation such as smooth cordgrass and saltmeadow cordgrass.

"This project would place up to **475,000 cy of suitable hydraulically dredged material** within levees constructed from on-site material. Sediment would be placed in the site to build elevations suitable for marsh growth as determined from adjacent healthy wetlands.

"The final target elevation will consider sediment compaction and expected sea level rise.

"Project actions would restore up to 218 acres of marsh habitat, including **the conversion of up to 140 acres of existing open water to low marsh.**

"The potential sources of dredged material for the project include material obtained through USACE maintenance dredging from the GIWW and SNWW, private dredging sources, and material mined from dredged material placement areas.

"The total amount of time to complete the project would depend on the timing of sediment availability and quantity of sediment available in each dredging cycle. Generally, the Trustees would coordinate with USACE or other project partners regarding dredging schedules and would complete engineering, design, and permitting in years 1 and 2.

"Sediment placement may require more than one dredge cycle to fill the restoration cells to target elevation. Once construction is complete, post-construction monitoring would be conducted to assess project outcomes and determine if any corrective actions or adaptive management are needed.

"The emergent wetlands promoted by the BUDM project should be self-sustaining and would not require maintenance unless conditions change. The project may need to be modified during construction or adaptively managed post-construction."

The above project goals expressed in the Texas TIG Draft Restoration Plan/Environmental Assessment #3 echoes the **Salt Bayou Watershed Plan** that was begun a quarter century ago in the year 2000 out of the recognition by natural resource agencies that urgent action was required to save the coastal marsh of the Texas Chenier Plain.

Jefferson County Engineering Department, Jefferson County Drainage District 6 and Ducks Unlimited formed the Salt Bayou Watershed Working Group to develop a Texas Chenier Plain survival strategy.

Below are excepts from the Salt Bayou Watershed Plan that demonstrate concurrence with the Texas TIG's Draft Restoration Plan/Damage Assessment #3:

"The Salt Bayou ecosystem contains the largest contiguous estuarine marsh complex in Texas. This ecosystem is approximately 139,000 acres in size within a Chenier Plain landscape that includes freshwater to estuarine marsh, coastal prairie grasslands, tidal flats, creeks and basins and associated aquatic vegetation.

"This diversity of communities creates an extremely productive complex for an array of fish and wildlife resources. This system provides a wide variety of benefits for people of the area including outdoor recreation and storm protection. The Salt Bayou system is widely recognized for its fishing, hunting, and wildlife viewing opportunities.

"The area is extremely important for commercial and recreational fisheries productivity and for wintering and migratory bird habitat. The area is one of the largest extant wetland areas in the entire state and sustains a very high level of productivity.

"Marshes provide essential functions that maintain the productivity of the system. They filter pollutants, provide essential nutrients and food, and provide refuge from predators. These marshes are also highly effective at decreasing impacts from storm surges.

"The Army Corps of Engineers estimates that for each 2.7 miles of emergent marsh present, one foot of storm surge can be reduced. The portion of the Salt Bayou system covered by this plan is up to 20 miles wide and is effective at protecting nearby municipalities from a high frequency of severe storms that occur in the area."

The Salt Bayou Watershed Plan excerpt below describes marsh degradation as a response to manmade and natural conditions which the Texas TIG's proposed project will combat:

"In response to the overall increase in salinity, increased frequency of high salinity events, and continued marsh loss, several changes have occurred in the system.

"Areas of open water are increasing at the expense of other nearby habitat types. Plant communities have shifted so that only the more salt tolerant species remain, and/or additional areas of open water were created in areas where plants died due to harsh environmental conditions.

"Additionally, many of the historic reptiles and amphibians that were present have decreased or disappeared. Muskrats, nutria, and river otters, once common, have declined dramatically (TPWD and USFWS 1990). Sightings of these

mammals within the Salt Bayou system are now rare. The number of waterfowl using the system is declining even though the numbers for the state have not changed significantly over the last 20 years or more.

"The change in numbers reflects a shift in where waterfowl are spending the winter months, with more of them spending increasingly more time further inland in more preferable freshwater habitats. Hunting opportunities remain plentiful today but the quality of opportunities is likely to decrease as the habitat continues to degrade."

"Increased salinities have accelerated wetland plant loss while enhancing access of some estuarine marine fisheries including gulf menhaden, blue crabs, brown shrimp, and spotted seatrout (*Cynoscion nebulosus*), all valuable fisheries species. This accelerated increase in fisheries production will reverse as marsh loss continues, undercutting the foundation of the food web and its associated nursery habitat function."

"Plant viability, longevity, and reproductive success will decrease because seawater in flooded wetland soils leads to the conversion of sulfate to hydrogen sulfide, a compound toxic to marsh plants. Some plant species may be replaced by more tolerant species. However, conversion of marsh to open water can also be an outcome of this process if surface soils are lost and the area is inundated to a depth incompatible with establishment and growth of plants. Substantial marsh loss has already occurred in this system. This process of increased salinity and increased frequency of salinity spikes will continue to lead to a degraded ecosystem with reduced fisheries productivity, reduced use by migratory birds and mammals, elimination of most reptile and amphibian species, and reduction in abundance of the macroinvertebrate community."

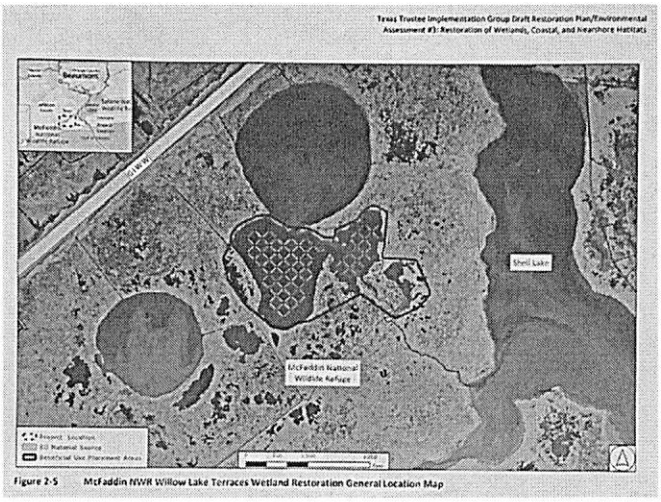


Figure 2-5 McFaddin NWR Willow Lake Terraces Wetland Restoration General Location Map

The Willow Lake Terrace project map above is from the Draft Restoration Plan/Environmental Assessment #3 by the Texas Trustee Implementation Group

Another Salt Bayou Watershed Plan except below describes the process of marsh degradation and death giving way to open water that is destined to occur throughout Jefferson County's coastal marsh without corrective action like that described in the Texas TIG's Draft Restoration Plan/Environmental Assessment #3

Loss of emergent marsh through loss of soils and elevation

"Within marshes of the Chenier plain, two typical patterns of marsh loss are commonly observed.

