Texas Coastal Management Program

Final Environmental Impact Statement

Prepared by:

National Oceanic and Atmospheric Administration
Office of Ocean and Coastal Resource Management

State of Texas
Coastal Coordination Council

August 1996

United States Department of Commerce

Combined Coastal Management Program and Final Environmental Impact Statement for the State of Texas

August 1996

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ABSTRACT

DESIGNATION: Final Environmental Impact Statement

TITLE: Proposed Federal Approval of the Texas Coastal Management Program

ABSTRACT: The State of Texas has submitted its Coastal Management Program to the Office of Ocean and Coastal Resource Management for approval pursuant to Section 306 of the Federal Coastal Zone Management Act of 1972 as amended (CZMA), 16 U.S.C. 1451 et seq. Approval would allow program administrative grants to be awarded to the State and would require that Federal actions be consistent with the program. This document includes a copy of the program, which is a comprehensive management program for coastal land and water use activities. It consists of numerous policies on diverse management issues which are administered under Texas laws and is the culmination of several years of program development. The Texas Coastal Management Program either promotes the beneficial use of coastal resources, prevents their impairment, or manages major activities that substantially affect numerous resources. The program will enhance decision-making processes used for determining the appropriateness of actions in the coastal area.

Approval and implementation of the program will enhance governance of Texas's coastal land and water uses according to the coastal policies and standards contained in Texas's statutes, authorities and rules. Federal alternatives to program approval include delaying or denying approval, if certain requirements of the Coastal Zone Management Act have not been met. The State could modify parts of the program or withdraw its application for Federal approval if either of the above Federal alternatives results from circulation of this document.

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COMMENTS: Comments on the Final Environmental Impact Statement are due to NOAA 30 days after date published.

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NOTE TO READERS

The National Environmental Policy Act (NEPA) of 1969 requires that an environmental impact statement be prepared as part of the review and approval process by Federal government agencies of major actions which significantly affect the quality of the human environment. The Federal action contemplated is approval of the Texas Coastal Management Program under Section 306 of the Federal Coastal Zone Management Act of 1972, as amended (CZMA). It is the general policy of the Federal Office of Ocean and Coastal Resource Management (OCRM) to issue combined environmental impact statements and program documents.

Part I of this Final Environmental Impact Statement (FEIS) was prepared jointly by the the National Oceanic and Atmospheric Administration's Office of Ocean and Coastal Resource Management (NOAA) and the State of Texas and provides summary information concerning the Texas Coastal Management Program (TCMP), including how the program addresses the requirements of the CZMA. Part II of the FEIS is a description of the TCMP and was prepared by the State. It has been reviewed by NOAA and is relied upon as a description of the proposed action for purposes of NEPA. Part III fulfills the remaining NEPA requirements for an FEIS and was prepared by NOAA with assistance from the State of Texas. Part VII contains public comments on the DEIS and NOAA's response to those comments.

An immediate effect of federal approval of the Texas program is the qualification of the State to receive Federal matching funds for use in administering the program. The CZMA also requires Federal agencies to undertake activities consistent to the maximum extent practicable with federally approved state coastal management programs. In addition, upon program approval, entities within the State of Texas will be eligible to apply for deepwater port licenses from the U.S. Coast Guard, pursuant to the Deepwater Port Act of 1974 (33 U.S.C.A. § 1503).

For purposes of reviewing this proposed action, the key questions are:

- whether the Texas program is consistent with the objectives and policies of the national legislation;
- whether the award of Federal funds under Section 306 of the Federal Act will help Texas to meet those objectives;
- whether Texas management policies, authorities, and organizational structure are adequate to implement the program; and
- whether there will be a net environmental gain as a result of program approval and implementation.

NOAA has made a preliminary determination that the answers to these questions are affirmative. NOAA wants the widest possible circulation of this document to all interested agencies and parties in order to receive the fullest expression of opinion on these questions. NOAA thanks those participating in the review of the TCMP and this FEIS.

TEXAS COASTAL MANAGEMENT PROGRAM
AND
FINAL ENVIRONMENTAL IMPACT STATEMENT

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Part I

OVERVIEW

PART I OVERVIEW

A. Summary of the Texas Coastal Management Program

While significant population growth and economic development along the Texas Coast have brought economic opportunity to the coast, they have also resulted in the loss or degradation of dune complexes, coastal wetlands and other critical aquatic sites; changes to bay and estuarine water quality; and added demands and limitations on coastal access. Also, increased coastal development has meant that greater numbers of persons and structures are vulnerable to coastal erosion, whether natural or human induced, and subject to coastal flooding, storm surge, and wind damage. The success of Texas' ports has resulted in the need for increased dredging and attendant dredged material disposal. Set against this background, Texas' fragmented government structure was not addressing these priority issues in a comprehensive, coordinated, and efficient manner. Consequently, it was within this context that the State developed its Coastal Management Program.

The Texas Coastal Management Program (TCMP) is based primarily on the Coastal Coordination Act of 1991 (33 TEX. NAT. RES. CODE ANN. §201 *et. seq.*) as amended by HB 3226 (1995), which calls for the development of a comprehensive coastal program based on existing statutes and regulations. Key elements of the Coastal Coordination Act and its implementation regulations (31 TAC §§501, 503, 505, and 506) include:

- establishment of the Coastal Coordination Council (Council) to develop policy and oversee implementation of the TCMP;
- development of a uniform set of coastal goals and policies;
- establishment of the fundamental legal requirements that selected "networked" state agencies and local governments must comply with, and enforcement of the uniform policies when the networked agencies take an action or develop rules that may adversely affect a coastal natural resource area;
- establishment of the scope and organizational framework of the program; and the program boundaries, designation of the Areas of Particular Concern (coastal natural resource areas) and the activities subject to the program through designation of specific networked agencies and local governments and authorities that are subject to, and will implement, the coastal policies;
- establishment of procedures to ensure networked state agency and local government implementation and adherence to the uniform policies, including rule certification and state consistency review (Council review);
- establishment of procedures to ensure that Federal activities will comply with the state's coastal policies;
- establishment of mechanisms such as the Council to ensure implementation of, and adherence to, the coastal policies; and

- establishment of the procedures for enforcement of the TCMP by the networked agencies and the Council and Attorney General's Office.

1. Scope of the Program

The Coastal Coordination Act establishes the geographic scope of the program by identifying the program's inland, interstate and seaward boundaries (described in Part II Chapter Two and Appendix F). The program's seaward boundary is the State's territorial seaward limit (10.3 miles). The State's inland boundary is based on the State's Coastal Facilities Designation Line (CFDL). The CFDL was developed in response to the Oil Spill Act of 1990 and basically delineates those areas in which oil spills would affect coastal waters or resources. For the purposes of the TCMP, the CFDL has been modified somewhat to capture wetlands in upper reaches of tidal waters. The program boundaries encompass all or portions of 19 coastal counties including Cameron, Willacy, Kenedy, Kleberg, Nueces, San Patricio, Aransas, Refugio, Calhoun, Victoria, Jackson, Matagorda, Brazoria, Galveston, Harris, Chambers, Liberty, Jefferson, and Orange counties and overall include roughly 8.9 million acres of land and water.

Within this coastal zone boundary, the scope of the TCMP's regulatory program is focused on the direct management of fourteen generic "Areas of Particular Concern," called coastal natural resource areas (CNRAs). These CNRAs are associated with valuable coastal resources or vulnerable or unique coastal areas and include: waters of the open Gulf of Mexico; waters under tidal influence; submerged lands; coastal wetlands; seagrasses; tidal sand and mud flats; oyster reefs; hard substrate reefs; coastal barriers; coastal shore areas; Gulf beaches; critical dune areas; special hazard areas; critical erosion areas; coastal historic areas; and coastal preserves. Specifically, the geographic scope of the regulatory programs is based on the direct regulatory jurisdiction of those "networked" state agency and local government authorities which are subject to the program as provided by the Coastal Coordination Act . It should be noted that the geographic scope extends upstream 200 miles from the mouths of rivers draining into coastal bays and estuaries in order to manage water appropriations on those rivers. In addition, the State has designated the Western Outer Continental Shelf (OCS) planning area as the geographical area in which Federal consistency shall apply outside of the coastal boundary. The TCMP also identifies those Federal lands which are excluded from the State's coastal zone.

Land and water uses subject to the program generally include: the siting, construction, and maintenance of electric generating and transmission facilities; oil and gas exploration and production; the siting, construction, and maintenance of residential, commercial, and industrial development on beaches, critical dune areas, shorelines, and within or adjacent to critical areas and other CNRAs. In addition, associated activities such as canal dredging; filling; placement of structures for shoreline access and shoreline protection; on-site sewage disposal, stormwater control, and waste management for local governments and municipalities; the siting, construction, and maintenance of public buildings and public works such as dams, reservoirs, flood control projects and associated activities; the siting, construction, and maintenance of roads, highways, bridges, causeways, airports, railroads, and non-energy transmission lines and associated activities; certain agricultural and silvicultural activities; water impoundments and diversions; the siting, construction, and maintenance of marinas, state-owned fishing cabins, artificial reefs, public recreational facilities, structures for shoreline access and shoreline protection, and boat ramps.

The uses and activities subject to the TCMP are, more specifically, those uses and activities managed by "networked" state agency and local government authorities, identified in the Council rules at 31 TAC §505.12 and listed in Part II Chapter Four. Land and water uses exempted from the program include those land and water uses exempted by statute or rule in the networked authorities and identified in Part II Chapter Four.

2. Program Goals and Policies

The policy framework is built around a uniform set of coastal goals and policies adopted by the Council at 31 TAC §501. The goals of the TCMP are:

1. to protect, preserve, restore, and enhance the diversity, quality, quantity, functions, and values of CNRAs;

2. to ensure sound management of all coastal resources by allowing for compatible economic development and multiple human uses of the coastal zone;

3. to minimize loss of human life and property due to the impairment and loss of protective features of CNRAs;

4. to ensure and enhance planned public access to and enjoyment of the coastal zone in a manner that is compatible with private property rights and other uses of the coastal zone;

5. to balance the benefits from economic development and multiple human uses of the coastal zone, the benefits from protecting, preserving, restoring, and enhancing CNRAs, the benefits from minimizing loss of human life and property, and the benefits from public access to and enjoyment of the coastal zone;

6. to coordinate agency and local government decision-making affecting CNRAs by establishing clear, objective policies for the management of CNRAs;

7. to make agency and local government decision-making affecting CNRAs efficient by identifying and addressing duplication and conflicts among local, state, and Federal regulatory and other programs for the management of CNRAs;

8. to make agency and local government decision-making affecting CNRAs more effective by employing the most comprehensive, accurate, and reliable information and scientific data available and by developing, distributing for public comment, and maintaining a coordinated, publicly accessible geographic information system of maps of the coastal zone and CNRAs at the earliest possible date;

9. to make coastal management processes visible, coherent, accessible, and accountable to the people of Texas by providing for public participation in the ongoing development and implementation of the TCMP; and

10. to educate the public about the principal coastal problems of state concern and technology available for the protection and improved management of CNRAs.

The coastal policies (which are described in Part II Chapter Four, and Appendix C) are primarily performance standards intended to avoid, minimize, and/or compensate for adverse impacts to the CNRAs. The policies address the protection of coastal resources including beaches and dune systems, submerged lands, wetlands, seagrass beds, tidal flats, oyster beds and other habitats as well as protection of coastal bays and estuaries (e.g., water quality and freshwater inflows). The policies also provide for maintenance and enhancement of public access to Gulf beaches, and the management of coastal development on beaches and in dunes and coastal hazard areas. The policies also provide for the management of specific land and water uses including electric generating facilities; oil and gas exploration and production; hazardous and solid waste facilities; large scale developments; construction of waterfront facilities such as marinas, wharves, and bulkheads; dredging and filling, and dredged material disposal; transportation projects; and levees and flood control projects. While the coastal policies as adopted by the Council reflect mostly existing policies, they also include enhancements to core policies related to managing "critical areas" (e.g., coastal wetlands, seagrasses and tidal sand and mud flats), dredging and dredged material disposal, submerged lands, beaches and dunes, and erosion areas.

3. Program Organization and Implementation

The TCMP is a networked program that will be implemented primarily through eight state agencies, 18 local governments, and the Council. The program will rely primarily on direct state control of land and water uses, although local governments will implement state guidelines related to beach and dune management. Implementation and enforcement of the coastal policies is primarily the responsibility of the networked agencies and local governments through their existing statutes, regulatory programs or other authorizations. Networked agencies include: the General Land Office/School Land Board, Texas Natural Resource Conservation Commission, Railroad Commission, Texas Parks and Wildlife Department, Texas Transportation Commission, Texas Historical Commission, the Public Utility Commission, the Texas State Soil and Water Conservation Board, and the Texas Water Development Board. Similarly, 18 county and municipal governments, in those counties with barrier islands, are also networked entities with responsibilities for program implementation vis-a-vis beaches and dunes.

The Coastal Coordination Act mandates that these networked agencies and local governments undertake specified actions, authorizations, and rulemaking in compliance with the TCMP policies as well as enforce relevant provisions of the TCMP through their regulatory processes. The Coastal Coordination Act also requires each networked agency or local government to issue a formal consistency determination that the project or authorization is consistent with the State's coastal policies when proposing an action subject to the TCMP. This decision can be contested by third parties, state agencies, or Council member agencies either administratively or judicially and, if necessary, forms the basis for Council reviews of these actions for consistency. A brief summary of the networked agencies and authorities is provided below.

Protection of Critical Areas

The School Land Board/General Land Office (SLB/GLO), Texas Natural Resource Conservation Commission (TNRCC), Railroad Commission (RRC), and Texas Parks and

Wildlife Department (TPWD) will all implement various coastal policies to manage development in and to protect critical wetlands and other aquatic habitats pursuant to their authorities related to water quality standards and Section 401 certifications, submerged lands approvals, and permits for dredging and mining.

Barrier Islands: Shoreline Access, Dune Protection, and Hazard Mitigation

City and county governments in those counties with barrier islands will implement the TCMP policies related to preservation of beach access and dune protection through development of Beach Access and Dune Protection Plans consistent with the TCMP policies per the Open Beaches Act and Dune Protection Act (TEX. NAT. RES. CODE ANN. Chapters 61 and 63), as amended by SB 1053 (1991) and floodplain requirements (TEX. NAT. RES. CODE ANN. Chapter 33). These plans must address development adjacent to public beaches and within critical dune areas and must address maintenance or enhancement of public access to beaches, impacts to dunes, construction practices to minimize damage from flooding and storm surge, and use and placement of erosion control structures. Once the plans are certified by the SLB/GLO and the Office of the Attorney General (OAG) to be consistent with these requirements, local governments may issue beachfront construction certificates and dune protection permits to implement the policy. The SLB/GLO and OAG review and comment on these certificates and permits and the OAG, GLO or local district attorney may initiate legal action if local permits are inconsistent with TCMP policy. In addition, the TNRCC and Texas Department of Transportation (TxDOT) will implement policies related to managing undeveloped areas of barrier islands through approval of special districts and transportation projects on barrier islands (TEX. WATER CODE ANN. Chapter 50 and TEX. REV. CIV. STAT. ANN. art. 6663).

Protection of Estuaries and Coastal Water Quality

The SLB/GLO, TNRCC, RRC, and TPWD will implement the TCMP policies related to dredging, dredged material disposal and beneficial uses of dredged material through submerged lands authorities (TEX. NAT. RES. CODE ANN. Chapter 33); water quality standards and Section 401 certification authority (TEX. WATER CODE ANN. Chapter 26); and TPWD dredging and mining permits (PARKS & WILDLIFE CODE ANN. Chapter 86). The SLB/GLO will implement policies related to construction of structures and marinas on state-owned submerged lands through submerged lands authorities. The TNRCC and RRC will implement policies to manage wastewater discharges through State Water Pollution Control authority (TEX. WATER CODE ANN. Chapter 26 and TEX. NAT. RES. CODE ANN. Chapter 91). The TNRCC will implement policies to manage the impacts of water appropriations through permits for water diversions (TEX. WATER CODE ANN. Chapter 11). The TNRCC will manage impacts from on-site sewage systems and underground storage tanks though on-site disposal system authorities (TEX. WATER CODE ANN. Chapter 26 and TEX. HEALTH & SAFETY CODE Chapter 166). The Texas State Soil and Water Conservation Board (TSSWCB) will implement policies to mange nonpoint-source impacts from agricultural and silvicultural activities (TAC Chapter 201 and TEX. WATER CODE ANN. Chapter 26)

Coastal Erosion

The local governments in concert with the GLO will implement the TCMP policies to manage impacts of erosion on Gulf beaches and coastal development, as well as impacts of coastal development which can cause coastal erosion, through the beach access and dune protection authorities (TEX. NAT. RES. CODE ANN. Chapters 61 and 63) and submerged lands authorities. Regarding bay shores, the SLB/GLO will implement coastal policies through the issuance of leases and easements for erosion control structures on state-owned submerged lands. Anticipated management activities include the development of a coastwide policy for managing coastal erosion that will identify Texas Gulf beaches that are eroding and rank them from most to least critical, and the implementation of a comprehensive long-term management plan for the restoration of Texas' critically eroding beaches pursuant to Senate Bill 1053. This coastwide erosion response plan will be submitted to the legislature with recommended actions. The coastwide erosion response plan will be the basis for prioritization of shore protection and restoration projects.

