

**STATEMENT OF FINDINGS FOR EXECUTIVE ORDER 11990  
(PROTECTION OF WETLANDS)**

**BNP PETROLEUM CORPORATION  
LEMON/LEMON SEED WELLS PIPELINE  
PADRE ISLAND NATIONAL SEASHORE, TEXAS**

**INTRODUCTION**

Padre Island National Seashore (PAIS) was established by Congress on September 28, 1962 (16 U.S.C. §459d, *et seq.*), “In order to save and preserve, for purposes of public recreation, benefit, and inspiration, a portion of the diminishing seashore of the United States that remains undeveloped...”. Padre Island National Seashore preserves the longest undeveloped barrier island in the United States (Figure 1). It encompasses 69 miles of the 113-mile-long barrier island. More than 60% of the park consists of wetlands comprising marshes, inland waters, wind-tidal flats, and seagrass beds.

At the time of the park’s establishment, surface ownership was held by the State of Texas or by private landowners. In 1973, the surface estate owned by the State of Texas was conveyed to the U.S. Government, while those surface rights held by private landowners were acquired by the federal government through condemnation. All subsurface mineral interests underlying the park were retained by private owners. Those underlying the submerged lands under the Laguna Madre and Gulf of Mexico were retained by the State of Texas and are administered by the Texas General Land Office. Thus, the federal government does not own any of the subsurface oil and gas rights in the park. However, Congress directed in the park’s enabling act that nonfederal oil and gas development be regulated.

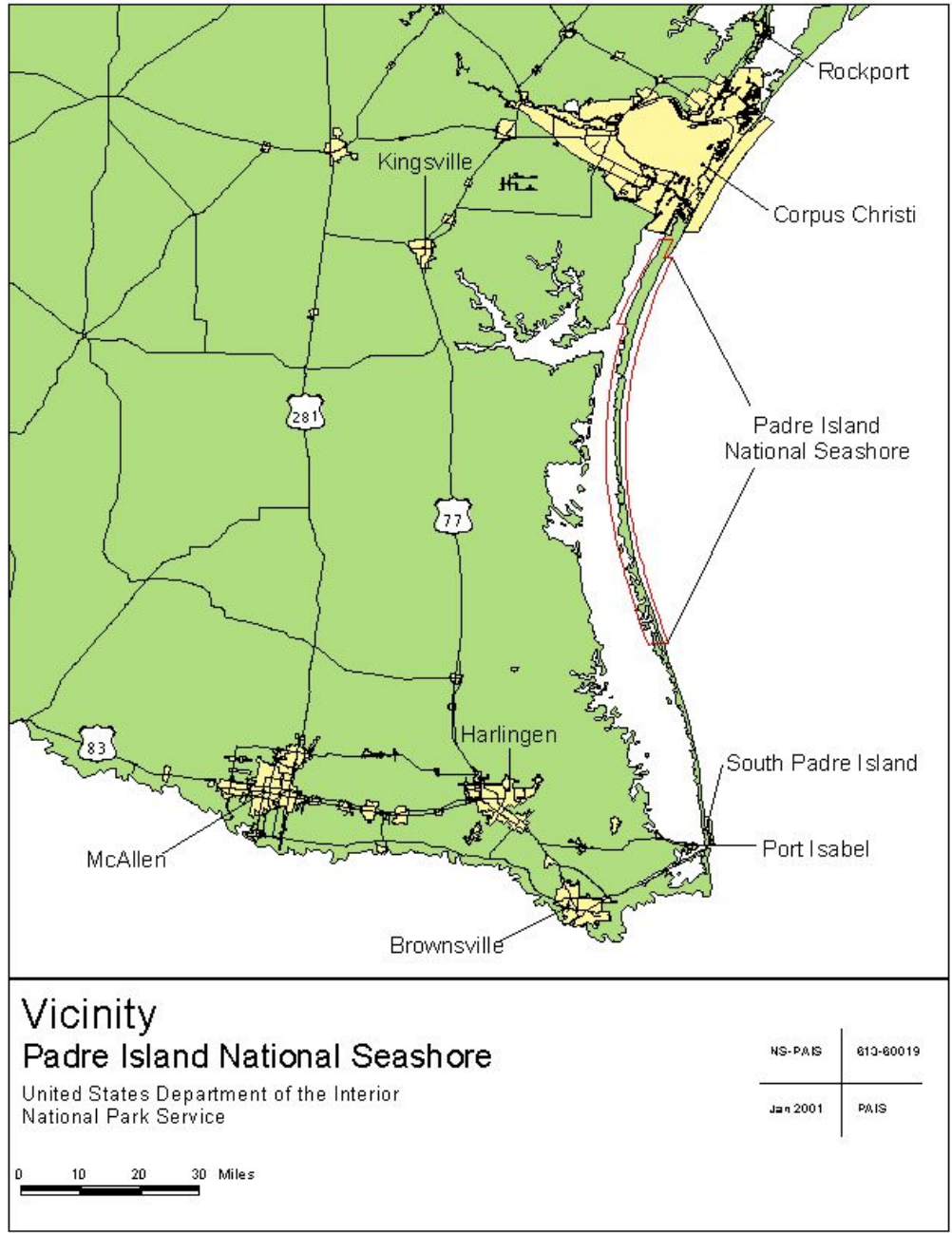
The drill pad and access road for the Lemon/Lemon Seed Unit Wells will not impact wetlands. The natural gas pipeline, however, will cross wetlands at one location, assuming the well is productive. This Statement of Findings will address this impact, alternatives considered, functions of the impacted wetland, and avoidance and minimization measures.