"In the first, loss of living root networks or erosion of organic soils below the root network cause the peat layer to collapse and form small patches of open water in a scattered pattern. This collapse then allows ponding within the affected area that precludes future plant growth ultimately leading to marsh loss.

Through time, as the peat layer is eroded further, these small ponds converge and create a large area of surface water in which emergent vegetation does not re-establish. The second pattern of marsh loss is described as "marsh loss hotspots." They are large areas of marsh experiencing rapid conversion to open water embedded within a larger area of marsh experiencing a much lower rate of marsh loss.

"Peat collapse appears to be the primary mechanism of hotspot formation. The inability of the marsh to accrete soils with components that are organic, mineral, or both leads to flooding stress and ponding within large areas of emergent vegetation. Within a marsh, loss may occur by both of these processes simultaneously.

"Within the Salt Bayou watershed, examples of both of these processes are found. The formation of hotspots is most prevalent within areas with active or abandoned oil and gas wells where the surface subsided as extraction occurred. After fluid removal operations ended, subsidence returned to background rates and is believed to continue at those rates.

"However, the elevation of the soil surface in these areas is below mean sea-level and these areas are nearly constantly inundated. The scattered ponding pattern is evident in areas of the marsh not associated with mineral extraction activities but that are under flooding stress with saltwater. These areas cannot

support an emergent plant community without additional inputs of sediments. Effective restoration of the soil accretion process within the watershed will require addressing waterlogging by saltwater as well as restoring the physical conditions (e.g. elevation, flow patterns, wet/dry cycles, etc.) that promote vigorous growth of vegetation and accumulation of organic material. Addressing the loss of emergent marsh will require consideration of the rates of surface subsidence in relation to marsh soil accretion such that proposed actions will promote accretion at a rate sufficient to keep up with subsidence and relative sea-level changes.

"In order to address the problems associated with surface subsidence, the following goals and objectives were developed:

"**Goal:** Slow or reverse the current trend of emergent vegetation converting to open water through loss of marsh soils and elevation.

"**Objective**: Promote the beneficial use of dredge material to stabilize degrading marsh and restore elevations sufficient to support emergent marsh vegetation.

"**Objective**: Stabilize seasonal salinity patterns to reduce or eliminate rapid changes within the system that lead to conversion of vegetated marsh to shallow open water.

"**Objective**: Reduce stress to emergent marsh plants from extended exposure to waterlogging, high salinity, or hydrogen sulfide that leads to plant death and conversion to open water.

"**Goal**: Create conditions that promote formation of marsh soils having both mineral and organic components at a rate capable of keeping pace with relative sea level rise.

"**Objective**: Develop ways to deliver beneficial use dredge material across the watershed to accrete marsh soils and supply nutrients to marsh vegetation.

"**Objective**: Re-establish hydrologic conditions that support primary productivity within the emergent marsh plant community sufficient to allow accretion of organic soil components at a rate to match or exceed relative sea level rise.

The **Texas Point Project Summary** excerpts below are from the Draft Restoration Plan/Environmental Assessment #3:

"This project would restore up to **623 acres of coastal intertidal wetlands** through the placement of BUDM, which is consistent with the Restore and Conserve Habitat and the Wetlands, Coastal, and Nearshore Habitats Restoration Type goals in the Final PDARP/PEIS (DWH NRDA Trustees 2016).

"To accomplish the Restoration Type goals, the project objectives are to"

"1) increase grade elevations to be suitable for estuarine marsh restoration as determined by adjacent reference wetlands; and

"2) establish estuarine marsh vegetation.

"The project site is within the Texas Point NWR managed by the USFWS. Dredged material would provide fill for three marsh restoration cells, using containment levees built from sediments collected on site to restore up to 623 acres of intertidal marsh. The predominant wetland habitats near the Texas Point NWR are characterized as salt and brackish marsh and estuarine open water. Over the past several decades, the vegetated marsh at the site has undergone physical deterioration resulting in the expansion of shallow open water.

"The combination of rising sea levels, erosion, and reduced sediment supplies have resulted in significant loss of wetlands and other coastal habitats in the region and project site. This project is consistent with regional efforts to combat land and habitat loss through dune restoration, hydrology enhancements, and estuarine marsh restoration.

"The overarching goal of the project is to restore and conserve wetlands and coastal habitats by beneficially using dredged material to create viable, vegetated, wetland habitat for a variety fish and wildlife. In addition, rebuilding the wetlands contributes to coastal resiliency by creating buffers that protect adjacent natural areas from storm surge damage.

"The primary objective of this project is to restore shallow submerged open water habitat in the Texas Point NWR to reference marsh elevations to support habitat restoration and revegetation with native vegetation such as smooth cordgrass and saltmeadow cordgrass. This project would place up to **1.6 million cy**

of suitable hydraulically dredged material within levees constructed from on-site sediment.

"Dredged material would be placed in the site to build elevations suitable for marsh growth as determined from adjacent healthy wetlands. The final target elevation will consider sediment compaction and expected sea level rise. Project actions would restore up to 623 acres of marsh habitat, including the **conversion of up to 239 acres of existing open water to intertidal marsh.**

"The potential sources of dredged material for the project include material obtained through USACE maintenance dredging from the SNWW, private dredging sources, or material mined from dredged material placement areas. The specific sources of dredged material would be determined during project implementation. Any dredged material used must pass all environmental compliance and permitting requirements to be suitable for the project, regardless of source.

"The emergent wetlands promoted by the BUDM project should be self-sustaining and would not require maintenance unless conditions change."

Jefferson County and its partners in Chenier Plain Restoration fully endorse the proposed Texas Point BUDM effort.

Figure 2-8 Texas Point NWR Wetland Restoration General Location Map

Texas Point BUDM plots shown on map.

Below are excerpts from the Draft Restoration Plan/Environmental Assessment #3 providing important natural resource and other information about the Texas Chenier Plain:

Marine and Estuarine Resources

"The tidal marshes and shallow open water are the primary habitats within the project area. The wetland edge is a particularly important habitat for white and brown shrimp. Other marsh-dwelling species include blue crab, red drum, spotted seatrout, Atlantic croaker, southern flounder, and Gulf menhaden. Wetlands act as nurseries to hundreds of noncommercial species that comprise a large part of the estuarine food web. Invertebrates such as blue crab and brown and white shrimp are common in the region.