Historic/Cultural Resources

The Texas Historical Commission will implement the TCMP policies related to conserving coastal historic resources through permits and other management activities pursuant to the Antiquities Act (TEX. NAT. RES. CODE ANN. Chapter 91)

Major Development

The Public Utility Commission will implement the TCMP policies to manage development of power plants and transmission lines through certificates of convenience and necessity (TEX. REV. CIV. STAT. ANN. art. 1446c). TxDOT will implement policies to manage the impacts of transportation projects through its approvals of these projects (TEX. REV. CIV. STAT. ANN. art. 6663, and art. 6674). TNRCC will implement policies related to managing impacts from levees and flood control projects through its approvals of these projects (TEX. WATER CODE ANN. Chapter 16).

Coastal Coordination Council

The Coastal Coordination Act established the Coastal Coordination Council, which consists of the heads of the State's resource agencies and four gubernatorial appointees representing local governments, agriculture, coastal business, and coastal citizens. The Council is responsible for: (1) policy development and policy coordination through promulgation of the uniform coastal policies; (2) program oversight and dispute resolution through the state consistency review procedures and agency rule certification and decertification; and (3) implementation of Federal consistency authority through reviews of Federal activities. While the networked state agencies and local governments are required by the Coastal Coordination Act to undertake actions in compliance with the coastal policies, the Coastal Coordination Act provides for oversight by the Council and a number of mechanisms to ensure that networked agencies and local governments comply with the coastal policies.

The Coastal Coordination Act and Council rules at 31 TAC §505 authorize and establish a process for the Council, in conjunction with the OAG, to review networked state agency and local government proposed actions and, if necessary, take legal action to ensure compliance with TCMP policy (see discussion in Part II Chapter Five). In order for an agency or local government action to be reviewed, the proposed action must be referred to the Council by a person, state agency or Council member and accepted for review by three or more Council members. If the Council accepts referral of an agency or local government action, and two-thirds of the Council members find the action to be inconsistent, the Council will issue findings and recommendations to the agency or local government proposing the action. If the agency does not comply with those recommendations the Council can request an OAG opinion and if the OAG concurs, a suit can be filed in court to ensure that the agency's action is consistent.

In practice, it is anticipated that the Council's oversight role will be limited to the review of major actions and cases requiring dispute resolution. The TCMP includes incentives (rule certification and thresholds for referral) for agencies to ensure that their operating rules are consistent with the coastal policies. While not mandated by the Coastal Coordination Act, nor required in order to implement the coastal policies, the rule certification procedures provide for a voluntary process whereby agencies can submit their existing rules, new rules, or rule amendments to the Council for review. If an agency's rules are found to "incorporate or otherwise require compliance with the coastal policies" then the Council will certify those agency rules as consistent. Upon a determination that the agency's rules are consistent--which may require rulemaking on the part of the networked agencies and local governments--the agency's rules would be incorporated as part of the TCMP's coastal policies and the agency can establish thresholds for referral to limit Council review of its proposed actions. The ability to limit the Council's review to major actions, therefore, should provide the incentive for an agency to submit its rules for certification. The networked agencies and local governments have developed agreements with the Council committing them to submit their existing and future rules to the Council for certification.

In addition, the Council has other means to ensure that agency actions are in compliance with the TCMP. The TCMP includes provisions and mechanisms for the Council to monitor state agency and local government implementation and enforcement of the program. The Council will review quarterly and annual reports developed by the networked agencies that detail the implementation of the coastal program and future agency rulemaking. If the Council finds that an agency has not complied with the coastal policies in implementing its authorities or has amended or developed new rules that are not consistent with the coastal policies, then the Council can issue a "Notice of Program Deficiency" with recommendations for remedying those deficiencies. If the networked agency fails to remedy the problems in a reasonable time the Council can revoke the agency's rule certification, which would void any thresholds for referral limiting the Council's ability to review that agency's proposed actions.

The Coastal Coordination Act also provides for a voluntary provision to allow agencies to ensure that agency or local government plans which will guide agency decision-making, are consistent with the coastal policies. The Council may provide, if requested by a state agency or local government, a non-binding advisory opinion on the proposed plans. Council participation in the planning process should help identify consistency issues well before actions are proposed and thereby could improve compliance with coastal policies.

Also, the Council will be the State entity responsible for Federal consistency reviews pursuant to Section 307 of the Coastal Zone Management Act (CZMA). The Council has developed Federal consistency procedures (31 TAC §506) and will conduct reviews of Federal agency activities to ensure that they are consistent with the Federally approved enforceable policies of the TCMP. The GLO and the Executive Committee of the Council will assist the Council with reviews by preparing initial staff recommendations to Council members. The TCMP also provides for the use of "Interagency Coordination Groups" (see below) to assist the Council in its reviews of Federal development projects.

Permitting Assistance Group/Preliminary Reviews

The Coastal Coordination Act provides new mechanisms to improve compliance with policies as well as streamline the permitting process--the preliminary consistency review process and the Permitting Assistance Group (PAG). Preliminary reviews will be used to identify potential consistency issues early on, and indicate what changes are necessary for the applicant to make to comply with the coastal policies before the applicant is too invested in a particular course of action. The PAG, which consists of staff level members from the principal networked agencies, will conduct the preliminary reviews. The PAG will also provide technical assistance to the applicant not only to improve compliance with the coastal policies, but to assist applicants move through the permitting/approval process as quickly as possible. Where there is adequate information and public comment, the Executive Committee (see below) with assistance from the PAG, can make preliminary consistency findings, which will preclude the need for the full Council to review that action unless there are significant changes to the action.

Advisory Committee

Texas will use an additional mechanism to ensure continued public and governmental participation in the TCMP and to assist with public outreach and education. The Council will establish a citizens advisory committee to provide enhanced opportunities for public input into program implementation. The Advisory Committee, expected to be established in October 1996, will be responsible for identifying significant or emerging issues; hosting local meetings or workshops, and disseminating information on the program to the general public. The Council is considering establishing regional subcommittees as part of the Advisory Committee structure, but no decision has been made as of this date.

Executive Committee of the Council

The Executive Committee, which consists of senior management level representatives of the Council members, will be responsible for implementing Council directives, providing recommendations for most issues addressed by the Council, issuing preliminary consistency findings; and assisting in policy development.

Interagency Coordination Groups

The Coastal Coordination Act also provides for the establishment of Interagency Coordination Groups (ICGs) to assist Federal agencies in developing projects that are consistent with the Federally approved TCMP policies and assist the Council in carrying out Federal

consistency reviews for those activities. ICGs are composed of representatives of Federal and state resource agencies (at least three Council member agency representatives), and local sponsors of the particular project. The ICGs will work with the Federal agency to develop a project that will be consistent with the coastal policies. If the Federal agency then submits a consistency determination that follows the ICG's recommendations (and which a majority of the Council member representatives on the ICG have determined to be consistent) then the Council will automatically concur with the Federal agency's consistency determination.

Lead Coastal Agency: Texas General Land Office

The Governor designated the GLO to be the lead coastal agency for the purposes of receiving and administering Federal CZMA funds. The GLO will also be responsible for monitoring the implementation of the coastal policies by the agencies and local governments. The GLO also serves as staff for the Council, implements the state lands authorities, co-administers the beach dune regulations with the OAG, and will play an important role in public education and outreach.

4. Other Special Planning Requirements of the CZMA

The CZMA requires that states specifically address the issue of shoreline erosion, shorefront access, and consideration of the national interest in facility siting, designating special management areas for preservation and restoration, public participation, and plan coordination as part of program development. The TCMP responses to these requirements are found in Part II Chapters Six, Seven, and Eight.

B. Changes The Program Will Make

The TCMP will better manage coastal development to enhance and protect natural resources. There are four principal areas in which the TCMP enhances Texas' management of its natural resources and improves government processes: (1) government accountability, responsiveness, and coordination; (2) dredging in bays and estuaries; (3) development on beach and dune systems and coastal hazard areas along Gulf shorelines; and (4) development in coastal wetlands and other aquatic sites.

1. Government Accountability, Responsiveness, and Coordination

Texas' fragmented government structure frustrates the development of comprehensive coastal policy and management mechanisms. For example, response to shoreline erosion has been hampered by the lack of a clear state policy and confusion over state, Federal, and local roles and responsibilities. The lack of a meaningful coordination mechanism to move agencies to address this critical coastal issue sparked public support for a coastal management program and resulted in the Texas Legislature creating the Council.

For the first time, the Council provides a single public forum in which the public and permit applicants can address all the policy makers at one time and the agency heads can communicate and work together on policy issues . This increased accountability will increase both the efficiency and effectiveness of Texas' response to priority coastal issues such as shoreline erosion and loss of coastal wetlands and other critical areas.

The TCMP will foster improved accountability, responsiveness, and coordination among numerous Federal, state, and local governmental agencies with jurisdiction in the coastal area though the Council's promulgation of uniform coastal policies. The establishment of the Council and the state consistency review procedures for both issuance of permits and rulemaking actions provide a forum for effective resolution of disputes over the interpretation of coastal policy. Compliance with coastal policy will be enhanced as a result of the requirement of the GLO and Council to monitor all state agency and local government implementation with annual reports to the Council and legislature.

In addition, the TCMP will simultaneously foster permit simplification and improved compliance with the State's coastal policies. Permit applicants will receive technical assistance from the PAG and preliminary consistency findings issued by the Executive Committee of the Council. These and other provisions-- such as coordinated review of multi-permit projects and joint consideration of cumulative and secondary impacts from major actions--will facilitate identification of problems with proposed coastal projects. The TCMP will help ensure projects are designed to meet all applicable requirements and that potentially costly and time-consuming interagency disputes are resolved quickly. The TCMP will also provide for joint public notice for state and Federal wetlands permitting requirements.

2. Dredging in Coastal Waters

The TCMP includes a process for creating a long-term plan for dredging and the disposal or placement of dredged material. More than 770 miles of commercially navigable waterways

have been dredged through Texas' coastal waters. Ongoing maintenance of these waterways results in approximately 30 to 40 million cubic yards of material being dredged annually. Extensive dredging is also conducted by state, local, and private concerns done within the coastal zone. Records from the Corps' Galveston District regulatory program indicate that 90 navigation related permits were issued in 1995.

The TCMP policy recognizes the importance of dredging to ports and commerce and reflects the State's conclusion that dredged material is a resource that can be used beneficially to slow shoreline erosion, create coastal wetlands, and serve other beneficial purposes. The TCMP requires beneficial use of dredged material under circumstances outlined in the dredge policy, and discussed in Chapter Four. This policy provides a balance between the competing national and state interests in ports and navigation and protection and restoration of important coastal resources. The TCMP will also require mitigation of the impacts from dredging and dredged material disposal practices. In particular, the TCMP establishes a preferred sequence of dredged material disposal, maximizing beneficial use, upland and contained disposal, while minimizing open bay disposal, thus ensuring that navigation concerns are satisfied in a manner sensitive to the coast and other coastal resource users.

The TCMP incorporates an innovative technique that uses the State's Federal consistency review authority as a long range planning tool. Over the first three to five years of Federal approval of the TCMP, the Council and the Corps of Engineers will review all coastal waterways to determine whether current commercial dredging and dredged material disposal and placement practices can be improved. Where changes to current practices would incur additional costs, time is allowed to obtain the necessary funds before the changes are implemented. This will result in greater beneficial use of the dredged material and improved disposal and placement practices.

3. Development on the Gulf of Mexico Shoreline

Public support for a coastal management program resulted in the Texas Legislature enacting amendments to the Open Beaches Act, Dune Protection Act, and statutes authorizing coastal cities and counties to adopt floodplain development ordinances. These amendments gave the GLO and local governments the authority to manage development in the beach/dune system and coastal hazard areas along the Gulf shoreline. In 1993, the GLO adopted rules under which local governments developed local plans for permitting development in these areas. The rules require that development be planned so that public access to beaches is preserved and improved, destruction of dunes is avoided, and erosion, storm, and flood hazards are minimized. All 18 local governments have received GLO approval for their plans and are actively managing that development. This program will improve local government capacity to manage coastal development to better protect dunes and public beaches.

While direct permitting authority resides at the local level, the State maintains active policy authority and oversight over the beach and dune program. The GLO retains authority to establish minimum dune protection and beach access standards. The OAG and GLO receive and review all local permits. Finally, the GLO and OAG may take direct enforcement action for violations of the beach/dune rules.

4. Development of Coastal Wetlands and Other Critical Areas

Development of the TCMP resulted in three state agencies adopting new rules for management of coastal wetlands, seagrasses, tidal sand and mud flats, oyster reefs, and hard substrate reefs. Collectively, these are known as "critical areas." The TNRCC, RRC, and SLB adopted rules governing their respective authorities over development in critical areas. Before the TCMP, these agencies issued authorizations using a variety of different written and unwritten policies. Each agency's rules now require application of a mitigation sequence (avoid, minimize, and mitigate) currently used by the U.S. Environmental Protection Agency and the Corps of Engineers (Corps). The policy also establishes a uniform state compensatory mitigation policy for unavoidable impacts. Finally, the policy prohibits activities if they would result in significant degradation to critical areas.

As a result, the five agencies responsible for managing coastal wetlands in Texas' coastal zone will now operate under clearer, more comprehensive, and uniform standards. This will make critical area management in the coastal zone both more effective in terms of critical areas protection and more efficient in terms of intergovernmental coordination, predictability, and responsiveness.

5. Program Objectives and Action Items

Texas intends to use Section 306, 306A and other Federal CZMA funds to further advance the program goals and address the priority issues identified above. The Council has established seven broad priorities that will be used to allocate CZMA funding. These priority areas include:

1. *Coastal Natural Hazards Response* - TCMP monies can help enhance local government capacity to respond to coastal natural hazards such as erosion and flooding by funding local planning and management efforts.

2. *Critical Areas Enhancement* - Wetlands, seagrasses, oyster reefs, and tidal sand and mud flats are widely recognized as being of great value. Unfortunately, because these coastal natural resources are susceptible to many threats, they are still being lost and degraded. TCMP funds can be used to help state and local governments manage critical areas within their jurisdictions.

3. *Shoreline Access* - Texas has one of the strongest sets of laws in the Nation protecting public access to the beach. However, increased shoreline development makes meeting the shoreline access needs of the public a challenge. TCMP funds can be used to plan for and acquire access corridors and enhance existing access sites (e.g., off-beach parking, public bathrooms).

4. *Waterfront Revitalization and Ecotourism Development* - CZMA funds can be used to revitalize urban waterfronts to provide enhanced recreational opportunities and boost local economies and to develop local plans for ecotourism.

5. *Permit Streamlining/Assistance and Governmental Coordination* -A common complaint of coastal citizens and business persons is that the various levels of government do not act in concert. Such fragmentation and incoordination result in time delays and last-minute changes in projects that cost businesses and individuals money. TCMP funds can be used to streamline permitting processes and to provide technological and technical assistance.

6. *Information and Data Availability* - Government efforts at improving resource management are often hampered by lack of basic information. TCMP funds can be used to develop the baseline data and maps necessary for sound implementation of the TCMP goals and policies.

7. *Public Education and Outreach* - Conveying the meaning of laws and regulations to the regulated public in an appropriate format rarely receives high priority. TCMP funds can be used to develop and distribute public education materials such as user's manuals and to host public meetings, workshops, and conferences where technical information can be exchanged and training can be obtained.

6. Effects of Federal Approval

The principal anticipated effects of Federal program approval are fourfold. First, Federal CZMA funds (anticipated to be roughly 2.2 million dollars annually) will be available to Texas to assist in program implementation activities by the state and local entities. The funds will be used to address the seven broad priorities established by the Council identified above.