**PURPOSE AND NEED FOR ACTION**

According to the Environmental Assessment, there are 3 objectives for this project:

- Provide BNP Petroleum Corporation, as holder of nonfederal oil and gas mineral interests, reasonable access for exploration and development.
- Avoid or minimize impacts on park resources and values, visitor use and experience, and human health and safety.
- Prevent impairment of park resources and values.

**Figure 1: Region/Vicinity Map**



The drill site is approximately 12.5 miles south along the Gulf beach, from the end of Park Road 22, and 900 feet west (Figures 2 and 3). The pipeline extends from the drill site to the west-northwest approximately 4300 feet to an existing pipeline. The location of the wetland impact is approximately 4000 feet west of the drill site (Figures 4 and 5).

## **ALTERNATIVES**

One pipeline alternative was considered but dismissed from further analysis. This route would have been approximately 15,900 feet to the south of the preferred alignment and would have connected with an existing pig station (where pipes can be accessed and cleaned) at Yarborough Pass. This alternative would be more costly and would impact more than 18 acres of upland and almost 0.25 acres of wetlands. For these reasons, this alternative was dismissed.

Two alternatives were evaluated for this project. Under the first alternative, no action, the well would not be drilled and the pipeline would not be installed. There would be no adverse impacts to wetlands and this would be the environmentally preferred alternative. This alternative was not selected as the proposed action since the enabling legislation of PAIS honors existing nonfederal oil and gas rights.

The second alternative, the proposed action, is the BNP Petroleum Corporation proposal. Under this alternative, a pipeline would be laid within a trench (25' wide by 55.3' long) through a wetland (Figure 6), resulting in temporary wetland impacts of 1382.5 ft<sup>2</sup> (0.03 acres). The area would be excavated, with material temporarily sidecast. The pipeline would then be laid in the trench and the sidecast material redeposited. The disturbed area would be restored to pre-construction contours and revegetated. Top soil and vegetation would be reserved on-site and replaced after the pipe was laid.

## **WETLAND DESCRIPTION**

The wetland was delineated and surveyed on January 17, 2002 by Belair Environmental, Inc. and verified by the Corps of Engineers during a site visit the same day. The Corps' verification letter noted that the wetland is considered adjacent to the Laguna Madre and is located approximately 15,000 feet north of Yarborough Pass and 4000 feet west of the primary beach dunes. The Corps has authorized the pipeline impacts to the wetland under Nationwide Permit 12.

