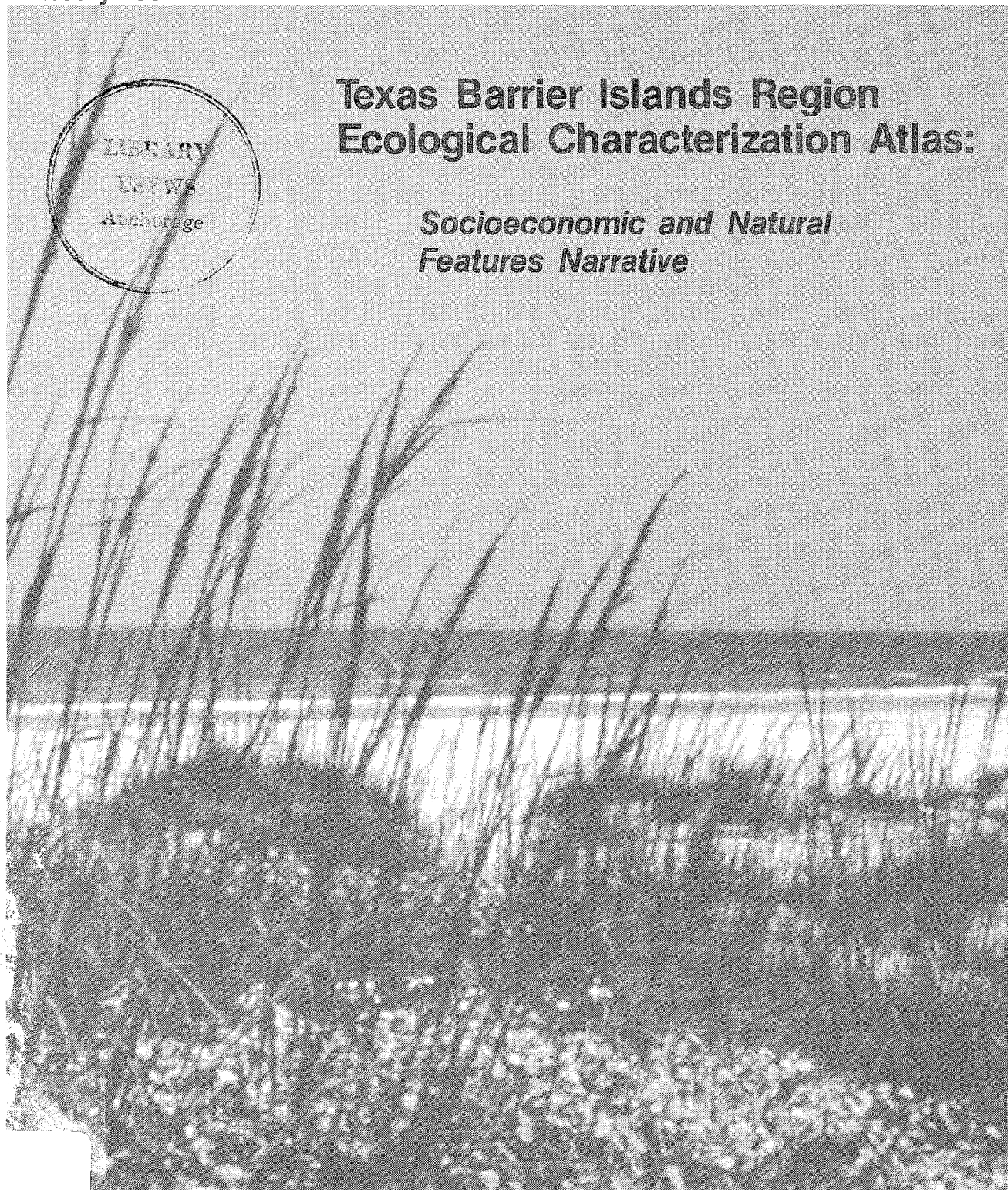


Texas Barrier Islands Region Ecological Characterization Atlas:

Socioeconomic and Natural Features Narrative



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TEXAS BARRIER ISLANDS REGION ECOLOGICAL CHARACTERIZATION ATLAS:
Socioeconomic and Natural Features Narrative

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PREFACE

The purpose of this study, begun in October 1979, is to cartographically render those known aspects of the natural and cultural features of the Texas coastal areas which might influence land use decisions. Since verbal and tabular presentations of information often conceal the spatial attributes of phenomena and spatial relationships and constraints are best rendered cartographically, this atlas was planned. The study uses an ecological characterization approach in which characterizations "provide descriptions of the socioeconomic features, biological resources and physical processes that comprise a particular coastal ecosystem" (Johnston 1978:692). This narrative and its accompanying maps on socioeconomic and natural features are one set in a series of three constituting the Texas Barrier Islands Region Ecological Characterization Atlas, sponsored by the Minerals Management Service (MMS) and Fish and Wildlife Service (FWS), both within the U. S. Department of the Interior. Other map sets and narratives are Biological Resources (FWS/OBS-82/16) and Mineral Resources and Selected Oil and Gas Infrastructures (FWS/OBS-82/17). The maps are designed to supplement the textual materials contained in Texas Barrier Islands Region Ecological Characterization: A Socioeconomic Study (Vol. 1: Synthesis Papers, FWS/OBS-80/19; Vol. 2: Data Appendix, FWS/OBS-80/20; U.S. Fish and Wildlife Service and Bureau of Land Management, August 1980).

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SUMMARY

The coastal areas of Texas have doubled in population since 1950, and the population of the region is growing at an average rate over twice as great as that of the United States. Industry, agriculture, fisheries, commerce, settlement, and recreation compete for space in this zone, and the task of reconciling individual and corporate interests as well as the general welfare is not easy. Indeed, economic and political pressures arising out of the conflict over natural-resource protection and resource-use make the task of responsible government agencies difficult. The data contained on the 16 socioeconomic map overlays of the Texas Barrier Islands Region Characterization Atlas are part of the effort to present cartographically information that can aid in developing policies to facilitate this reconciliation process.

The Texas Barrier Island Region extends from East Bay in Chambers County to the Texas-Mexico border. The coastal boundary is the State-Federal demarcation line, which in Texas is three leagues offshore to approximately 64 km (40 mi) inland. Sixteen U. S. Geological Survey planimetric quadrangles at a scale of 1:100,000 covering an area of one degree in an east-west direction and half a degree in the north-south direction have been used as the base maps for the mylar map overlays which constitute the Socioeconomic and Natural Features.

Six sets of socioeconomic and cultural themes are mapped in this work: conservation, preservation, and recreation areas; point source discharges, water quality and sewage facilities; public and military lands; historical sites and archaeological areas; major transportation networks, major natural and artificial waterways; and the major dredge-material disposal sites.

National policy, state concern, and individual effort have created a number of conservation and preservation areas within the Texas Barrier Islands Region (TBIR). There are five national wildlife refuges occupying 60,222 ha (148,809 ac) and one national seashore 54,196 ha (133,918 ac) within this region. Except for the Padre Island National Seashore, which faces the Gulf of Mexico, these 114,418 ha (282,726 ac) front the inland bay and canal waters for the most part. These federal lands occur in 8 of the 16 quadrangles. The State of Texas has established 18 parks and recreation areas - 52,804 ha (130,480 ac) - for the use of visitors and residents of Texas. These are found in 9 of the 16 quadrangles. Using the data contained in the Texas Parks and Wildlife Department's Regions 24,25,26,28,32,22 (which include a larger inland area than the TBIR), Liebow, Butler, Plaut, and associates (1980) found that facilities include 18,134 m (19,927 yd) of linear fishing parks, 63 camping parks, and 1,613 boat slips and stalls. The largest majority (95%) of the state parks are in rural settings. Private organizations such as Audubon Society and Nature Conservancy have bought lands which they manage or have turned

over to federal and state governments. Private foundations have set aside areas for scientific study, notably the Rob and Bessie Welder Wildlife Foundation (Beeville Quadrangle). As exploitation pressure mounts in the TBIR, such preserves will become more and more valuable. Municipalities, county governments, and regional authorities have also set aside lands for recreation.

Large areas for these purposes are enclosed within broken lines with an identifying alphanumeric code on each map overlay. The small areas and facilities have been mapped with point symbols and numbers. Point symbols and area designations are interpreted in individual map narrative details.

Point source discharges are effluents generated by municipalities and industries, moved by pipeline or channeled to natural lakes, bay waters, estuaries or ocean waters. Occasionally these debouch to a processing plant or settling basin and no "discharge" takes place. The effects of point source discharge in water quality have been various. The Trinity Basin area within the TBIR has relatively few point source discharges, and no significant water problems have occurred in that basin. However, high bacterial concentrations in San Jacinto River waters have so affected Galveston Bay that nearly half the bay is closed to oyster harvesting because of water pollution (Anahuac Quadrangle) and major fish kills have occurred in parts of the San Jacinto-Brazos Coastal Basin (Houston, Anahuac, and Angleton Quadrangles). Generally acceptable water quality is found in the central coastal area river basins, but a high incidence of fecal coliform bacteria is found in the Lavaca Basin caused by livestock operations. High fecal coliform levels from municipal wastewater and high total dissolved solids due to residual effects of discontinued open-pit discharges of oil field brine and non-point source effluents have affected the water quality in the San Antonio and Nueces Basin (Beeville, San Antonio, and Corpus Christi Quadrangles). The Arroyo Colorado (Harlingen Quadrangle) receives much of the industrial wastes as well as municipal and agricultural wastes of the lower Rio Grande Valley lands so that the flows maintained by irrigation water returns and municipal effluents are depleted in oxygen and elevated in levels of fecal coliforms, nitrogen, phosphorus, and dissolved solids.

Public and military lands in the TBIR consist primarily of prison farms, airports, and military airfields. Texas State Department of Corrections utilizes agricultural laboring as an integral part of the correction program. Most of the prison farms are in Brazoria and Nueces counties and are found on the Houston, Angleton, Port Lavaca, and Freeport quadrangles. Airports are found in all quadrangle maps of the coast but Baffin Bay and Allyns Bight quadrangles. The military lands, all airfields, are found in the Houston and Corpus Christi area quadrangles. There are 11 U. S. Coast Guard Stations situated generally at mouths of estuaries and along navigable channels.

Historical and archaeological areas and sites plotted on these map overlays illustrate that American Indian settlements were

distributed along the whole of the coast (15 of 16 quadrangles) and were generally associated with riparian settings on high natural levees or river terraces. These environments and surrounding lands provided a variety of food and shelter resources for the hunting-gathering populations. The earliest archaeological finds date from the Terminal Pleistocene. These are few in number. After a chronological gap extending to 4,000 years before present, the record becomes better and extends to historic time. The archaeology of the TBIR is not well worked, and much of what has been done has been accomplished under the real time constraints of salvage archaeology. However, it is clear that the prehistory is far richer and more complex than earlier understood. Meticulous excavations occur as time and monies are available, but it must be understood that the presently recognized archaeological areas are not a complete survey and the discovery of new areas can be expected.

The rich historical legacy of this region is preserved in the National Register of Historic Places and in the State Historical Parks, Sites and Structures. The National Register catalogues sites, buildings, districts, structures, and objects of historical value. The Registry is expanded as value is demonstrated by local groups and individuals. The items plotted on this set of map overlays include all Registry items recognized by October 31, 1979. While administered by the National Park Service, U. S. Department of the Interior, activities are supervised in Texas by the Executive Director of the Texas Historical Commission. National Register items include such features as the Aransas Pass Light Station (Corpus Christi Quadrangle), the Old Brulay Plantation (Harlingen Quadrangle), and the Bishops Palace (Galveston Quadrangle). Some 93 items have been plotted in the study. The larger number of features are in Harris County (Houston Quadrangle), but items on the Register are found in nine of the quadrangle areas.

Many of the features now on the National Register were first identified by the State of Texas and designated a State Historical Park, Site or Structure. There are three historical parks, three historic sites, and two historic structures listed for the TBIR found on five quadrangles. No effort was made to plot and list all sites marked by official Texas historical markers. These are numerous. Those wishing to know more about Texas historical markers should consult the Guide to Official Texas Historical Markers published by the Texas Historical Commission. Underwater archaeological tracts are those bay or Gulf lease tracts which are known to have (or are suspected to contain) one or more underwater wrecks. These have been identified in a number of ways, including magnetometer surveys.

The transportation network and systems are an essential part of the infrastructure of the TBIR. They do, and will, play a key role in the future growth and development of the region because transportation controls access to resources as well as traffic of goods, services, and people.

The transportation system serving all the communities of the TBIR is the network of highways and roads. Interstate highways link Houston and Corpus Christi with other Gulf ports and the rest of the country. Federal and primary highway networks link together the metropolitan industrial centers and tie them to the ship channels and ports. Mileage figures of State and local roads are recorded on a county-wide basis. According to county figures (which include a slightly larger area than that of the study area), in 1976 the State maintained approximately 11,300 km (7,000 mi) of roads and local agencies maintained 51,500 km (32,000 mi) (Zlatkovich 1976). All Federal and State highways have been plotted. Local roads have been plotted to illustrate the linkages possible between major roads and to show access to coastal waters. Park roads have been plotted when no other roads reached the shore. No major roads exist on the barrier islands chain; Galveston Island has more roads serving the population than any of the other coastal islands. The building of highways impacting bays and estuaries has been restricted by economic constraints, the State building roads and bridges only when they could be justified by use. Critical decisions will have to be made in view of growth predictions concerning new road systems in wetlands and islands, balancing rights of the population for access and resource exploration with environmental protection concerns.

Seven Class 1 line-haul railroads and three Class 2 line-haul railroads serve the TBIR. According to county figures for an area that exceeds the TBIR area, the trackage in 1976 was 4,591 km (2,853 mi) (Texas Almanac 1979). The greatest concentration of rail service is in the Houston, Angleton, and Galveston quadrangles, which contain 62.6% of the area trackage (Liebow et al. 1980). Houston is the major hub, and important rail centers are Galveston, Corpus Christi, and Brownsville.

Waterways carry the greatest volume of commercial transportation in the TBIR. There are seven deep-draft ship channels: Houston, Texas City, Galveston, Freeport, Matagorda, Corpus Christi, and Brownsville. The Houston Ship Channel accounts for about 23% of the total area traffic (Liebow et al. 1980). The Corpus Christi Channel accounts for the second largest amount (some 12%). There are 14 shallow draft channels in the region, most located in the northern half of the coast from Anahuac to Corpus Christi. These are Anahuac, Trinity River, Cedar Creek, Clear Creek, Dickinson Bayou, Chocolate Bay, San Bernard River, Colorado River, Palacios, Victoria, Rockport, Port Mansfield, Arroyo Colorado, and Port Isabel. There are, in addition, smaller channels and canals in use for coastwise shipping and boat traffic. These also have been mapped.

Six deep harbor areas are located in the TBIR: Houston, Texas City, Galveston, Freeport, Corpus Christi, and Brownsville. The Port of Houston is the largest in the area and third largest in the Nation. The Port of Galveston is the second largest in the TBIR.

The Gulf Intracoastal Waterway (GIWW) is the longest of the artificial waterways in the region. Begun in the 1930's for the purpose of commercial transport, the GIWW today serves fishing and recreational craft as well. One third of the total length of the GIWW occurs in the TBIR and, including the stretch east of the TBIR in Texas, it carries 63% of the total GIWW traffic tonnage recorded in 1977 (Liebow et al. 1980).

Perennial streams and lakes are common in the TBIR east of the 40" isohyet of average annual precipitation. In the southern third of the region, perennial streams are not common although permanent pools of fresh and brackish water are found all along the coast.

All navigation channels are susceptible to filling, thus requiring maintenance activities which include dredging. The management of dredging activities and dredged material disposal is of critical importance in the wise use of the TBIR area. An attendant problem is the design and construction of landfill. The management of landfill, dredging, and dredged-material disposal is one of the most significant ways in which estuarine environments and coastal wetlands have been modified.

Management of dredging and dredged material within navigable waters is administered by the Corps of Engineers, U. S. Department of the Army. Public notices are required for any maintenance dredging activities. Notices are distributed to all interested State and Federal agencies and known interested persons to assist in developing facts and recommendations concerning the proposed continuation of maintenance dredging activities. Laws under which the proposed dredging is reviewed include: Federal Water Pollution Control Act, Coastal Zone Management Act of 1972, National Environmental Policy Act of 1969, Fish and Wildlife Act of 1956, Fish and Wildlife Coordination Act, Migratory Marine Game Fish Act, Endangered Species Act of 1973, and the National Historic Preservation Act of 1966. Disposal plans are coordinated with the Administrator, Environmental Protection Agency. With public notice announcements are maps outlining areas designated for potential dredged-material disposal. Dredging by others (notably by the private sectors associated with the oil, gas, and petrochemical industries) is regulated by the Department of the Army permit program. The areas permitted for active dredged-material disposal have been plotted from the public notices and the NOAA small craft charts.

Dredged-material deposition sites associated with the construction of drainage and irrigation canals have been plotted in a few quadrangles. These are limited to the rice and sugar cane areas of the TBIR. Recently, environmental impact statements have been required for all such projects. It is recognized that navigation channels are of vital importance to the transportation system, but since their construction and maintenance can be a threat to the

productivity of coastal wetlands, great care needs to be exercised in the permitting of such activities.

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INTRODUCTION

The study area for the Texas Barrier Islands Region Ecological Characterization Atlas extends from the eastern end of East Bay, Texas to the Texas-Mexico border. The offshore boundary is the State-Federal demarcation line, and the inland boundary is approximately 40 miles inland, including, among others, the coastal counties of Chambers, Galveston, Brazoria, Matagorda, Calhoun, Aransas, Refugio, San Patricio, Nueces, Kleberg, Kenedy, Willacy, and Cameron.