Second, program approval will also activate the Federal consistency provisions of the CZMA, which require that Federal activities, Federally licensed and permitted activities, and Federal assistance to state and local governments be consistent with the Federally approved enforceable policies of the TCMP.

Third, Federal approval will ensure that varied national interests will be considered and weighed when the State is making decisions with regard to the coast.

Finally, Federal approval of the TCMP will ensure that interested parties in the State are eligible to apply for a deepwater port license from the U.S. Coast Guard, pursuant to the Deepwater Port Act of 1974, by meeting one of the critical eligibility requirements of the Deepwater Port Act. A more detailed description of the effects of Federal approval of the TCMP is provided in Part III (B), Alternatives to the Proposed Action, and Part III (D), Environmental Consequences.

C. The Federal Coastal Zone Management Act

In response to intense pressure on coastal resources, and because of the importance of coastal areas of the United States, Congress passed the Coastal Zone Management Act of 1972, as amended [CZMA] (16 U.S.C. 1451 *et. seq.*). The Act authorizes a Federal program to encourage coastal states and territories to develop comprehensive coastal management programs. The program is administered by the Secretary of Commerce, who in turn has delegated this responsibility to the National Oceanic and Atmospheric Administration's Office of Ocean and Coastal Resource Management (NOAA). Currently, 29 states have coastal programs approved by NOAA.

The CZMA affirms the national interest in the effective protection and careful development of the coastal zone by providing assistance and encouragement to coastal states to voluntarily develop and implement management programs for their coastal areas. The CZMA authorizes financial assistance grants under Section 305 for program development and Section 306 for program implementation to provide coastal states and territories with the means for achieving these objectives. Section 305 of the CZMA, allowing for Federal financial assistance to states to develop state coastal management programs, was re-authorized by Congress in the 1990 amendments to the CZMA (PL 101-508, November 5, 1990). NOAA awarded Texas a CZMA Section 305 grant of $200,000 on July 1, 1992, to complete development of the TCMP, with subsequent grants of $200,000 in 1993 and $110,000 in 1995.

Sections 305, 306, and 307 of the CZMA and implementing regulations published on March 28, 1979 (44 CFR Part 18595) as codified at 15 CFR Part 923, provide the requirements and procedures for state program development and Federal approval. In summary, the requirements for program approval are that a state develop a management program that among other things:

1. Identifies and evaluates those coastal resources recognized in the CZMA that require management or protection by the state or territorial government;

2. Re-examines existing policies or develops new policies to manage these resources. These policies must be specific, comprehensive, and enforceable, and must provide an adequate degree of predictability as to how coastal resources will be managed;

3. Determines specific uses and special geographic areas that are to be subject to the management program, based on the nature of identified coastal concerns. Uses and areas subject to management should be based on resource capability and suitability analyses and socio-economic considerations;

4. Identifies the inland and seaward areas subject to the management program;

5. Provides for consideration of the national interest in planning for and siting of facilities; and

6. Includes sufficient legal authorities and organizational structure to implement the program and to ensure conformance to it.

In arriving at these substantive aspects of the program, states are obligated to follow an open process which involves providing information to and considering the interests of the general public, interest groups, local governments, and regional, state, interstate, and Federal agencies.

Section 303 of the CZMA provides guidance on specific national objectives that warrant full consideration during the implementation of approved state coastal management programs.

Section 305 of the CZMA as amended by PL 101-508 in 1990 and subsequent appropriations language authorizes annual grants to states desiring to develop a coastal management program.

After its management program receives Federal approval, a state is then eligible for annual grants under Section 306 to implement its program. Section 306A of the CZMA also provides that states may use a portion of their Section 306 awards for low cost construction projects that result in the preservation of important natural areas, improved public access, or renewal of urban waterfronts.

Section 307 contains the Federal consistency provisions of the CZMA to ensure that Federal actions are consistent with the state's Federally approved program. Paragraphs (1) and (2) of Section 307(c) require that Federal activities and development projects in or directly affecting the coastal zone be consistent to the maximum extent practicable with a Federally approved state program. Subparagraphs (A) and (B) of Section 307(c) require that Federally licensed and permitted activities affecting the coastal zone also are consistent with a Federally approved state programs. Section 307(d) requires Federal assistance to state and local governments for projects affecting the coastal zone to be consistent with a Federally approved state management program. Federal consistency implementing regulations are found at 15 CFR Part 930.

Section 309, as amended by PL 101-508 in 1990, establishes a coastal enhancement grant program. This section provides that a portion of Section 306 funds is available to states to develop program changes which strengthen their programs' ability to address particular coastal issues. State efforts to seek such improvements are meant to focus on priorities based on a self-assessment of the nine objectives listed in Section 309. These objectives include stronger wetland protection, improved management of coastal hazards. and additional public access.

Section 312 directs the Secretary to evaluate the performance of state coastal management programs on a continuing basis. NOAA formally reviews the implementation of each state on a three year cycle.

Section 315 establishes a National Estuarine Research Reserve Program to preserve a representative series of undisturbed estuarine areas for long-term scientific and educational purposes. There are currently no estuarine research reserve sites designated in Texas.

The Coastal Zone Reauthorization Amendments of 1990 (CZARA) established a new Coastal Nonpoint Pollution Control Program (CNPC), in addition to updating the CZMA. The State of Texas has agreed to submit a complete Section 6217 program within 30 months of

program approval (See Appendix G). After Texas submits its coastal nonpoint program, NOAA and EPA will make a final determination regarding its compliance with Section 6217.

D. Cross Reference to Program Requirements

CZMA Section	Requirement	CZMA Approval Regulations	FEIS Section
306(d)(1)	The TCMP contains policies to adequately manage all uses with direct and significant impacts on coastal waters and ensure protection of those resources and areas that make the Texas coast a unique, vulnerable or valuable area.	15 CFR §923.3	Part II Chapter Four
306(d)(1)	The TCMP was developed after notice and with the opportunity for full participation by Federal agencies, state agencies, local governments, regional organizations, port authorities, and other interested parties and individuals, public and private.	15 CFR 923.3	Part II Chapter Eight
306(d)(2)(A)	The TCMP includes sufficient inland, seaward, and interstate boundaries.	15 CFR §923.31- 34	Part II Chapter Two
306(d)(2)(B)	The TCMP identifies the land and water uses subject to the management program.	15 CFR §923.11	Part II Chapter Four
306(d)(2)(C)	The TCMP designates Areas of Particular Concern.	15 CFR §923.21-23	Part II Chapters Four and Six
306(d)(2)(D)	The TCMP identifies the means by which the state will exert control over the defined land and water uses.	15 CFR §923.40-43	Part II Chapters Four and Five and Appendices B, C, D, and E
306(d)(2)(E)	The TCMP contains broad guidelines on priorities of uses in particular areas, including those uses of lowest priority.	15 CFR §923.3 (923.21)	Part II Chapter Four and Appendix C
306(d)(2)(F)	The TCMP includes a description of the organizational structure proposed to implement the TCMP, including the responsibilities and interrelationships of local, area wide, state, regional, and interstate agencies in the management process.	15 CFR §923.46	Part II Chapter Three and Appendix C
306(d)(2)(G)	The TCMP includes a definition of the term beach, and a planning process for the protection of, and provision of access to, public beaches and other public coastal areas.	15 CFR §923.24	Part II Chapter Six
306(d)(2)(H)	The TCMP includes a planning process for energy facilities likely to be located in, or which may significantly affect, the coastal zone, including a process for anticipating the management of the impacts from such facilities.	15 CFR §923.13	Part II Chapters Six and Seven

CZMA Section	Requirement	CZMA Approval Regulations	FEIS Section
306(d)(2)(I)	The TCMP includes a planning process for assessing the effects of, and studying and evaluating ways to manage the impact of, shoreline erosion and for restoring areas adversely affected by such erosion.	15 CFR §923.25	Part II Chapter Six
306(d)(3)(A)	The state has coordinated the TCMP with local, area wide, and interstate plans applicable to areas within the coastal zone existing before 1/1/95.	15 CFR §923.56	Part II Chapter Six
306(d)(3)(B)	The state has established an effective mechanism for continuing consultation and coordination between the Council and local governments, interstate agencies, regional agencies, and area wide agencies within the coastal boundary.	15 CFR §923.57	Part II Chapters Three, Six, and Eight
307	The TCMP contains adequate Federal consistency procedures.	15 CFR §923.53 and §930 Subparts C-F	Part II Chapter Five and Appendix C
306(d)(4)	The State has held adequate public hearings during the development of the TCMP.	15 CFR §923.58	Part II Chapter Eight
306(d)(5)	The Governor has reviewed and approved the management program and certifies that it contains adequate authorities.	15 CFR §923.48	Part II Chapter One
306(d)(6)	The Governor has designated a lead coastal agency.	15 CFR §923.47	Part II Chapters One and Three
306(d)(7)	The state is organized to implement the TCMP.	15 CFR §923.46	Part II Chapter Three
306(d)(8)	The TCMP provides for adequate consideration of the national interest.	15 CFR §923.52	Part II Chapter Seven and Appendix H
306(d)(9)	The TCMP includes a program by which specific areas may be designated for the purpose of preserving or restoring them for their conservation, recreational, ecological, historical, or esthetic values.	15 CFR §923.22	Part II Chapter Six

CZMA Section	Requirement	CZMA Approval Regulations	FEIS Section
306(d)(10)(A) and (B)	The state has authority for the management of the coastal zone in accordance with the TCMP, including the power to: a) administer land use and water use regulations to control development to ensure compliance with the TCMP; b) resolve conflicts among competing uses; and c) acquire fee simple and less than fee simple interests in land, waters, and other property through condemnation or other means, where necessary.	15 CFR §923.41	Part II Chapters Four, Five, and Six and Appendices B, C, D, and E
306(d)(10)(B)	The State has the authority to acquire interests in real property when necessary to achieve conformance with the management program.	15 CFR § 923.41	Part II Chapters Four and Six and Appendix D
306(d)(11)	The TCMP uses any one or a combination of the following techniques for control of land uses and water uses within the coastal zone: a) state establishment of criteria and standards for local implementation; b) direct state land and water use planning and regulation; and/or c) state administrative review of development plans, projects, or land and water use regulations.	15 CFR §923.41 - 44	Part II Chapters Three, Four, and Five and Appendices B, C, and D
306(d)(12)	The TCMP ensures that local land use and water use regulations within the coastal boundary do not unreasonably restrict or exclude land uses and water uses of regional benefit.	15 CFR §923.12	Part II Chapter Seven
306(d)(13)	The TCMP provides for an inventory and designation of areas that contain one or more coastal resources of national significance and specific and enforceable standards to protect such resources.	No Regulations	Part II Chapters One, Four, and Seven
306(d)(14)	The TCMP provides for public participation in permitting processes, consistency determinations, and other similar decisions.	No Regulations	Part II Chapters Three, Five, and Eight and Appendices C and D
306(d)(15)	The TCMP ensures that all state agencies will adhere to the program.	No Regulations	Part II Chapters Three, Four, and Five and Appendices B and C
306(d)(16)	The TCMP contains enforceable policies and mechanisms to implement applicable requirements of the §6217 (g).	Guidance on Coastal Nonpoint Source Program issued January 1993.	Part II Chapter Four and Appendix G

Part II

DESCRIPTION OF THE PROPOSED ACTION
THE TEXAS COASTAL MANAGEMENT PROGRAM

STATE OF TEXAS
OFFICE OF THE GOVERNOR

GEORGE W. BUSH
GOVERNOR

October 19, 1995

Dr. D. James Baker
Under Secretary and Administrator
National Oceanic and Atmospheric Administration
HCHB Room 5128
14th and Constitution Avenue N.W.
Washington, D.C. 20230

Dear Dr. Baker:

I hereby submit the Texas Coastal Management Program (CMP) to the National Oceanic and Atmospheric Administration (NOAA) for approval. As you are aware, I withdrew the previously submitted CMP to give the Texas Legislature the opportunity to review and revise the CMP before seeking NOAA approval.

The current Texas CMP meets the requirements of the Coastal Zone Management Act (CZMA) and will bring a coordinated approach to managing Texas' coastal resources without imposing unnecessary regulations on Texans. The CMP is the product of lengthy and difficult negotiations between groups and individuals representing diverse coastal interests.

I have reviewed and certify that the State of Texas has the authority and the organization capabilities to implement the CMP. I further designate the General Land Office as the agency to receive and administer grants under the CZMA. If you have any questions during the review procedure, please contact Andy Barrett, my Environmental Policy Director, at (512) 463-2198.

Sincerely,

GEORGE W. BUSH

GWB:ab

cc: Jeff Benoit, NOAA

POST OFFICE BOX 12428 AUSTIN, TEXAS 78711 (512) 463-2000 (VOICE)/(512) 475-3165 (TDD)

CHAPTER ONE.
INTRODUCTION

A. The Texas Coast

The Texas Gulf Coast is one of the most biologically rich and ecologically diverse regions of the state. It comprises barrier islands and peninsulas, shallow bays and lagoons, marshes and tidal flats, forested areas, fertile coastal prairie, and semiarid brush country.

The coastal environment is highly dynamic, continuously changed by tides, currents, wind, waves, subsidence, and periodic violent storms. But while it is a naturally resilient environment, human activities can, and frequently do, adversely impact coastal resources.

More than one-third of the state's permanent population and 70 percent of its economic activity are located within 100 miles of the Texas coastline. The Texas coast houses half the nation's petrochemical industry and more than a quarter of its refining capacity. Steady growth of these industries, as well as burgeoning marine commerce, agriculture, commercial and recreational fishing, and a thriving tourist trade, has intensified competition for coastal resources.

Continued economic and population growth are projected for the Texas coast. And as population and development increase, so do waste generation, environmental degradation, and the risks of irrevocable damage to natural systems. The loss of valuable coastal natural resources not only jeopardizes the environmental health of the area, but also threatens the economic health and the very livelihoods of coastal residents.

While ample state and federal regulatory authority exists for the management of Texas coastal resources, a piecemeal approach to regulation and problem-solving has often been employed. Agencies or programs have been established to address single activities, resources, or substances in response to human health, resource management, and environmental problems.

This splitting of regulatory authority among a number of entities has, in some cases, been an impediment to efficient management. Such fragmentation has the pontential to create inconsistencies in policies and regulations that could hamper effective resource management and increase the burden on the regulated community in planning operations and attempting to comply with environmental requirements.

B. The Texas Coastal Management Program: A Cooperative Solution

In the late 1980s, coastal communities initiated a grass roots campaign for state assistance in resolving the problem of fragmented management of coastal resources and other complex coastal problems that exceeded local government authority. In response to this effort, in 1989 the Texas Legislature directed the General Land Office (GLO) to coordinate development of a comprehensive, long-range plan for the management of state-owned coastal lands.

Following that first directive, the legislature enacted a series of bills which established authority for development of the Texas Coastal Management Program (TCMP) and steered the course of the TCMP. The final legislative action in 1995 made a number of changes to the

program and renewed the state's commitment to efficient and effective coastal resource management. This action led in October 1995 to the TCMP's final submission for federal approval.

The purpose of the TCMP is to improve the management of the state's coastal resources and to ensure the long-term ecological and economic productivity of the coast, all within the framework of the federal Coastal Zone Management Program. The TCMP is a "networked" program linking the regulations, programs, and expertise of state, federal, and local entities that manage various aspects of coastal resource use. Specifically, the TCMP identifies coastal natural resource areas; identifies uses or activities that may adversely affect those areas; and sets uniform policies to address those effects.

Management of the program is overseen by the Coastal Coordination Council (Council), which is chaired by the commissioner of the General Land Office. The other members of the Council are the chair of the Parks and Wildlife Commission; the chair of the Texas Natural Resource Conservation Commission; the chair of the Texas Transportation Commission; the chair of the Texas Water Development Board; a member of the Texas State Soil and Water Conservation Board; a member of the Railroad Commission of Texas; and four gubernatorial appointees. The gubernatorial appointees are a local elected official from the coastal area, a coastal resident, a coastal business person, and a representative of agriculture.

The Council is charged with adopting uniform goals and policies to guide decision-making by all entities regulating or managing natural resource use within the Texas coastal zone, and to review significant actions taken or authorized by state agencies and subdivisions that may adversely affect coastal natural resources. Ultimately, the TCMP is designed to avoid duplication of effort and conflicts in agency policies and regulatory decisions, and to address five primary issues of concern to coastal communities: coastal erosion, wetlands protection, water supply and water quality, dune protection, and shoreline access.

C. Principal Issues of State Concern

Coastal Erosion

Between the mid-1800s and 1982, more than 27,000 acres of Gulf shoreline were lost through erosion, an average of 225 acres per year. Bay shoreline loss during the same period averaged 287 acres per year. Over one-third of Texas Gulf beaches and up to two-thirds of Texas bay shores are eroding.