"The loss of this marsh habitat has increased the risk of storm surge impacts to economically important industries and nationally significant ports along the Texas Coast. Restoration and protection of marshes in the region would ensure long-term ecological resiliency for the habitats, as well as reduce vulnerability of critical infrastructure to hurricanes and storm surges. The Project would be a continuation of similar marsh restoration efforts in the region that are beneficially using dredged material.

"Recreational fishing in the area focuses on spotted seatrout, red drum, southern flounder, and other species. Commercially valuable species include brown shrimp, white shrimp, blue crab, black drum, and Gulf menhaden.

"The affected environment consists of the construction footprint of the project. The landscape in the vicinity of the proposed wetland restoration is characterized by a mosaic of saline and brackish marsh, elevated cheniers, and open water. The site is adjacent to the GIWW, a busy waterbody.

"The MSA defines EFH as those waters and substrates necessary to fish for spawning, breeding, feeding, or growth to maturity. Specific habitats include all estuarine water and substrate (mud, sand, shell, and rock) and all associated biological communities, such as subtidal vegetation (seagrasses and algae) and the adjacent intertidal vegetation (marshes and mangroves). Of the fish species considered by NMFS to potentially occur within the project area, EFH for these species consists of tidally influenced waters and tidally influenced marsh.

"Bald and Golden Eagles Bald eagles potentially forage within the project location, and golden eagles may occasionally migrate through the project area. Many species of birds spend all or a portion of their life cycle along the Gulf of Mexico using a variety of habitats at different stages. Major groups of birds that inhabit the northern Gulf of Mexico include waterfowl and other water-dependent species, pelagic seabirds, raptors, colonial waterbirds, marsh dwelling birds, and passerines. It is possible that birds protected under the MBTA and Texas Parks and Wildlife Code may nest in the project area.

Biological Resources

"The wetland habitats on the upper Texas coast provide important wintering and migration stopover habitat for migratory birds, including Central Flyway waterfowl, shorebirds, wading birds, marsh and waterbirds. A complex of protected lands along the coast, including NWRs such as McFaddin and state managed Wildlife Management Areas, serve as critical staging areas for waterfowl migrating to and from Mexico.

"The coastal marshes of McFaddin NWR, including the project area, support many species of birds; fish; and other wildlife, such as the northern river otter, bobcat, gray fox, coyote, and American alligator.

"The refuge is a primary wintering area for Central Flyway ducks and geese and serves as a critical staging area for waterfowl migrating to and from Mexico and other locations. The McFaddin NWR is predominantly a saline-brackish marsh complex comprised of emergent marshes, shallow subtidal flats, and open water. These shallow flats support diverse benthic communities that provide food sources for migratory waterfowl, estuarine fish and invertebrate species, and other marsh fauna. The low saline marsh landward of the beach ridge is dominated by smooth cordgrass and black rush. Upland brackish marsh is vegetated with salt meadow cordgrass, saltgrass, and saltmarsh bulrush.

Wildlife Species

"Tidal brackish marshes and shallow open water are the primary habitats within the McFaddin NWR including the project area. These habitats are critical for many species of plants, fish, birds, and other wildlife. Bird species, such as snowy egrets, great egrets, roseate spoonbills, yellow-crowned night herons, black-crowned night herons, and great blue herons use marsh as feeding habitat.

"The area also supports a large waterfowl population in the winter and a variety of year-round bird species. Wading birds and shorebirds utilize the mudflats and shallow marsh ponds located throughout the area. Wintering waterfowl include gadwall, northern pintail, lesser scaup, American widgeon, and blue-winged teal. Other birds such as clapper rail, seaside sparrows and other secretive marsh species use the marsh as well.

"NRDA restoration under OPA is a process that includes evaluating injuries to natural resources and the services they provide to determine the types and extent of restoration needed to address the injuries. Restoration activities need to produce benefits that are related to or have a connection to natural resource injuries and service losses resulting from a spill

"Benefits to the biological, physical, human uses, and socioeconomics environment would result if the project was implemented.

"Restoration projects identified in this RP/EA #3 are designed to address injuries to resources resulting from the spill.

"McFaddin NWR project area is located in the Chenier Plain region of Texas. A distinguishing feature of the region is the cheniers, ridges representing ancient Gulf shorelines generally aligned parallel to the Gulf or as fan-shaped alluvial deposits at the mouths of rivers. It is comprised of a mainland beach fronting a chenier plain that formed from a Pleistocene promontory overlain by Holocene marginal-deltaic sediments (King 2007). The geologic substrate of the Chenier Plain region is primarily composed of sediments deposited during the late recent epoch with some subsurface Pleistocene outcropping. These deposits are overlain at the coast by a geologically recent series of inland ridges representing stranded beaches that align parallel to the coast. Accumulation of finegrained sediment deposited between these multiple beach ridges formed marshes and mudflats. Tidal channels lie between successive ridges.

"The BUDM restoration technique emulates riverine deltaic and other coastal sediment processes that have been interrupted by human alterations to the land and seascape. Emulating these natural accretion processes is a useful restoration tool to restore valuable coastal habitats where the rate of relative sea level rise exceeds accretion.

"Injury to the coastal wetlands was observed across wide swaths of the northern GOM. Injury occurred in all oiling exposure categories, with more severe

and varied injuries documented along more heavily oiled shorelines. Multiple model species were affected, including mainland salt marsh plants (reduced plant cover and aboveground biomass), periwinkles (reduced abundance), shrimp (reduced growth and biomass), amphipods (reduced survival and biomass), Fundulus spp. (reduced hatch success and biomass), juvenile southern flounder (Paralichthys lethostigma; reduced growth and biomass), red drum (Sciaenops ocellatus; reduced growth and biomass), fiddler crab (reduced burrow density), insects (reduced abundance), and nearshore oysters (reduced cover and biomass). Marsh edge habitat also suffered increased erosion.

"BUDM has become an increasingly important tool and a cost-effective approach in coastal restoration and resiliency. The impact of sea level rise, erosion, and subsidence is resulting in significant and unprecedented land loss, particularly in ecologically important habitats. The demand for sediment to mitigate this loss is high, as is the cost of transporting and placing fill material for habitat restoration.

"Navigational dredging on the Texas coast produces millions of cy of material annually. These dredged sediments are often placed in closed placement areas and inshore open waters or deposited offshore and removed from natural sediment budgets, rather than being beneficially used to restore coastal habitats.

"USACE has acknowledged the potential benefits to BUDM and, in a January 2023 Beneficial Use of Dredged Material Command Philosophy Notice (USACE 2023), outlined the USACE's goal to beneficially use at least 70% of dredged sediments by 2030, and identified the need for partnerships to meet this goal.