Three sets of maps were produced to display information that will assist land-use planners and coastal decision makers. The three maps are 1) Socioeconomic and Natural Features, 2) Mineral Resources and Selected Oil and Gas Infrastructures, and 3) Biological Resources.

This text addresses the map of "Socioeconomic and Natural Features," which is composed of 1:100,000 base map overlays. The socioeconomic and cultural themes on this map are grouped under six sub-headings:

- 1) conservation, preservation, and recreation areas - including boat launch sites;
- 2) point source discharges, water quality and sewage facilities;
- 3) public and military lands;
- 4) historical and archaeological areas and sites;
- 5) major transportation networks and major natural and artificial waterways; and
- 6) major dredge material disposal sites.

Table 1 lists the themes mapped on the Socioeconomic map and their presence or absence on each of the sixteen map overlays. An "X" represents one or more features of this theme plotted on the map. A blank indicates a lack of information from field-checking and literature review. When the theme is not applicable (e.g., underwater archaeological sites in inland areas), N/A has been used. When no information on a particular feature was found within a specific map area and, therefore, no data have been compiled on the map, "no data" is indicated in the Map Narrative Detail.

The legend for this set of Atlas maps is given in Table 2. The symbols were designed for easy recognition and to be easily visible on mylar overlays placed on the base maps.

Included in the Federal reservation and recreation lands are national wildlife refuges and the national seashore on Padre Island. State preservation and recreation lands and sites include wildlife management areas, parks, recreation areas, and fishing piers. The wildlife management areas have been developed to preserve critical habitats for individual species or groups of species. These are administered by the Texas Parks and Wildlife Department, which also administers the parks, recreation areas, and piers.

By definition state parks are "spacious areas of outstanding natural or scenic character, often containing archaeological, ecological or geological values, selectively developed to

Table 1. Socioeconomic activities and natural features; map themes and the map sheets on which the theme is represented.

Quadrangle Name	Themes																																
	Federal lands	State lands	State recreation, park, or magt. area	Private preservation area	Private preservation site	County or municipal park	Marina	Other outdoor recreation	Boat launch	Industrial, discharge	Industrial, no discharge	Municipal sewage/water treatment, discharge	Municipal water treatment, no discharge	Municipal sewage treatment, no discharge	Power plant	Public lands	Airports	Military lands	US Coast Guard Sta.	National Register	State Historical Parks, Sites, Structures	Archeological area/sites	Underwater archeological tracts	Highways	Railroads	Perennial Streams	Canals	Perennial Lakes	Open water	On Land			
Allyns Bight																						X											
Anahuac	X			X	X	X	X	X	X	X		X			X		X				X	X	X	X	X	X	X	X	X	X	X	X	X
Angleton	X	X	X	X	X	X	X	X	X	X		X		X		X	X				X		X	X	X	X	X	X	X	X	X	X	X
Baffin Bay	X			X		X		X	X			X		X				X							X	X	X	X	X	X	X	X	
Beeville		X	X	X		X		X	X	X		X		X			X	X			X		X		X	X	X	X	X	X	X	X	X
Brownsville		X	X	X		X		X	X	X		X		X			X				X		X	X	X	X	X	X	X	X	X	X	X
Corpus Christi	X	X		X		X	X	X	X	X		X		X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
El Campo						X	N/A			X		X					X		N/A		X	X	N/A	X	X	X	X	X	X	X	N/A		
Freeport	X	X				X	X	X	X	X		X				X	X		X		X		X	X	X	X	X	X	X	X	X	X	X
Galveston		X		X	X	X	X	X	X	X		X		X			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Goliad			X			X				X		X		X			X	X		X	X	X	N/A	X	X	X	X	X	X	X	N/A		
Harlingen	X	X	X	X		X	X	X	X	X	X	X		X			X		X		X		X	X	X	X	X	X	X	X	X	X	X
Houston		X				X	X	X	X	X		X		X		X	X				X		X		X	X	X	X	X	X	X	X	X
Port Lavaca		X	X			X	X	X	X	X	X			X			X				X		X	X	X	X	X	X	X	X	X	X	X
Port Mansfield	X						X	X	X	X		X					X		X				X	X	X	X	X	X	X	X	X	X	X
San Antonio Bay	X	X	X	X		X	X	X	X		X					X		X					X	X	X	X	X	X	X	X	X	X	X

Conservation, preservation & recreation sites and areas

Point source discharge, water quality & sewage treatment facilities













Public & military lands & sites

Historical sites & archeological areas

Major transportation network & major natural & artificial waterway

Major dredge material disposal sites

Table 2. Legend for maps of socioeconomic and natural features.

- A. Conservation, recreation, and preservation areas**
- [FNA¹] Federal lands
 - [SNA¹] State lands
 - Ⓐ¹ State Recreation, park, or wildlife management sites
 - [PNA¹] Private preservation areas
 - ⊖¹ Private preservation sites
 - ¹ County or municipal parks
 - ▲ Boat launch, unimproved
 - △ Boat launch, improved
 - Ⓓ¹ Outdoor recreation facility including marina
- B. Point source discharge, water quality and sewage treatment facilities**
- ¹ Industrial, discharge
 - ◇¹ Industrial, no discharge
 - ¹ Municipal or domestic sewage/water treatment, discharge
 - [W¹] Municipal water treatment facility, no discharge
 - [S¹] Municipal sewage treatment, no discharge
 - ¹ Power plant
- C. Public and military lands and installations**
- [P¹] Public lands
 - [AP¹] Airport
 - [MP¹] Military lands
 - ⊙ United States Coast Guard Station
- D. Historical sites and archeological areas**
- Historical sites
- ⊙¹ National Register
 - ¹ State historical parks; structures, sites
- [AA¹] Archeological areas
- ★¹ Underwater archeological sites with lease block number
- E. Major transportation networks and the natural and artificial waterways**
-  Interstate highway
 -  Federal highway
 -  Business route
 -  State highway
 - Spur Spur road
 -  Farm-to-market road
 -  Park road
 -  Private road
 - ++++ Railroad
 -  Perennial stream
 -  Navigation channel
 -  Irrigation and/or drainage canal
 -  Perennial lake
- F. Major dredge disposal sites**
-  Open water
 - * On land

Note: Superscripts are identified by name in the map narrative.

provide opportunities for compatible types of resource-oriented recreation." A few parks are valued for their historic significance such as Varner Hogg State Historical Park (Angleton Quadrangle). State recreation areas are "relatively natural areas having the best available scenic quality, which are usually associated with water resource oriented, unstructured, outdoor recreation opportunities serving regional or statewide needs." State fishing piers are sites "along the Texas Gulf coast and bays which provide regional recreation fishing opportunity through pier-type structure but lack sufficient land base to support extensive recreational development" (Texas Parks and Wildlife Department 1979).

Private preservation lands and sites include National Audubon Society preserves, private foundation lands, and personal family areas given over to public use. These are found on nine quadrangles.

County and municipal parks are recreation areas administered by local jurisdictions and may take several forms. They may be sports parks including golf links, zoos, and open spaces with planted and spontaneous vegetation having picnic areas and paths arranged within them. Swimming pools have not been noted except when associated with another facility. These are characteristically small in size and have been represented by point symbols. They are found on all but two quadrangles.

Outdoor recreation facilities include marinas as well as other commercial recreation services. These are identified by name in the map narrative details and are found on all but two quadrangles. Occasionally one of these facilities is called a park such as the W. T. Davis Park (Houston Quadrangle).

Since it is a commercial facility, it is listed in this section. Most of the information for these features has been taken from Marinas on the Texas Gulf Coast (Crompton et al. 1976) and the Region maps prepared by personnel of the Texas Parks and Wildlife Department.

The point source discharge and water quality and sewage treatment categories were taken from the Texas Water Quality Board definitions. These are Municipal Sewage Treatment and Water Treatment facility, discharge; Industrial facility, discharge; and Power Plant, discharge. The terms are straight forward. Where there is no discharge at a facility, that is noted (as in Municipal Sewage Treatment Facility, no discharge; Municipal Water Treatment, no discharge; Industrial, no discharge; and Power Plant, no discharge). No discharge occurs in self-contained facilities which recycle the wastes. Only Allyns Bight Quadrangle has no point source discharges.

Public and military lands and installations include state prison farms, airports, military fields, and United States Coast Guard stations. These are found throughout the Texas Barrier Islands Region.

The historical sites and archaeological areas include parks, sites, and structures of historical interest, and lands known or expected to be rich in archaeological finds. Underwater archaeological sites are listed by bay or Gulf lease block number. The historical sites include all facilities listed in the National Register and those areas set aside by the State of Texas. The state historical parks are those areas established largely to "preserve and interpret sites, events, persons or objects and which are of sufficient size to completely include

the historic feature" yet permit development of substantial recreation facilities (such as San Jacinto Battleground). The historic sites have the same purpose of preservation and interpretation, but they are of limited size such as the Lipantitlan historical archaeological site. The historic structures are areas of limited size which are established to preserve structures "embodying the distinguishing characteristics of an architectural type which are inherently valuable for the study of a period, style or method of construction" (such as the Fulton Mansion).

The major transportation networks include highways and roads, class 1 and class 2 line-haul railroads and port railroads. The waterways include navigation channels, main irrigation and drainage canals, rivers, and their first tributaries. Major dredged-material disposal sites are those identified from NOAA charts and from public notices issued during the permitting process of the Department of the Army.

The maps were compiled at a mesoscale (1:100,000) on United States Geological Survey (USGS) planimetric base maps printed on mylar. Theme data were plotted on diazo copies of the base maps, and the information was then transferred to mylar overlays which were punch registered with the USGS base maps. The names of the 16 base maps from northeast to south are: Anahuac Quadrangle (Houston northeast), Houston Quadrangle (Houston northwest), Galveston Quadrangle (Houston southeast), Angleton Quadrangle (Houston southwest), El Campo Quadrangle (Seguin southeast), Freeport Quadrangle (Bay City northwest), Port Lavaca Quadrangle (Beeville northeast), Goliad Quadrangle (Beeville northwest), San Antonio Bay Quadrangle (Beeville southeast), Allyns

Bight Quadrangle (Corpus Christi northeast), Beeville Quadrangle (Beeville southwest), Corpus Christi Quadrangle (Corpus Christi northwest), Baffin Bay Quadrangle (Corpus Christi southwest), Port Mansfield Quadrangle (Brownsville north half of north half), Harlingen Quadrangle (Brownsville south half of north half), and finally Brownsville Quadrangle (Brownsville north half of south half). The quadrangle area and counties of the Texas Barrier Island Region are shown in figures 1 and 2.

The principal sources used to locate the conservation, preservation, and recreation areas and sites were Texas Coastal Sanctuaries (National Audubon Society, n.d.); Concept Plan: Unique Wildlife Ecosystems of Texas (U. S. Fish and Wildlife Service 1979b); the draft Region Maps on which are located parks and recreation areas prepared by the State Historical Commission; NOAA small craft charts for the Texas coast; Marinas on the Texas Gulf Coast (Crompton et al. 1976); and an unpublished computer printout of coastal parks and recreation facilities from the Texas Parks and Wildlife Department, dated June 12, 1980. Because of the ephemeral nature of many of the recreational enterprises, we expect that we have not been able to plot all the facilities. Some enterprises plotted may have gone out of business by the time this study has been published. Boat launch locations were compiled from NOAA small craft charts, Doran and Brown's (1975) A Recreational Guide to the Central Texas Coast, and informed reports and field checking. These must be underreported although care has been taken to make the mapping as complete as possible. Improved boat launches have paved ramps or other devices to improve service to the boating public.

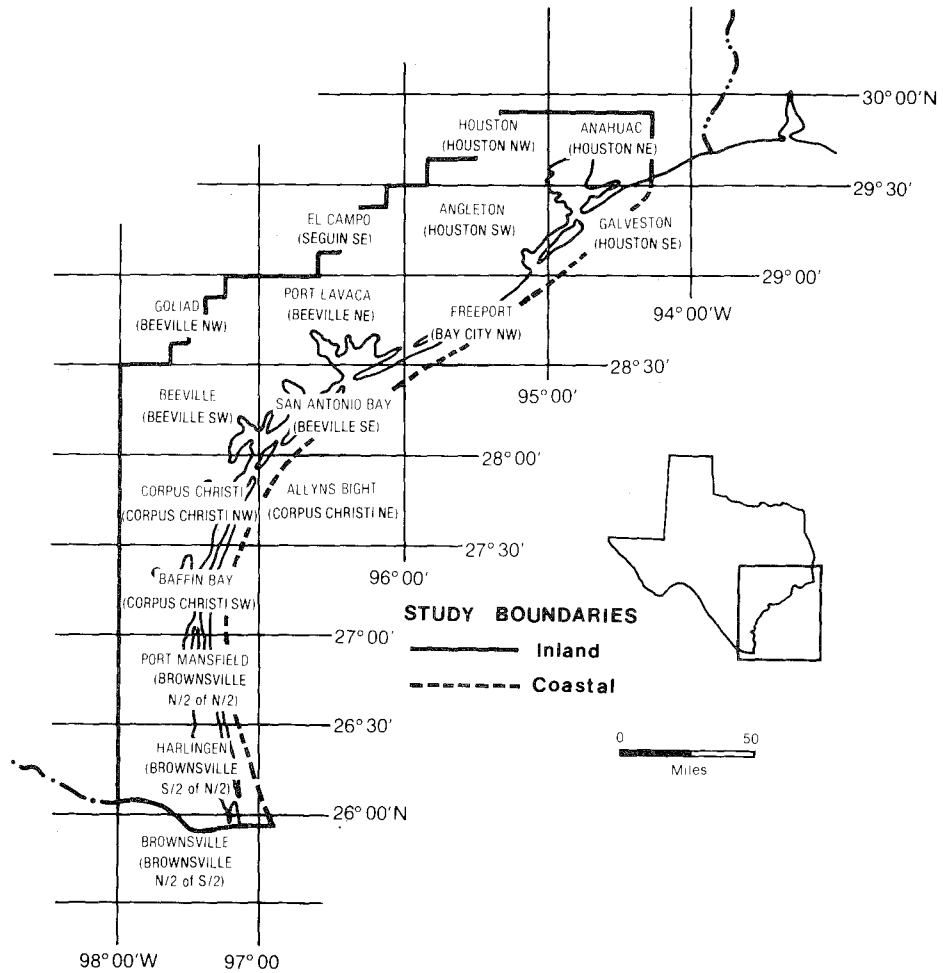


Figure 1. Index to sheets of the Texas Barrier Islands Region Ecological Characterization Atlas: Socioeconomic and Natural Features.

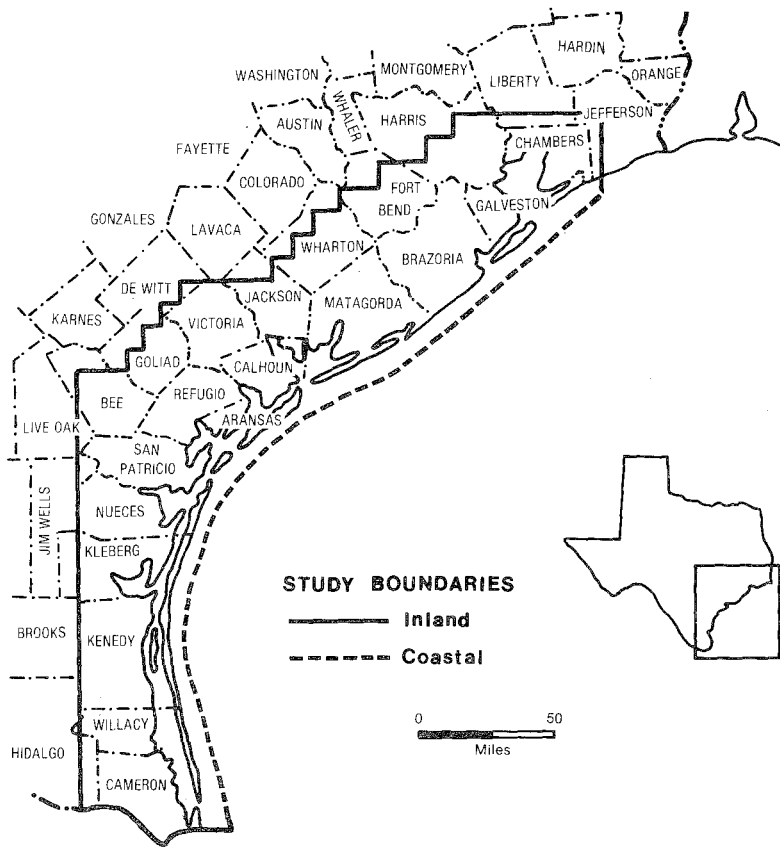


Figure 2. Counties of the Texas Barrier Islands Region.

The locations for point source discharges were extracted from the basin series of maps published by the Texas Water Quality Board in 1977 and a computer printout of state permit sub-systems dated April 11, 1980, provided by Dr. Clyde Bohmfalk, Chief, Water Quality Planning of the Texas Department of Water Resources.

Public and military lands were identified from USGS topographic maps, Texas State Highways, General Highway Maps (1/2 scale) and two sheets of the Texas General Land Office's 1976 Texas Coastal Management Program map series. The historical and archaeological sites were taken from the Texas General Land Office 1975 map--Historical and Archaeological Sites, Plates 8A and 8B, which were updated for the State by staff archaeologist Bob Wilson (courtesy of Dr. Curtis Tunnell); the Region Maps; and The National Register of Historic Places in Texas, published by the Texas Historical Commission in 1979. Additional sites were plotted from "Additions and Corrections to National Register Listing through October 31, 1979". Where a State Historical Park, Site, or Structure was also an item on the National Register, it was plotted as on the National Register and not listed elsewhere, hence the term "none others" found on some map details. The actual or potential underwater sites were identified by lease block numbers by Dr. Barto Arnold, State Underwater Archaeologist.