Erosion is caused both by natural processes and human activity. Damming rivers blocks sediment supply, and constructing navigation and erosion response structures compounds erosion in some areas. As a result, valuable beaches, wetlands, and agricultural, industrial, and residential lands are being lost.

Wetlands and Other Aquatic Resources

Coastal wetlands are among the most valuable of coastal natural resources. They filter pollutants from water and trap suspended materials, letting them settle to the bottom. Wetlands help reduce shoreline erosion by absorbing and dissipating wave energy, binding and stabilizing sediments, and increasing sediment deposition. They also protect upland areas from flooding by storing floodwaters and reducing, capturing, and retaining surface water runoff, with the added benefit of allowing water to infiltrate underground recharge zones. Finally, wetlands provide valuable habitat for wildlife and plant life, a relatively safe environment for threatened and endangered species, and important feeding and breeding places for many commercially and recreationally valuable fish species.

Again, both natural and human activities contribute to the destruction or degradation of coastal wetlands. Wetlands are drained for crop and timber production and mosquito control. They are dredged for navigation and flood protection, used as disposal sites, and filled for commercial, residential, and industrial development. Materials such as pesticides and other pollutants are discharged into wetlands, and their soils are mined for sand and gravel. Finally, natural phenomena such as sea level rise, droughts, hurricanes, erosion, and habitat alterations by wildlife can also destroy or degrade coastal wetlands.

Water Supply and Water Quality

The element probably most essential to the continued productivity of the coastal region is sufficient amounts of clean water. Appropriation of water rights, maintenance of adequate freshwater inflows into bays and estuaries, and management of waste and point-source and nonpoint-source discharges are all vital concerns.

The productivity of fisheries depends on freshwater inflows to Texas bays and estuaries. These inflows transport nutrients and sediments that promote estuarine productivity, while the seasonal inundation of wetlands and periodic flushing of the bays by freshwater inflows can remove pollutants, parasites, bacteria, and viruses harmful to the estuarine ecosystem.

Point source discharges and nonpoint-source runoff can adversely impact coastal waster quality. Degraded water quality can pose risks to public health, damage the biological productivity of bays and estuaries, and interfere with public recreation and use of coastal waters.

Since the passage of the Clean Water Act and implementation of the state's water quality program, industrial point source discharges have been increasingly regulated and the impact of point source discharges on coastal waters has been reduced. For example, in recent years, point source discharges have been implicated in few shell fish bed closings. Nonpoint-source discharges include runoff from urban areas, agriculture activities, residential lands, industrial sites, and solid and hazardous waste facilities. Nonpoint-source discharges enter surface waters in a diffuse manner and at intermittent intervals tied mostly to the occurrence of meteorological events. The extent and impact of nonpoint-source pollution on coastal waters is related, at least in part, to certain uncontrollable climatic events, as well as local geographic and geologic conditions and may differ greatly from place to place and year to year. In some areas, the impact of nonpoint-source discharges on coastal water quality exceeds that of point source discharges.

Dune Protection

The protection of dunes is essential to a healthy coastal environment and economy. Dunes protect inland areas from storms and flooding, slow shoreline erosion by storing sand, serve as habitat for wildlife, and provide an aesthetic amenity to beach users and beachfront property owners.

Many human activities directly and indirectly destroy or damage dunes or discourage the natural formation of new dunes. Dunes are destroyed when sand is removed for fill material or are levelled for construction. Pedestrians and vehicles can uproot dune vegetation that anchors the sand, making dunes vulnerable to wind and wave erosion. Development immediately landward of dunes can destroy them by increasing traffic or by limiting the amount of sand available for maintenance of the natural dune system.

Shoreline Access

With population growth and an increase in tourism to the Texas coastal area, the demand for public access to the shoreline is growing. Beach users, fishermen, pleasure boaters, and naturalists all demand shoreline access. In more heavily populated areas, this demand for recreational access may conflict with the demand for industrial shoreline sites and access and for attractive shorefront sites for businesses and homes.

The Texas Open Beaches Act ensures the public's right to use state-owned beaches on the seaward shore of the Gulf of Mexico. However, conflicts often arise, such as the one between the public's right of access and the environmental and human safety issues imposed by vehicle traffic on the beach.

D. Coastal Natural Resource Areas

To address the issues of concern, and in response to the requirements of the Coastal Coordination Act, the Council has designated the areas listed below as coastal natural resource areas (CNRAs) requiring special management under the Coastal Management Program. The definitions of all CNRAs, as adopted by the Council, can be found in Appendix B - "Rules for CMP Goals and Policies."

- *Waters of the open Gulf of Mexico* are waters seaward of coastal barrier islands and bays and estuaries and extending to the territorial limits of the state (i.e., approximately 10.36 miles offshore). Waters in the open Gulf of Mexico serve as habitat for numerous commercial and recreational fishery species.

- *Waters under tidal influence* are those waters in the state that are contained behind coastal barrier islands and within bays and estuaries and rivers to the inland extent of tidal influence. Together, waters in the open Gulf of Mexico and waters under tidal influence are considered "coastal waters." Waters under tidal influence provide important aquatic habitat, serve as prime recreation areas, and provide some domestic water supply.

- *Submerged lands* are lands underlying waters under tidal influence or waters of the open Gulf of Mexico that are owned by an agency or subdivision of the state, or by a person other than the state. The sediments of coastal public submerged lands are habitat for a diverse benthic, or bottom-dwelling, animal community.

- *Coastal wetlands* are those areas having a predominance of hydric soils that are inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that under normal circumstances support, the growth and regeneration of hydrophytic vegetation, as defined in the Texas Water Code, Chapter 11, Subchapter J, and that lie within the Coastal Facility Designation Line and within one mile from the mean high tide line of tidal river and stream segments to the inland extent of tidal influence, except for the Trinity and Neches rivers. On the Trinity River, coastal wetlands are those wetlands occurring within the area located between the mean high tide line on the western shoreline of the river and FM Road 565 and FM Road 1409, and wetlands within the area located between the mean high tide line on the eastern shoreline of that portion of the river and FM Road 563. On the Neches River, coastal wetlands are those wetlands occurring within one mile of the mean high tide line on the western shoreline of the river, and wetlands within the area located between the mean high tide line on the eastern shoreline of that portion of the river and FM Road 105. Coastal wetlands provide wildlife habitat, convey and store floodwaters, trap sediment, and reduce water pollution.

- *Submerged aquatic vegetation* is rooted aquatic vegetation growing in permanently inundated areas in estuarine and marine systems. Submerged aquatic vegetation provides valuable habitat for numerous commercial and recreational fishery organisms and for wildlife.

- *Tidal sand and mud flats* are silt, clay, or sand substrates, unvegetated or vegetated by algal mats, that occur in the intertidal zone and that are regularly or intermittently exposed and flooded by tides. Mud flats and sand flats are the feeding grounds for coastal shorebirds, fish, and invertebrates.

- *Oyster reefs* are natural or artificial formations in intertidal or subtidal areas that are composed of oyster shell, live oysters, and other organisms and that are discrete, contiguous, and clearly distinguishable from scattered oysters. Oyster reefs not only support the oyster fishery but also serve as habitat, forage ground, or hiding places for numerous estuarine species.

- *Hard substrate reefs* are naturally occurring hard substrate formations, such as rock outcrops or serpulid worm reefs (living or dead), in intertidal or subtidal areas that are discrete and contiguous. Hard substrate reefs provide habitat for numerous invertebrates.

- *Coastal barriers* are undeveloped areas on barrier islands and peninsulas or otherwise protected areas, as mapped by the U.S. Fish and Wildlife Service (i.e., Coastal Barrier Resource System Units). Coastal barriers are subject to wave, tidal, and wind energy from the Gulf of Mexico. Barrier islands are Galveston, Matagorda, San Jose, Mustang, and North and South Padre islands. Coastal barriers act as important buffers against coastal

storms and protect coastal natural resource areas and the mainland from erosion, flooding, and destruction.

- *Coastal shore areas* are all areas within 100 feet landward of the high water mark on submerged land. Shore areas function as buffers, protecting upland habitats from erosion and storm damage and adjacent marshes and waterways from water quality degradation. Designation of coastal shore areas as a CNRA is exclusively intended to address erosion impacts within coastal shore areas.

- *Gulf beaches* are beaches bordering on the Gulf of Mexico that extend inland from the line of mean low tide to the natural line of vegetation bordering on the seaward shore of the Gulf of Mexico, or such larger contiguous area to which the public has acquired a right of use or easement to or over by prescription, dedication, or estoppel, or has retained a right by virtue of continuous right in the public since time immemorial. Texas beaches serve as important recreational areas and provide protection for landward structures during storms.

- *Critical dune areas* are protected sand dune complexes on the Gulf shoreline within 1,000 feet of mean high tide. Sand dunes help prevent loss of life and property by absorbing the impact of storm surge and high waves and by stopping or delaying intrusion of water inland.

- *Special hazard areas* are areas designated by the administrator of the Federal Insurance Administration under the National Flood Insurance Act as having special flood, mudslide (i.e., mudflow) and/or flood-related erosion hazards, and shown on a Flood Hazard Boundary Map or Flood Insurance Rate Map as Zone A, AO, A1-30, AE, A99, AH, VO, V1-30, VE, V, M, or E. These areas are important because they receive the brunt of storms, act as natural water-detention systems, and are natural filters for upland runoff.

- *Critical erosion areas* are those Gulf and bay shorelines that are undergoing erosion and are designated by the commissioner of the GLO under Texas Natural Resources Code, §33.601(b). Critical erosion areas require comprehensive management because loss of life and property can result if development occurs in these areas.

- *Coastal historic areas* are sites in the National Register of Historic Places on public land and state archaeological landmarks that are identified by the Texas Historical Commission as being coastal in character. Coastal historic areas provide important information about the coastal history and culture of the state.

- *Coastal preserves* are any lands owned by the state that are designated and used as parks, recreation areas, scientific areas, wildlife management areas, wildlife refuges, or historic sites and that are designated by the Texas Parks and Wildlife Department as being coastal in character. These areas are valued for the recreational opportunities they afford and for the diverse habitats they comprise.

E. Uses to Be Managed

In addition to designating CNRAs in need of special management, the Council has adopted uniform policies to better manage uses and activities that may adversely affect CNRAs. The following is a list of uses to be managed which are subject to TCMP policies.

- *Electric generating and transmission facilities* include siting, construction, and maintenance of electric generating facilities, electric transmission lines, and associated facilities such as waste management, and activities associated with access.

- *Oil and gas exploration and production* includes geophysical operations, waste management, pipeline placement, and activities associated with access to the exploration or production site.

- *Residential development* includes siting, construction, and maintenance of single- and multi-unit dwellings; filling; canal dredging; placement of structures for shoreline access and shoreline protection; and on-site sewage disposal, stormwater control, and waste management for subdivisions and municipalities.

- *Commercial development* includes siting, construction, and maintenance of offices, warehouses, retail stores, hotels, restaurants; filling; waste management; stormwater management; dredging; and the construction of structures for shoreline access and shoreline protection.

- *Industrial development* includes siting, construction, and maintenance of manufacturing and petrochemical plants, refineries, processing facilities, and ports; mineral mining; waste management; air pollution control; filling; dredging; construction of structures for shoreline access and shoreline protection; and stormwater management.

- *Public purpose development* includes siting, construction, and maintenance of public structures such as hospitals, schools, municipal buildings, and public works (e.g., dams, reservoirs, flood control projects), and associated activities such as filling, waste management, dredging, and construction of structures for shoreline access and shoreline protection.

- *Transportation* includes siting, construction, and maintenance of roads, highways, bridges, causeways, airports, railroads, and non-energy transmission lines, and associated activities such as filling, dredging, draining, and stormwater management.

- *Agriculture* includes farming, ranching, aquaculture, silviculture, range management, and associated activities such as water impoundments and diversions.

- *Recreational development and uses* include siting, construction, and maintenance of state-owned fishing cabins, artificial reefs, and public facilities, and associated activities such as waste management, dredging, stormwater management, and construction of structures for shoreline access and shoreline protection, boating (including boat ramps), fishing, and hunting.

F. Goals of the Texas Coastal Management Program

In managing the uses and activities and their impact on CNRAs, the goals of the TCMP, as set forth in the Council's rules, are:

1. to protect, preserve, restore, and enhance the diversity, quality, quantity, functions, and values of CNRAs;

2. to ensure sound management of all coastal resources by allowing for compatible economic development and multiple human uses of the coastal zone;

3. to minimize loss of human life and property due to the impairment and loss of protective features of CNRAs;

4. to ensure and enhance planned public access to and enjoyment of the coastal zone in a manner that is compatible with private property rights and other uses of the coastal zone;

5. to balance the benefits from economic development and multiple human uses of the coastal zone, the benefits from protecting, preserving, restoring, and enhancing CNRAs, the benefits from minimizing loss of human life and property, and the benefits from public access to and enjoyment of the coastal zone;

6. to coordinate agency and subdivision decision-making affecting CNRAs by establishing clear, objective policies for the management of CNRAs;

7. to make agency and subdivision decision-making affecting CNRAs efficient by identifying and addressing duplication and conflicts among local, state, and federal regulatory and other programs for the management of CNRAs.

8. to make agency and subdivision decision-making affecting CNRAs more effective by employing the most comprehensive, accurate, and reliable information and scientific data available and by developing, distributing for public comment, and maintaining a coordinated, publicly accessible geographic information system of maps of the coastal zone and CNRAs at the earliest possible date;

9. to make coastal management processes visible, coherent, accessible, and accountable to the people of Texas by providing for public participation in the ongoing development and implementation of the Texas CMP; and

10. to educate the public about the principal coastal problems of state concern and technology available for the protection and improved management of CNRAs.

G. A Strategy for the Texas Coast

The TCMP lays out the state's long-term strategy for addressing the principal coastal issues and improving management of coastal natural resource areas. It is built on a solid, existing framework. Much of the Texas coast is owned and directly managed by units of state or

Federal government. There are more than 557,000 acres of state or Federal parks, preserves, refuges, and other areas on the Texas coast that are managed for conservation or preservation purposes. This includes the Padre Island National Seashore, which covers more than 130,000 acres on the world's longest barrier island. There are roughly 1,375,000 total acres of wetlands, seagrasses, tidal flats and other critical areas in the coastal zone. Of these, approximately 60 percent are on publicly owned lands.

A myriad of federal, state, and local units of government exercise regulatory authority over the parts of the coast that are not publicly owned. Over 181,000 acres of the Texas coastal zone are included in Coastal Barrier Resource Units. Under the Coastal Barrier Resources Act, development in these areas is highly limited. The bays, estuaries, shores, wetlands, and dunes of the Texas coast are protected by a comprehensive web of federal, state, and local authorities. The TCMP is built on the most efficient use of this framework.

Throughout development of the TCMP, the general public, state and Federal agencies, local governments, regional agencies, and interest groups were consulted extensively. Numerous public hearings were held, and comments and recommendations from the public and governmental entities were considered carefully during development of the program. The unprecedented level of cooperation and input used in designing the TCMP will help ensure its success in preserving and protecting the Texas coast for future generations.

H. What the TCMP Will Accomplish

The TCMP is designed to enhance protection and management of CNRAs, particularly coastal wetlands and other critical areas, management of the beach and dune system, submerged lands, and coastal bays and estuaries.

The TCMP will foster improved coordination among numerous local, state, and Federal government entities with jurisdiction in the coastal area through establishment of uniform state coastal policies. Better coordination will result not only from the establishment of the multi-agency Council but from the Council's exercise of consistency review authority over local, state and federal actions.

Through the TCMP grants program and the coordinated exercise of existing authorities, the TCMP will enhance the management of coastal development. In particular, the program will help maintain and enhance public access to Gulf beaches, reduce the loss of life and property from coastal hazards, and improve management of major actions, which are those requiring preparation of an environmental impact statement.

In addition, the TCMP will foster improved compliance with the program's policies through technical assistance to permit applicants by the Permitting Assistance Group (PAG). The PAG will work with applicants, particularly individuals and small businesses, early in the permitting process to meet the requirements of the TCMP. Compliance with coastal policies should be enhanced as a result of the requirement that the Council prepare an annual program report summarizing efforts to implement the program by state agencies and political subdivisions.

The TCMP also contains provisions to simplify permitting processes. Through the TCMP, joint public notices for state and federal wetlands permits are expected to be developed. In addition, the PAG will, among other things, provide a simple explanation of all permit requirements and coordinate the agency permitting schedules when many agencies are required to approve or authorize the same project.