The wetland is classified as palustrine emergent seasonally flooded (PEMC). The wetland is not identified on the US Fish and Wildlife Service's National Wetland Inventory map (NWI) (Figure 4). The wetland is located in a draw between 2 hummocks. The NWI map shows PEMC wetlands on either side of the proposed pipeline and in reality, the PEMC wetlands are joined.

## Padre Island National Seashore Landcover Classes

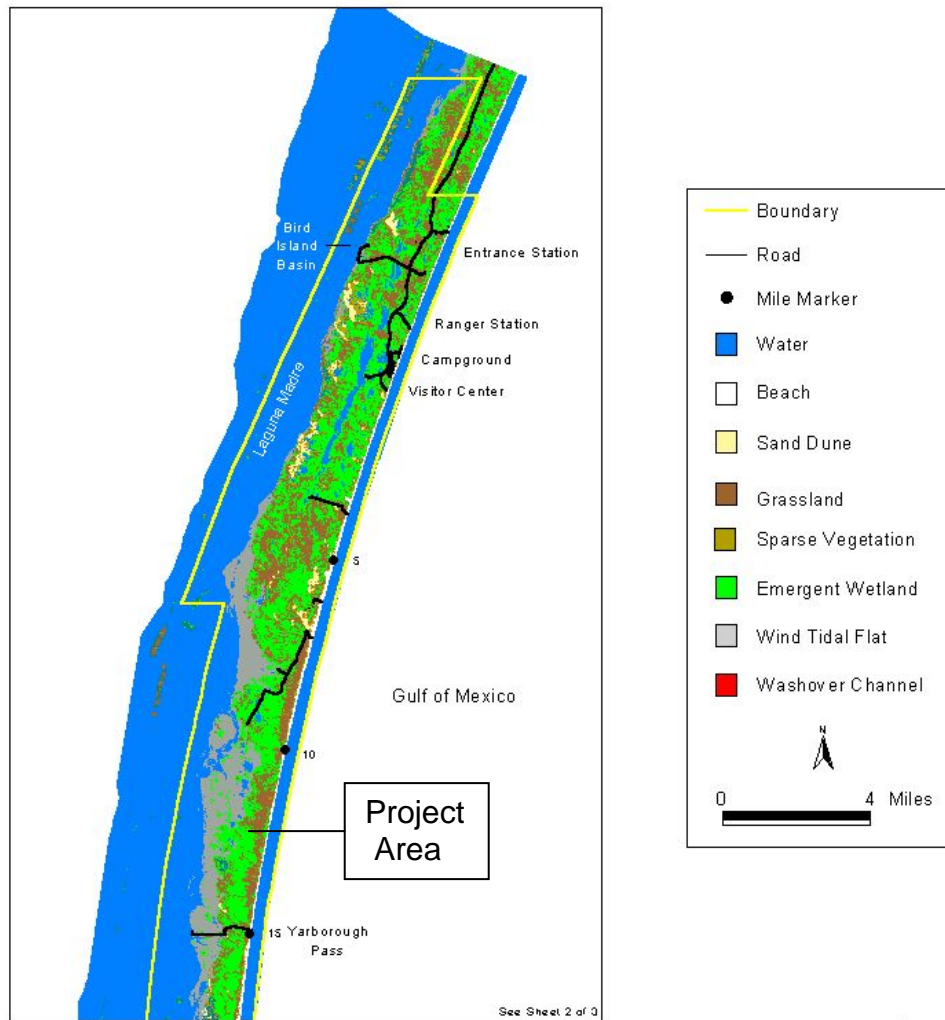


Figure 3.5  
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