"For typical USACE dredging projects using BUDM, project partner expenses are limited to the incremental costs to beneficially use the sediments, while USACE incurs dredging and traditional, planned sediment placement costs. This partnership arrangement typically results in highly cost-efficient marsh restoration projects because project partners do not bear the full cost of sediment procurement, characterization, and equipment mobilization.

"The Texas TIG would also seek additional opportunities to leverage project costs, including other NRDA case funds and state and federal funding sources. Before entering into an agreement with USACE or other viable sources, the Texas TIG would evaluate each incremental cost analysis USACE or other viable sources provides to ensure restoration costs are reasonable. Due to the cost efficiency of BUDM as described above and past and ongoing leveraging efforts, the Texas TIG

concludes that for the eight evaluated alternatives, BUDM is a cost-effective approach for restoring injured resources through the Wetlands, Coastal and Nearshore Restoration Type funds.

"The Texas TIG anticipates this project would have a high likelihood of success because the Texas TIG agencies have successfully implemented similar marsh restoration projects in nearby locations.

"To accomplish the Restoration Type goals, the project objectives are to 1) increase grade elevations to be suitable for estuarine marsh restoration as determined by adjacent reference wetlands; and 2) establish estuarine marsh vegetation.

Texas Point

"A.3.8 Texas Point NWR Wetland Restoration The project site is within the Texas Point NWR managed by the USFWS. Dredged material would provide fill for three marsh restoration cells, using containment levees built from sediments collected on site to restore up to 623 acres of intertidal marsh. The predominant wetland habitats near the Texas Point NWR are characterized as salt and brackish marsh and estuarine open water. Over the past several decades, the vegetated marsh at the site has undergone physical deterioration resulting in the expansion of shallow open water. The combination of rising sea levels, erosion, and reduced sediment supplies have resulted in significant loss of wetlands and other coastal habitats in the region and project site. This project is consistent with regional efforts to combat land and habitat loss through dune restoration, hydrology enhancements, and estuarine marsh restoration.

"The overarching goal of the project is to restore and conserve wetlands and coastal habitats by beneficially using dredged material to create viable, vegetated, wetland habitat for a variety fish and wildlife. In addition, rebuilding the wetlands contributes to coastal resiliency by creating buffers that protect adjacent natural areas from storm surge damage.

"The primary objective of this project is to restore shallow submerged open water habitat in the Texas Point NWR to reference marsh elevations to support habitat restoration and revegetation with native vegetation such as smooth cordgrass and saltmeadow cordgrass. This project would place up to 1.6 million

cubic yards of suitable hydraulically dredged material within levees constructed from on-site sediment. Dredge material would be placed in the site to build elevations suitable for marsh growth as determined from adjacent healthy wetlands.

"The final target elevation will consider sediment compaction and expected sea level rise. Project actions would restore up to 623 acres of marsh habitat, including the conversion of up to 239 acres of existing open water to intertidal marsh (Figure A-9). The potential sources of dredged material for the project include material obtained through USACE maintenance dredging from the SNWW, private dredging sources, or material mined from dredged material placement areas. The specific sources of dredged material would be determined during project implementation.

"Any dredged material used must pass all environmental compliance and permitting requirements to be suitable for the project, regardless of source. Resources of the Affected Environment are described in Section A.3.8.1; project-level environmental consequences are summarized in Table A23 and described in Section A.3.8.2.

"This section presents the affected resources of the Texas Point NWR Wetland Restoration project and the environmental consequences of the proposed actions in context of the project-specific affected environment. Geology and Substrates The Texas Point NWR project area is located in the Chenier Plain region of Texas. A distinguishing feature of the region is the cheniers, ridges representing ancient Gulf shorelines generally aligned parallel to the Gulf or as fan-shaped alluvial deposits at the mouths of rivers. It is comprised of a mainland beach fronting a chenier plain that formed from a Pleistocene promontory overlain by Holocene marginal-deltaic sediments (King 2007).

"The geologic substrate of the Chenier Plain region is primarily composed of sediments deposited during the late recent epoch with some subsurface Pleistocene outcropping. These deposits are overlain at the coast by a geologically recent series of inland ridges representing stranded beaches that align parallel to the coast.

"Accumulation of finegrained sediment deposited between these multiple beach ridges formed marshes and mudflats. Tidal channels lie between successive ridges. The shore of the coast is formed by a narrow beach or washover terrace that developed through the deposition of sand and shell. The coastline is breached by inlets that connect estuaries extending inland up-river to valleys (USFWS 2008).

"The ground surface within the project area is mostly comprised of chenier plain and coastal plain sediments deposited by fluvial, tidal, littoral, and deltaic processes. The coastal plain is characterized as seaward-thickening sediment deposits to depths of thousands of feet below the present land surface. The terrain is relatively flat to gently sloping. Two types of landforms characterize the area: broad marshes containing organic clays and peat and long, narrow relict cheniers, which appear as ridges parallel to the coast.

"Chenier ridges form as a result of cyclic shoreline advance and retreat and are typically mixtures of silt, sand, and shell fragments. They are slightly elevated features and attain elevations of 5 to 10 feet above sea level (FERC 2011). The BUDM restoration technique emulates riverine deltaic and other coastal sediment processes that have been interrupted by human alterations to the land and seascape.

"Emulating these natural accretion processes is a useful restoration tool to restore valuable coastal habitats where the rate of relative sea level rise exceeds accretion. Hydrology and Water Quality

"The Texas Point NWR Wetland Restoration Project site is within the Gulf of Mexico watershed (Hydrologic Unit Code 120402020500), downstream of Sabine Lake, and within Reservoir Segment 2411 Sabine Pass. The Sabine and Neches rivers discharge into Sabine Lake from the north. The Sabine Pass Channel, which borders the Texas Point NWR, is at the southern end of the watershed. This narrow tidal inlet is the outlet for this system to the Gulf of Mexico. Wind-driven tides predominate the area and affect the estuary environment, producing wind-tidal flats and marshes (FERC 2011).

"The project site is within the Texas Point NWR managed by the USFWS. Dredged material would provide fill for three marsh restoration cells, using containment levees built from sediments collected on site to restore up to 623 acres of intertidal marsh. The predominant wetland habitats near the Texas Point NWR are characterized as salt and brackish marsh and estuarine open water. Over the past several decades, the vegetated marsh at the site has undergone physical deterioration resulting in the expansion of shallow open water. The combination of rising sea levels, erosion, and reduced sediment supplies have resulted in significant loss of wetlands and other coastal habitats in the region and project site.