Finally, through the exercise of federal consistency review authority, the TCMP will ensure that federal agencies adhere to the State of Texas's goals and policies for management of its coastal resources. In particular, the TCMP is designed to promote the beneficial use of dredged material from commercially navigable waterways.

Overall, the TCMP is a cooperative program to improve management of the state's valuable coastal resources by reducing fragmentation, conflict and overlap among government entities. The specific benefits to the state and citizens of Texas from Federal approval of the TCMP are discussed in Part I and Part III of the Final Environmental Impact Statement.

CHAPTER TWO.
THE TEXAS COASTAL MANAGEMENT BOUNDARY

A. Introduction

The boundaries of the area subject to the Texas Coastal Management Program were delineated in accordance with the requirements of the Federal Coastal Zone Management Act (§306(d)(2)(A)), the Federal program development and approval regulations (15 CFR §§923.31-34), and the Texas Coastal Coordination Act (TEX. NAT. RES. CODE ANN. §33.052).

The CZMA requires that the state's coastal zone boundary include four elements: an inland boundary, a seaward boundary, interstate boundaries, and federal lands excluded from the boundary.

The federal regulations specify that the inland boundary must encompass "those areas the management of which is necessary to control uses which have direct and significant impacts on coastal waters" (15 CFR §923.31(a)(1)). A state's inland boundary must also include special management areas, waters under saline influence, salt marshes and wetlands, beaches, transitional and intertidal areas, and islands. Federal regulations stipulate that the boundary must be drawn clearly and precisely so that property owners, or anyone engaging in activities subject to the program, can easily determine whether they are within the management area (15 CFR §923.31).

The coastal zone boundary encompasses the area within Texas lying generally seaward of the coastal facility designation line, which is the line adopted under the Oil Spill Prevention and Response Act of 1991 to describe areas where oil spills are likely to enter tidal waters. It also includes certain wetlands landward of the coastal facility designation line. These coastal wetland areas generally extend inland one mile from the shoreline along the extreme inland reach of certain tidal rivers and streams.

The boundary of the Texas coastal zone includes all the coastal natural resource areas (CNRAs) identified in Chapter Four of this document and defined in 31 TAC §501.3(b) and the Coastal Coordination Act.

There is a distinction between the coastal zone as defined by the boundary and the CNRAs. All CNRAs are located within the coastal zone boundary, but not all areas within the boundary are considered CNRAs.

B. General Description of the Coastal Zone Boundary

The Coastal Management Program boundary (fig. 1) delineates the coastal zone. Generally, the boundary encompasses the area within Texas lying seaward of the coastal facility designation line. It also includes coastal wetlands landward of the coastal facility designation line. The boundary includes areas within the following Texas counties: Cameron, Willacy, Kenedy, Kleberg, Nueces, San Patricio, Aransas, Refugio, Calhoun, Victoria, Jackson, Matagorda, Brazoria, Galveston, Harris, Chambers, Liberty, Jefferson, and Orange. The seaward reach of the boundary extends into the Gulf

of Mexico to the limit of state title and ownership under the Submerged Lands Act (43 United States Code §1301 *et seq.*), or three marine leagues.

C. Legal Description of the Coastal Zone Boundary

The boundary is more particularly described in terms of (1) the inland boundary, (2) the seaward boundary, (3) the boundary with the State of Louisiana, (4) the boundary with the Republic of Mexico, and (5) the excluded federal lands.

1. The Inland Boundary

The inland boundary encompasses the following areas.

(a) Roadway portion of boundary. The coastal facility designation line begins at the International Toll Bridge in Brownsville, thence northward along U.S. Highway 77 to the junction of Paredes Lines Road (FM Road 1847) in Brownsville, thence northward along FM Road 1847 to the junction of FM Road 106 east of Rio Hondo, thence westward along FM Road 106 to the junction of FM Road 508 to the junction of FM Road 1420, thence northward along FM Road 1420 to the junction of State Highway 186 east of Raymondville, thence westward along State Highway 186 to the junction of U.S. Highway 77 near Raymondville, thence northward along U.S. Highway 77 to the junction of FM Road 774 in Refugio, thence eastward along FM Road 774 to the junction of State Highway 35 south of Tivoli, thence northward along State Highway 35 to the junction of State Highway 185 between Bloomington and Seadrift, thence northwestward along State Highway 185 to the junction of FM Road 616 in Bloomington, thence northeastward along FM Road 616 to the junction of State Highway 35 east of Blessing, thence southward along State Highway 35 to the junction of FM Road 521 north of Palacios, thence northeastward along FM Road 521 to the junction of State Highway 36 south of Brazoria, thence northward along State Highway 36 to the junction of State Highway 332 in Brazoria, thence eastward along State Highway 332 to the junction of FM Road 2004 to the junction of Interstate Highway 45 between Dickinson and La Marque, thence northwestward along Interstate Highway 45 to the junction of Interstate Highway 610 in Houston, thence east and northward along Interstate Highway 610 to the junction of Interstate Highway 10 in Houston, thence eastward along Interstate Highway 10 to the Louisiana State line.

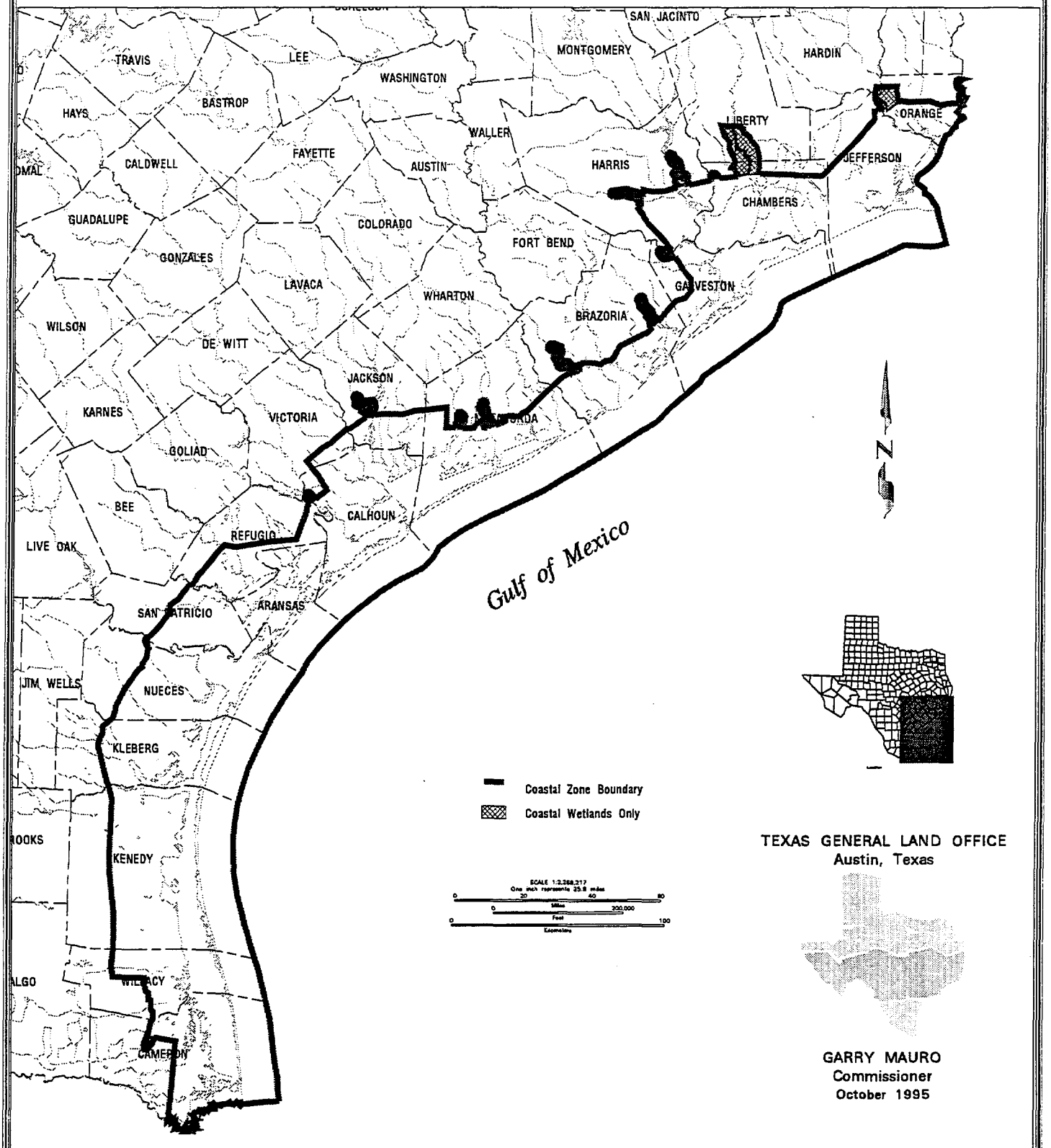
(b) Tidal portion of boundary. The boundary runs at a distance of 100 yards inland of the mean high tide line along each of the following tidal river and stream segments from the point where they intersect the roadway boundary:

(1) on the Arroyo Colorado, to a point 100 meters (110) yards downstream of Cemetery Road south of Port Harlingen in Cameron County.

(2) on the Nueces River, to Calallen Dam 1.7 kilometers (1.1 miles) upstream of U.S. Highway 77 in Nueces/San Patricio County.

FIGURE 1

Texas Coastal Management Program



(3) on the Guadalupe River, to the Guadalupe-Blanco River Authority Salt Water Barrier 0.7 kilometers (0.4 miles) downstream of the confluence of the San Antonio River in Calhoun/Refugio County.

(4) on the Lavaca River, to a point 8.6 kilometers (5.3 miles) downstream of U.S. Highway 59 in Jackson County.

(5) on the Navidad River, to Palmetto Bend Dam in Jackson County.

(6) on Tres Palacios Creek, to a point 0.6 kilometers (1.0 mile) upstream of the confluence of Wilson Creek in Matagorda County.

(7) on the Colorado River, to a point 2.1 kilometers (1.3 miles) downstream of the Missouri-Pacific Railroad in Matagorda County.

(8) on the San Bernard River, to a point 3.2 kilometers (2.0 miles) upstream of State Highway 35 in Brazoria County.

(9) on Chocolate Bayou, to a point 4.2 kilometers (2.6 miles) downstream of State Highway 35 in Brazoria County.

(10) on Clear Creek, to a point 100 meters (110 yards) upstream of FM Road 528 in Galveston/Harris County.

(11) on Buffalo Bayou, to a point 400 meters (440 yards) upstream of Shepherd Drive in Harris County.

(12) on the San Jacinto River, to Lake Houston Dam in Harris County.

(13) on Cedar Bayou, to a point 2.2 kilometers (1.4 miles) upstream of Interstate Highway 10 in Chambers/Harris County.

(14) on the Trinity River, to a point 3.1 kilometers (1.9 miles) downstream of U.S. Highway 90 in Liberty County.

(15) on the Neches River, to a point 11.3 kilometers (7.0 miles) upstream of Interstate Highway 10 in Orange County.

(16) on the Sabine River, to Morgan Bluff in Orange County.

(c) Wetlands portion of boundary. Except for the part of the boundary adjacent to the Trinity and Neches rivers, the boundary includes wetlands lying within one mile inland of the mean high tide line of the tidal river and stream segments identified in subparagraph (B).

(1) adjacent to the Trinity River, the boundary includes wetlands within the area located between the mean high tide line on the western shoreline of the river and FM Road 565 and FM Road 1409, and wetlands within the area located between the

mean high tide line on the eastern shoreline of that portion of the river and FM Road 563.

(2) adjacent to the Neches River, the boundary includes wetlands within one mile of the mean high tide line on the western shoreline of the river, and wetlands within the area located between the mean high tide line on the eastern shoreline of that portion of the river and FM Road 105.

2. The Seaward Boundary

The seaward reach of the boundary extends into the Gulf of Mexico to the limit of state title and ownership under the Submerged Lands Act (43 U.S.C. §1301 *et seq.*), three marine leagues (10.36 miles) from the state's Gulf shoreline.

3. The Boundary with the State of Louisiana

The boundary with the State of Louisiana begins in Orange County at Morgan Bluff, the northernmost extent of tidal influence, along the adjudicated boundary between the State of Texas and the State of Louisiana, as established by the United States Supreme Court in Texas v. Louisiana, 410 U.S. 702 (1973); thence it continues in a southerly direction along the adjudicated boundary out into the Gulf of Mexico until it intersects the seaward boundary. Determination of the interstate boundary was made after consultation with the Louisiana Department of Natural Resources, as required by the federal regulations.

4. The Boundary with the Republic of Mexico

The boundary with the Republic of Mexico begins at a point three marine leagues into the Gulf of Mexico where the line marking the seaward limit of Texas title and ownership under the Submerged Lands Act (43 United States Code §1301 *et seq.*) intersects the international boundary between the United States and the Republic of Mexico, as established pursuant to the Treaty of Guadalupe-Hidalgo (February 2, 1848) between the United States and the Republic of Mexico; thence it continues in a westerly direction along the international border with the Republic of Mexico until it meets the International Toll Bridge in Brownsville (that point on the border marking the westernmost intersection of Cameron County).

5. Excluded Federal Lands

The excluded Federal lands are those lands owned, leased, or held in trust by the federal government or whose use is otherwise by law subject solely to the discretion of the Federal government, its officers, or its agents. Examples are military bases, national seashore lands, national wildlife refuge lands, National Guard installations, and lands occupied by federal facilities.
Table 1 lists those major federal lands excluded from the coastal zone. While activities on excluded federal lands are not required to comply with the TCMP goals and policies, an activity that has spillover effects on CNRAs is subject to the federal consistency requirement (see Chapter Five).

Table 1

EXCLUDED FEDERAL LANDS IN THE TEXAS COASTAL ZONE

SITE	AGENCY	COUNTY
Brazoria NWR	USFWS	Brazoria
San Bernard NWR	USFWS	Brazoria/Matagorda
Matagorda Island NWR	USFWS	Calhoun/Aransas
Aransas NWR	USFWS	Calhoun/Aransas
Anahuac NWR	USFWS	Chambers
Moody NWR	USFWS	Chambers
Laguna Atascosa NWR	USFWS	Cameron
McFaddin NWR	USFWS	Jefferson
Texas Point NWR	USFWS	Jefferson
Big Boggy NWR	USFWS	Matagorda
Lower Rio Grande NWR	USFWS	Willacy/Cameron
Johnson Space Center	NASA	Harris
Naval Station Ingleside (and associated training areas)	DOD	San Patricio/Nueces
Naval Air Station Corpus Christi (and associated training areas)	DOD	Nueces
Naval Air Station Kingsville (and associated training areas)	DOD	Kleberg
Padre Island NS	NPS	Kleberg/Kenedy/ Willacy

NWR = National Wildlife Refuge
USFWS = United States Fish and Wildlife Service
NS = National Seashore
NPS = National Park Service
DOD = Department of Defense

NOTE: Not included in this table, but likewise excluded from the coastal zone, are individual buildings and sites such as post offices and small National Guard installations.

D. Delineation of the Coastal Management Boundary

At the request of the Executive Committee of the Coastal Coordination Council (EC), an interagency work group of biologists, geologists, hydrologists, and attorneys representing member agencies of the State Agency Task Force (SATF) was formed to research and recommend boundary options within a 33-county planning area. The work group evaluated the planning area to determine the locations of CNRAs and the types and locations of activities having adverse effects on CNRAs. Existing maps, studies, and agency experts on natural resources were consulted during the analysis.

The work group identified three options: (1) a boundary encompassing all counties with tidewater shorelines (the first tier of counties bordering on the Gulf of Mexico), (2) a boundary encompassing all first- and second-tier counties, and (3) a boundary encompassing all counties within the coastal watersheds.

At the instruction of the SATF and the EC, the work group narrowed its focus to an inland boundary that included all first-tier counties plus four second-tier counties: Hidalgo, Fort Bend, Jasper, and Newton. All other second-tier counties were determined not to contain activities having adverse effects on CNRAs. The GLO staff also consulted with the State of Louisiana on the interstate boundary. No points of conflict were identified.

The EC reviewed the information on these counties in May 1993 and recommended to the Council that the inland boundary be drawn to include the first tier of counties plus Hidalgo and Fort Bend counties. In June 1993, the Council reviewed the findings and recommendations of the EC and published the recommended boundary in the *Texas Register* as a proposed rule.