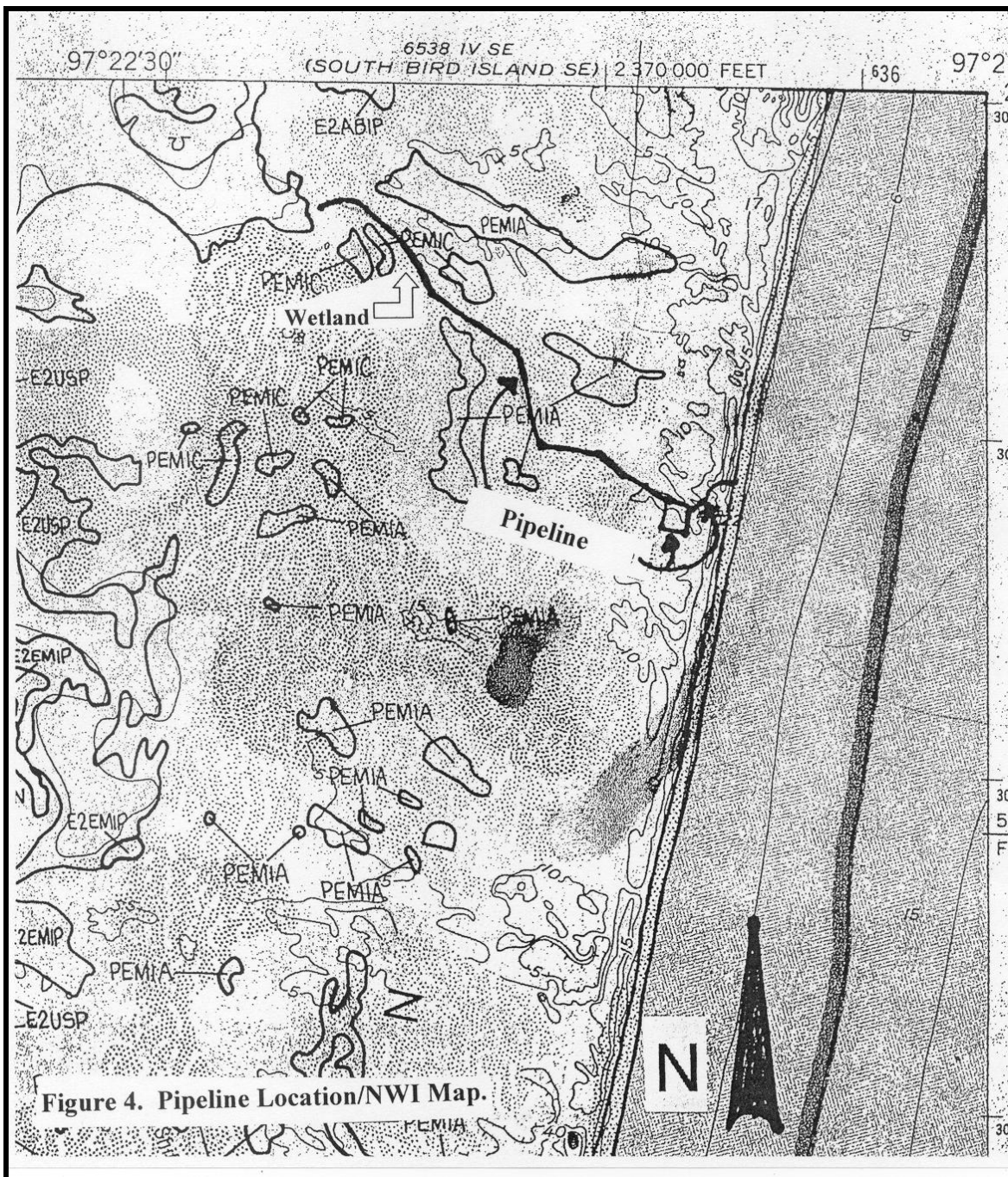
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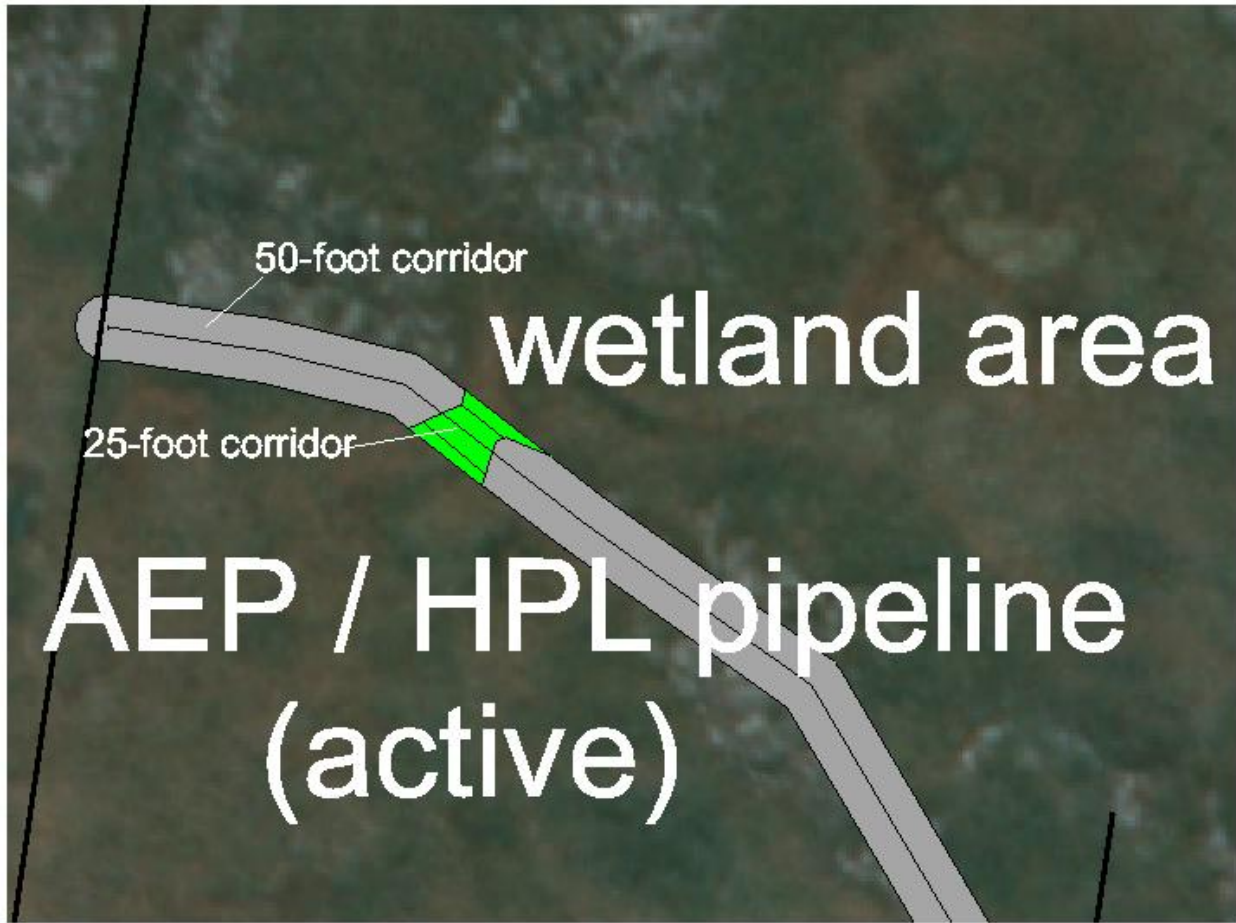
**Figure 2: General location of the proposed Lemon/Lemon Seed Unit in relation to Padre Island National Seashore boundaries.**