Transportation and waterway networks were well documented, and thus easily plotted; but the inclusion of pertinent dredged-disposal sites was more difficult. The major highways were taken from the 1980 State Highway Map. Some minor roads, including private roads, were mapped when they were the only ones giving access to the coastal waters. Details were taken from General Highway maps of the

coastal counties produced by the Texas Highway Department. Railroads were taken from the highway maps and USGS topographic maps, as were the perennial streams (main stem and first tributaries only), main navigation canals, principal irrigation and drainage canals, and the perennial lakes. Major dredged material disposal sites were taken from the NOAA small craft charts, USGS topographic maps, and maps accompanying public notices of maintenance dredging from different parts of the coast, furnished by Col. James Sigler, District Engineer, Galveston District, Corps of Engineers, Department of the Army.

Two field checks were made during the mapping process. The trips followed the compilation phase and served to clarify points of confusion in the literature, as well as to locate information otherwise not available.

Compilation and map design conventions used in this study are those in general use among cartographers; also, some conventions were specially developed for these maps. The information on the maps includes linear features which are represented by lines of different weights, areas which have been delineated by dashed lines, and smaller areas or locations which are represented by point symbols on the map.

Linear representations include shorelines, both coastal and lacustrine, and banks for large rivers. Highways are labeled by number and listed as Federal and State highways, farm-to-market, park, and private roads in the map narrative detail. Railroads are represented by abbreviation and the names listed in the map narrative detail for each sheet. Navigation channels are labeled by initials interpreted in the map narrative detail.

Areas are surrounded by a broken line and are identified by an alpha-numeric symbol placed within spaces on the line, with the bottom of the letters and numbers facing inside the area. When two or more areas have a common boundary, the alpha-numeric are alternately positioned on the line. If two delineated areas are adjacent, the alpha-numeric are facing different directions indicating the direction of the center of the respective areas. Areas have been indicated as precisely as information allowed except for the archaeological areas. These, because of their vulnerability to destructive exploitation, have been indicated by broadly bounded areas containing numbers of sites. Similarly, wrecks and other underwater archaeological sites have been identified by the bay or lease block number, which has been placed in the center of the relevant lease block. In many cases, the symbol shows a potential site or sites, and may not represent an actual site. Many presently unknown archaeological sites probably exist, and the areas mapped should not be considered an exhaustive representation of all potentially important archaeological sites along the coast.

Small areas, including National Register listings, recreation sites and boat launches are identified by point symbols. Point symbols are either placed on the site or close by, with an arrow to the site. Where there is considerable congestion because facilities are located near one another, some

symbols will have arrows to the site where another symbol is located. The point symbol indicates location only and not areal extent. County and municipal parks were indicated by individual point symbols in rural areas and identified by number. Municipal parks were listed in the map narrative details for towns and smaller cities. Small parks were not identified especially in the central metropolitan areas of Houston, Corpus Christi, and Brownsville. Within a city, one symbol may indicate that one or more city parks may be found there. In cities and smaller towns, the point symbol is placed in the general vicinity of the actual location since often a precise location was not available.

Map narrative details prepared or each sheet of this map include additional levels of information within each subheading. Some features are named or identified by permit number. Other items (such as streams and canals) are merely noted as present or no data. "No data" is used in this study when no information on a particular feature was found for a specific map area and, thus, no data have been compiled on the maps. This situation arises either because the feature does not exist or because it is not reported in the literature consulted. The format of each map narrative detail is consistent to aid in the identification of features. The outline presents the names of the principal features found on each sheet.

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MAP NARRATIVE DETAIL - SOCIOECONOMIC ACTIVITIES

ALLYNS BIGHT QUADRANGLE (Corpus Christi NE), including part of Aransas County

A. Conservation, recreation, and preservation areas

1. Federal lands (FNA)
no data
2. State lands (SNA) and sites
 - a) areas
no data
 - b) sites
no data
3. Private preservation areas (PNA) and sites
 - a) areas
no data
 - b) sites
no data
4. County or municipal parks
 - a) areas
no data
 - b) sites
no data
5. Outdoor recreation facilities
 - a) marinas
no data
 - b) others
no data
6. Boat launches
 - a) unimproved
no data
 - b) improved
no data

B. Point source discharges, water quality and sewage treatment facilities

1. Industrial, discharges
no data
2. Industrial, no discharge
no data

3. Municipal or domestic sewage/ water treatment, discharges
no data
4. Municipal water treatment facilities, no discharge
no data
5. Municipal sewage treatment facilities, no discharge
no data
6. Power plants
no data

C. Public (P) and military (M) lands and installations

1. Public, airports (AP)
no data
2. Military lands and sites
no data
3. United States Coast Guard Station
no data

D. Historical sites and archaeological areas

1. Historical sites
 - a) National Register
no data
 - b) State Historical Parks, Sites, Structures
no data
2. Archaeological areas (AA)
no data
3. Underwater archaeological sites
 - a) Bay lease block number
no data
 - b) 662 L = Gulf lease block number NW

E. Major transportation networks and major natural and artificial waterways

1. Highways and roads

- a) Federal
no data
- b) State
no data
- c) Farm to Market
no data
- d) Park
no data
- 2. Railroads
no data
- 3. Water features
 - a) Perennial streams
no data
 - b) Canals

- i) navigation
no data
- ii) drainage and irrigation
no data
- c) Perennial lakes
no data

F. Major dredge disposal sites

- 1. Open water
no data
- 2. On land
no data

MAP NARRATIVE DETAIL - SOCIOECONOMIC ACTIVITIES

ANAHUAC QUADRANGLE (Houston NE), including parts of Chambers, Harris and Galveston counties

A. Conservation, recreation, and preservation areas

1. Federal lands (FNA)
 - 1 = Anahuac National Wildlife Refuge
2. State lands (SNA) and sites
 - a) areas
no data
 - b) sites
no data
3. Private preservation areas (PNA) and sites
 - a) area
 - 1 = Vingt-et-un Islands Audubon Wildlife Sanctuary
 - b) site
 - 1 = James H. Robbins Memorial Park
4. County or municipal areas and sites
 - a) areas
no data
 - b) sites
 - 1 = Morgans Point City Park SW
 - 2 = Baytown Park NW
 - 3 = Fort Anahuac Park NW
 - 4 = Unnamed site SW
 - 5 = Bun's Ranch NW
 - 6 = Oak Island Park SW
 - 7 = Double Bayou Park SW
 - 8 = Winnie Stowell Park NE
 - 9 = White Memorial Park NW
 - 10 = High Island City Park NE
 - 11 = Job Beason Park NW

5. Outdoor recreation facilities
 - a) marina
 - 1 = Stingaree Marina SE
 - b) others
 - 2 = Harbours Fish Camp SW
 - 3 = Morgans Point bait & tackle SW
 - 4 = High Island Fishing Pier SE
 - 5 = Forbes Fish Camp NW
 - 6 = Muckleroy's Camp NW
 - 7 = Thompson Camp SW
 - 8 = Tollesons Camp NW
6. Boat launches
 - a) unimproved
present
 - b) improved
present

B. Point source discharges, water quality and sewage treatment facilities

1. Industrial, discharges
 - 1 = Permit number 01499-01 NW
 - 2 = Permit number 00952-01, 02 NW
 - 3 = Permit number 01332-01 SW
2. Industrial, no discharge
no data
3. Municipal or domestic sewage/ water treatment, discharges
 - 1 = Permit number 11031-10 NW
 - 2 = Permit number 11534-01 NW
 - 3 = Permit number 10990-01 NW
 - 4 = Permit number 10440-01 NW

- 5 = Permit number 11520-01
NW
- 6 = Permit number 11030-01
NW
- 7 = Permit number 11449-01
NW
- 8 = Permit number 11109-01
NW
- 9 = Permit number 11591-01
NW
- 10 = Permit number 11442-01
SW
- 11 = Permit number 11537-01
SW
- 12 = Permit number 11667-01
SW
- 13 = Permit number 11681-01
SW
- 4. Municipal water treatment facilities, no discharge
no data
- 5. Municipal sewage treatment facilities, no discharge
no data
- 6. Power plants
 - 1 = Permit number 01241-01,
11,21,31,41

C. Public (P) and military (M) lands and installations

- 1. Public, airports (AP)
 - 1 = Humphrey Airport NW
 - 2 = Chambers County Airport
SW
- 2. Military lands and sites
no data
- 3. United States Coast Guard Station
no data

D. Historical sites and archaeological areas

- 1. Historical sites
 - a) National Register
 - 1 = Anahuac site NE
 - b) State Historical Parks, Sites, Structures
 - 1 = Gov. Ross Sterling's birthplace NE

- 2 = Chamber's home site NE
- 2. Archaeological areas (AA)
 - 1 = Part of 38 Prehistoric sites (McGuff and Ford 1979)
 - 2 = Cedar Bayou District (on National Register)
 - 3 = One hundred and forty eight prehistoric sites (Shafer et al. 1975; Ambler 1967)
 - 4 = Orcoquisac Archeological District (on National Register)
 - 5 = Twenty two prehistoric sites (Ambler 1967; Shafer 1972)
- 3. Underwater archaeological sites
 - a) Bay lease block number
no data
 - b) 115 = Gulf lease block number SE
137S = Gulf lease block number SE

E. Major transportation networks and major natural and artificial waterways

- 1. Highways and roads
 - a) Federal
 - I 10
 - b) State
 - 61
 - 65
 - 73
 - 87
 - 124
 - 146
 - c) Farm to Market
 - 562
 - 563
 - 564
 - 565
 - 1405
 - 1406
 - 1942
 - 1985
 - 2354
 - d) Park
no data

2. Railroads

AT&SF = Atcheson Topeka and Santa Fe

SP = Southern Pacific

MP = Missouri Pacific

PT = Port Terminal Railroad

U.S.S.C. = U.S. Steel Corp Railroad

3. Water features

a) Perennial streams present

b) Canals

i) navigation

GIWW = Gulf Intra-coastal Waterway

HSC = Houston Ship Channel

CB = Junction of Houston Ship Channel

with first bend of Cedar Bayou

AC = Anahuac Channel

DBC = Double Bayou Channel

TRC = Trinity River Channel

UCC = Clear Creek Channel

ii) drainage and irrigation present

c) Perennial lakes present

F. Major dredge disposal sites

1. Open water

present

2. On land

present

MAP NARRATIVE DETAIL - SOCIOECONOMIC ACTIVITIES

ANGLETON QUADRANGLE (Houston SW), including parts of Galveston, Brazoria, Fort Bend, Wharton and Matagorda counties

A. Conservation, recreation, and preservation areas

1. Federal lands (FNA)
 - 1 = Brazoria National Wildlife Refuge
2. State lands (SNA) and sites
 - a) area
 - 1 = Hale Ranch State Park
 - b) site
 - 1 = Varner-Hogg State Historical Park
3. Private preservation areas (PNA) and sites
 - a) areas
 - 1 = West Bay Bird Island Wildlife Sanctuary, National Audubon Society
 - 2 = Mud Island
 - b) sites
 - 1 = West Bay Fishing and Hunting Club SE
 - 2 = Dow Lake Jackson Park SE
 - 3 = Dow Brazoria Reservoir Park SE
4. County or municipal parks
 - a) areas
 - no data
 - b) sites
 - 1 = McLemore Park NE
 - 2 = Morgan Park NE
 - 3 = Mustang Park NE
 - 4 = Owen Park NE
 - 5 = Newman NE
 - 6 = Pearson Park NE
 - 7 = Rice Park NE
 - 8 = Sealy Park NE
 - 9 = Talmadge Park NE
 - 10 = Straton Ridge Park SE
 - 11 = Wilson Park SW
 - 12 = Angleton City Park NE
 - 13 = American Region Ball Park SE
 - 14 = Dunbar Park SE
 - 15 = Lake Jackson Park SE
 - 16 = Hitchcock City Park #1 NE
 - 17 = Hitchcock City Park #2 NE
 - 18 = East Columbia Park SW
5. Outdoor recreation facilities
 - a) marinas
 - 1 = Sea Isle Marina SE
 - 2 = West Bay Bart Camp SE
 - 3 = J. C. Petersons Marina NW
 - 4 = Chocolate Bayou Marina SE
 - 5 = Marlin Marina SE
 - 6 = Bastrop Marina SE
 - 7 = Turtle Cove Marina SE
 - 8 = Sharp's Yacht Service SE
 - b) others
 - 9 = Halls Bayou Fishing Camp NE
 - 10 = Lutes Marine Service NE-SE
 - 11 = West Bay Bait Camp Private Campground SE
 - 12 = San Luis Pass Fishing Pier
6. Boat launches
 - a) unimproved present
 - b) improved present

B. Point source discharges, water quality and sewage treatment facilities

1. Industrial, discharges

- 1 = Permit number 00004-01,
02,03,04 NW
- 2 = Permit number 00377-01
NE
- 3 = Permit number 00990-01
NE
- 4 = Permit number 00993-01,
03 NW
- 5 = Permit number 00994-01
NW
- 6 = Permit number 00001-01
SE
- 7 = Permit number 01333-01
SE
- 8 = Permit number 01221-01
SE
- 9 = Permit number 00721-01,
02,03,04 SW
- 10 = Permit number 01802-01,
02 SE

2. Industrial, no discharge
no data

3. Municipal or domestic sewage/
water treatment, discharges

- 1 = Permit number 10343-01
NW
- 2 = Permit number 10743-01
NE
- 3 = Permit number 11251-01
NE
- 4 = Permit number 10605-01
NE
- 5 = Permit number 11511-01
NE
- 6 = Permit number 10861-01
NE
- 7 = Permit number 10174-01
NE
- 8 = Permit number 10173-01
NE
- 9 = Permit number 10173-02
NE
- 10 = Permit number 10375-02
NE
- 11 = Permit number 10843-01
NW

- 12 = Permit number 11130-01
NW
- 13 = Permit number 11529-01
NW
- 14 = Permit number 10991-01
NW
- 15 = Permit number 10158-01
SE
- 16 = Permit number 10700-01
NE
- 17 = Permit number 10420-01
NE
- 18 = Permit number 10690-01
NE
- 19 = Permit number 10663-01
SW
- 20 = Permit number 10297-01
SW
- 21 = Permit number 10312-01
SW
- 22 = Permit number 11614-01
SE
- 23 = Permit number 11306-01
SW
- 24 = Permit number 10133-01
SW
- 25 = Permit number 11602-01
SW
- 26 = Permit number 10047-01
SE
- 27 = Permit number 10829-01
SE
- 28 = Permit number 10548-01
SE
- 29 = Permit number 10674-01
SE
- 30 = Permit number 10629-01
SE
- 31 = Permit number 10044-01
SE
- 32 = Permit number 10789-01
SE
- 33 = Permit number 11266-01
SE

4. Municipal water treatment
facilities, no discharge
no data

5. Municipal sewage treatment
facilities, no discharge

- 1 = Permit number 11397-01
SE

- 2 = Permit number 11768-01 SW
- 6. Power plants
no data

C. Public (P) and military (M) lands and installations

- 1. Public, airports
 - a) public lands
 - 1 = State Dept. of Corrections, Clemens Unit
 - 2 = State Dept. of Corrections, Ramsey Unit
 - 3 = State Dept. of Corrections, Retrieve Unit
 - 4 = State Dept. of Corrections, Harrington Unit
 - b) airports (AP)
 - 1 = Lake Jackson Airport
 - 2 = Cameron Airport
 - 3 = Bailes Airport
 - 4 = Landing strip, Danbury Dome
 - 5 = Alvin Air Park
 - 6 = S&S Patrol Field
 - 7 = Landing strip
 - 8 = Cole Airport
 - 9 = under construction
- 2. Military lands and sites
no data
- 3. United States Coast Guard Station
no data

D. Historical sites and archaeological areas

- 1. Historical sites
 - a) National Register
 - 1 = Ammon Underwood House SW
 - b) State Historical Parks, Sites, Structures
no data
- 2. Archaeological areas (AA)
 - 1 = Three prehistoric sites (Aten 1972)
 - 2 = Seventy eight sites: 76 prehistoric, 2 historic (McGuff and Cox 1973)

- 3 = South Texas Project Transmission Network (Dillehay et al. 1975)
- 4 = Nine prehistoric sites (Skelton 1974)
- 5 = Shell Point Study (Hole and Wilkinson 1973)

- 3. Underwater archaeological sites
 - a) 47 = Bay lease block number NE
 - 54 = Bay lease block number NE
 - b) 279S = Gulf lease block number NE
 - 299S = Gulf lease block number NE
 - 300S = Gulf lease block number NE
 - 301S = Gulf lease block number NE
 - 310S = Gulf lease block number NE
 - 311S = Gulf lease block number NE
 - 312S = Gulf lease block number NE
 - 313S = Gulf lease block number NE

E. Major transportation networks and major natural and artificial waterways

- 1. Highways and roads
 - a) Federal
 - 59
 - 59BR
 - 75
 - I-45
 - b) State
 - 3
 - 6
 - 35
 - 36
 - 60
 - 332
 - BR 35
 - 288A
 - c) Farm to Market
 - 288
 - 360