On the basis of public comment, the Council reexamined the proposed boundary in September 1993 and concluded that the majority of activities occurring in Fort Bend and Hidalgo counties did not directly and significantly impact CNRAs. The Council adopted an inland boundary encompassing only the 19 first-tier counties which have tidewater influence, and the established seaward, interstate, and international boundaries as the TCMP boundary.

The Council received public comment on the proposed TCMP goals and policies between March 15 and September 6, 1994. On the basis of public comment, the Council reexamined the adopted boundary in September 1994. It concluded that the majority of activities occurring in Liberty County did not directly and significantly impact CNRAs and proposed amending the adopted boundary to exclude Liberty County. In addition, the Council directed that a work group be formed to reevaluate the boundary in light of the adopted goals and policies of the TCMP and to determine if any further modification of the boundary was necessary.

A boundary work group consisting of representatives of Council members, interested local governments, and coastal legislators met in January, February, and March 1995. While the work group was developing and considering options, the Texas Legislature established by statute that the coastal boundary be the coastal facility designation line and include coastal wetlands generally within one mile along tidal segments of rivers and streams.

CHAPTER THREE.
ORGANIZATIONAL STRUCTURE FOR IMPLEMENTATION

A. Implementation

Collectively, state agencies, cities, and counties have been managing Texas' coastal resources for quite some time. The laws that authorize them to manage the coast have been enacted piecemeal over the last several decades. These agencies and subdivisions of the state will implement the TCMP through their ongoing exercise of these existing authorities.

The TCMP is based on the Coastal Coordination Act, which was first enacted in 1991 and subsequently amended in 1995. The TCMP is designed to improve management of coastal natural resources by the networked agencies and subdivisions. The Act requires the networked agencies and subdivisions to exercise their existing legal authorities in a manner consistent with a uniform set of goals and policies.

The Coastal Coordination Council (Council) is responsible for achieving the greater efficiency and effectiveness mandated by the Coastal Coordination Act. Therefore, the Council sets the TCMP goals and policies and ensures that agencies' and subdivisions' actions are consistent with them.

In addition to the networked agencies and subdivisions and the Council, there are several committees that will help implement the TCMP. Some of these were created during program development and will be retained during program implementation. They are designed to improve interagency coordination and dissemination of program information and to help mediate disputes. Other coordinating mechanisms being developed or already in existence will also be employed. The organizational structure of the TCMP will remain flexible, especially during the first few years of program implementation, to ensure that the state most effectively utilizes staff and supporting resources.

1. Coastal Coordination Council

The Council's primary responsibilities for program implementation are set forth in the Coastal Coordination Act (TEX. NAT. RES. CODE ANN. §33.201 *et seq.*). These include:

- continually reviewing the principal coastal problems of state concern;
- reviewing the effectiveness of the TCMP and issuing an annual report;
- promulgating rules adopting the goals and policies of the TCMP;
- periodically submitting recommendations to an agency or subdivision designed to encourage the agency or subdivision to carry out its functions in a manner consistent with the goals and policies of the TCMP;

- reviewing agency rulemaking actions that an agency submits to the Council for certification for consistency with the TCMP, and either certifying the actions as consistent or denying certification and reporting back to the agency with recommendations for correcting any deficiencies;

- issuing a Notice of Program Deficiency to any agency that either implements or amends its certified rules in a manner inconsistent with the TCMP, and in the case of an agency that does not correct the deficiency, revoking certification of those rules;

- reviewing for consistency any proposed federal action subject to the TCMP that three regular members of the Council submit to the Council for review, including receiving the oral or written testimony of any person regarding the matter;

- reviewing for consistency any proposed state agency or subdivision action subject to the TCMP that three regular members of the Council submit to the Council for review, including receiving the oral or written testimony of any person regarding the matter;

- in the case of a state agency or subdivision action that the Council finds inconsistent, protesting the action, reporting the findings and recommendations to the agency or subdivision and, if the agency or subdivision does not resolve the inconsistency, referring the matter to the attorney general for issuance of an opinion and possibly a lawsuit, and either proceeding with litigation or, if possible, entering into settlement agreements with the agency or subdivision; and

- reporting to the Texas Legislature on recommended statutory changes and agencies' and subdivisions' compliance with the TCMP.

In addition, the Council will annually approve the funding priorities and award criteria for distributing the federal coastal funds that Texas will receive after federal approval of the TCMP. The Council will award the individual grants using those priorities and criteria.

2. Implementation Mechanisms

The Council will use the mechanisms described below to facilitate implementation of the TCMP, provide opportunity for public and agency input, and ensure compliance with the TCMP goals and policies.

a. Executive Committee of the Council

The Executive Committee of the Council (the EC), composed of management-level representatives of the Council members, will coordinate responses to Council inquiries and implementation of Council directives. The EC will also review other matters that may be the subject of future Council deliberation. The EC will generally meet in advance of Council meetings to refine these issues and recommend Council action on them.

The EC will also issue preliminary findings for proposed agency or subdivision actions.

If the EC issues a preliminary finding of consistency with the goals and policies of the TCMP, the Council may review the proposed action only if the final agency or subdivision action is substantially different than it was when presented to the EC for preliminary review.

b. Permitting Assistance Group

The Coastal Coordination Act establishes a Permitting Assistance Group (PAG). The PAG is composed of a representative of each Council member and is chaired by the representative of the Council chair. The PAG will: (1) support the EC in rendering preliminary consistency review decisions; and (2) provide preapplication assistance for individuals and small business.

Initiated at the request of a state agency or applicant, preliminary review is intended to provide direct Council input into the agency or local government permitting process to assist in the identification and resolution of any consistency issues before an action is proposed.

During preliminary review, the PAG will identify all consistency issues, make recommendations for their resolution, and present the proposed action to the EC for a preliminary consistency finding.

The PAG will also help facilitate preapplication assistance upon request to any individual or small business owner filing an application for an agency or subdivision permit or other action subject to the TCMP. This assistance will identify all necessary permits, simply explain all permitting requirements, and help the applicant complete the application.

Finally, the PAG, under EC guidance, will coordinate agencies' consistency determinations upon request where multiple authorizations or permits are required for a single project.

c. Interagency Coordination Groups

To assist the Council in evaluating the consistency of federal development projects with the TCMP policies, the TCMP rules allow a federal agency to form an ad hoc Interagency Coordination Group (ICG). At a minimum, each ICG will include, as voting members, representatives of the local project sponsor, federal and state natural resource and regulatory agencies with jurisdiction over the project, and three Council members or their representatives. The ICG, with input from the Council, will advise the federal agency on the consistency of the project with the TCMP goals and policies. If a majority of the Council members on the ICG support the group's assessment of the project's consistency, the ICG will develop a formal consistency determination for the project. If the federal agency submits a consistency determination to the Council incorporating the ICG's recommendations and/or conditions for consistency with the TCMP, the Council will issue a general consistency agreement for the project.

d. Maintenance Dredging Memorandum of Agreement

Because of the extensive federal maintenance dredging activities within the coastal boundary, the Council executed a memorandum of agreement with the U.S. Army Corps of Engineers (Corps) in October 1994. The MOA establishes a multi-year period for consistency review of ongoing federal maintenance dredging projects within the TCMP boundary. Through the MOA, a schedule for review of particular projects was established. Without the MOA, the Corps would have to prepare and submit consistency determinations on all its projects within 120 days of federal approval of the TCMP, and the state would have to review and respond to the consistency determination within 60 days (15 CFR Part 930). The time lines stipulated in the MOA allow the state and Corps to conduct more complete and thorough reviews of federal maintenance dredging projects.

For each maintenance dredging project (e.g., Gulf Intracoastal Waterway), the Corps will produce a long-term maintenance dredging plan that is consistent with the TCMP. If the state disagrees with the Corps consistency determination for a maintenance dredging plan, the Corps and the state will negotiate directly or enter into some form of alternative dispute resolution. The product will be a negotiated consistency determination for the project's maintenance dredging plan. The plan can include a schedule for any necessary changes in current maintenance dredging practices for the project, thus providing flexibility. The process includes opportunities for ports and other local sponsors of navigation projects to participate in reviews of their projects.

e. Trans-Texas Water Program Policy Management Committee

The Council will utilize the existing Trans-Texas Water Program Policy Management Committee (PMC) to ensure that this water development project is consistent with the TCMP. The PMC is a multiagency body with responsibility for the overall planning of the Trans-Texas Water Program. It currently includes three individual Council members (TWDB, TNRCC, and TPWD) and one representative of the Council as a whole (GLO) who are responsible for ensuring full application of the TCMP goals and policies in the planning of the Trans-Texas project.

If the Council, acting through its representatives on the PMC, finds the Trans-Texas Water Program and any water rights actions (TEX. NAT. RES. CODE ANN. §33.2053(f)(8)-(10)) to be taken pursuant to the program consistent with the TCMP goals and policies, further Council review of the proposed actions will be unnecessary. This review of proposed actions for consistency at the earliest planning stage will avoid last-minute delays due to consistency concerns.

f. Advisory Committee

The Council will establish an advisory committee to assist in implementation of the TCMP and to provide a formal mechanism for ongoing public input into the program. Four or five regional subcommittees may be established to represent the citizens, local governments, and other interested parties in each coastal region. The committee will meet at least annually and will report regularly to the Council. By law, advisory committee members may only include persons with expertise in coastal matters and persons who live in the coastal area.

To facilitate public participation in the TCMP, the regional subcommittees would be responsible for identifying coastal issues of concern in each region, hosting regular local meetings in each region, and disseminating program information to the public.

g. Corps of Engineers Preapplication Process

State and federal regulatory and natural resource agencies meet biweekly with the Galveston District Corps of Engineers to review applications for Corps permits (e.g., §404 permits) received during the previous two weeks. The agencies normally participating in this process are the U.S. Fish and Wildlife Service, the National Marine Fisheries Service, the Texas Parks and Wildlife Department, the U.S. Environmental Protection Agency, the Texas Natural Resource Conservation Commission, and the GLO. The biweekly meetings give participating agencies an opportunity to comment on the applications and identify any preliminary concerns. Project sponsors may present their proposed projects to the interagency group for comment even before applying for a Corps permit. The Council plans to use this process to identify potential consistency issues with permits or proposed projects.

3. Texas General Land Office - Lead State Coastal Agency

The federal regulations (15 CFR §923.48(b)) require the state's designated lead agency to have the fiscal and legal capability to: (1) accept and administer grant funds; (2) make contracts or other arrangements (such as pass-through grants) with eligible agencies and local governments and other eligible entities for the purpose of carrying out specific management tasks; and (3) account for a recipient's expenditure of implementation funds. The designated lead agency must have the administrative capability to: (1) monitor and evaluate the management of the state's coastal resources by the various agencies and/or local governments with specified responsibilities under the state's coastal management program, irrespective of whether such entities receive §306 funds; (2) make periodic reports to OCRM, the governor, or the state legislature, as appropriate, regarding the performance of all agencies involved in the program; and (3) present evidence of adherence to the management program or justification for deviation as part of the review of state performance required by §312 of the CZMA.

The Texas Legislature designated the GLO both as the lead agency to coordinate the development of the TCMP, in cooperation with other state agencies having responsibilities relating to coastal matters (TEX. NAT. RES. CODE ANN. §33.052), and as the staff of the Coastal Coordination Council (TEX. NAT. RES. CODE ANN. §33.204). Governor George W. Bush designated the GLO as the lead agency for administration of grants under the CZMA in his letter of October 19, 1995, to the Under Secretary of Commerce. As such, the GLO will manage the daily operations of the program. Primary responsibility for management of the TCMP will reside within the GLO Coastal Division.

Responsibilities of the Coastal Division include: (1) providing staff support to the Council (this includes the duties of the secretary to the Council), the Executive Committee, and the advisory committee; (2) coordinating the PAG's activities and serving on the various other committees, panels, and groups implementing the TCMP; (3) administering CZMA funds and pass-through grants and contracts; (4) coordinating and preparing the necessary documentation for program evaluation reviews under CZMA §312; (5) coordinating state and federal

consistency reviews; (6) providing technical and policy assistance to state and local entities with responsibilities for implementing the TCMP; (7) coordinating ongoing public participation and education programs; (8) coordinating implementation of the erosion response plan, energy facility siting plan, and other special planning elements by the appropriate agencies; (9) providing technical and policy assistance and coordinating and compiling agencies' quarterly reports; and (10) preparing annual reports for the Texas Legislature.

Administrative Capacity for Program Implementation

The GLO has the fiscal and legal capability to accept and administer grant funds. The agency's organizational structure includes a large program area devoted to fiscal affairs which comprises a purchasing division, a budget office, and an office of alternative funding. This area is experienced in dealing with purchasing (including purchases from minority and women's business enterprises), contracts, and pass-through grants. The GLO's Legal Services program area employs attorneys expert in contracts and fiscal affairs. The Coastal Division employs a grant specialist who oversees the day-to-day management of the division's grants, including reporting and billing.

The GLO's administrative capability to oversee and administer the TCMP also meets federal requirements. Texas Natural Resources Code §§33.054 and 33.204 authorize: (1) the commissioner of the GLO to review the management program periodically and, with concurrence of the Council, to amend it as new information or changed conditions may warrant; (2) the GLO to assist the Council in carrying out its duties; and (3) the GLO to draft, for Council approval, annual reports to be submitted to the legislature on a biannual basis analyzing the effectiveness of the TCMP and making recommendations for improving the TCMP.

The Coastal Division serves as the coastal policy, technical, and administrative staff to the chairman of the Council (commissioner of the GLO), as well as to the Council. The Coastal Division currently has 17 policy, technical, and administrative staff members with expertise in coordinating intergovernmental management programs, grant and contract management, program administration, public participation, land use planning, geographic information systems, wetlands management, coastal physical processes, navigation planning, living resources management, natural resource damage assessment, and water quality. Other divisions within the GLO have expertise in asset management, including surveying, land sales and leasing, energy resources management, oil spill prevention and response, and environmental law.

4. Networked State Agencies and Subdivisions Responsible for Implementation

The primary responsibility of the state agencies and subdivisions that are subject to the provisions of the TCMP is to ensure that proposed actions listed in 31 TAC Chapter 505 that may adversely affect coastal natural resource areas (CNRAs) are consistent with the goals and policies of the TCMP. The agencies and subdivisions will do this through the exercise of their statutory authorities. Chapter Four summarizes the scope of each agency's regulatory authority by providing the following information: a description of each listed action; the land and water uses that are managed under each listed action; the agency's authority to issue variances; monitoring and enforcement requirements; and the agency's authority to regulate or condition the action to satisfy TCMP policies.

B. Compliance Monitoring

1. Coastal Coordination Council

It is a responsibility of the Council to monitor the actions of the state and federal agencies and state subdivisions subject to the TCMP to ensure their continued compliance with the TCMP goals and policies. The Council's compliance monitoring will include monitoring decisions below state consistency review thresholds and monitoring agency enforcement of authorities. The Council will monitor all actions subject to consistency review, including authorizations, development projects, and rule changes.

Monitoring Mechanisms and Procedures

The agencies undertaking or authorizing actions subject to the TCMP will be responsible for monitoring their permits, licenses, development projects, etc. Specific descriptions of line agencies' statutory authority to monitor permits and licenses they issue or their development projects are included later in this chapter and in Chapter Four.

The Coastal Coordination Act requires the GLO, in coordination with the networked agencies and subdivisions, to prepare an annual report on the effectiveness of the TCMP. The Council approves the final report. The Council will monitor long-term compliance with the TCMP goals and policies through the annual report. The Council will use the annual report to monitor the consistency of agency and subdivision actions taken over the previous year to determine the effectiveness of the goals and policies and consistency review processes. Any recommendations made by the Council under TEX. NAT. RES. CODE ANN. §33.207(1) to an agency or subdivision will also be included in the report to encourage agencies or subdivisions to carry out their functions in compliance with the goals and policies. On or before January 15 of each odd-numbered year the GLO will send the previous two annual reports to the state legislature.

The report will, in part, be a compilation of the reports agencies must submit quarterly to the Council under §505.30(e) of the Council's rules. These reports will provide the information necessary for the Council to evaluate the line agencies' actions. The report will also include information and recommendations from the advisory committee and from public comment on the report.

The report will include information such as summaries of the results of the preliminary review and permitting processes, the number of actions subject to the TCMP taken by agencies (including rulemaking actions), the number of rulemaking actions submitted to the Council for certification, the number of rulemaking actions denied certification by the Council, any Notice of Program Deficiency issued by the Council and the agency's corrective response to the notice, the number of actions found by an agency to have no direct and significant adverse effect on CNRAs, the number of actions in which consistency was at issue, the number of actions qualifying for review by the Council, the number of actions referred to the Council, the number of actions protested by the Council and the outcome, and information on agency monitoring, compliance, and enforcement measures, such as the extent of any followup monitoring of

authorized activities, the number of cases where the agency determined there was noncompliance, the number and type of enforcement actions and their outcome, etc.