"This project is consistent with regional efforts to combat land and habitat loss through dune restoration, hydrology enhancements, and estuarine marsh

restoration. The overarching goal of the project is to restore and conserve wetlands and coastal habitats by beneficially using dredged material to create viable, vegetated, wetland habitat for a variety fish and wildlife. In addition, rebuilding the wetlands contributes to coastal resiliency by creating buffers that protect adjacent natural areas from storm surge damage.

"The primary objective of this project is to restore shallow submerged open water habitat in the Texas Point NWR to reference marsh elevations to support habitat restoration and revegetation with native vegetation such as smooth cordgrass and saltmeadow cordgrass. This project would place up to 1.6 million cy of suitable hydraulically dredged material within levees constructed from on-site sediment.

"Dredged material would be placed in the site to build elevations suitable for marsh growth as determined from adjacent healthy wetlands. The final target elevation will consider sediment compaction and expected sea level rise. Project actions would restore up to 623 acres of marsh habitat including the conversion of up to 239 acres of existing open water to intertidal marsh.

"The potential sources of dredged material for the project include material obtained through USACE maintenance dredging from the SNWW, private dredging sources, or material mined from dredged material placement areas. The specific sources of dredged material would be determined during project implementation.

"The Texas Point NWR Wetland Restoration project (Project) would restore wetlands through the beneficial use of dredged material in the Texas Point NWR located in Jefferson County.

"The Project is one of the eight restoration sites identified for engineering and design under the Texas Dredged Material Planning for Wetland Restoration project by the Texas Trustee Implementation Group [Texas TIG].

1.3 Conceptual Setting

"The Project will restore priority areas in the Texas Point NWR, which manages approximately 8,972 acres and is located along the western bank of the Sabine Pass Channel and north of the Gulf of Mexico. (Figure 1). The area is within the Chenier Plain of southeast Texas and contains estuarine marshes interspersed with elevated fan-shaped salty prairie known as "cheniers." Sea level

rise, subsidence, insufficient sediment inflow due to anthropogenic alterations, and erosion have severely degraded marsh and wetland habitat in the region.

"This habitat degradation is exhibited by the increase in the areal extent of open water and the decrease in estuarine marsh area. The Project would be a continuation of similar marsh restoration efforts in the region that are beneficially using dredged material. The initial establishment of marsh vegetation is anticipated to occur within two years of the placement of dredged material within the restoration cells. This Project will rely on external partners, such as the U.S. Army Corps of Engineers (USACE), to provide sediment dredged from sites in close proximity to the restoration site. The quantity, quality, and timing of availability of dredged sediments will be a key driver in the final acreage of intertidal marsh habitat restored.

"Given that technically feasible restoration approaches are available to compensate for natural resource and service losses, the DWH Trustees rejected the Natural Recovery alternative under the OPA evaluation within the Final PDARP/PEIS.

"Extreme weather may result in damage to the Project prior to, during, or post construction. Extreme weather could also affect the growth/survival of transplanted vegetation and/or allow invasive species to be established and/or dominate the vegetation community. Recreational and commercial waterborne traffic are common around Texas Point NWR.

Biological Resources

"The wetland habitats on the upper Texas coast provide important wintering and migration stopover habitat for migratory birds, including Central Flyway waterfowl, shorebirds, wading birds, and marsh and waterbirds. A complex of protected lands along the coast—including NWRs such as Texas Point and state-managed WMAs—serve as critical staging areas for waterfowl migrating to and from Mexico.

"The Sabine Lake estuary is a vital habitat for fish and shellfish species found in the Gulf of Mexico. The biological resources discussion is divided into habitats, wildlife species, marine and estuarine resources, and protected species.

Habitats

"The Texas Point NWR is predominantly a saline-brackish marsh complex comprised of emergent marshes, shallow subtidal flats, and open water. These shallow flats support diverse benthic communities that provide food sources for migratory waterfowl, estuarine fish and invertebrate species, and other marsh fauna.

"The southeastern portion of the Texas Point NWR, where the project is located, is strongly influenced by daily tidal action. This low saline marsh is dominated by smooth cordgrass and black rush. Upland brackish marsh is vegetated with saltmeadow cordgrass, seashore saltgrass, and saltmarsh bulrush. Small areas of intermediate marsh are found in the western and northern portions of the NWR.

"Wintering waterfowl include gadwall, northern pintail, lesser scaup, American widgeon, and blue-winged teal. Other birds such as clapper rail, seaside sparrows and other secretive marsh species use the marsh as well. Marine and Estuarine Resources Tidal marshes and shallow open water are the primary habitats within the project area

"The wetland edge is a particularly important habitat for white and brown shrimp. Other marsh-dwelling species include blue crab, red drum, spotted seatrout, Atlantic croaker, southern flounder, and Gulf menhaden. Wetlands act as nurseries to hundreds of noncommercial species that comprise a large part of the estuarine food web. Invertebrates such as blue crab and brown and white shrimp are common in the region.

"Jefferson County has a total population of 251,496, a decrease of 2% since 2020, based on the 2023 U.S. Census population estimates. Approximately 37% of the county population identified as white (not Hispanic or Latino), 34% as Black or African American, 25% as Hispanic or Latino, 4% as Asian, with the remaining population including small percentages of American Indian and Alaska Native and Native Hawaiian or Other Pacific Islander. Median household income (2018 to 2022) in Jefferson County is $57,294, with 18.8% of the county living in poverty (USCB 2024e).

"The Texas Point NWR encompasses 8,972 acres located in Jefferson County, Texas, on the southeastern tip of the upper Texas coast. The Texas Point NWR is bounded on the south by the Gulf of Mexico with approximately 6 miles

of Gulf shoreline. It is bounded on the east by a narrow strip of private land adjacent to the SNWW, which connects the Sabine-Neches estuary with the Gulf and on the west and north by Sea Rim State Park. The project area contains no access roads.

"Management includes use of the marsh for recreational fishing and waterfowl hunting. Hunting, fishing, hiking, and wildlife viewing are regularly enjoyed by the public in the Texas Point NWR. This area is an important nursery for marine and estuarine fishery species, including several that are important to the local economy. Recreational fishing in the area focuses on spotted seatrout, red drum, southern flounder, and other species. Commercially valuable species include brown shrimp, white shrimp, blue crab, black drum, and Gulf menhaden.

"Texas Point NWR is relatively remote with no public roads within its boundaries and limited pedestrian and water access. The site is adjacent to the commercially important SNWW.

"The landscape in the vicinity of the proposed wetland restoration is characterized by a mosaic of saline and brackish marsh, elevated cheniers, and open water. The site is adjacent to the SNWW, a highly industrialized waterbody, and though the NWR is adjacent and undeveloped, the viewshed is dominated by the industrial nature of the area.