- 442
- 517
- 521
- 523
- 524
- 528
- 1128
- 1301
- 1462
- 1459
- 1728
- 2004
- 2540
- 3005
- d) Park
 - no data
- 2. Railroads
 - AT&SF = Atchison, Topeka and Santa Fe
 - SP = Southern Pacific
 - MP = Missouri Pacific
- 3. Water features
 - a) Perennial streams
 - present
 - b) Canals
 - i) navigation
 - GIWW = Gulf Intra-coastal Waterway
 - BBC = Bastrop Bay Channels
 - DBC = Drum Bay Channel
 - CBC = Chocolate Bay Channel
 - ii) drainage and irrigation
 - present
 - c) Perennial lakes
 - present
- F. Major dredge disposal sites
 - 1. Open water
 - present
 - 2. On land
 - present

MAP NARRATIVE DETAIL - SOCIOECONOMIC ACTIVITIES

BAFFIN BAY QUADRANGLE (Corpus Christi SW), including parts of Kenedy, Kleberg, and Brooks counties

A. Conservation, recreation, and preservation areas

1. Federal lands (FNA)
 - 1 = Padre Island National Seashore
2. State lands (SNA) and sites
no data
3. Private preservation areas (PNA) and sites
 - a) area
 - 1 = South Bird Island, Audubon Society
 - b) = sites
no data
4. County or municipal parks
 - a) areas
no data
 - b) sites
 - 1 = Bicentennial Park NW
 - 2 = Brookshire One NW
 - 3 = Brookshire Two NW
 - 4 = Kingsville City Park NW
 - 5 = Corral Street Park NW
 - 6 = Dick Kleberg NW
 - 7 = Flato Park NW
 - 8 = Plaza Park NW
 - 9 = Thompson Park NW
5. Outdoor recreation facilities
 - a) marinas
no data
 - b) others
 - 1 = Williamson Boat Works NW
 - 2 = Kratz Bait Camp NW
6. Boat launches
 - a) unimproved
present
 - b) improved
no data

B. Point source discharges, water quality and sewage treatment facilities

1. Industrial, discharges
no data
2. Industrial, no discharge
no data
3. Municipal or domestic sewage/ water treatment, discharges
 - 1 = Permit number 10696-01 NW
 - 2 = Permit number 10696-02 NW
 - 3 = Permit number 10696-03 NW
4. Municipal water treatment facilities, no discharge
no data
5. Municipal sewage treatment facilities, no discharge
 - 1 = Permit number 11515-01 NW
6. Power plants
no data

C. Public (P) and military (M) lands and installations

1. Public, airports (AP)
no data
2. Military lands and sites
 - 1 = Kingsville Naval Air Station
 - 2 = U.S. Naval Reservation
3. United States Coast Guard Station
no data

D. Historical sites and archaeological areas

1. Historical sites
 - a) National Register
no data
 - b) State Historical Parks, Structures, Sites

- no data
- 2. Archaeological areas (AA)
 - 1 = King Ranch
 - 2 = Padre Island study (Campbell 1964); 13 sites; *8 prehistoric, 1 prehistoric/historic, 4 historic (Scurlock et al. 1974)
 - 3 = Forty prehistoric sites (Hester et al. 1969)
- 3. Underwater archaeological sites
 - a) Bay lease block number
no data
 - b) Gulf lease block number
no data

E. Major transportation networks and major natural and artificial waterways

- 1. Highways and roads
 - a) Federal
77
 - b) State
285
428

- c) Farm to Market
628
771
- d) Park
no data
- 2. Railroads
MP = Missouri Pacific
- 3. Water features
 - a) Perennial streams
present
 - b) Canals
 - i) navigation
GIWW = Gulf Intra-coastal Waterway
 - ii) drainage and irrigation
no data
 - c) Perennial lakes
present

F. Major dredge disposal sites

- 1. Open water
present
- 2. On land
no data

MAP NARRATIVE DETAIL - SOCIOECONOMIC ACTIVITIES

BEEVILLE QUADRANGLE (Beeville SW), including parts of Bee, Refugio, San Patricio, Aransas, Goliad, Live Oak and Jim Wells counties

A. Conservation, recreation, and preservation areas

1. Federal lands (FNA)
no data
2. State lands (SNA) and sites
 - a) area
1 = Lake Corpus Christi State Recreation Area
 - b) site
1 = Copano Bay Fish Fishing Pier SE
3. Private preservation areas (PNA) and sites
 - a) area
1 = Rob & Bessie Welder Wildlife Foundation
 - b) sites
no data
4. County or municipal parks
 - a) areas
no data
 - b) sites
1 = Mathes Park SE
2 = Memorial Park SE
3 = Spencer Park SE
4 = Rockport Beach, Navigation Dist. SE
5 = Navigation Park 1 SE
6 = Navigation Park 2 SE
7 = Park Welder Zoo SE
8 = Speck Eakin Park SW
9 = Rob and Bessie Welder Park SW
10 = Bayside Park and Pier NE
11 = Lions Park NE
12 = 32-Acre Park NE

- 13 = Water Tower Park SW
- 14 = Beeville City Park NW
5. Outdoor recreation facilities
 - a) marinas
no data
 - b) others
1 = Showondosse Camp SW
2 = The Roundup SW
3 = Camp Bell SW
4 = Hoffman's Camp SW
5 = Lenz Camp SW
6 = Sleepy Hollow Marina Camp and Park SW
7 = Sunrise Beach Camp Ground SW
8 = Wrights Fishing Camp SW
9 = St. Mary's Fishing Camp SE
10 = Copano Bay Fish Camp SE
11 = Harbor Seafood SE
12 = Bea's Bait Stand SE
13 = Capt. Cadys Bait House SE
14 = Fleming Bait Stand SE
15 = Mary Lou's Bait Stand SE
16 = Moms Bait Stand SE
17 = Red Fish Camp and Pouzees' SE
18 = Sandollar Marine SE
19 = Redfish Cap SE
20 = Fray Trailer Inn SE
6. Boat launches
 - a) unimproved
present
 - b) improved
present

B. Point source discharges, water quality and sewage treatment facilities

1. Industrial, discharges

- 1 = Permit number 01242-01
NW
- 2. Industrial, no discharge
no data
- 3. Municipal or domestic sewage/
water treatment, discharges
 - 1 = Permit number 10124-01
NW
 - 2 = Permit number 10124-02
NW
 - 3 = Permit number 10156-01
SE
 - 4 = Permit number 10253-01
NE
 - 5 = Permit number 10669-01
SE
 - 6 = Permit number 11407-01
SE
 - 7 = Permit number 10015-01
SW
 - 8 = Permit number 10055-01
SE
 - 9 = Permit number 10054-01
SE
- 4. Municipal water treatment
facilities, no discharge
no data
- 5. Municipal sewage treatment
facilities, no discharge
 - 1 = Permit number 11624-01
SE
 - 2 = Permit number 11165-01
SW
 - 3 = Permit number 11334-01
SE
 - 4 = Permit number 11280-01
SE
- 6. Power plants
no data

C. Public (P) and military (M) lands and installations

- 1. Public, airports (AP)
 - 1 = Beeville County Airport
 - 2 = Sinton Airport
 - 3 = Rooke Airport, Refugio
 - 4 = Aransas County Airport
- 2. Military lands and sites
 - 1A = Chase Field Naval Air
Station

- 1B = Chase Field Naval Air
Station
- 3. United States Coast Guard
Station
no data
- D. Historical sites and
archaeological areas

- 1. Historical sites
 - a) National Register
 - 1 = Fulton Mansion State
Historic Structure SE
 - 2 = T. H. Mathis House SE
 - b) State Historical Parks,
Sites, Structures
no data
- 2. Archaeological areas (AA)
 - 1 = See Martin n.d. un-
published files in
Texas State Historical
Commission
 - 2 = See Martin n.d. un-
published files in
Texas State Historical
Commission
 - 3 = South Texas Project
Transmission Network
(Dillehay et al. 1975)
 - 4 = See Martin n.d. un-
published files in
Texas State Historical
Commission
 - 5 = Eighteen prehistoric
sites (Holliday and
Grombacher 1973)
- 3. Underwater archaeological site
no data

E. Major transportation networks and
major natural and artificial waterways

- 1. Highways and roads
 - a) Federal
 - 37
 - 59
 - 77
 - 77A
 - 181
 - 183
 - b) State
 - 35
 - 202

- 359
- 516
- c) Farm to Market
 - 136
 - 534
 - 666
 - 673
 - 774
 - 881
 - 2678
 - 3162
- d) Park
 - no data
- 2. Railroads
 - MP = Missouri Pacific
 - SP = Southern Pacific
- 3. Water features

- a) Perennial streams
 - present
- b) Canals
 - i) navigation
 - GIWW = Gulf Intra-coastal Waterway
 - ii) drainage and irrigation
 - no data
- c) Perennial lakes
 - present

F. Major dredge disposal sites

- 1. Open water
 - present
- 2. On land
 - present

MAP NARRATIVE DETAIL - SOCIOECONOMIC ACTIVITIES

BROWNSVILLE QUADRANGLE (Brownsville N/2, S/2), including part of Cameron County

A. Conservation, recreation, and preservation areas

1. Federal lands (FNA)
no data
2. State lands (SNA) and sites
 - a) area
1 = Brazos Island State Recreation Area
 - b) sites
1 = Las Palomas Wildlife Management Area, Voshell Unit
2 = Brownsville Whitewing Dove Habitat
3 = Resaca de la Palma State Park Site
3. Private preservation areas (PNA) and sites
 - a) area
1 = Sabal Palm Grove, National Audubon Society
 - b) sites
no data
4. County or municipal parks
 - a) areas
no data
 - b) sites
1-15 Brownsville parks and recreation areas NE
5. Outdoor recreation facilities
 - a) marinas
no data
 - b) others
1 = Brownsville Fishing Harbor NE
2 = River View Golf Course NE
6. Boat launches

- a) unimproved
no data
- b) improved
present

B. Point source discharges, water quality and sewage treatment facilities

1. Industrial, discharge
 - 1 = Permit number 00446-01 NE
2. Industrial, no discharge
no data
3. Municipal or domestic sewage/ water treatment, discharges
 - 1 = Permit number 11611-01 NW
 - 2 = Permit number 11610-01 NW
 - 3 = Permit number 10397-02 NE
 - 4 = Permit number 10397-03 NE
 - 5 = Permit number 10332-05 NE
 - 6 = Permit number 10332-03 NE
 - 7 = Permit number 10332-01 NE
 - 8 = Permit number 11489-01 NE
 - 9 = Permit number 10757-01 NE
4. Municipal water treatment facilities, no discharge
no data
5. Municipal sewage treatment facilities, no discharge
 - 1 = Permit number 10397-04 NE
 - 2 = Permit number 11344-01 NE

- 3 = Permit number 10332-04
NE
- 4 = Permit number 10332-03
NE
- 6. Power plants
no data

C. Public (P) and military (M) lands and installations

- 1. Public, airports (AP)
 - 1 = Brownsville International Airport
- 2. Military lands and sites
no data
- 3. United States Coast Guard Station
no data

D. Historical sites and archaeological areas

- 1. Historical sites
 - a) National Register
 - 1 = Browne-Wagner House NE
 - 2 = Southern Pacific Railroad Passenger Depot NE
 - 3 = Old Brulay Plantation NE
 - 4 = Resaca de la Palma Battlefield NW
 - 5 = Palmito Hill Battlefield NW
 - b) State Historical Parks, Sites, Structures
no data
- 2. Archaeological areas (AA)
 - 1 = Fort Brown Area
 - 2 = Old settlement and fort (Clark et al. n.d. unpublished)
 - 3 = Southmost Ranch Natural Area Survey, Archaeology and Ethnohistory (Paul and Zavaleta n. d. unpublished)
 - 4 = No area of this number plotted on this map
 - 5 = Palo Alto Battlefield (Bond 1979; Baxter and Killen 1976)
 - 6 = Twelve sites, 9 pre-historic, 3 historic

(Hall and Grombacher 1974)

- 3. Underwater archaeological site
 - a) Bay lease block number
no data
 - b) 1241 = Gulf lease block number

E. Major transportation networks and major natural and artificial waterways

- 1. Highways and roads
 - a) Federal
 - 77
 - BR 83
 - 83
 - 281
 - b) State
 - 4
 - 48
 - 415
 - c) Farm to Market
 - 511
 - 802
 - 1419
 - 1421
 - 1847
 - 3068
 - d) Park
no data
- 2. Railroads
 - SP = Southern Pacific
 - MP = Missouri Pacific
- 3. Water features
 - a) Perennial streams
present
 - b) Canals
 - i) navigation
BSC = Brownsville Ship Channel
 - ii) drainage and irrigation
present
 - c) Perennial lakes
present

F. Major dredge disposal sites

- 1. Open water
no data
- 2. On land
present

MAP NARRATIVE DETAIL - SOCIOECONOMIC ACTIVITIES

CORPUS CHRISTI QUADRANGLE (Corpus Christi NW), including all or parts of Aransas, Jim Wells, Kleberg, Nueces and San Patricio counties.

A. Conservation, recreation, and preservation areas

1. Federal lands (FNA)
 - 1 = Padre Island National Seashore
2. State lands (SNA) and sites
 - a) area
 - 1 = Mustang Island State Park
 - b) sites
 - no data
3. Private preservation areas (PNA) and sites
 - a) areas
 - 1 = Harbor Island Wildlife Sanctuary National Audubon Society
 - 2 = Lydia Ann Island Wildlife Sanctuary, National Audubon Society
 - b) sites
 - no data
4. County or municipal parks
 - a) areas
 - no data
 - b) sites
 - 1 = Nueces County Fishing Pier 1 NE
 - 2 = Nueces County Fishing Pier 2 NE
 - 3 = Padre Ball Park SE
 - 4 = Packery Channel Park NE
 - 5 = McCampbell Park NE
 - 6 = Newberry Park NE
 - 7 = Ingleside Park NE
 - 8 = Baker Park NE
 - 9 = Bayside Park NE

- 10 = Brian Bluff Park NE
- 11 = East Cliff Park NE
- 12 = Portland Municipal Park NE
- 13 = Portland Softball Complex NE
- 14 = Twin Fountains Park NE
- 15 = Westcliff Park NE
- 16 = Willacy Park NE
- 17 = Parker Park SE
- 18 = Wranosky Park SE
- 19 = Glen Arbor Park SE
- 20 = Corpus Christi Beach North NE
- 21 = Surfside Park NE
- 22 = Kiwanis Park NE
- 23 = Breakwater Park NE
- 24 = Mortle Park NE
- 25 = Hudson Park NW
- 26 = West Guth Park NW
- 27 = Highway Park NW
- 28 = Country Estates NW
- 29 = Nueces County Park #1 SE
- 30 = Robstown 30 acre Park SW
- 31 = Sablatura Park SW
- 32 = Hazel Brazemore Park SW
- 33 = Amistad Park SW
- 34 = Bishop City Park SW
- 35 = Bicentennial Park SW
- 36 = Brookshire Park #1 SW
- 37 = Brookshire Park #2 SW
- 38 = Kingsville City Park SW
- 39 = Corral Street Park SW
- 40 = Dick Kleberg Park SW
- 41 = Flato Park SW
- 42 = Plaza Park SW
- 43 = Thompson Park SW
- 44 = Odem Recreation Park NW
- 45 = Sharp Memorial Park NW
- 46 = Welder Park NW

- 47 = Barrio Little League NE
- 48 = Green Park NE
- 49 = Hidalgo Park NE
- 50 = Reynolds Park NE
- 51 = Victoria Park NE
- 52 = Nueces County Park #2
SE
- 53 = Nueces County Park #3
SE
- 54-161 = 107 other Corpus
Christi Parks NE-SE

5. Outdoor recreation facilities

a) marinas

- 1 = University of Texas
Marina NE
- 2 = Woody's Boat Basin
(Marina) NE
- 3 = Villa de la Pesca NE
- 4 = Port Aransas Municipal
Boat Harbour NE
- 5 = San Patricio County
Navigation District
Marina NE
- 6 = Sports Center NE
- 7 = Fin and Feather Marina
NE
- 8 = Seven Seas Marina NE
- 9 = Bahia Azul Marina NE
- 10 = B. G.'s Marina SE
- 11 = Corpus Christi Muni-
cipal Marina NE
- 12 = Hap's Bait Stand SE
- 13 = Jerry's Place SE
- 14 = Coburn Marina Center SE
- 15 = Laguna Marine SE
- 16 = Ingleside Marina NE

b) others

- 17 = Billie and Gene Bait
Stand NE
- 18 = Deep Sea Headquarters
NE
- 19 = Fishermens Wharf NE
- 20 = Hogans Bait Stand NE
- 21 = Bait Hut NE
- 22 = Billings Bait Stand SE
- 23 = Blacks Bait Stand SE
- 24 = Fisherman's Folly SE
- 25 = Grahams Bait Stand SE

- 26 = Rainbow Bait Stand SE
- 27 = Red Out Bait Stand SE
- 28 = Snoopy's Bait Stand SE
- 29 = The Coastway SE
- 30 = The Boat Hole Fishing
Basin SE
- 31 = Fleming's Bait Stand NE
- 32 = Bait Camp NE
- 33 = Bait Camp NE
- 34 = Bait Camp NE
- 35 = Indian Point Pier NE

6. Boat launches

- a) unimproved
present
- b) improved
present

B. Point source discharges, water
quality and sewage treatment
facilities

1. Industrial, discharges

- 1 = Permit number 00351-02,
03,04 NW
- 2 = Permit number 00358-01
02,03 NE
- 3 = Permit number 01909-01,
02 NE
- 4 = Permit number 00314-01
NE
- 5 = Permit number 00465-01,
02 NE
- 6 = Permit number 01037-01
NE
- 7 = Permit number 00349-01
NE
- 8 = Permit number 00457-01,
02 NE
- 9 = Permit number 00467-01
NE
- 10 = Permit number 01426-01
NE
- 11 = Permit number 00311-01
NE
- 12 = Permit number 10651-01,
02 NE
- 13 = Permit number 00656-01
NE
- 14 = Permit number 00579-01
SW