The annual report will also provide status and trend reviews of CNRAs, any updates of CNRA inventories, an attempt to analyze cumulative and secondary effects of activities on CNRAs, summarize new research relevant to the TCMP, describe issues raised and recommendations made by the advisory committee, summarize issues raised by the public, recommend actions the Council may take to improve the TCMP, and recommend statutory changes needed to make more effective and efficient use of public funds and provide for more effective and efficient management of CNRAs, including recommendations on methods to simplify government procedures (TEX. NAT. RES. CODE ANN. §33.207(2)).

In addition to its direct monitoring, the Council will coordinate with the monitoring programs of the Galveston Bay Estuary Program (GBEP), formerly the Galveston Bay National Estuary Program, and the Corpus Christi Bay National Estuary Program (CCBNEP). Linking the monitoring programs of the TCMP and these programs is important because the majority of activities along the Texas coast occur in the heavily industrialized and densely populated counties surrounding Galveston and Corpus Christi bays. The Council's member agencies are participating in the CCBNEP and will work to ensure that a sound and workable monitoring program is developed for the CCBNEP study area.

The GBEP's Galveston Bay Plan includes a chapter on the Galveston Bay regional monitoring program. While this program concentrates on monitoring changes in the health of the bay ecosystem (e.g., overall pollutant loadings to the bay, bay ambient conditions, overall ecological productivity and diversity of the bay), the health of the bay will be a good indicator of the general success of the TCMP goals and policies since the goals and policies target avoidance and minimization of adverse effects on CNRAs.

The Council will also improve its compliance monitoring with the aid of the public. The advisory committee may also help the council identify compliance problems. The committee will be valuable in this way because its members live and work on the coast and have a greater knowledge of daily activities.

2. Texas General Land Office

The monitoring responsibilities of the GLO, as the agency administering the TCMP, primarily include tasks that support the Council's monitoring efforts. The GLO's role is that of reporter, ensuring that all monitoring information received by the Council is recorded, analyzed, and presented to the appropriate parties. GLO staff will also coordinate the state and federal consistency review processes and maintain and update the CNRA inventory in the Geographic Information System (GIS).

a. Monitoring Mechanisms and Procedures

The GLO will compile agencies' quarterly reports, draft the annual report, and submit it to the Council for approval. GLO staff will also coordinate preliminary reviews, permitting assistance, and state and federal consistency reviews.

b. Administrative Monitoring Capacity

The GLO has 17 staff members in the Coastal Division with expertise in coastal issues. Two staff members work on the development and upkeep of the TCMP GIS. Eight Coastal Division staff members with expertise in coastal policy and technical issues will draft the annual reports and provide the initial analysis needed for the Council to review and approve them.

3. Networked State Agencies and Subdivisions Responsible for Monitoring

The networked state agencies will retain the responsibility for monitoring permitted or authorized actions for compliance with permit conditions and with the goals and policies of the TCMP. The agencies will continue to use mechanisms such as site visits, self-reporting, citizen complaints, and citizen monitoring in their compliance monitoring programs. Agencies' monitoring authorities are included in the information provided in Chapter Four.

C. Enforcement

The Coastal Coordination Act, the TCMP rules, the Texas Administrative Procedure Act (APA), and the enabling statutes of the networked agencies establish three enforcement techniques.

(1) The networked agencies and subdivisions can take administrative action against private parties to enforce the existing authorities that are linked together into the TCMP. For example, permit conditions necessary to achieve TCMP consistency can be enforced through all means available to networked agencies. These existing enforcement powers typically include assessment of administrative penalties and fines or revocation of the agency authorization or approval. If administrative action does not achieve compliance, the agency or subdivision can pursue civil or criminal litigation through referral of the matter to the attorney general.

(2) The Council can administratively review agency and subdivision consistency determinations. If the Council disagrees with an agency's or subdivision's determination and the agency or subdivision does not correct the problem, the Council can pursue litigation through referral of the matter to the attorney general.

(3) Third parties (citizens, agencies, or local governments) can administratively challenge an agency consistency determination. For example, a party can challenge agency consistency determinations in a contested case hearing before an agency. Third parties can also seek judicial review of agency/subdivision consistency determinations, as provided by law.

1. Coastal Coordination Council

The Council is responsible for enforcing compliance with the Coastal Coordination Act. The Act authorizes the Council to enforce the statute against state agencies and political subdivisions, which are the entities whose actions are governed by the statute.

Enforcement Mechanisms and Procedures

The Coastal Coordination Act provides the statutory basis for the Council's enforcement of the TCMP goals and policies. As defined in the TCMP rules and articulated in §33.206(b) of the Texas Natural Resources Code, compliance with the TCMP goals and policies is mandatory for actions subject to the program. If the Council finds that a proposed action is inconsistent with the TCMP goals and policies, it must protest the proposed action to the agency or subdivision. When protesting a proposed action, the Council must issue a report of findings to the agency or subdivision authorizing the action. If the agency or subdivision does not modify the proposed action to make it consistent with the TCMP, the Council must refer the matter to the attorney general for issuance of an opinion and possibly litigation. Even after suit is filed, the Council may still enter into a settlement agreement with the agency or subdivision with regard to the proposed action. If a suit has been filed by the attorney general, the attorney general must be a party to the settlement.

2. Attorney General

The attorney general has the authority, under the Coastal Coordination Act and APA, to enforce the decisions of the Council against agencies and subdivisions. The attorney general must file suit in a district court of Travis County if the attorney general finds that the proposed action is inconsistent and the agency or subdivision fails to implement the Council's recommendations. In determining whether to sue, the attorney general must consider the Council's findings and recommendations and the agency's response to the recommendations.

The attorney general's obligation to undertake enforcement action is clear and mandatory. The language of the Coastal Coordination Act requires the attorney general to seek enforcement through the courts unless a settlement agreement is reached.

3. Texas General Land Office

As the lead entity for administering the TCMP, the GLO has a role supporting the Council but no direct responsibility for enforcing the Coastal Coordination Act. The GLO will act as administrative, technical, and legal support for the Council when the Council refers, reviews, protests, or reports to a state agency or subdivision on a proposed action, when it requests an opinion from the attorney general, or when it enters into negotiations with the agency or subdivision. The GLO will also provide the attorney general's office with any information needed to issue an opinion or bring suit.

4. Networked State Agencies and Subdivisions Responsible for Enforcement

The networked state agencies and subdivisions with jurisdiction over a proposed action are responsible for enforcing the provisions of the TCMP. State agencies have long had the authority to ask the attorney general to initiate enforcement action against a private party for violation of the terms or conditions of a permit. All agencies are authorized to enforce the permits or other authorizations they issue. Conditions included in a permit or authorization to ensure consistency with the TCMP goals and policies would likewise be enforceable against private parties through established agency enforcement proceedings.

In 1991, the Texas Legislature adopted far-reaching amendments to the Texas Water Code, the Solid Waste Disposal Act, and the Texas Clean Air Act providing for criminal sanctions for violations of these statutes. In addition, the attorney general can seek monetary civil penalties and appropriate injunctive relief under these and other statutes networked under the TCMP.

In addition to enforcing permits and authorizations directly or indirectly through the attorney general, state agencies also have procedures authorized by the APA or the agency's enabling legislation which allow the agency's consistency determination to be challenged by an aggrieved party in a contested case before the agency and ultimately in a court of law. The APA provides an independent basis for enforcement of the TCMP goals and policies by aggrieved parties by giving them the right to judicially challenge an agency's final decision.

Details of authorities to enforce the conditions of permits and authorizations subject to the TCMP can be found in Chapters Four and Five.

D. Local Government Involvement

Several program features ensure effective communication between the Council and local governments with the goal of integrating local governments into management of coastal natural resources. Local governments will be notified of relevant TCMP decisions, including those which may conflict with local land use plans or zoning ordinances. First, the Council includes as a full voting member a local government representative. This individual is responsible for ensuring that the interests of local governments are brought before the Council. This representative will also assist in communicating Council decisions to all local governments.

Second, an additional local government representative will be added to the Council as a non-voting member when the Council takes up any matter on review. By statute, this non-voting member must be from the jurisdiction affected by the matter before the Council. Thus, Council decisions will be directly communicated to the affected local government.

Third, the Council will establish a permanent advisory committee to ensure effective communication with all local interests, particularly local governments with land use authority.

CHAPTER FOUR.
PROGRAM GOALS AND POLICIES

A. Introduction

The statutory authorities and rules of networked agencies and subdivisions set standards by which "enforceable" administrative actions are taken to approve, with or without conditions, or disapprove activities that may adversely affect coastal natural resource areas (CNRAs). To create consistency among these many agencies and subdivisions, the Coastal Coordination Act requires these agencies and subdivisions to comply with a uniform set of coastal goals and policies when taking these actions. The TCMP goals and policies reflect the state's priorities in balancing economic development with resource protection and provide consistent guidelines for coordinated management of the coast. The policies do not impose or create any requirement which is beyond the existing legal authority of any agency or local government, nor may they be applied in a manner that would result in the taking, damage, or destruction of property without adequate compensation.

It is a role of the Coastal Coordination Council (Council) to ensure that the proposed actions of the agencies and subdivisions are consistent with the goals and policies in this chapter. Upon approval of the TCMP under the federal Coastal Zone Management Act, the Council will ensure that federal actions, activities, and Outer Continental Shelf plans are also consistent with these goals and policies. The procedures for consistency review are found in 31 TAC Chapters 505 and 506 and described in Chapter Five of this document.

The first part of this chapter states the goals of the TCMP that guide the interpretation and implementation of the program (31 TAC §501.12). The second part lists all CNRAs which the policies are designed to protect. The third part lists the 21 policy categories of the TCMP and identifies the related state agency actions, the uses managed by the actions and policies, and the scope of authority of state agencies to manage the uses. This part of the chapter also describes the "Policy for Major Actions" and the "Administrative Policies," which provide guidance to agencies and subdivisions making administrative decisions (31 TAC §§501.13 and 501.15).

The final part of this chapter, "Advisory Policies," describes those policies that make the TCMP a comprehensive program that serves as a planning tool. Advisory policies offer recommendations for future actions or programs and promote nonregulatory aspects of coastal management such as planning and acquisition. Additionally, they establish preferences for the siting and operation of certain activities and facilities.

Advisory policies are written to help foster innovative ways of responding to coastal management issues and resource protection concerns. Advisory policies are not enforceable; however, their inclusion in the TCMP document allows federal Coastal Zone Management (CZM) funds to be used by eligible entities.

This chapter is explanatory in nature; any legal interpretations should be based on the rules adopted by the Council under 31 TAC Chapter 501.

B. TCMP Goals

The goals of the TCMP are:

1. to protect, preserve, restore, and enhance the diversity, quality, quantity, functions, and values of CNRAs;

2. to ensure sound management of all coastal resources by allowing for compatible economic development and multiple human uses of the coastal zone;

3. to minimize loss of human life and property due to the impairment and loss of protective features of CNRAs;

4. to ensure and enhance planned public access to and enjoyment of the coastal zone in a manner that is compatible with private property rights and other uses of the coastal zone;

5. to balance the benefits from economic development and multiple human uses of the coastal zone, the benefits from protecting, preserving, restoring, and enhancing CNRAs, the benefits from minimizing loss of human life and property, and the benefits from public access to and enjoyment of the coastal zone;

6. to coordinate agency and subdivision decision-making affecting CNRAs by establishing clear, objective policies for the management of CNRAs;

7. to make agency and subdivision decision-making affecting CNRAs efficient by identifying and addressing duplication and conflicts among local, state, and federal regulatory and other programs for the management of CNRAs.

8. to make agency and subdivision decision-making affecting CNRAs more effective by employing the most comprehensive, accurate, and reliable information and scientific data available and by developing, distributing for public comment, and maintaining a coordinated, publicly accessible geographic information system of maps of the coastal zone and CNRAs at the earliest possible date;

9. to make coastal management processes visible, coherent, accessible, and accountable to the people of Texas by providing for public participation in the ongoing development and implementation of the Texas CMP; and

10. to educate the public about the principal coastal problems of state concern and technology available for the protection and improved management of CNRAs.

C. Coastal Natural Resource Areas

To address the issues of concern, and in response to the requirements of the Coastal Coordination Act, the Coastal Coordination Council has designated the areas listed below as coastal natural resource areas requiring special management under the Coastal Management Program. Legal definitions can be found in Appendix B - Rules for TCMP Goals and Policies.

- *Waters of the open Gulf of Mexico* are waters seaward of coastal barrier islands and bays and estuaries and extending to the territorial limits of the state (i.e., approximately 10.36 miles offshore). Waters in the open Gulf of Mexico serve as habitat for numerous commercial and recreational fishery species.

- *Waters under tidal influence* are those waters in the state that are contained behind coastal barrier islands and within bays and estuaries and rivers to the inland extent of tidal influence. Together, waters in the open Gulf of Mexico and waters under tidal influence are considered "coastal waters." Waters under tidal influence provide important aquatic habitat, serve as prime recreation areas, and provide some domestic water supply.

- *Submerged lands* are lands underlying waters under tidal influence or waters of the open Gulf of Mexico that are owned by an agency or subdivision of the state, or by a person other than the state. The sediments of coastal public submerged lands are habitat for a diverse benthic, or bottom-dwelling, animal community.

- *Coastal wetlands* are those areas having a predominance of hydric soils that are inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that under normal circumstances support, the growth and regeneration of hydrophytic vegetation, as defined in the Texas Water Code, Chapter 11, Subchapter J, and that lie within the Coastal Facility Designation Line and within one mile from the mean high tide line of tidal river and stream segments to the inland extent of tidal influence, except for the Trinity and Neches rivers. On the Trinity River, coastal wetlands are those wetlands occurring within the area located between the mean high tide line on the western shoreline of the river and FM Road 565 and FM Road 1409, and wetlands within the area located between the mean high tide line on the eastern shoreline of that portion of the river and FM Road 563. On the Neches River, coastal wetlands are those wetlands occurring within one mile of the mean high tide line on the western shoreline of the river, and wetlands within the area located between the mean high tide line on the eastern shoreline of that portion of the river and FM Road 105. Coastal wetlands provide wildlife habitat, convey and store floodwaters, trap sediment, and reduce water pollution.

- *Submerged aquatic vegetation* is rooted aquatic vegetation growing in permanently inundated areas in estuarine and marine systems. Submerged aquatic vegetation provides valuable habitat for numerous commercial and recreational fishery organisms and for wildlife.

- *Tidal sand and mud flats* are silt, clay, or sand substrates, unvegetated or vegetated by algal mats, that occur in the intertidal zone and that are regularly or intermittently

exposed and flooded by tides. Mud flats and sand flats are the feeding grounds for coastal shorebirds, fish, and invertebrates.

- *Oyster reefs* are natural or artificial formations in intertidal or subtidal areas that are composed of oyster shell, live oysters, and other organisms and that are discrete, contiguous, and clearly distinguishable from scattered oysters. Oyster reefs not only support the oyster fishery but also serve as habitat, forage ground, or hiding places for numerous estuarine species.

- *Hard substrate reefs* are naturally occurring hard substrate formations, such as rock outcrops or serpulid worm reefs (living or dead), in intertidal or subtidal areas that are discrete and contiguous. Hard substrate reefs provide habitat for numerous invertebrates.

- *Coastal barriers* are undeveloped areas on barrier islands and peninsulas or otherwise protected areas, as mapped by the U.S. Fish and Wildlife Service (i.e., Coastal Barrier Resource System Units). Coastal barriers are subject to wave, tidal, and wind energy from the Gulf of Mexico. Barrier islands are Galveston, Matagorda, San Jose, Mustang, and North and South Padre islands. Coastal barriers act as important buffers against coastal storms and protect coastal natural resource areas and the mainland from erosion, flooding, and destruction.

- *Coastal shore areas* are all areas within 100 feet landward of the high water mark on submerged land. Shore areas function as buffers, protecting upland habitats from erosion and storm damage and adjacent marshes and waterways from water quality degradation. Designation of coastal shore areas as a CNRA is exclusively intended to address erosion impacts within coastal shore areas.

- *Gulf beaches* are beaches bordering on the Gulf of Mexico that extend inland from the line of mean low tide to the natural line of vegetation bordering on the seaward shore of the Gulf of Mexico, or such larger contiguous area to which the public has acquired a right of use or easement to or over by prescription, dedication, or estoppel, or has retained a right by virtue of continuous right in the public since time immemorial. Texas beaches serve as important recreational areas and provide protection for landward structures during storms.