Public Health and Safety

"The recreational and industrial users of the Texas Point NWR are accustomed to navigating the marsh via the existing channels and avoiding shallow areas and areas that contain obstructions. The immediate vicinity of the project area was historically salt and brackish marsh, but it has since been inundated primarily due to erosion and relative sea level rise. This has had adverse impacts on coastal resiliency and deleterious effects on the area's functionality as a buffer for storm surges.

"It is anticipated that the project would provide long-term benefits by restoring the area to a suitable elevation to sustain historical marsh habitat. It is anticipated that the project would provide long-term benefits from the restoration and levee protection of the marsh. The project would maintain linkages within the broader coastal and nearshore ecosystem by facilitating the natural movement of water, sediments, energy, and nutrients among habitats.

"Long-term benefits to EFH will occur from the improvement of habitat for commercially important prey species. The creation of additional estuarine marsh generates additional EFH that is anticipated to benefit the local ecosystem by enhancing the food web and supporting many ecologically and economically important fish species. Many of the species that directly utilize coastal estuarine marshes as juveniles later migrate offshore, where they serve as prey for ecologically and economically important open-ocean species.

"Thus, these highly productive habitats support ecological connectivity both within the coastal ecosystem and between the coastal, nearshore, and open-ocean ecosystems through the movement of species that use wetlands during their life cycle to grow and reproduce.

"Placement of BUDM to create estuarine emergent marsh will have a long-term beneficial effect on the habitat's ability to support sea turtles, West Indian manatees, and eastern black rails. The proposed project aims to restore estuarine emergent marsh, which will protect and improve sensitive resources utilized by these species. In addition, the proposed project will improve water quality by reducing sedimentation from subsidence and coastal erosion into the GIWW and shallow bay systems utilized by sea turtles and West Indian manatees. Long-term effects of project construction activities are considered to be beneficial to the eastern black rail, as this is an estuarine marsh restoration project, which will ultimately protect and enhance thousands of acres of suitable eastern black rail foraging and nesting habitat.

"However, if construction activities occur during the nesting season, the area affected by project activities would be surveyed for the presence of nesting birds by a qualified biologist. If nesting birds are present or indications of pre-nesting behavior are observed, appropriate best practices would be employed to ensure that no incidental take of any individuals occurs. Best practices may include signage, exclusion zones for workers and equipment, hazing, and deterrents. Best practice activities would be coordinated with USFWS and TPWD biologists.

Fisheries and Aquaculture

"Short-term, minor, adverse impacts to fisheries could occur due to construction activities such as dredging, addition of sediments or borrow materials, and removal of sediments. It is anticipated that the project would provide long-term benefits to the public through increased fishing opportunities (both commercial and recreational) by restoring coastal habitats that benefit fish. Long-term benefits would arise from the improvement of habitat for commercially

important brown and white shrimp fisheries and the recreational red drum fishery. To the extent that these increased recreational opportunities result in increased visitation, local businesses may benefit from visitors' increased expenditures.

No Action Analysis

"If the No Action alternative is selected, implementation of projects included within the RP/EA #3 would not occur, and no action would be taken to restore or protect coastal wetlands within the project area. Marsh loss would continue to occur, resulting in a decline in fish, wildlife, and marine productivity. Under the No Action alternative, project areas would likely continue to be altered by ongoing processes of shoreline erosion, shoreline breaching, and marsh deterioration.

"This would result in continued loss of coastal wetland resources that are vital for fish, wildlife, and marine organisms that depend on these habitats. The No Action alternative does not provide the substantial environmental benefits to injured natural resources and services that would occur through active restoration and does not fulfill the Texas TIG goal to create, restore, and enhance coastal wetlands.

"The No Action Alternative is anticipated to result in long-term, moderate to major, adverse impacts to physical resources such as geology and substrates and hydrology and water quality from degraded hydrologic connectivity, continued wetland habitat degradation, and conversion of wetlands to open water.

"Continued wetland degradation would also result in long-term, moderate to major, adverse impacts to biological resources such as habitats, wildlife species, marine and estuarine resources, and protected species. Continued wetland degradation would also result in long-term, minor, adverse impacts to socioeconomic resources including infrastructure, land and marine management, tourism and recreational use, fisheries and aquaculture, aesthetics and visual resources, and public health and safety. Natural resources would not recover without restoration, and the public would not be compensated for losses to natural resources and their services during this recovery time period."

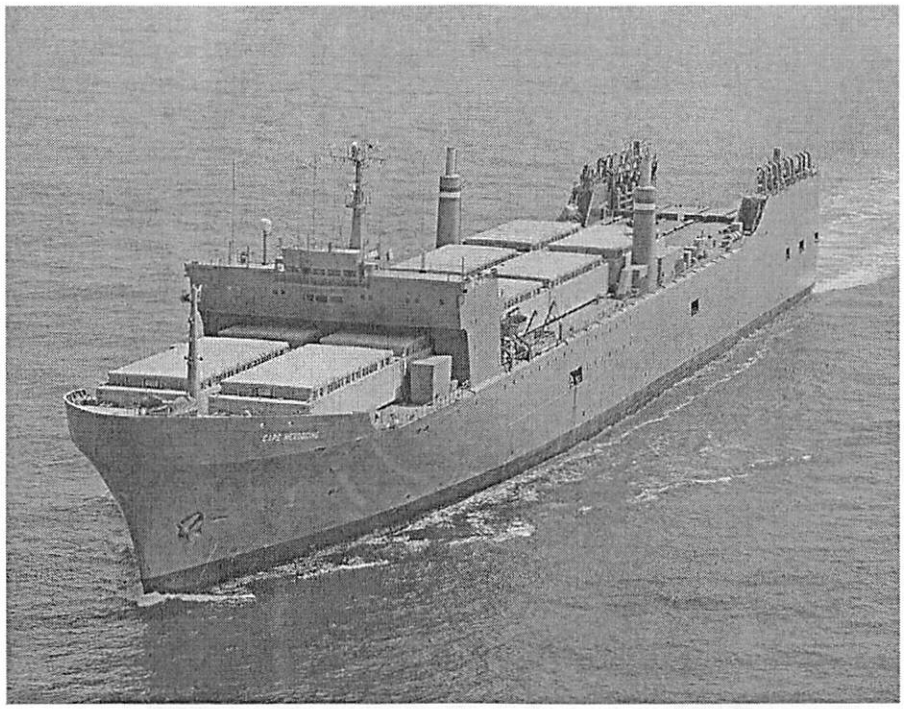
2. Jefferson County is Homeport of U.S. Army Ready Reserve Force and Strategic Petroleum Reserve

The Port of Beaumont is designated as the Homeport of the nation's Ready Reserve Fleet. Excerpts below are from the U.S. Maritime Administration:

American Ships. American Crews. American Jobs.