- 15 = Permit number 00337-01
SE
- 2. Industrial, no discharge
no data
- 3. Municipal or domestic sewage/
water treatment, discharges
 - 1 = Permit number 10401-02
NW
 - 2 = Permit number 10237-01
NW
 - 3 = Permit number 10401-06
NW
 - 4 = Permit number 10705-01
NE
 - 5 = Permit number 10478-01
NE
 - 6 = Permit number 11096-01
NE
 - 7 = Permit number 10092-01
NE
 - 8 = Permit number 10422-01
NE
 - 9 = Permit number 10521-02
NE
 - 10 = Permit number 10140-01
NW
 - 11 = Permit number 11583-01
NW
 - 12 = Permit number 11541-01
SW
 - 13 = Permit number 11689-01
SW
 - 14 = Permit number 10261-01
NW
 - 15 = Permit number 11205-01
SW
 - 16 = Permit number 11345-01
NW
 - 17 = Permit number 10401-11
SE
 - 18 = Permit number 11134-01
SE
 - 19 = Permit number 10401-03
SE
 - 20 = Permit number 10401-05
NE
 - 21 = Permit number 10401-04
SE
 - 22 = Permit number 10401-08
SE

- 23 = Permit number 10846-01
NE
- 24 = Permit number 10696-01
SW
- 25 = Permit number 10427-01
SW
- 26 = Permit number 11446-01
SE
- 27 = Permit number 10401-07
SE
- 28 = Permit number 10401-09
SE
- 4. Municipal water treatment
facilities, no discharge
no data
- 5. Municipal sewage treatment
facilities, no discharge
 - 1 = Permit number 11660-02
NW
 - 2 = Permit number 11660-01
NW
 - 3 = Permit number 10978-01
SE
 - 4 = Permit number 10930-03
SE
- 6. Power plants
 - 1 = Permit number 10255-01,
02 NW
 - 2 = Permit number 01490-01
SE

C. Public (P) and military (M) lands
and installations

- 1. Public, airports (AP)
 - 1 = Bishop Municipal Air-
port SW
 - 2 = Nueces County Airport,
Robstown NW
 - 3 = Corpus Christi Inter-
national Airport SE
 - 4 = Aransas Pass Municipal
Airport NE
 - 5 = Hunt Airport NE
 - 6 = Taft Airport NE
 - 7 = Mustang Beach Airfield
NE
- 2. Military lands and sites
 - 1 = Kingsville Naval Air
Station SW

- 2 = Cabaniss Karol Auxiliary Landing Field SE
- 3 = Waldron SE
- 4 = Corpus Christi Naval Air Station SE
- 5 = NASA Tracking Station SE
- 3. United States Coast Guard Stations
 - two installations NE

- 6 = Sixteen prehistoric sites (Corbin 1963; see also Story 1968 and Dibble 1972)
- 7-8 = Thirty four Prehistoric Sites (Oso Creek), 47 sites (Petronilla Creek): 46 prehistoric, 1 historic (Patterson and Ford 1974; see also Martin n.d.)

D. Historical sites and archaeological areas

- 1. Historical sites
 - a) National Register
 - 1 = Aransas Pass Light Station, Harbor Island NE
 - 2 = Dunn Ranch SE
 - 3 = James McGloin Homestead NW
 - 4 = Birtton-Evans House (Centennial House) NE
 - 5 = Nueces County Courthouse NE
 - 6 = Old St. Anthony's Catholic Church NW
 - 7 = Tarpon Inn NE
 - b) State Historical Parks, Sites, Structures
 - 1 = Lipantitlan State Historical Site NW
- 2. Archaeological areas (AA)
 - 1 = King Ranch (on National Register)
 - 2 = Padre Island Study (Campbell 1964); 13 sites: 8 prehistoric/historic, 4 historic, (Scurlock et al. 1974)
 - 3 = South Texas Project Transmission Network. (Dillehay et al. 1975)
 - 4 = See Martin n.d. unpublished files in Texas State Historical Commission
 - 5 = Tule Lake Tract, Nueces County, Texas. (Highley et al. 1977)

- 3. Underwater archaeological sites
 - a) 306 = Bay lease block number
 - b) 847S = Gulf lease block number
 - 855S = Gulf lease block number
 - 899S = Gulf lease block number

E. Major transportation networks and major natural and artificial waterways

- 1. Highways and roads
 - a) Federal
 - 37
 - 77
 - 181
 - b) State
 - 44
 - 141
 - 234
 - 286
 - 357
 - 358
 - 359
 - 361
 - c) Farm to Market
 - 35
 - 43
 - 70
 - 136
 - 624
 - 665
 - 666
 - 881
 - 1069
 - 1355

- d) Park
 - 22
 - 53
- 2. Railroads
 - T-M = Texas-Mexican Railway
 - MP = Missouri Pacific
 - SP = Southern Pacific
- 3. Water features
 - a) Perennial streams
 - present
 - b) Canals
 - i) navigation
 - GIWW = Gulf Intra-coastal Waterway
 - AC = Aransas Channel
 - TLC = Tule Lake Channel
 - LQC = LaQuinta Channel

- JKCC = John Kennedy Causeway Channel
- EC = Encinal Channel
- LAC = Lydia Ann Channel
- CCC = Corpus Christi Channel

ii) drainage and irrigation present

c) Perennial lakes present

F. Major dredge disposal sites

- 1. Open water
 - present
- 2. On land
 - no data

MAP NARRATIVE DETAIL - SOCIOECONOMIC ACTIVITIES

EL CAMPO QUADRANGLE (Seguin SE),
including parts of Jackson, Wharton,
Fort Bend and Matagorda counties

A. Conservation, recreation,
preservation and facilities

1. Federal lands (FNA)
no data
2. State lands (SNA) and sites
 - a) areas
no data
 - b) sites
no data
3. Private preservation areas
(PNA) and sites
 - a) areas
no data
 - b) sites
no data
4. County or municipal parks
 - a) areas
no data
 - b) sites
 - 1 = Firemans Park NE
 - 2 = Guadeloupe Park NE
 - 3 = Harris Park NE
 - 4 = Lida Dennis Croom Park
NE
 - 5 = Marianne S. Davis Croom
Park NE
 - 6 = Mayfair Park NE
 - 7 = Alamo Park SE
 - 8 = City Park SE
 - 9 = Friendship Park SE
 - 10 = Housing Authority Park
SE
 - 11 = Mustang Creek Park SE/
SW
5. Outdoor recreation facilities
 - a) marinas
not applicable

b) others
no data

6. Boat launches
 - a) unimproved
no data
 - b) improved
no data

B. Point source discharges, water
quality and sewage treatment
facilities

1. Industrial, discharges
 - 1 = Permit number 01208-02
SE
 - 2 = Permit number 01208-03
SE
 - 3 = Permit number 01208-01
SE
 - 4 = Permit number 01208-04
SE
2. Industrial, no discharge
no data
3. Municipal or domestic sewage/
water treatment, discharges
 - 1 = Permit number 10996-01
NE
 - 2 = Permit number 10381-01
NE
 - 3 = Permit number 10935-01
SE
 - 4 = Permit number 10844-02
SE
 - 5 = Permit number 10844-01
SE
 - 6 = Permit number 10849-01
SE
 - 7 = Permit number 10010-01
SW
4. Municipal water treatment
facilities, no discharge
no data

- 5. Municipal sewage treatment facilities, no discharge
no data
- 6. Power plants
no data

5 = Area in survey of Brushy Creek Watershed (Cole 1977b)

- 3. Underwater archaeological site
not applicable

C. Public (P) and military (M) lands and installations

- 1. Public, airports (AP)
 - 1 = El Campo Metropolitan Airport
 - 2 = Wharton Municipal Airport
 - 3 = Jackson County Airport
- 2. Military lands and sites
no data
- 3. United States Coast Guard Station
not applicable

D. Historical sites and archaeological areas

- 1. Historical sites
 - a) National Register
no data
 - b) State Historical Parks Sites, Structures
 - 1 = Glen Flora Plantation NE
- 2. Archaeological areas (AA)
 - 1 = Area in survey of Brushy Creek Watershed which extends outside this map area (Cole 1977b)
 - 2 = Another area in survey of Brushy Creek Watershed (Cole 1977b)
 - 3 = South Texas Project Transmission Network (Grombacher et al. 1975)
 - 4 = Eighty-four sites: 43 prehistoric, 41 historic (Mallouf et al. 1973; see also Wakefield 1968)

E. Major transportation networks and major natural and artificial waterways

- 1. Highways and roads
 - a) Federal
59
BR59
 - b) State
60
71
172
 - c) Farm to Market
102
442
530
1300
1301
 - d) Park
no data
- 2. Railroads
 - SP = Southern Pacific
 - AT&SF = Atchison, Topeka, and Santa Fe
- 3. Water features
 - a) Perennial streams
present
 - b) Canals
 - i) navigation
none
 - ii) drainage and irrigation
present
 - c) Perennial lakes
present

F. Major dredge disposal sites

- 1. Open water
not applicable
- 2. On land
no data

MAP NARRATIVE DETAIL - SOCIOECONOMIC ACTIVITIES

FREEPORT QUADRANGLE (Bay City NW), including parts of Brazoria and Matagorda counties

A. Conservation, recreation and preservation areas

1. Federal lands (FNA)
 - 1 = Brazoria National Wildlife Refuge
 - 2 = San Bernard National Wildlife Refuge
2. State lands (SNA) and sites
 - a) area
 - 1 = Bryan Beach State Recreation Area
 - b) sites
no data
3. Private preservation areas (PNA) and sites
 - a) areas
no data
 - b) sites
no data
4. County or municipal parks
 - a) areas
no data
 - b) sites
 - 1 = Brazoria County Beach Park NE
 - 2 = Surfside Beach NE
 - 3 = Quintana Bryan Beach NE
 - 4 = Arrington Park NE
 - 5 = Austin Park NE
 - 6 = Freeport Municipal Park NE
 - 7 = Freeport Municipal Golf Course NE
 - 8 = Peppermint Park NE
 - 9 = Riverside Park NE
 - 10 = Sam Houston Park NE
 - 11 = Highland Park Addition NW
 - 12 = Le Tuller Park NW

5. Commercial recreation facilities
 - a) marinas
 - 1 = Bridge Harbor Marina NE
 - 2 = Surfside Marina NE
 - 3 = Hide-Away Marina NE
 - 4 = Freeport Party Boat, Inc. NE
 - 5 = Ernies Acres Leisure City Marina NE
 - 6 = Churchill Camp Marina NW
 - 7 = Bollington's Fishing Camp NE
 - b) others
 - 8 = Starfish Bait Camp SW
 - 9 = Kelley's Bait Camp SW
 - 10 = The Beach Comber SW
 - 11 = Old Box Factory Fishing Camp SW
 - 12 = Riverbend Tavern SW
 - 13 = Vaughn's Bait Camp SW
 - 14 = Bait Camp SW
 - 15 = Anchor Bait Camp SW
 - 16 = Baileys Fishing Camp SW
 - 17 = Taiuas Bait Camp SW
 - 18 = Bait Camp SW
 - 19 = Rawlings Bait Camp SW
 - 20 = Olivers Bait Camp SW
 - 21 = Sportsman's Village NE
6. Boat launches
 - a) unimproved
present
 - b) improved
present

B. Point source discharges, water quality and sewage treatment facilities

1. Industrial discharges
 - 1 = Permit number 00007-01, 02,03,11,12,13,21,23,

- 31,33,41,48,51,61,63,
81 NE
- 2 = Permit number 01878-01
NE
- 3 = Permit number 01871-01
NE
- 4 = Permit number 01769-01
NE
- 5 = Permit number 01954-01
NE
- 6 = Permit number 01866-01
NE
- 7 = Permit number 01806-01,
02 NE
- 8 = Permit number 01822-01
NE
- 9 = Permit number 01852-01
NE
- 10 = Permit number 01518-01
NE
- 11 = Permit number 01861-01
NE
- 2. Industrial, no discharge
no data
- 3. Municipal or domestic sewage/
water treatment, discharges
 - 1 = Permit number 10123-01
NW
 - 2 = Permit number 11528-01
NW
 - 3 = Permit number 10878-01
NE
 - 4 = Permit number 10882-02
NE
 - 5 = Permit number 10882-01
NE
 - 6 = Permit number 10913-01
SW
- 4. Municipal water treatment
facilities, no discharge
no data
- 5. Municipal sewage treatment
facilities, no discharge
no data
- 6. Power plants
no data

C. Public (P) and military (M) lands
and installations

- 1. Public, airports

- a) public lands
 - 1 = Clemens Unit, State
Department of Correc-
tions
- b) airports (AP)
 - 1 = Bayport Airport
 - 2 = Bay City Municipal Air-
port
- 2. Military lands and sites
no data
- 3. United States Coast Guard
Station
one installation NE

D. Historical sites and
archaeological areas

- 1. Historical sites
 - a) National Register
 - 1 = Jones Creek: McCrosky
Log Cabin NE
 - 2 = Brazoria: Elerslie
Plantation NE
 - b) State Historical Parks,
Sites, Structures
no data
- 2. Archaeological areas (AA)
 - 1 = Colorado River mouth
study (Comstock and
Galloway 1973) SW
 - 2 = One area of Matagorda
Bay Study (Fritz 1975)
NW/SW
 - 3 = South Texas Trans-
mission Network (Grom-
bacher et al. 1975) NW
 - 4 = Area with 9 prehistoric
sites (Skelton 1974) NW
 - 5 = Archaeological Survey
of the Bryan Mound
storage facility (Bax-
ter and Bond 1978) NE
 - 6 = Archaeological survey
of the Freeport Harbor
(Ippolito and Baxter
1976) NE
 - 7 = Archaeological survey
of Freeport Harbor
(Baxter and Ippolito
1975) NE

- 8 = Archaeological investigations in the village of Oyster Creek (Dering and Ayers 1977) NE
- 9 = Area including 21 sites: 20 prehistoric, 1 historic (Texas Archaeological Survey 1974) NE
- 10 = One area of Matagorda Bay Study (Fritz 1975) SW
- 11 = One area of Matagorda Bay Study (Fritz 1975) SW
- 3. Underwater archaeological sites
 - a) 109 = Bay lease block number SW
 - b) 344S = Gulf lease block number NE
 - 356S = Gulf lease block number NE
 - 366S = Gulf lease block number NE
 - 367S = Gulf lease block number NE
 - 376S = Gulf lease block number NE
 - 378S = Gulf lease block number NE
 - 406S = Gulf lease block number NE
 - 411S = Gulf lease block number NE

E. Major transportation networks and major natural and artificial waterways

- 1. Highways and roads
 - a) Federal
 - no data
 - b) State
 - 35
 - 36
 - 60
 - 175
 - 288

- c) Farm to Market
 - 332
 - 457
 - 521
 - 523
 - 524
 - 1459
 - 1495
 - 2031
 - 2540
 - 2611
 - 2668
 - 2918
- d) Park
 - no data
- 2. Railroads
 - AT&SF = Atchison, Topeka and Santa Fe
 - MP = Missouri Pacific
 - SP = Southern Pacific
- 3. Water features
 - a) Perennial streams
 - present
 - b) Canals
 - i) navigation
 - GIWW = Gulf Intra-coastal Waterway
 - FHC = Freeport Harbor Channel
 - FBC = Freeport Barge Canal
 - DBC = Dow Barge Canal
 - SBRC = San Bernard River Canal
 - ii) drainage and irrigation
 - present
 - c) Perennial lakes
 - present

F. Major dredge disposal sites

- 1. Open water
 - present
- 2. On land
 - present

MAP NARRATIVE DETAIL - SOCIOECONOMIC ACTIVITIES

GALVESTON QUADRANGLE (Houston SE),
including part of Galveston County

A. Conservation, recreation and
preservation areas

1. Federal lands (FNA)
no data
2. State lands (SNA) and sites
 - a) area
1 = Galveston Island State
Park
 - b) sites
no data
3. Private preservation areas
(PNA) and sites
 - a) area
1 = North Deer Island Wild-
life Sanctuary, Nation-
al Audubon Society
 - b) site
1 = Camp Karankawa, Boy
Scouts of America SW
4. County or municipal parks
 - a) areas
no data
 - b) sites
1 = Seawolf Park NW
2 = Fort Bolivar Community
Center County Park NW
3 = Bayshore County Park NW
4 = Bacliff County Park and
Community Center NW
5 = 3 Beach Pocket Park
Site SW
6 = Fort Travis Park NW
5. Outdoor recreation facilities
 - a) marinas
1 = Robins Marina NW
2 = Pirate's Beach Marina
SW
3 = Marina Del Mar NW
4 = Sea Isle Marina NW

- 5 = Galveston Yacht Basin
NW
- 6 = Johns Boat Storage NW
- 7 = Tiki Bait Camp and
Marina NW

- b) others
 - 8 = Port Bolivar Fishing
Camp NW
 - 9 = Reeds Fishing Camp NW
 - 10 = Smitty's Fishing Camp
NE
6. Boat launches
 - a) unimproved
present
 - b) improved
present

B. Point source discharges, water
quality and sewage treatment
facilities

1. Industrial, discharge
 - 1 = Permit number 01263-01,
02 NW
 - 2 = Permit number 01396-01,
NW
 - 3 = Permit number 00443-01,
02 NW
 - 4 = Permit number 00575-01-
04 NW
 - 5 = Permit number 00451-01,
02,11,21 NW
 - 6 = Permit number 00980-01
NW
 - 7 = Permit number 00449-01,
02,03 NW
 - 8 = Permit number 00452-03,
04,05 NW
 - 9 = Permit number 01485-01
NW
 - 10 = Permit number 00448-01
NW