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**Figure 3: Proposed location of the Lemon/Lemon Seed Units, 12.5 mile marker on Padre Island National Seashore. Depicts location of access road, pad/production site, proposed pipeline, and wetland area.**





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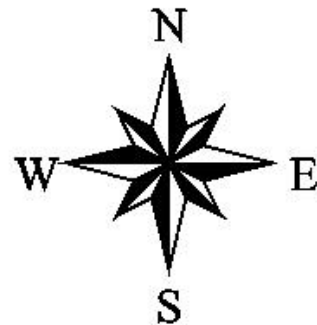
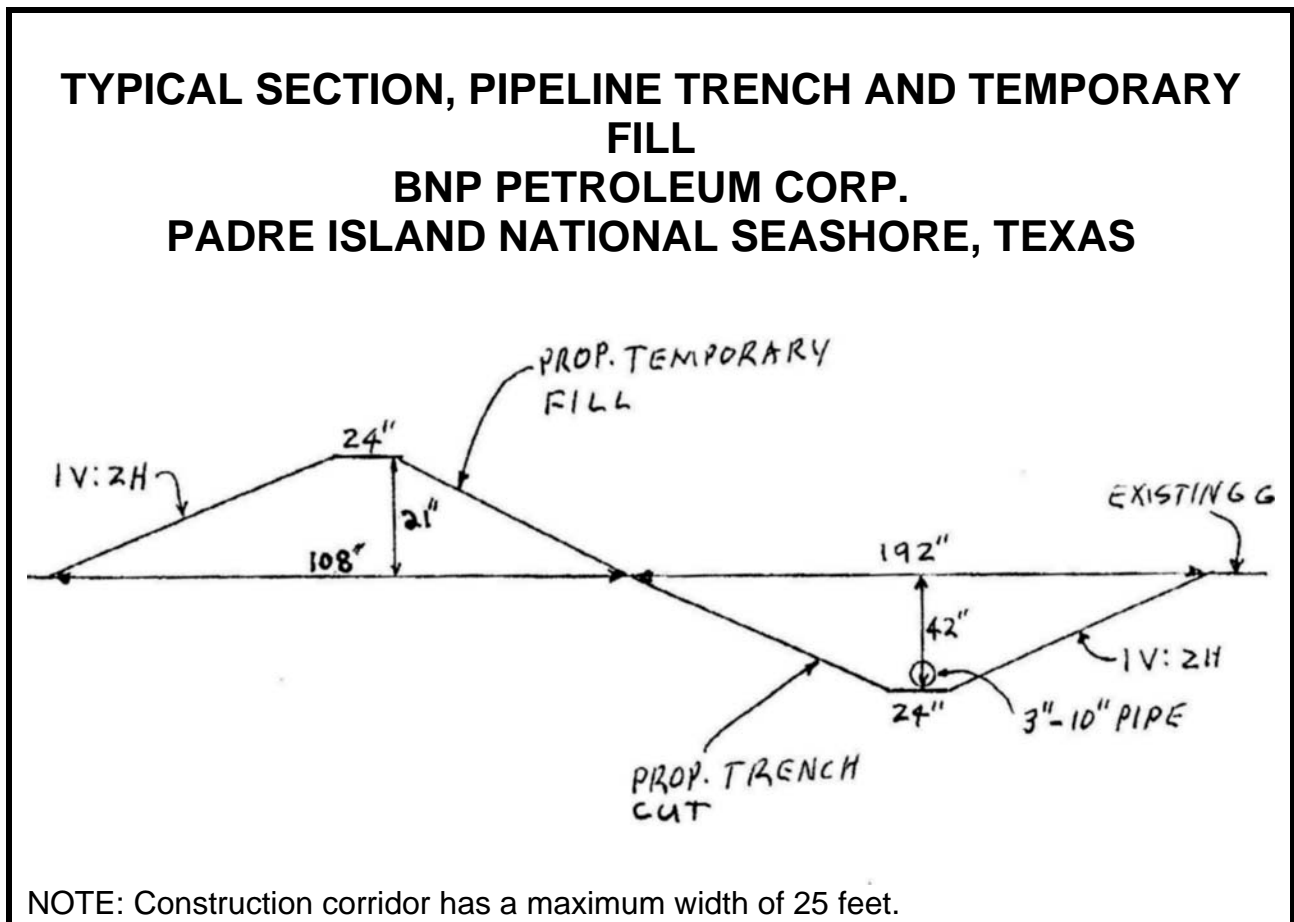


Figure 5: Close-up of wetland area with the 25-foot work corridor marked.

Figure 6. Pipeline Construction Detail



Plant species present in the wetland include *Spartina patens* (FACW), *Scirpus americanus* (OBL), *Paspalum monostachyum* (FACW+), and *Hydrocotyle bonariensis* (FACW).