The Ready Reserve Force (RRF) is a subset of vessels within MARAD's National Defense Reserve Fleet (NDRF) ready to support the rapid worldwide deployment of U.S. military forces. As a key element of Department of Defense (DOD) strategic sealift, the RRF primarily supports transport of Army and Marine Corps unit equipment, combat support equipment, and initial resupply during critical surge periods -- the period of time before commercial ships can be secured for similar support. The RRF provides nearly 50% of government-owned surge sealift capability and has rightfully been called "America's Sea Power Reliant Partner."

The Ready Reserve Force (RRF)



Vessels

The program began with 6 vessels in 1977 and now consists of 48:

- 42 roll-on/roll off (RO/RO) vessels, including
  - 8 Fast Sealift Support (FSS) vessels,
  - 7 LMSR's (Large, Medium-Speed, Roll-on/Roll-off)
- 4 auxiliary craneships, and
- 2 aviation repair vessels

How does it work?

- **Strategically Positioned**. Some RRF ships are anchored with the NDRF homeport in Beaumont, Texas, but most are anchored at various U.S. "outports" around the country, a combination of government and commercial facilities selected by military planners to minimize sailing time to strategic locations. Outported RRF ships are also used by the Army and Navy for cargo-handling exercises, and by various law enforcement agencies for homeland security training.
- **At-the-Ready**. RRF ships are expected to be fully operational within their assigned 5 and 10-day readiness status and then sail to designated loading berths. Prior to being activated, commercial U.S. ship managers provide systems maintenance, equipment repairs, logistics support, activation, manning, and operations management by contract. The RRF is periodically tested by DOD-driven activations of ships for military cargo operations and exercises.
- **Crewed by Mariners**. Ships in priority readiness have Reduced Operating Status (ROS) maintenance crews of about 10 commercial merchant mariners that are then supplemented by additional mariners on a situational basis once activated.

Inception and Usage

The RRF program was initiated in 1976 and is defined by a Memorandum of Agreement (MOA) between the Department of Defense (DOD) and Department of Transportation (DOT). To date, the RRF has experienced hundreds of vessel activations, with dozens per year supporting a variety of humanitarian, natural disaster, and military operations. For details, contact MARAD's Office of History or visit the Maritime Administration's Video Theater to see the Ready Reserve Force in action.

Office of Strategic Sealift

The Mission

The Associate Administrator for the Office of Strategic Sealift, who reports directly to the Maritime Administrator is responsible for the Maritime Administration (MARAD) offices that secure America's maritime interests through a series of programs that use government and

commercial vessels to provide timely and scalable sealift capabilities in times of national emergency and to meet Department of Defense (DoD) strategic sealift needs during war.

He also serves as the he North Atlantic Treaty Organization (NATO), Chair of the Transportation Group (Ocean Shipping) committee, with the Office of Sealift Support serving as Secretariat.

A Fleet at the Ready

At the forefront of MARAD's strategic sealift operations is the National Defense Reserve Fleet (NDRF), approximately 100 government-owned vessels waiting in reserve to provide additional domestic or international logistic support, typically cargo and tanker ships.

The Ready Reserve Force (RRF), a subset of the NDRF, is comprised of 41 vessels available for additional "surge" shipping or rapid deployment of U.S. military forces to support the Department of Defense's U.S. Transportation Command (USTRANSCOM).

The NDRF and RRF are managed and maintained by the Office of Ship Operations, and operate with appropriations from the U.S. Navy's National Defense Sealift Fund in accordance with a 1997 Memorandum of Agreement between the Maritime Administration and USTRANSCOM.

Emergency Coordination

MARAD also develops and maintains plans to carry out national and international transportation support for military mobilization during national emergencies or Congressionally-declared war, managed by the Office of Emergency Preparedness & Response (EPR), who also maintains emergency resource evaluation data and operates MARAD's emergency operations and telecommunications centers.

Ensuring Resources

To ensure the availability of U.S.-managed vessels that can sustain a robust U.S. intermodal system and U.S. military operations abroad in an emergency, MARAD administers the Maritime Security Program (MSP) and Voluntary Intermodal Sealift Agreement (VISA). The Office of Sealift Support manages both programs, as well as the transfer of U.S.-flagged ships to foreign interests and programs to recognize U.S. Merchant Mariners who have made contributions to support our nation during national conflicts.

Ship Disposal

Every merchant ship, no matter its role or importance, reaches the end of its effectiveness or economic viability, and thus its life in service to the U.S. Government. One of MARAD's

key functions, administered by the Office of Ship Disposal, is to manage the environmentally sound disposal of these non-retention NDRF vessels, accomplished through dismantlement/recycling, artificial reefing, sale for recycle and reuse, deep-sinking in conjunction with DoD at-sea training exercises, or donation to qualified non-profit organizations. Ship disposal programs also include special disposal activities, such as management and decommissioning activities for the Nuclear Ship *Savannah*.

Industry Advice

The Associate Administrator for the Office of Strategic Sealift, who reports directly to the Maritime Administrator, also serves as the Chair of Transportation Group (Ocean Shipping) committee, with the Office of Sealift Operations & Emergency Response serving as Secretariat. TG(OS) reports directly to the Civil Emergency Planning Committee and, when necessary, to Supreme Headquarters Allied Powers Europe (SHAPE). TG(OS) meets several times annually, both in its entirety and in representative working group sessions, using two formats:

- NATO only -- only the current 28 NATO members attend
- Euro-Atlantic Partnership Council (EAPC) -- NATO member nations plus national representatives from EAPC attend. Note: EAPC Nations participate in TG(OS) work, however, are not involved in the decision-making process.