- 11 = Permit number 01351-01
NW
- 12 = Permit number 01634-01,
02 NW
- 13 = Permit number 00779-01
NW
- 2. Industrial, no discharge
no data
- 3. Municipal or domestic sewage/
water treatment, discharges
 - 1 = Permit number 10627-01
NW
 - 2 = Permit number 11546-01
NW
 - 3 = Permit number 10357-01
NW
 - 4 = Permit number 10410-01
NW
 - 5 = Permit number 11040-01-
04 NW
 - 6 = Permit number 10771-01
NW
 - 7 = Permit number 11672-01
NW
 - 8 = Permit number 11700-01
NW
 - 9 = Permit number 10435-01
NW
 - 10 = Permit number 11033-01
SW
 - 11 = Permit number 11477-01
SW
 - 12 = Permit number 10879-01
NW
 - 13 = Permit number 10688-03
NW
 - 14 = Permit number 10688-02
NW
 - 15 = Permit number 10688-01
NW
 - 16 = Permit number 10931-01
NW
 - 17 = Permit number 11264-01
NW
 - 18 = Permit number 11085-01
NW
 - 19 = Permit number 10942-01
NW
 - 20 = Permit number 11619-01
NW

- 21 = Permit number 11677-01
NW
- 22 = Permit number 10688-04
NW
- 4. Municipal water treatment
facilities, no discharge
no data
- 5. Municipal sewage treatment
facilities, no discharge
no data
- 6. Power plants
 - 1 = Permit number 01050-01
- C. Public (P) and military (M) lands
and installations
 - 1. Public, airports (AP)
 - 1 = Texas City Airport
 - 2 = Scholes Airport
 - 2. Military lands and sites
 - 1 = Pelican Spit Military
Reservation
 - 2 = Old Fort San Jacinto
 - 3. United States Coast Guard
Station
 - Two installations NW
- D. Historical sites and
archaeological areas
 - 1. Historical sites
 - a) National Register
 - 1 = Ashton Villa NW
 - 2 = Henry Beissner House
NW
 - 3 = Bishops Palace NW
 - 4 = East End Historic Dis-
trict NW
 - 5 = First Presbyterian
Church NW
 - 6 = Galveston Causeway NW
 - 7 = Galveston Maritime Site
NW
 - 8 = Galveston Orphans Home
NW
 - 9 = Galveston Seawall NW
 - 10 = Grace Episcopal Church
NW
 - 11 = Grand Opera House NW
 - 12 = McKinney-McDonald House
NW
 - 13 = Michel B. Menard House
NW

- 14 = Old Customs House NW
- 15 = "Old Red" (Ashbel Smith Building) NW
- 16 = Powhatan House NW
- 17 = St. Joseph's House NW
- 18 = St. Mary's Cathedral NW
- 19 = George Sealy Home NW
- 20 = Strand Historic District NW
- 21 = Sweeney-Royston House NW
- 22 = Trueheart-Adriana Building NW
- 23 = Samuel May Williams House NW
- 24 = Elissa (Sea Wolf Park) NW
- 25 = Garten Verein Pavilion NW
- b) Texas State Historical Parks, Sites, Structures
 - 1 = Port Bolivar Lighthouse NW
 - 2 = Galveston Historical District NW
- 2. Archaeological areas (AA)
 - 1 = Area containing 3 pre-historic sites (Aten 1972)
- 3. Underwater archaeological sites
 - a) 61 = Bay lease block number NW
 - 87A = Bay lease block number NW
 - 112A = Bay lease block number NW
 - 114A = Bay lease block number NW
 - 117A = Bay lease block number NW
 - 122B = Bay lease block number NW
 - 127A = Bay lease block number NW
 - 132A = Bay lease block number NW
 - 133A = Bay lease block number NW
 - 134A = Bay lease block number NW

- 135A = Bay lease block number NW
- b) 99L = Gulf lease block number NW
- 102L = Gulf lease block number NW
- 142S = Gulf lease block number NW
- 147L = Gulf lease block number NW
- 151S = Gulf lease block number NW
- 165S = Gulf lease block number NW
- 174S = Gulf lease block number NW
- 178S = Gulf lease block number NW
- 181S = Gulf lease block number NW
- 182S = Gulf lease block number NW
- 207S = Gulf lease block number NW
- 210S = Gulf lease block number NW
- 213S = Gulf lease block number NW
- 214S = Gulf lease block number NW
- 215S = Gulf lease block number NW
- 221S = Gulf lease block number NW
- 229S = Gulf lease block number NW
- 231S = Gulf lease block number SW
- 241S = Gulf lease block number SW
- 59L = Gulf lease block number NE
- 98L = Gulf lease block number NE

E. Major transportation networks and major natural and artificial waterways

1. Highways and roads

a) Federal

I 45

75

- b) State
 - 3
 - 6
 - 34
 - 87
 - 146
 - c) Farm to Market
 - 715
 - 2612
 - 3005
 - d) Park
 - no data
 - 2. Railroads
 - GH&H = Galveston, Houston, and Henderson
 - SP = Southern Pacific
 - AT&SF = Atchison, Topeka, and Santa Fe
 - TCT=Texas City Terminal
 - 3. Water features
 - a) Perennial streams
 - present
 - b) Canals
 - i) navigation
- GIWW = Gulf Intracoastal Waterway
 - HSC = Houston Ship Channel
 - BRC = Bolivar Roads Channel
 - GBEC = Galveston Bay Entrance Channel
 - GC = Galveston Channel
 - DBC = Dickerson Bay Channel
 - TCC = Texas City Channel
 - ii) drainage and irrigation
 - present
 - c) Perennial lakes
 - present
- F. Major dredge disposal sites
 - 1. Open water
 - present
 - 2. On land
 - present

MAP NARRATIVE DETAIL - SOCIOECONOMIC ACTIVITIES

GOLIAD QUADRANGLE (Beeville NW), including parts of Bee, Karnes, Dewitt, Refugio, Goliad and Victoria counties

A. Conservation, recreation and preservation areas

1. Federal lands (FNA)
no data
2. State lands (SNA) and sites
 - a) areas
no data
 - b) site
1 = Coleta Creek Recreation Area--Guadalupe Blanco River Authority SE
3. Private preservation areas (PNA) and sites
 - a) areas
no data
 - b) sites
no data
4. County or municipal parks
 - a) areas
no data
 - b) sites
1 = Goliad County City Park SE
2-12 = 11 Victoria City Parks SE
5. Outdoor recreation facilities
 - a) marinas
no data
 - b) others
no data
6. Boat launches
 - a) unimproved
no data
 - b) improved
no data

B. Point source discharges, water quality and sewage treatment facilities

1. Industrial, discharges
 - 1 = Permit number 00996-01 NE
 - 2 = Permit number 00770-01 NE
2. Industrial, no discharge
no data
3. Municipal or domestic sewage/ water treatment, discharges
 - 1 = Permit number 10458-01 SE
 - 2 = Permit number 11411-01, 02 SE
 - 3 = Permit number 10856-01 NE
 - 4 = Permit number 10466-01 NE
 - 5 = Permit number 11078-01 NE
4. Municipal water treatment facilities, no discharge
no data
5. Municipal sewage treatment facilities, no discharge
no data
6. Power plants
 - 1 = Permit number 01521-01 NE
 - 2 = Permit number 01165-01, 02 NE
 - 3 = Permit number 01165-03 NE

C. Public (P) and military (M) lands and installations

1. Public, airports (AP)

- 1 = Aloe Field
- 2. Military lands and sites
 - 1 = Goliad Naval Auxiliary Landing Field
- 3. United States Coast Guard Station
 - no data

D. Historical sites and archaeological areas

- 1. Historical sites
 - a) National Register
 - 1 = Goliad County Courthouse Historic District SE
 - 2 = Old Market House SE
 - 3 = Captain Bartow Peck House SE
 - 4 = Mission Nuestra Senora del Espiritu Santo de Zuniga SE
 - 5 = Presidio la Bahia NW
 - 6 = Mission Vicinity: Willeke site NE
 - 7 = Victoria Grist Mill NE
 - 8 = Old Victoria County Courthouse NE
 - b) State Historical Parks, Sites, Structures
 - 1 = Fannin Battleground State Historical Site SE
 - 2 = Goliad State Historical Park SE
- 2. Archaeological areas (AA)
 - 1 = Survey of Coletto Creek (Fox and Hester 1976)
 - 2 = Survey and testing of sites on Coletto Creek (Fox et al. 1979)
- 3. Underwater archaeological site
 - not applicable

E. Major transportation networks and major natural and artificial waterways

- 1. Highways and roads
 - a) Federal
 - 59
 - 77
 - 77A/183
 - 87
 - b) State
 - 239
 - c) Farm to Market
 - 236
 - 237
 - 275
 - 447
 - 622
 - d) Park
 - no data
- 2. Railroads
 - SP = Southern Pacific
 - MP = Missouri Pacific
- 3. Water features
 - a) Perennial streams
 - present
 - b) Canals
 - i) navigation
 - no data
 - ii) drainage and irrigation
 - present
 - c) Perennial lakes
 - present

F. Major dredge disposal sites

- 1. Open water
 - not applicable
- 2. On land
 - no data

MAP NARRATIVE DETAIL - SOCIOECONOMIC ACTIVITIES

HARLINGEN QUADRANGLE (Brownsville S/2, N/2), including parts of Cameron, Hidalgo, and Willacy counties

A. Conservation, recreation, and preservation areas

1. Federal lands (FNA)

- 1 = Padre Island National Seashore
- 2 = Laguna Atascosa National Wildlife Refuge

2. State lands (SNA) and sites

a) area

- 1 = Brazos Island State Recreation Area

b) = sites

- 1 = Las Palomas Wildlife Management Area, Longoria Unit NW
- 2 = Las Palomas Wildlife Management Area, Adams Unit SW
- 3 = Las Palomas Wildlife Management Area, Fredericks Unit NW
- 4 = Queen Isabella State Fishing Pier SE

3. Private preservation areas (PNA) and sites

a) areas

- 1 = Green Island Wildlife Sanctuary National Audubon Society
- 2 = Three Islands Wildlife Sanctuary National Audubon Society

b) sites

no data

4. County or municipal parks

a) areas

no data

b) sites

- 1 = Rio Hondo Community Park SW
- 2 = Rio Hondo Reservoir Park SW
- 3 = Los Fresnos City Park SE
- 4 = Plaza Valencia NW
- 5 = East Park SW
- 6 = Frontier Park SW
- 7 = Tony Unger Park SW
- 8 = Andy Bowie SE
- 9 = Isla Blanca SE
- 10 = Flanigan Park SW
- 11 = John F. Kennedy Memorial Park SW
- 12 = Landrum Park SW
- 13 = Library Park SW
- 14 = Municipal Park SW
- 15 = Rudy League Park SW
- 16 = McKelvey Park SW
- 17 = Sam Houston School Park SW
- 18 = J.J. Victor Park SW
- 19 = Bonham School Park SW
- 20 = Pendleton Park SW
- 21 = Plaza Park NW
- 22 = Primera City Park SW
- 23 = Civic Center Park SW
- 24 = Jaycees Park SW
- 25 = Little League Park SW
- 26 = Melton Park SW
- 27 = Queens City Park SW
- 28 = Gibson Public Park SW
- 29 = Harlon Block Park SW
- 30 = Plaza Park SW
- 31 = Weslaco City Park SW
- 32 = Elsa Park East NW
- 33 = Elsa Park West NW
- 34 = Sun Rise Hill SW
- 35 = Delta Lake Park NW

- 36 = Delta Lake Reservoir NW
- 37 = City Municipal Golf Course NW
- 38 = Raymondville City Park NW
- 39 = Jaycees Pony League Park NW
- 40 = Swimming Pool Park NW
- 41 = Lyford City Park NW
- 42-53 = 12 Harlingen Parks SW
- 5. Outdoor recreation facilities
 - a) marinas
 - 1 = Hi-Way Baits SE
 - 2 = Jimmy's Bait Stand SE
 - 3 = Sea Ranch Motel and Marina SE
 - 4 = South Padre Marina SE
 - 5 = Jim's Pier SE
 - 6 = Captain Wiley's SE
 - 7 = Port Isabelle Marina SE
 - 8 = John R. Wilcox SE
 - 9 = Harvey's Courts SE
 - 10 = White Sands Motor Lodge and Marina SE
 - 11 = Anchor Marina Trailer Park SE
 - 12 = Woods Marina SE
 - 13 = Haley Marine Center SE
 - 14 = Fisherman's Lodge SE
 - 15 = El Pescador SE
 - 16 = Palm Bay Pier SE
 - 17 = Seaway RV Village NE
 - 18 = Sanchez Bait Stand NE
 - b) others
 - 19 Arroyo Piers NE
 - 20 Las Palmas Golf Course SW
- 6. Boat launches
 - a) unimproved
 - no data
 - b) improved
 - present

B. Point source discharges, water quality and sewage treatment facilities

- 1. Industrial, discharges
 - 1 = Permit number 00310-01, 02 NW

- 2 = Permit number 01752-01 NW
- 3 = Permit number 01624-01 SW
- 4 = Permit number 01187-01 SW
- 2. Industrial, no discharge
 - 1 = Permit number 01839-01 SW
- 3. Municipal or domestic sewage/ water treatment, discharges
 - 1 = Permit number 10365-02 NW
 - 2 = Permit number 10365-01 NW
 - 3 = Permit number 10776-01 NW
 - 4 = Permit number 11210-01 NW
 - 5 = Permit number 10163-01 NW
 - 6 = Permit number 10330-01 NW
 - 7 = Permit number 10475-01 SW
 - 8 = Permit number 10475-02 NW
 - 9 = Permit number 10619-01 SW
 - 10 = Permit number 10619-02 SW
 - 11 = Permit number 10975-01 SW
 - 12 = Permit number 10347-01 SW
 - 13 = Permit number 10697-01 SW
 - 14 = Permit number 11628-01 SW
 - 15 = Permit number 11688-01 SW
 - 16 = Permit number 11490-01 SW
 - 17 = Permit number 10473-01 SW
 - 18 = Permit number 10490-06 SW
 - 19 = Permit number 10490-01 SW

- 20 = Permit number 10490-02
SW
- 21 = Permit number 10493-03
SW
- 22 = Permit number 10473-02
SW
- 23 = Permit number 10350-01
SE

- 4. Municipal water treatment facilities, no discharge
no data
- 5. Municipal sewage treatment facilities, no discharge
 - 1 = Padre Island Cameron County Water District #1, unit A, SW
 - 2 = Padre Island Cameron County Water District #1, unit B, SW
 - 3 = Permit number 11349-01, 02 SE
 - 4 = Permit number 11652-01 SE
 - 5 = Permit number 10590-01 SE
- 6. Power Plants
 - 1 = Permit number 01256-01, 02,03 SW

C. Public (P) and military (M) lands and installations

- 1. Public, airports (AP)
 - 1 = Mid Valley Airport SW
 - 2 = Mercedes Airport SW
 - 3 = Harlingen Industrial Airport SW
 - 4 = Port Isabel Cameron Co. Airport SE
 - 5 = San Benito Municipal Airport SW
- 2. Military lands and sites
no data
- 3. United States Coast Guard Station
one installation SE

D. Historical sites and archaeological areas

- 1. Historical sites
 - a) National Register
 - 1 = Brazos Santiago Depot SE

- 2 = Fort, Brazos Island SE
- 3 = Garcia Pasture Site SE
- 4 = Port Isabell Lighthouse SE
- 5 = Palo Alto Battlefield SE

- b) State Historical Parks, Sites, Structures
none others
- 2. Archaeological areas (AA)
 - 1 = Mallouf, et al. 1979
 - 2 = The Unland Site (Mallouf and Zavaleta 1979)
 - 3 = Underwater magnetometer survey by Texas
 - 4 = Twelve sites: 9 prehistoric, 3 historic (Hall and Grombacher, and 1974)
 - 5 = Palo Alto Battleground (Baxter and Killen 1976; Bond 1979)
 - 6-10 = forty nine sites: 43 prehistoric, 6 historic (Mallouf et al. 1977)

- 3. Underwater archaeological sites
 - a) 751 = Bay lease block number SE
 - b) 1153S = Bay lease block number NE
 - 1211S = Bay lease block number SE
 - 1219S = Bay lease block number SE
 - 1220S = Bay lease block number SE
 - 1223S = Bay lease block number SE
 - 1224S = Bay lease block number SE
 - 1230 = Bay lease block number SE

E. Major transportation networks and major natural and artificial waterways

- 1. Highways and roads
 - a) Federal

BR 77
 83
 281
 b) State
 48
 spur 54
 100
 107
 175
 186
 345
 spur 374
 spur 448
 c) Farm to Market
 88
 106
 490
 491
 497
 498
 506
 507
 508
 510
 511
 732
 803
 1015
 1018
 1420
 1421
 1422
 1425
 1479
 1595
 1732
 1761
 1847

1921
 2209
 2520
 2629
 2845
 2925
 d) Park
 100
 2. Railroads
 SP = Southern Pacific
 MP = Missouri Pacific
 3. Water features
 a) Perennial streams
 present
 b) Canals
 i) navigation
 GIWW = Gulf Intracoast-
 al Waterway
 BSP = Brazos Santiago
 Pass
 BSC = Brownsville Ship
 Channel
 ACC = Arroyo Colorado
 Cutoff
 PC = Pilot Channel
 PIC = Port Isabelle
 Channel
 ii) drainage and irriga-
 tion
 present
 c) Perennial lakes
 present
 F. Major dredge disposal sites
 1. Open water
 present
 2. On land
 present