According to the Kenedy County Soils Survey, soils at the impact site are Galveston-Mustang complex (Figure 7). The soil survey notes in its Selected Uses table that the soil has characteristics of wetness and that it floods. The Willacy County Soil Survey notes that Mustang soils are poorly drained and the water table is at the surface or at a depth of no more than 0.5 foot. Runoff is very slow or ponded. Mustang soils are mixed, hyperthermic typic psammaquents. Willacy is the county to the south of Kenedy and was used for background information since no Kenedy Soil Survey was available.

According to the park's Oil and Gas Management Plan, one of the reasons emergent wetlands are significant is that they provide important habitat for the varied wildlife resources of the park. Wildlife that could use the wetland include white-tailed deer (*Odocoileus virginianus*), coyote (*Canis latrans*), bobcat (*Felis rufus*), skunk (*Mephitis*



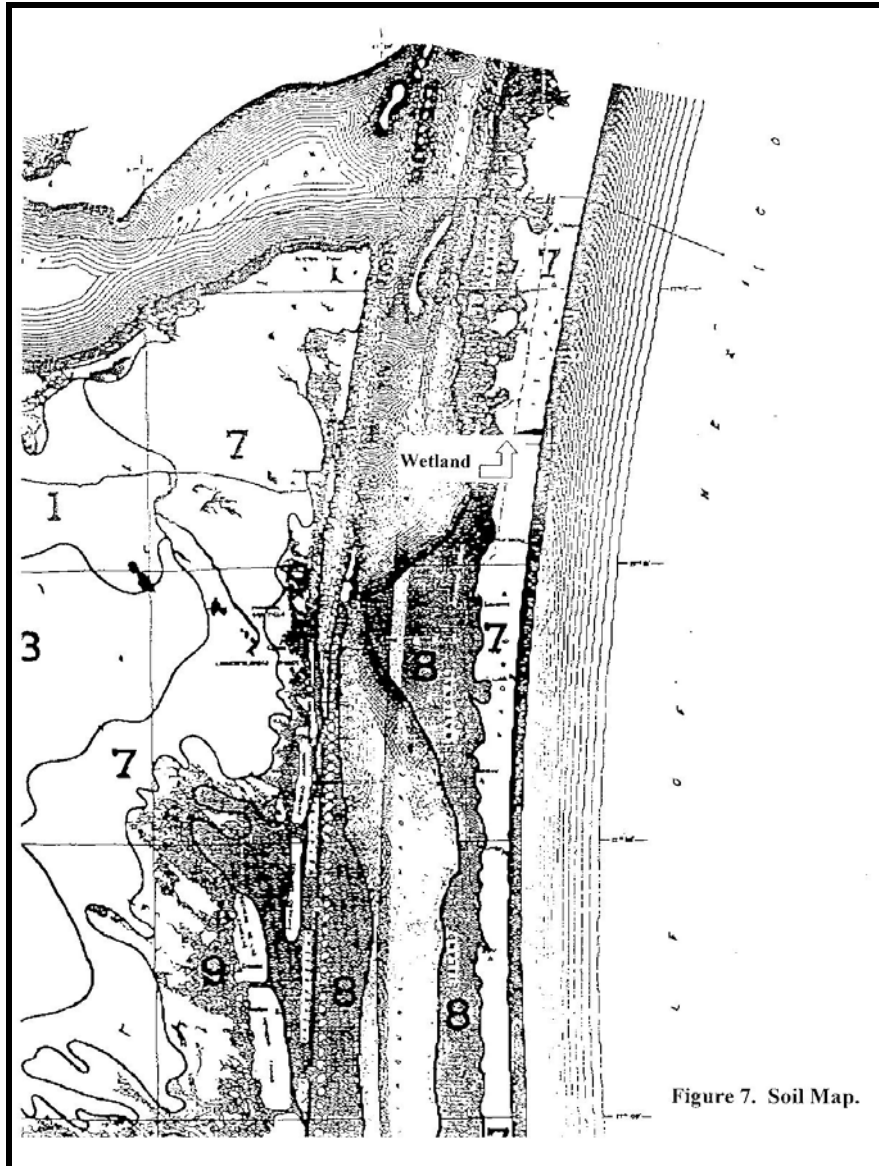


Figure 7. Soil Map.