National Port Readiness Network (NPRN)

The National Port Readiness Network (NPRN) is a cooperative designed to ensure readiness of commercial ports to support force deployment during contingencies and other national defense emergencies. The NPRN consists of the National Port Readiness Network Steering Group (NPRNSG), a National Port Readiness Network Working Group (NPRNWG), and the following nine (9) Federal agencies and organizations:

- Maritime Administration (MARAD)
- U.S. Coast Guard (USCG)
- Military Sealift Command (MSC)
- U.S. Army Forces Command (USFORSCOM)
- U.S. Transportation Command (USTRANSCOM)
- U.S. Army Corps of Engineers (USACE)
- U.S. Northern Command (USNORTHCOM)
- Transportation Security Administration (TSA)
- Surface Deployment and Distribution Command (SDDC)

Commercial Strategic Seaports

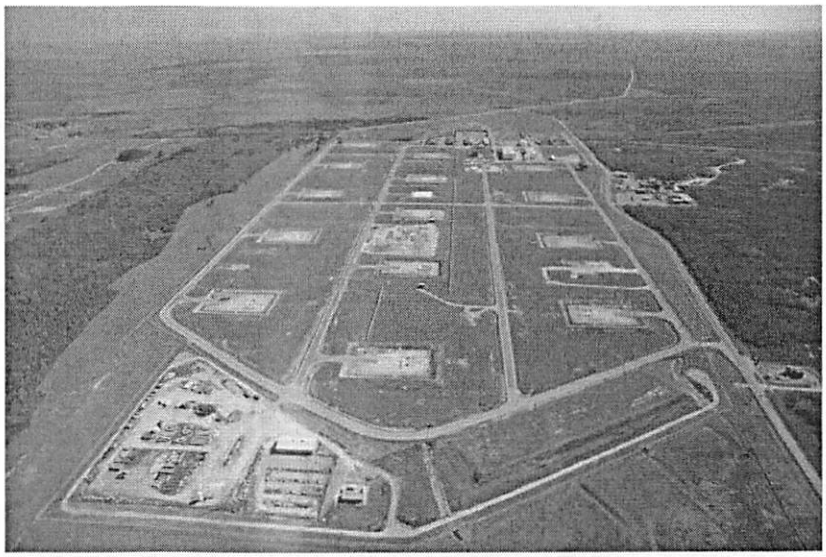
At each strategic commercial port (below), representatives of the nine agencies maintain a Port Readiness Committee -- chaired by the USCG Captain of the relative Port -- which provides the means to coordinate efficient port operations during peacetime and actual national defense emergencies.

- Anchorage, AK
- Beaumont, TX
- Charleston, SC
- Corpus Christi, TX
- Port of Everett, WA
- Guam
- Gulfport, MS
- Hampton Roads, VA
- Jacksonville, FL
- Long Beach, CA
- Morehead City, NC
- Oakland, CA
- Philadelphia, PA
- Port Arthur, TX
- San Diego, CA
- Savannah, GA
- Tacoma, WA
- Wilmington, NC

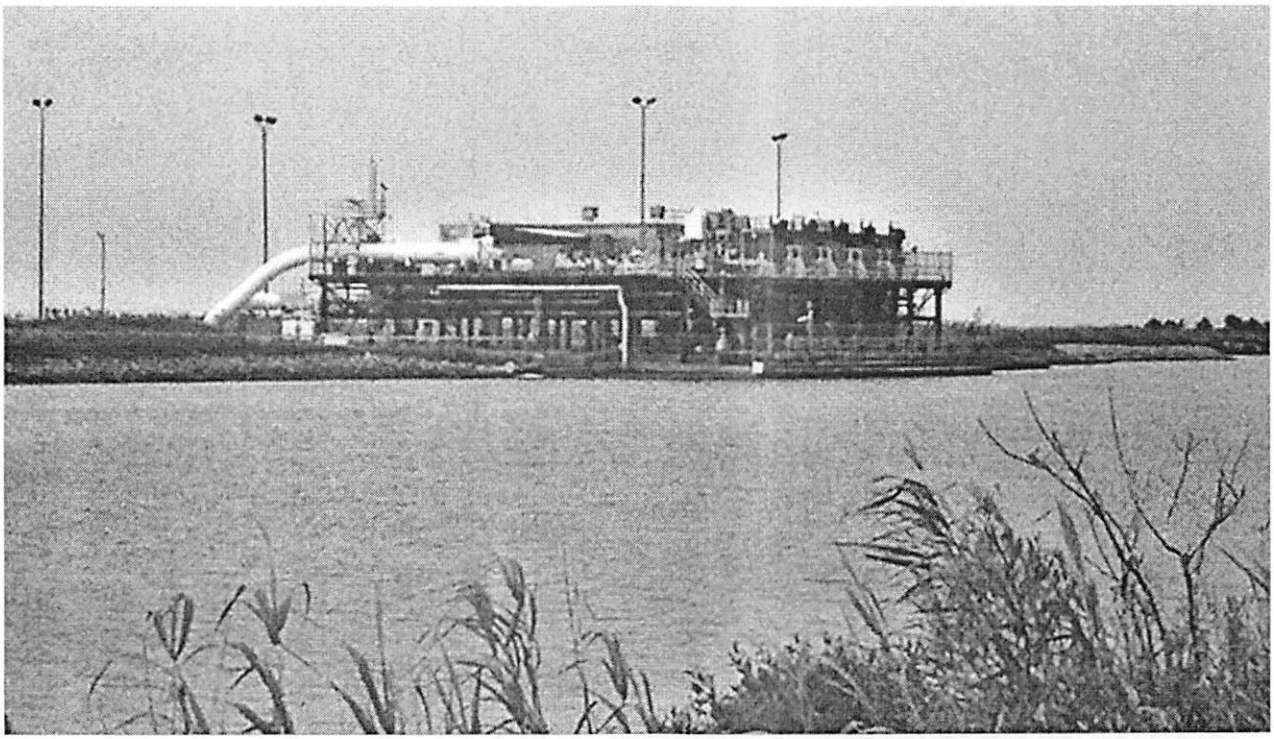
The Ports for National Defense (PND) Program's primary mission is to identify and assess the adequacy and responsiveness of defense-important CONUS port infrastructure to support DoD deployment requirements. We do this by maintaining comprehensive PND studies for each formally designated Strategic Seaport and each identified Alternate Seaport. These PND studies evaluate to the sufficiency of port access (highway, rail, and water), port infrastructure (gate, roads, berths, material handling equipment, etc.) and cargo throughput capabilities to meet DoD's needs. Additionally, PND works with SDDC port commanders to identify alternatives to overcome infrastructure and/or equipment shortfalls and resolve any port-related issues. PND also provides timely engineering analysis of Strategic Seaports during exercises or deployment operations. PND provides SDDC with the engineering expertise necessary to validate operational strategies and advocate for proposed port infrastructure improvement plans. This expertise enables SDDC and USTRANSCOM to better influence funding decisions in a fiscally constrained environment.

Finally, PND works in close coordination with the partner agencies/organizations of the National Port Readiness Network.

STRATEGIC PETROLEUM RESERVE



Over 50% of the nation's Strategic Petroleum Reserve are sheltered by intact coastal marshes in Jefferson County including the Big Hill Strategic Petroleum Reserve in Jefferson County and the Hackberry Strategic Petroleum Reserve in adjacent Cameron Parish, Louisiana.



Big Hill Strategic Petroleum Reserve outlet on the Gulf Intracoastal Waterway in Jefferson County