MAP NARRATIVE DETAIL - SOCIOECONOMIC ACTIVITIES

HOUSTON QUADRANGLE (Houston NW), including parts of Brazoria, Fort Bend, Harris, and Chambers counties

A. Conservation, recreation, and preservation areas

1. Federal lands (FNA)
no data
2. State lands (SNA) and sites
 - a) areas
 - 1 = Sheldon Wildlife Management Area
 - 2 = San Jacinto Battleground State Park (designated National Historic Landmark and in the National Register)
 - b) sites
no data
3. Private preservation areas (PNA) and sites
 - a) areas
no data
 - b) sites
no data
4. County or municipal parks
 - a) areas
no data
 - b) sites
 - 1 = Webster City Park SE
 - 2 = Colonial Park Recreation Center SE
 - 3 = Wier Park SE
 - 4 = Briar Branch Creek Park NE
 - 5 = Spring Valley City Park NE
 - 6 = Christy Field SE
 - 7 = South Houston City Park No. 1 SE
 - 8 = South Houston City Park No. 2 SE

- 9 = Shoreacres City Park SE
- 10 = Pasadena Memorial Park SE
- 11 = Armand Bayou Park SE
- 12 = Charles H. Milby Park SE
- 13 = Meadow Creek Park SE
- 14 = Freeway Mann Park SE
- 15 = Evelyn Wilson Park SE
- 16 = Gulf Plains Park SE
- 17 = Beverly Hills Park SE
- 18 = Deer Park SE
- 19 = Reveille Park SE
- 20 = Garden Villas Park SE
- 21 = Law Park SE
- 22 = Simm's Bayou Park SE
- 23 = Crestmont Park SE
- 24 = Cloverland Park SE
- 25 = Blueridge Park SE
- 26 = Sunnyside Park SE
- 27 = Townwood Park SE
- 28 = McGregor Park SE
- 29 = Herman Park SE
- 30 = Memorial Park NE
- 31 = John T. Mason Park SE
- 32 = Eastwood Park SE
- 33 = Finnegan Park NE
- 34 = Denver Harbor Park NE
- 35 = Jacinto City Park NE
- 36 = Smith Park NE
- 37 = Falcon Park NE
- 38 = City Park Keene St. NE
- 39 = Galena Manor Park NE
- 40 = Clinton Park NE
- 41 = Hutcheson Park NE
- 42 = Woodland Park NE
- 43 = Oak Park NE
- 44 = Stude Park NE
- 45 = Hogg Park NE
- 46 = Sam Houston Park NE
- 47 = Sabine Park NE
- 48 = Moody Park NE

- 49 = Love Park NE
 - 50 = Miloy Park NE
 - 51 = Monte Park NE
 - 52 = Jaycees Park NE
 - 53 = James Anderson Park SE
 - 54 = Briar Meadow Park SE
 - 55 = Blossom Heights Park SE
 - 56 = Tanglewilde Park SE
 - 57 = Bayland Park SW
 - 58 = Brae-Burn Park SW
 - 59 = Freed Park NE
 - 60 = Liberty Park NE
 - 61 = Singwood Park NE
 - 62 = Maxey Park NE
 - 63 = Greenwood Park NE
 - 64 = Greens Bayou Park NE
 - 65 = Willow Park SE
 - 66 = Goodwin Park SW
 - 67 = Braesmont Park SW
 - 68 = Westbury Park SW
 - 69 = Chimney Port Park SW
 - 70 = Lee Hager SW
 - 71 = Brentwood Park SE
 - 72 = Wildheather Park SE
 - 73 = Windsor Village Park SE
 - 74 = La Port city parks SE
 - 75 = Deer Park city parks SE
 - 76 = Lake Nassau Park SE
 - 77 = Swan-Lagoon Park SE
 - 78 = Nassau Bay City Park SE
 - 79 = Southmore Park SE
 - 80 = Brazos Park SW
 - 81 = Harwood Park SW
 - 82 = Macario Garcia Memorial Park SW
 - 83 = Riverbend Park SW
 - 84 = Sunset Park SW
 - 85 = Travis Park SW
 - 86 = Jane Long Park SW
 - 87-122 = 35 Pasadena City Parks SE
 - 123-333 = 210 other Houston city and Harris county parks
 - 334-341 = 8 La Port city parks
 - 342-345 = 4 Deer Park city parks
5. Outdoor recreation facilities
- a) marinas
 - 1 = Nassau Bay Yacht Club SE
 - 2 = Bal Harbour Inc. SE
 - 3 = Clear Lake Marine Center Inc. SE
 - 4 = Lake Haven Boat Basin SE
 - 5 = Lakeside Marina SE
 - 6 = Lakewood Yacht Club SE
 - 7 = Oddos Yacht Club SE
 - 8 = Seabrook Shipyard SE
 - 9 = Watergate Yachting Center SE
 - 10 = Houston Yacht Club SE
 - b) others
 - 11 = Strangne's Camp SE
 - 12 = The Point SE
 - 13 = Thompsons Camp SE
 - 14 = Joe's Hideaway SE
 - 15 = Little Joe's Ponderosas Camp SE
 - 16 = W. T. Davis Park SW
6. Boat launches
- a) unimproved present
 - b) improved present
- B. Point source discharges, water quality and sewage treatment facilities
1. Industrial, discharges
- 1 = Permit number 01957-01 NE
 - 2 = Permit number 01849-01 NE
 - 3 = Permit number 00002-01, 11 NE
 - 4 = Permit number 01940-01 NE
 - 5 = Permit number 01423-01 NE
 - 6 = Permit number 00477-01 SW
 - 7 = Permit number 01232-01 SW
 - 8 = Permit number 00469-01 SW
 - 9 = Permit number 00687-01 NE

10 = Permit number 00357-01 NE	35 = Permit number 01962-01 SE
11 = Permit number 00660-01 NE	36 = Permit number 01860-01 SE
12 = Permit number 01851-01 NE	37 = Permit number 01429-01, 02,11,12 SE
13 = Permit number 01197-01 NE	38 = Permit number 01173-01 SE
14 = Permit number 01421-01 NE	39 = Permit number 00544-01, 02 SE
15 = Permit number 01286-01 SE	40 = Permit number 00639-01, 02 SE
16 = Permit number 00761-01 SE	41 = Permit number 01689-01 SE
17 = Permit number 01211-01 SE	42 = Permit number 00663-01, 11,121,131,21 SE
18 = Permit number 00785-01, 11,21 NE	43 = Permit number 01539-01 SE
19 = Permit number 01743-01 NE	44 = Permit number 01707-01 NE
20 = Permit number 01855-01- 03 NE	45 = Permit number 01198-01, 02 NE
21 = Permit number 00391-01 NE	46 = Permit number 01058-01 SE
22 = Permit number 01922-01 NE	47 = Permit number 01062-01 NE
23 = Permit number 00002-01, 11 SE	48 = Permit number 01280-01 SE
24 = Permit number 00403-01- 12 SE	49 = Permit number 00534-01, 02 SE
25 = Permit number 01229-01 SE	50 = Permit number 01217-01 SE
26 = Permit number 00402-01, 03 SE	51 = Permit number 00549-01 NE
27 = Permit number 01262-01 SE	52 = Permit number 01215-01, 02 NE
28 = Permit number 01310-01 NE	53 = Permit number 01914-01 NE
29 = Permit number 01205-01 NE	54 = Permit number 00474-01 SE
30 = Permit number 01247-01 NE	55 = Permit number 01318-01 SE
31 = Permit number 01583-01 SE	56 = Permit number 00440-01 SE
32 = Permit number 01731-01 NE	57 = Permit number 01786-01 SE
33 = Permit number 00305-01, 05,11,12 SE	58 = Permit number 00592-01, 02 SE
34 = Permit number 00458-01- 08 SE	59 = Permit number 01385-01 NE

- 60 = Permit number 01000-01
SE
- 61 = Permit number 00442-01,
02,11 SW
- 62 = Permit number 00726-01
SW
- 63 = Permit number 01225-01
SW
- 64 = Permit number 01063-01
SW
- 65 = Permit number 01260-01
SE
- 66 = Permit number 01900-01
SE
- 67 = Permit number 01688-01
SE
- 68 = Permit number 01901-01
SE
- 69 = Permit number 39002-01
SE
- 70 = Permit number 00951-01
SE
- 71 = Permit number 01044-02
SE
- 72 = Permit number 01028-01
SE
- 73 = Permit number 01054-01
SE
- 2. Industrial, no discharge
no data
- 3. Municipal or domestic sewage/
water treatment, discharges
 - 1 = Permit number 10620-01
NE
 - 2 = Permit number 10495-76
NE
 - 3 = Permit number 10518-01
NE
 - 4 = Permit number 11061-01
NE
 - 5 = Permit number 10495-16
NE
 - 6 = Permit number 10495-71
NE
 - 7 = Permit number 11004-01
NE
 - 8 = Permit number 10451-01
NE
 - 9 = Permit number 10333-01
NE
 - 10 = Permit number 11461-01
SW
 - 11 = Permit number 11128-01
SW
 - 12 = Permit number 11019-01
SW
 - 13 = Permit number 10832-01
SW
 - 14 = Permit number 11354-01
SW
 - 15 = Permit number 11088-01
SW
 - 16 = Permit number 10857-01
SW
 - 17 = Permit number 10906-01
SW
 - 18 = Permit number 11560-01
SW
 - 19 = Permit number 10761-01
SW
 - 20 = Permit number 10495-01
SW
 - 21 = Permit number 10584-01
SW
 - 22 = Permit number 10495-29
NE
 - 23 = Permit number 10550-01
SE
 - 24 = Permit number 10495-37
SE
 - 25 = Permit number 10712-01
SE
 - 26 = Permit number 10058-01
SE
 - 27 = Permit number 11207-01
NE
 - 28 = Permit number 11067-01
NE
 - 29 = Permit number 11355-01
NE
 - 30 = Permit number 10608-02
NE
 - 31 = Permit number 10032-01
NE
 - 32 = Permit number 10794-01
NE
 - 33 = Permit number 11555-01
NE
 - 34 = Permit number 11127-01
NE

35 = Permit number 10053-02 SE	60 = Permit number 10495-81 SE
36 = Permit number 10558-01 NE	61 = Permit number 10960-01 SE
37 = Permit number 10105-01 NE	62 = Permit number 10950-01 SE
38 = Permit number 10184-01 NE	63 = Permit number 10495-43 SE
39 = Permit number 11127-02 SE	64 = Permit number 11631-01 SE
40 = Permit number 10519-02 SE	65 = Permit number 11598-01 NE
41 = Permit number 11250-01 SE	66 = Permit number 10495-03 SE
42 = Permit number 11214-01 NE	67 = Permit number 10495-47 SE
43 = Permit number 11623-01 SE	68 = Permit number 10495-49 SE
44 = Permit number 10842-01 NE	69 = Permit number 10495-09 SE
45 = Permit number 01220-01 SE	70 = Permit number 11581-01 SW
46 = Permit number 10779-01 SE	71 = Permit number 10495-20 SE
47 = Permit number 11195-01 NE	72 = Permit number 10495-65 SE
48 = Permit number 10104-01 NE	73 = Permit number 11616-01 SE
49 = Permit number 10949-01 SW	74 = Permit number 10495-79 SE
50 = Permit number 10607-01 SW	75 = Permit number 10495-50 SE
51 = Permit number 11617-01 SW	76 = Permit number 10495-21 SE
52 = Permit number 11655-01 SW	77 = Permit number 10495-75 SE
53 = Permit number 10258-02 SW	78 = Permit number 10858-01 SE
54 = Permit number 11475-01 SW	79 = Permit number 10053-04 SE
55 = Permit number 11317-01 SW	80 = Permit number 11539-01 SE
56 = Permit number 11046-01 SW	81 = Permit number 10053-03 SE
57 = Permit number 11039-01 SW	82 = Permit number 10520-01 SE
58 = Permit number 10495-69 SE	83 = Permit number 10272-01 SE
59 = Permit number 10495-07 SE	84 = Permit number 10921-01 SE

- 85 = Permit number 10568-01
SE
- 86 = Permit number 10526-01
SE
- 87 = Permit number 10539-01
SE
- 88 = Permit number 10206-02
SE
- 89 = Permit number 10106-01
SE
- 90 = Permit number 10243-01
SE
- 91 = Permit number 10758-01
SE
- 92 = Permit number 10206-01
SE
- 93 = Permit number 10671-01
SE
- 4. Municipal water treatment facilities, no discharge
no data
- 5. Municipal sewage treatment facilities, no discharge
 - 1 = Permit number 11358-01
SW
 - 2 = Permit number 10086-01
SW
 - 3 = Permit number 11046-01
SW
 - 4 = Permit number 11346-01
SE
- 6. Power plants
 - 1 = Permit number 01031-01,
04 SW
 - 2 = Permit number 01026-01
SW
 - 3 = Permit number 01893-01
SW
 - 4 = Permit number 01027-01
SW
 - 5 = Permit number 01038-01
SW

C. Public (P) and military (M) lands and installations

- 1. Public, airports

- a) Public land
 - 1 = State Department of Corrections, Jester Unit
 - 2 = State Department of Corrections, Central Unit
 - 3 = Blue Ridge State Prison Farm
- b) airport (AP)
 - 1 = Andrau Airport
 - 2 = Pearland Airport
 - 3 = Clover Airport
 - 4 = Hobby Airport
 - 5 = Genoa Airport
 - 6 = La Porte Municipal Airport
 - 7 = Houston Gulf Airport
- 2. Military lands and sites
no data
- 3. United States Coast Guard Station
one installation

D. Historical sites and archaeological areas

- 1. Historical sites
 - a) National Register
 - 1 = Annunciation Church NE
 - 2 = Antioch Missionary Baptist Church NE
 - 3 = W. L. Foley Building SE
 - 4 = Union Station NE
 - 5 = Julia Ideson Building (Houston Public Library) NE
 - 6 = Kellum-Noble House NE
 - 7 = Old Cotton Exchange NE
 - 8 = Old Houston National Bank NE
 - 9 = Pillot Building NE
 - 10 = Rice Hotel NE
 - 11 = Sweeney, Coombs, & Fredericks Building NE
 - 12 = Hogg Building NE
 - 13 = U.S. Custom House NE

- 14 = The Old Sixth Ward District NE
- 15 = 1879 Houston Water Works NE
- 16 = Houston Turn-Verein NE
- 17 = C. H. Sewell House NE
- 18 = USS Texas (The Battleship Texas) NE
- 19 = South Texas National Bank NE
- 20 = James L. Autry House NE
- 21 = J. J. Carroll House NE
- 22 = W. T. Carter Jr. House NE
- 23 = Christ Church NE
- 24 = A. S. Cleveland House NE
- 25 = T. J. Conoghue House NE
- 26 = J. M. Dorrance House NE
- 27 = W. C. Hunt House NE
- 28 = Kennedy Bakery NE
- 29 = Sterling Myer House NE
- 30 = C. L. Nuehaus House NE
- 31 = John W. Parker House NE
- 32 = Paul-Republic Building NE
- 33 = Judson Taylor House NE
- b) State Historical Parks, Sites, Structures
 - none other
- 2. Archaeological areas (AA)
 - 1 = Part of 38 prehistoric sites (McGuff and Ford 1979; see also McGuff and Cox 1974)
 - 2 = Seventy-eight sites: 76 prehistoric, 2 historic (McGuff and Cox 1973)
 - 3 = Armond Bayou Archaeological District
 - 4 = Part of 38 prehistoric sites (McGuff and Ford 1979; see also McGuff and Cox 1974)
- 3. Underwater archaeological site
 - no data

E. Major transportation networks and major natural and artificial waterways

1. Highways and roads

- a) Federal
 - I-10
 - I-45
 - 59
 - 75
 - 90
 - 90A
 - 1610 loop

b) State

- 3
- 6
- 35
- 36
- 146
- 225
- 228
- 288A

c) Farm to Market

- 359
- 518
- 526
- 528
- 1093
- 1128
- 1464
- 1942

d) Park

no data

2. Railroads

- PT = Port Terminal R.R.
- MP = Missouri Pacific
- SP = Southern Pacific
- AT&SF = Atchison, Topeka, and Santa Fe
- GHH = Galveston, Houston and Henderson
- CRI&P = Chicago, Rock Island and Pacific
- FW&D = Fort Worth and Denver
- HB&T = Houston Belt & Terminal
- MK&T = Missouri Kansas & Texas

3. Water features

a) Perennial streams
present

b) Canals

i) navigation

HSC = Houston Ship
Channel

CLCC = Clear Creek
Channel

ii) drainage and irrigation
present

F. Major dredge disposal sites

1. Open water
present

2. On land
present

MAP NARRATIVE DETAIL - SOCIOECONOMIC ACTIVITIES

PORT LAVACA QUADRANGLE (Beeville NE), including part of Victoria, Jackson, Calhoun, Matagorda, Wharton and Refugio counties

A. Conservation, recreation, and preservation areas

1. Federal lands (FNA)
no data
2. State lands (SNA) and sites
 - a) area
1 = Texas Shorefront Area
 - b) sites
1 = Port Lavaca State Fishing Pier SW
2 = Palmetto Bend State Park NW
3. Private preservation area (PNA) and site
 - a) areas
no data
 - b) sites
no data
4. County or municipal parks
 - a) areas
no data
 - b) sites
1 = Indianola Park SE
2 = Point Comfort City SE
3 = Lavaca-Navidad River Authority Marina NW
4 = Bennet Park NW
5 = Mustang Creek Park NW
6 = Strane Park NW
7 = Westoff Park NW
8 = Port Lavaca Tillery Park SW
9 = Magnolia Beach Park SW
10 = Alamo Beach SW
11 = Palacios City Park SE
12 = East Park SE
13 = Memorial Park SE
14 = West Park SE