*mephitis*), badger (*Taxidea taxus berlandieri*), raccoon (*Procyon lotor*), jackrabbit (*Lepus californicus merriami*), bobwhite quail (*Colinus virginianus*), dove (*Zenaida macroura*), meadowlark (*Sturnella magna*), northern harrier (*Circus cyaneus*), peregrine falcon (*Falco peregrinus*), American egret (*Casmerodius albus*), great blue heron (*Ardea herodias*), ducks, geese, and shorebirds. Reptiles and amphibians that could use the wetland include: northern leopard frog (*Rana pipiens*), Hunter's spadefoot toad (*Scaphiopus holbrookii*), diamondback water snake (*Nerodia rhombifer*), Texas coral snake (*Micrurus fulvis*), checkered garter snake (*Thamnophis marcianus*), red-eared turtle (*Trachemys scripta*), and yellow mud turtle (*Kinosternon flavescens*).

Federal and/or state listed species that could use the wetland include: reddish egret (*Egretta rufescens*), white-tailed hawk (*Buteo albicaudatus*), ferruginous hawk (*Glaucidium brasilianum*), and white-faced ibis (*Plegadis chichi*). The Fish and Wildlife Service determined during a site visit on December 10, 2001 that the proposed project

would have no effect on federally listed threatened and endangered species or their critical habitat because of the limited size and ephemeral nature of the wetland.

The wetland lies in a depression among hummocks. Hydrology is derived from runoff, precipitation, and a seasonally high water table. The wetland serves to collect runoff water and eroded sediment, recharge the water table, as a surface expression for a high water table (i.e., ground water), and to store flood waters.

It is doubtful that this small wetland is used by tourists/recreationists, although it could be used by bird watchers. A cultural resource survey was conducted and no archeological resources were found. The wetland is not currently being used for research purposes.

## **WETLAND AVOIDANCE, MINIMIZATION, MITIGATION**

The project proposes to temporarily impact 0.03 acres of wetland. Measures have been taken to avoid wetlands to the maximum extent practicable and to minimize impacts to wetlands that could not be avoided.

One pipeline alternative was rejected in part due to wetland impacts of 0.25 acres.

The current configuration of the pipeline was routed around several wetlands along the 4300' length. The final route resulted in temporary impacts to one wetland that could not be avoided due to the fact that it is a continuous feature that runs perpendicular to the pipeline route. The current configuration of the trench has been reduced from a 50' width to the current 25'. This has reduced the wetland impacts from 0.06 acre to 0.03 acre.

Mitigation is not being proposed to offset impacts from the pipeline. NPS Procedural Manual #77-1 allows for compensation to be waived if adverse wetland impacts are less than 0.1 acre (Section 5.2.C.1.). No compensation is proposed since

- the impact is temporary and the area will be restored immediately upon completion of the pipeline segment using sidecast soil and reserved native vegetation
- the 25' by 55.3' trench (0.03 acre) is below the 0.1 acre threshold
- the loss of wetland functions is considered to be minimal (PEMC wetlands are common throughout the park)

## **CONCLUSION**

The National Park Service finds that there are no practicable alternatives to temporarily disturbing 0.03 acres of wetlands within Padre Island National Seashore for the Lemon/Lemon Seed natural gas pipeline project. Wetlands have been avoided to the maximum practicable extent, and the wetland impacts that could not be avoided will be

minimized. This project is consistent with the NPS no-net-loss of wetlands policy in that the site will be restored to pre-disturbance contours and the native vegetation community restored when the trench is backfilled and revegetated. The site is expected to return to its full pre-disturbance wetland functions within one year. The National Park Service, therefore, finds that this project is in compliance with Executive Order 11990: "Protection of Wetlands."