5. Outdoor recreation facilities
 - a) marinas
1 = Indianola Fishing Center SW
2 = East Bay Yacht Harbor SE
3 = Palacios Marina SE
 - b) others
4 = Oyster Lake Bait Camp SE
5 = Schicke Point Bait Camp SE
6 = Townsend Bait Camp SE
7 = Pioneer Park NW
8 = Mustang Creek NW
9 = Palacios Golf Course SE
10 = Ed Bills' Fishing Camp SE
11 = 3 bait camps in E. Palacios SE
12 = Put-put Golf Course NW
6. Boat launches
 - a) unimproved
present
 - b) improved
present

B. Point source discharges, water quality and sewage treatment facilities

1. Industrial discharges
 - 1 = Permit number 01371-01 SW
 - 2 = Permit number 00478-01, 02,03,11,12 SW
 - 3 = Permit number 01489-01 SW
 - 4 = Permit number 00447-01 SW
 - 5 = Permit number 00447-02 SW
 - 6 = Permit number 01158-01 SW

- 7 = Permit number 00394-01-09 SW
- 8 = Permit number 00445-01, 02 NE
- 9 = Permit number 00447-02 NE
- 10 = Permit number 01918-01, 02 NE
- 2. Industrial, no discharge
 - 1 = Permit number 01697-01 NW
- 3. Municipal or domestic sewage/ water treatment, discharges
 - 1 = Permit number 11333-01 NW
 - 2 = Permit number 10164-01 NW
 - 3 = Permit number 10911-01 NW
 - 4 = Permit number 10217-01 NE
 - 5 = Permit number 10580-01 NE
 - 6 = Permit number 10856-02 NW
 - 7 = Permit number 01742-01 NW
 - 8 = Permit number 10513-01 SW
 - 9 = Permit number 10196-01 NW
 - 10 = Permit number 10599-01 SW
 - 11 = Permit number 10593-01 SE
 - 12 = Permit number 10580-01 SW
 - 13 = Permit number 10251-02 SW
- 4. Municipal water treatment facilities, no discharge
 - no data
- 5. Municipal sewage treatment facilities, no discharge
 - no data
- 6. Power plant
 - 1 = Permit number 01303-01 SW

C. Public (P) and military (M) lands and installations

- 1. Public, airports
 - a) public (P)
 - no data
 - b) airports (AP)
 - 1 = Victoria Regional Airport
 - 2 = Calhoun County Airport
 - 3 = Jackson County Airport
 - 4 = Tanner Airport
 - 5 = La Ward Municipal Air Strip
 - 6 = Palacios Municipal Airport
- 2. Military lands and sites
 - no data
- 3. United States Coast Guard Station
 - no data

D. Historical sites and archaeological areas

- 1. Historical sites
 - a) National Register
 - 1 = Fort St. Louis NW
 - 2 = Hotel Blessing NE
 - 3 = Old Victoria County Courthouse NW
 - 4 = Victoria Grist Mill NW
 - b) State Historical Parks, Sites, Structures
 - no data
- 2. Archaeological areas (AA)
 - 1 = Colorado River mouth study (Comstock and Galloway 1973)
 - 2 = One of Cox Bay Study areas (Fritz 1972)
 - 3 = South Texas Project Transmission Network (Dillehay et al. 1975)
 - 4 = Area including 84 sites: 43 prehistoric and 41 historic (Malouf et al. 1973; see also Wakefield 1968)
 - 5 = One of Cox Bay Study

- areas (Fritz 1972) SW
- 6 = One of Cox Bay Study areas (Fritz 1972)
- 7 = One of Cox Bay Study areas (Fritz 1972)
- 8 = One of Cox Bay Study areas (Fritz 1972)
- 9 = Area covered by 16 magnetometer anomalies in Matagaorda Bay indicating possible shipwrecks (Scurlock et al. 1974)
- 10 = Location of the town of Texana (Jackson)
- 11 = One of Cox Bay Study areas (Fritz 1972)
- 12 = Turtle Bay Burial (State Archaeologic files access number 41M G35)
- 3. Underwater archaeological sites
 - a) 37 = Bay lease block number SE
 - 46 = Bay lease block number SW
 - 53 = Bay lease block number SE
 - 54 = Bay lease block number SE
 - 64 = Bay lease block number SE
 - 65 = Bay lease block number SE
 - 67 = Bay lease block number SE
 - 72 = Bay lease block number SE
 - 81 = Bay lease block number SE
 - 86 = Bay lease block number SE
 - 87 = Bay lease block number SE
 - 94 = Bay lease block number SE
 - 95 = Bay lease block number SE
 - 96 = Bay lease block number SE
 - 104 = Bay lease block number SE

- 105 = Bay lease block number SE
- 106 = Bay lease block number SE
- b) 555S = Gulf lease block number SE
- 559S = Gulf lease block number SE

E. Major transportation networks and major natural and artificial waterways

- 1. Highways and roads
 - a) Federal
 - 59
 - 77
 - 87
 - b) State
 - 35
 - 71
 - 111
 - 141
 - 172
 - 175
 - 185
 - 238
 - 316
 - 346
 - c) Farm to Market
 - 234
 - 521
 - 616
 - 1095
 - 1289
 - 1468
 - 1593
 - 1862
 - 2431
 - 2433
 - 3131
 - d) Park
 - no data
- 2. Railroads
 - SP = Southern Pacific
 - MP = Missouri Pacific
 - PC&N = Point Comfort & Northern
- 3. Water features
 - a) Perennial streams present

b) Canals

i) navigation

GIWW = Gulf Intracoast-
al Waterway

PC = Palacios Channel

MSC = Matagorda Ship
Channel

PLC = Port Lavaca Chan-
nel

LRC = Lavaca River
Channel which con-
nects with Port Lava-
ca Channel

CRC = Colorado River
Canal

VC = Victoria Canal

ii) drainage and irriga-
tion

present

c) Perennial lakes

present

F. Major dredge disposal sites

1. Open water

present

2. On land

present

MAP NARRATIVE DETAIL - SOCIOECONOMIC ACTIVITIES

PORT MANSFIELD QUADRANGLE (Brownsville N/2, N/2), including parts of Kenedy, Willacy, Brooks and Hidalgo counties.

A. Conservation, recreation, and preservation areas

1. Federal lands (FNA)
 - 1 = Padre Island National Seashore
2. State lands (SNA) and sites
 - a) areas
no data
 - b) sites
no data
3. Private preservation areas (PNA) and sites
 - a) areas
no data
 - b) sites
no data
4. County or municipal parks
 - a) areas
no data
 - b) sites
no data
5. Outdoor recreation facilities
 - a) marinas
 - 1 = Willacy County Navigation District Marina SE
 - 2 = Red Fish Marina SE
 - 3 = Mae's Tackle Box SE
 - b) others
 - 4 = Fred's Charter Service SE
 - 5 = Marlin Marina and Buds Bait and Tackle SE
6. Boat launches
 - a) unimproved
no data
 - b) improved
present

B. Point source discharges, water quality and sewage treatment facilities

1. Industrial, discharges
 - 1 = Permit number 01367-01 SE
2. Industrial, no discharge
no data
3. Municipal or domestic sewage/ water treatment, discharges
 - 1 = Permit number 10682-01 SE
 - 2 = Permit number 10682-03 SE
 - 3 = Permit number 11368-01 SE
4. Municipal water treatment facilities, no discharge
no data
5. Municipal sewage treatment facilities, no discharge
no data
6. Power plants
no data

C. Public (P) and military (M) lands and installations

1. Public, airports (AP)
 - 1 = Port Mansfield Airport
2. Military lands and sites
no data
3. United States Coast Guard Station
one installation SE

D. Historical sites and archaeological areas

1. Historical sites
 - a) National Register
no data

- b) State Historical Parks, Sites, Structures
no data
 - 2. Archaeological areas (AA)
 - 1 = forty nine sites: 43 prehistoric, 6 historic (Mallouf et al. 1977)
 - 2 = King Ranch
 - 3 = Underwater Magnetometer Survey by the Texas Antiquities Commission
 - 4 = Mansfield Art Underwater District, Kenedy/Willacy counties
 - 3. Underwater archaeological sites
 - a) Bay lease block number
no data
 - b) 1085S = Gulf lease block number NE
 - 1111S = Gulf lease block number SE
 - 1112S = Gulf lease block number SE
 - 1119S = Gulf lease block number SE
 - 1124S = Gulf lease block number SE
 - 1127S = Gulf lease block number SE
 - 1139S = Gulf lease block number SE
- E. Major transportation networks and major natural and artificial waterways
- 1. Highways and roads

- a) Federal
77
BR 77
 - b) State
no data
 - c) Farm to Market
497
1762
2209
3142
 - d) Park
no data
 - 2. Railroads
MP = Missouri Pacific
 - 3. Water features
 - a) Perennial streams
no data
 - b) Canals
 - i) navigation
GIWW = Gulf Intra-coastal Waterway
PMC = Port Mansfield Channel
 - ii) drainage and irrigation
present
 - c) Perennial lakes
present
- F. Major dredge disposal sites
- 1. Open water
present
 - 2. On land
present

MAP NARRATIVE DETAIL - SOCIOECONOMIC ACTIVITIES

SAN ANTONIO BAY QUADRANGLE (Beeville SE), including parts of Calhoun, Matagorda, Aransas and Refugio counties

A. Conservation, recreation, and preservation areas

1. Federal lands (FNA)
 - 1 = Aransas National Wildlife Refuge (access within refuge area by private roads PR)
 - 2 = Matagorda Island National Wildlife Refuge
2. State lands (SNA) and sites
 - a) area
 - 1 = Goose Island Recreation Area
 - b) site
 - 1 = Swan Point Fisherman Access Area NW
3. Private preservation areas (PNA) and sites
 - a) area
 - 1 = Second Chain of Islands Wildlife Sanctuary, National Audubon Society
 - b) sites
 - no data
4. County or municipal parks
 - a) areas
 - no data
 - b) sites
 - 1 = Bayfront City Park NW
 - 2 = Port O'Connor County Park NE
 - 3 = Magnolia Beach Park NE
5. Outdoor recreation facilities
 - a) marinas
 - 1 = Bob and Leonards NW
 - 2 = Weathersby Docks NE
 - 3 = Alligator Head Club NE

- 4 = Port O'Connor Fishing Center NE
- 5 = Pirates Cove NE
- b) others
 - 6 = Pats Alley Bait Camp NE
 - 7 = Swan Point Motel NW
 - 8 = Hoppers Landing NW
 - 9 = Pete's Bait Camp NE
 - 10 = Bob and Leonards Fishing Camp NW
 - 11 = Bobs Exxon Private Camp Ground NE
 - 12 = Corbins Fishing Camp NE
 - 13 = Leroy Want's Port O'Conner Fishing Center
 - 14 = Gibbon's Fishing Center NE
6. Boat launches
 - a) unimproved present
 - b) improved present

B. Point source discharges, water quality and sewage treatment facilities

1. Industrial, discharges
 - no data
2. Industrial, no discharge
 - no data
3. Municipal or domestic sewage/ water treatment, discharges
 - 1 = Permit number 11256-01 NW
 - 2 = Permit number 11117-01 NW
 - 3 = Permit number 10822-01 NW
4. Municipal water treatment facilities, no discharge
 - no data

5. Municipal sewage treatment facilities, no discharge
no data
6. Power plants
no data

C. Public (P) and military (M) lands and installations

1. Public, airports (AP)
 - 1 = Gulf Coast Airport
 - 2 = Port O'Conner Airfield
2. Military lands and sites
no data
3. United States Coast Guard Station
two installations NE

D. Historical sites and archaeological areas

1. Historical sites
 - a) National Register
no data
 - b) State Historical Parks, Sites, Structures
no data
2. Archaeological areas (AA)
 - 1 = St. Charles Bay connected to Copano Bay on Beeville SW (G.C. Martin n.d.)
 - 2 = Part of 7 sites: 6 prehistoric, 1 prehistoric/historic (Comstock et al. 1973)
 - 3 = South Texas Transmission Network (Dillehay et al. 1975)
 - 4 = Part of Cultural Resources Survey at the LaSalle Terminal, Matagorda Bay (McCormick and Gilmore 1977)
 - 5 = Part of 7 sites: 6 prehistoric, 1 prehistoric/historic (Comstock et al. 1973)
 - 6 = Part of Cultural Resources Survey at the

LaSalle Terminal, Matagorda Bay (McCormick and Gilmore 1977)

3. Underwater archaeological sites
 - a) 93 = Bay lease block number NE
 - 115 = Bay lease block number NE
 - 118 = Bay lease block number NE
 - 133 = Bay lease block number NE
 - 134 = Bay lease block number NE
 - 135 = Bay lease block number NE
 - 144 = Bay lease block number NE
 - b) 522L = Gulf lease block number NE
 - 577S = Gulf lease block number NE
 - 599S = Gulf lease block number NE
 - 622S = Gulf lease block number NE
 - 623S = Gulf lease block number NE
 - 627S = Gulf lease block number NE
 - 635S = Gulf lease block number NE
 - 636S = Gulf lease block number NE
 - 637S = Gulf lease block number NE
 - 638S = Gulf lease block number NE
 - 643S = Gulf lease block number NE
 - 645S = Gulf lease block number NE
 - 646S = Gulf lease block number NE
 - 674S = Gulf lease block number NE
 - 679S = Gulf lease block number NE

E. Major transportation networks and major natural and artificial waterways

1. Highways and roads
 - a) Federal
no data
 - b) State
35
185
238
239
 - c) Farm to Market
774
1289
2040
 - d) Park
no data
 - e) Private
present
2. Railroads
MP = Missouri Pacific
3. Water features
 - a) Perennial streams
present

- b) Canals
 - i) navigation
GIWW = Gulf Intracoastal Waterway
VC = Victoria Channel
C = Palacios Channel
FC = Ferry Channel
MSC = Matagorda Ship Channel
AC = Aransas Channel
 - ii) drainage and irrigation
present
- c) Perennial lakes
present

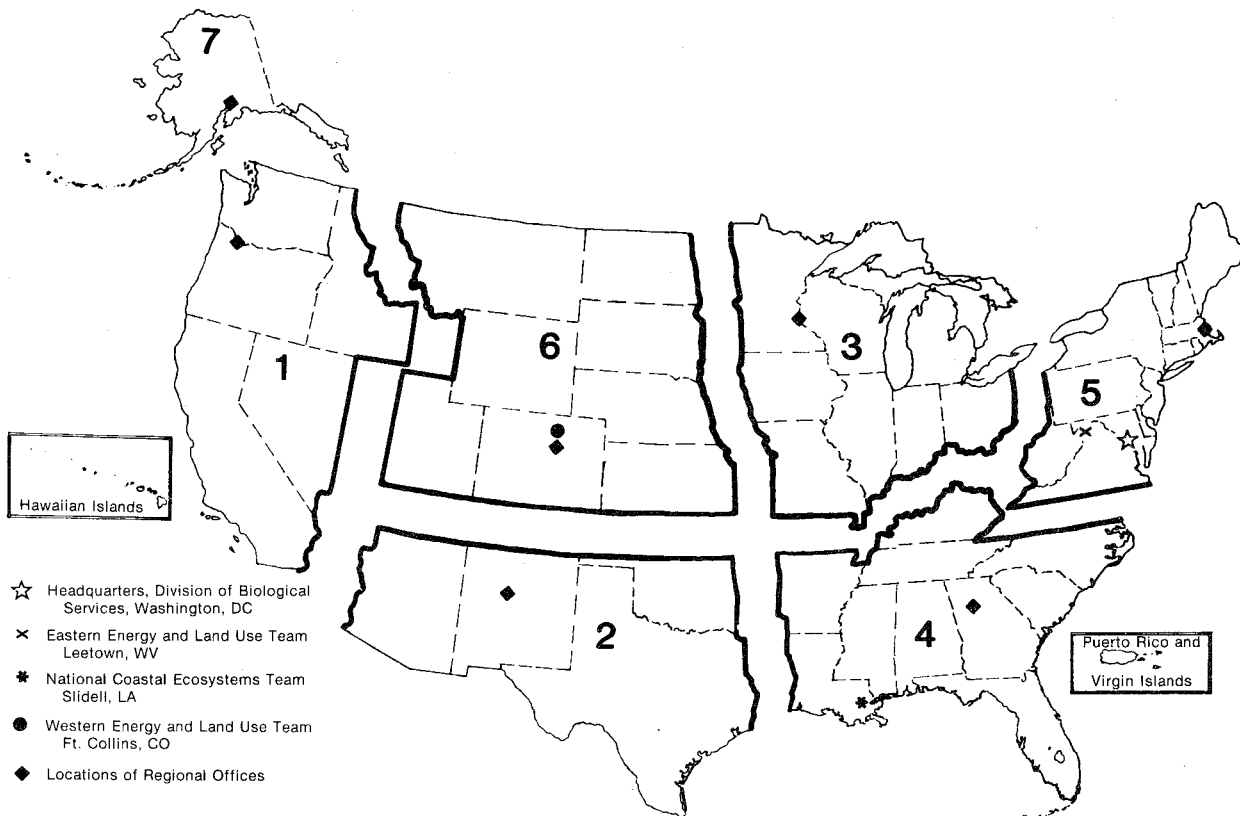
F. Major dredge disposal sites

1. Open water
present
2. On land
no data

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DEPARTMENT OF THE INTERIOR
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