- *Critical dune areas* are protected sand dune complexes on the Gulf shoreline within 1,000 feet of mean high tide. Sand dunes help prevent loss of life and property by absorbing the impact of storm surge and high waves and by stopping or delaying intrusion of water inland.

- *Special hazard areas* are areas designated by the administrator of the Federal Insurance Administration under the National Flood Insurance Act as having special flood, mudslide (i.e., mudflow) and/or flood-related erosion hazards, and shown on a Flood Hazard Boundary Map or Flood Insurance Rate Map as Zone A, AO, A1-30, AE, A99, AH, VO, V1-30, VE, V, M, or E. These areas are important because they receive the brunt of storms, act as natural water-detention systems, and are natural filters for upland runoff.

- *Critical erosion areas* are those Gulf and bay shorelines that are undergoing erosion and are designated by the commissioner of the GLO under Texas Natural Resources Code, §33.601(b). Critical erosion areas require comprehensive management because loss of life and property can result if development occurs in these areas.

- *Coastal historic areas* are sites in the National Register of Historic Places on public land and state archaeological landmarks that are identified by the Texas Historical Commission as being coastal in character. Coastal historic areas provide important information about the coastal history and culture of the state.

- *Coastal preserves* are any lands owned by the state that are designated and used as parks, recreation areas, scientific areas, wildlife management areas, wildlife refuges, or historic sites and that are designated by the Texas Parks and Wildlife Department as being coastal in character. These areas are valued for the recreational opportunities they afford and for the diverse habitats they comprise.

D. Enforceable Policies of the TCMP

POLICY CATEGORY 1: CONSTRUCTION OF ELECTRIC GENERATING AND TRANSMISSION FACILITIES

State Agency Action and Managed Uses

PUC - Certificate of Convenience and Necessity (TEX. NAT. RES. CODE ANN. §33.2053(b))

Construction of new electric generating units and new electric transmission lines; i.e., lines used for bulk transmission of electricity and all lines operating at 60,000 volts or more (TEX. REV. CIV. STAT. ANN. art. 1446c, §50, and 16 TAC §23.31). Construction of new electric high voltage switching stations or new electric substations within a utility's certificated area do not require a certificate of convenience and necessity and therefore are not a use managed by the following policies (16 TAC §23.31).

Policies

The Public Utility Commission shall comply with the policies in this category when issuing certificates of convenience and necessity and adopting rules under the Public Utility Regulatory Act (TEX. REV. CIV. STAT. ANN. art. 1446c, governing construction of electric generating facilities, electric transmission lines, and associated facilities in the coastal zone).

Construction of electric generating facilities and electric transmission lines in the coastal zone shall comply with the policies in this category.

A. New electric generating facilities shall, where practicable, be located at previously developed sites. New electric generating facilities at undeveloped sites shall be located so that future expansion will avoid construction in critical areas, Gulf beaches, critical dunes, and washovers to the greatest extent practicable. To the extent applicable to the public beach, these policies are supplemental to any further restrictions or requirements relating to the beach access and use rights of the public.

B. Electric generating facilities using once-through cooling systems shall be located and designed to have the least adverse effects practicable, including impingement or entrainment of estuarine organisms.

C. Electric generating facilities shall be constructed at sites selected to have the least adverse effects practicable on recreational uses of CNRAs and on areas used for spawning, nesting, and seasonal migrations of terrestrial and aquatic fish and wildlife species.

D. Electric transmission lines to or on Coastal Barrier Resource System Units and Otherwise Protected Areas designated on maps dated October 24, 1990, under the Coastal Barrier Resources Act, 16 U.S.C.A. §3503(a) on coastal barriers shall:

i. be located, where practicable, in existing rights-of-way or previously disturbed areas if necessary to avoid or minimize adverse effects; and

ii. be located at sites at which future expansion shall avoid construction in critical areas, Gulf beaches, critical dunes, and washovers to the greatest extent practicable.

Management Authority and Administration

The Public Utility Commission of Texas (PUC) regulates public utilities, including the construction of electric generating facilities, electric transmission lines, and associated facilities in the coastal zone. Under the Public Utility Regulatory Act (TEX. REV. CIV. STAT. ANN. art. 1446c), the PUC has the authority to establish a comprehensive regulatory system to regulate public utilities; to assure rates, operations, and services; and to "do all things . . . necessary and convenient to the exercise of these powers and jurisdiction."

Before a utility can construct a transmission line or power plant, it must apply for a "Certificate of Convenience and Necessity" (3 TAC Ch. 21), which must require compliance with the above policies (31 TAC § 501.14(a)). The utility is required to notify and coordinate with the appropriate state and federal agencies which enforce environmental requirements. The PUC also requires evidence from the utility that all requirements and regulations of local, state, and federal agencies have been met, including obtaining required permits and authorizations. These requirements of the PUC will ensure that other TCMP policies applicable to electric generating and transmission facilities are met.

Exemptions

Certificate of Convenience and Necessity. A certificate of convenience and necessity is not required for a new electric high voltage switching station or a new electric substation within the utility's certificated area (16 TAC §23.31).

Variances

Certificate of Convenience and Necessity. None.

Monitoring and Enforcement

Certificate of Convenience and Necessity. The PUC does not independently monitor or enforce compliance with environmental and resource protection regulations.

Agency's Authority to Regulate or Condition Listed Action to Satisfy TCMP Policy

Certificate of Convenience and Necessity. Certificates of convenience and necessity must be granted on a nondiscriminatory basis after consideration by the commission of the adequacy of existing service, the effect of the granting of the certificate on the recipient of the certificate and on any public utility of the same kind already serving the proximate area, and on such factors as community values, recreational and park areas, historical and aesthetic values, environmental

integrity, and the probable improvement of service or lowering of cost to consumers in the area resulting from the granting of such certificate (TEX. REV. CIV. STAT. ANN. art. 1446c, §54(c)).

POLICY CATEGORY 2: CONSTRUCTION, OPERATION, AND MAINTENANCE OF OIL AND GAS EXPLORATION AND PRODUCTION FACILITIES

State Agency Action and Managed Uses

SLB - Mineral Lease Plan of Operations
(TEX. NAT. RES. CODE ANN. §33.2053(a)(1))

Drilling activities; alterations to the natural landscape; surface and bottom-hole location of the initial well; location of additional planned wells and production facilities; location of shipping fairways and anchorage areas; anticipated routes for pipelines; and location of routes of dredging required for all production-related activities, such as pipelines, well-drilling, and construction of facilities.

GLO - Geophysical or Geochemical Permit
(TEX. NAT. RES. CODE ANN. §33.2053(a)(2)

Geophysical and geochemical exploration. Geophysical exploration means a survey or investigation conducted to discover or locate minerals or oil and gas prospects using magnetic, gravity, seismic, and/or electrical techniques. Geochemical exploration means a survey or investigation conducted to discover or locate minerals or oil and gas prospects using techniques involving soil sampling and analysis (TEX. NAT. RES. CODE ANN. §52.321 and §53.161).

GLO - Miscellaneous Easement
(TEX. NAT. RES. CODE ANN. §33.2053(a)(4))

Construction and placement of telephone, telegraph, electric transmission, and power lines; oil pipelines; gas pipelines and sulphur pipelines; other electric lines and pipelines of any nature; irrigation canals, laterals, and water pipelines; roads; and any other purpose the commissioner considers to be in the best interests of the state (TEX. NAT. RES. CODE ANN. §51.291). Construction and placement of electric substations, pumping stations, loading racks, and tank farms on state land other than land owned by the University of Texas System (TEX. NAT. RES. CODE ANN. §51.292).

GLO - Surface Lease
(TEX. NAT. RES. CODE ANN. §33.2053(a)(6))

Unsold public school land and asylum land may be leased for agricultural, grazing, or commercial purposes (TEX. NAT. RES. CODE ANN. §51.121).

SLB - Coastal Easement
(TEX. NAT. RES. CODE ANN. §33.2053(a)(3))

Dredging of basins and channels on state-owned submerged land; construction of piers, docks, marinas, bulkheads, seawalls, and other waterfront structures on state-owned submerged land. The School Land Board may also grant easement rights to the owner of adjacent littoral property

authorizing the placement or location of a structure on coastal public land for purposes connected with the ownership of littoral property (TEX. NAT. RES. CODE ANN. §33.111).

Policies

The GLO and SLB shall comply with the policies in this category when approving oil, gas, and other mineral lease plans of operations and granting surface leases, easements, and permits and adopting rules under the Texas Natural Resources Code, Chapters 32, 33 and 51-53, governing oil and gas exploration and production on submerged lands.

1. Oil and gas exploration and production on submerged lands shall comply with the policies in this category.

   A. In or near critical areas, facilities shall be located and operated and geophysical and other operations shall be located and conducted in such a manner as to avoid and otherwise minimize adverse effects, including those from the disposal of solid waste and disturbance resulting from the operation of vessels and wheeled or tracked vehicles, whether on areas under lease, easement, or permit or on or across access routes thereto. Where practicable, buffer zones for critical areas shall be established and directional drilling or other methods to avoid disturbance, such as pooling or unitization, shall be employed.

   B. Lessees, easement holders, and permittees shall construct facilities in a manner that avoids impoundment or draining of coastal wetlands, if practicable, and shall mitigate any adverse effects on coastal wetlands impounded or drained in accordance with the sequencing requirements in 31 TAC §501.14(h) (relating to Development in Critical Areas).

   C. Upon completion or cessation of operations, lessees, easement holders, and permittees shall remove facilities and restore any significantly degraded areas to pre-project conditions as closely as practicable, unless facilities can be used for maintenance or enhancement of CNRAs or unless restoration activities would further degrade CNRAs.

2. To the extent applicable to the public beach, these policies are supplemental to any further restrictions or requirements relating to the beach access and use rights of the public.

Management Authority and Administration

The GLO and SLB are the management entities for oil and gas exploration and production on state submerged lands under the authority of chapters 32, 33, and 51-53 of the Texas Natural Resources Code. The GLO and SLB serve proprietary rather than regulatory roles and determine whether a proposed use of state land is appropriate. Standards and procedures for granting permits and leases for geophysical and geochemical exploration for and production of oil and gas on state-owned land are established in 31 TAC Chapter 9. The rules set out provisions to prevent damage to or pollution of all lands and waters, including restrictions on the release of solid

wastes; restrictions on the use of vehicles to minimize impacts to submerged lands and marshes; provisions for the protection of natural resources, including aquatic life and wildlife, from seismic and production operations; and provisions for remediation of any surface damage from operations.

Oil and gas leases may be issued for islands, saltwater lakes, bays, inlets, and marshes owned by the state within tidewater limits; rivers and channels owned by the state; the portion of the Gulf of Mexico within the jurisdiction of the state; all unsold surveyed and unsurveyed public school land; and all land sold with a reservation of minerals to the state under TEX. NAT. RES. CODE ANN. §51.054 in which the state has retained leasing rights.

A mineral lease plan of operations is not currently a condition of the lease application process. Applications for mineral leases may contain any information the commissioner requires (TEX. NAT. RES. CODE ANN. §53.015).

Under 31 TAC Chapter 155, coastal easements are issued to lessees for the dredging of channels to allow access to oil and gas exploration and production sites. The rules establish standards and criteria for the siting, design, and construction of dredged channels and dredged material disposal areas. Under 31 TAC Chapter 13, miscellaneous easements are granted for rights-of-way across public lands for oil and gas pipelines, and surface leases are granted for structures such as oil and gas platforms on state submerged lands.

Exemptions

Geophysical or Geochemical Permit. Holders of valid oil and gas leases are not required to have a permit (TEX. NAT. RES. CODE ANN. §52.322).

Variances

Mineral Lease Plan of Operations. Mineral lease plans are not currently a condition for obtaining a mineral lease.

Monitoring and Enforcement

Geophysical or Geochemical Permit. A violation of the conditions or provisions of a geophysical or geochemical permit is a misdemeanor punishable by a fine of not less than $100 nor more than $1,000 per day (TEX. NAT. RES. CODE ANN. §52.325). All operations are subject to inspection and monitoring by the commissioner or the commissioner's representatives at any time. Within 30 days of the expiration of the permit, the permittee must file with the commissioner a sworn "summary of activities" report (31 TAC §9.4(f)).

Coastal Easement. Any construction or placement on coastal public land without first obtaining a coastal easement of a structure from the GLO is subject to a civil penalty of not more than $200 (TEX. NAT. RES. CODE ANN. §33.112). Violations can also result in penalties of no more than $1,000 per day per violation, the removal of the structure, or the filing of a lien (TEX. NAT. RES. CODE ANN. §51.302).

Miscellaneous Easement. Existing miscellaneous easements must be renewed periodically. No easements may be granted for a term longer than 10 years, but the commissioner may set any term deemed to be in the best interest of the state (TEX. NAT. RES. CODE §51.296). No person may undertake the activities described above on state-owned land without a miscellaneous easement from the commissioner or the board. A person without an easement is subject to a penalty of not more than $1,000 per day, the removal of the structure, or the filing of a lien (TEX. NAT. RES. CODE ANN. §51.302).

Agency's Authority to Regulate or Condition Listed Action to Satisfy TCMP Policy

Mineral Lease Plan of Operations. The commissioner may include in the lease any provision the commissioner considers necessary for protection of the interests of the state. TEX. NAT. RES. CODE ANN. §53.016(b).

Geophysical or Geochemical Permit. Permits are required for all exploration on public school land, which includes all land dedicated to the permanent free school fund and specifically includes land with a mineral classification in which the state has retained the oil and gas interest and areas within tidewater limits (TEX. NAT. RES. CODE ANN. §52.321). Except for a person who has a valid oil and gas lease on public school land, a person may not conduct geophysical and geochemical exploration without a permit (TEX. NAT. RES. CODE ANN. §52.322). The commissioner may make rules relating to geophysical or geochemical exploration, permits, or permittees the commissioner considers appropriate (TEX. NAT. RES. CODE ANN. §52.324 and §53.163).

Miscellaneous Easement. The grant of a miscellaneous easement may contain any provisions that the commissioner considers necessary to protect the interests of the state and may be perpetual or for a term of years (TEX. NAT. RES. CODE ANN. §51.305).

POLICY CATEGORY 3: DISCHARGES OF WASTEWATER AND DISPOSAL OF WASTE FROM OIL AND GAS EXPLORATION AND PRODUCTION ACTIVITIES

State Agency Action and Managed Uses

RRC - Waste Disposal or Storage Pit Permit
(TEX. NAT. RES. CODE ANN. §33.2053(c)(2))

Maintenance or use of a pit for storage of oil field fluids or oil and gas wastes (16 TAC §3.8).

RRC - Wastewater Discharge Permit
(TEX. NAT. RES. CODE ANN. §33.2053(c)(1))

Disposal of wastewater generated in connection with activities associated with the exploration, development, and production of oil or gas or geothermal resources into coastal waters. Before a permit is issued, the Railroad Commission must determine that the discharge will not result in pollution or in a violation of Texas Water Quality Standards (16 TAC §3.8).

Policies

1. Disposal of oil and gas waste in the coastal zone shall comply with the policies in this category.

   A. No new commercial oil and gas waste disposal pits shall be located in any CNRA.

   B. Oil and gas waste disposal pits shall be designed to prevent releases of pollutants that adversely affect coastal waters or critical areas.

2. Discharge of oil and gas exploration and production wastewater in the coastal zone shall comply with the following policies.

   A. All discharges shall comply with all provisions of surface water quality standards established by the TNRCC under Policy Category 6.

   B. To the greatest extent practicable, new wastewater outfalls shall be located where the discharge will not adversely affect critical areas. Existing wastewater outfalls that adversely affect critical areas shall be either discontinued or relocated so as not to adversely affect critical areas within two years of the effective date of these rules.

   C. The RRC shall notify the TNRCC and the TPWD upon receipt of an application for a new permit to discharge produced waters to waters under tidal influence. In determining compliance with these policies, the RRC shall consider the effects of salinity from the discharge.

Management Authority and Administration

Under the authority of Texas Natural Resources Code, Chapter 91, and Texas Water Code, Chapter 26, the RRC regulates the management of oil and gas waste and wastewater discharges from exploration and production activities. The RRC must comply with the policies for the discharge of wastewater and disposal of waste from oil and gas exploration and production activities when issuing permits and adopting rules under these authorities.

The RRC authorizes some oil and gas waste management practices by rule. For instance, low-chloride, water-based drilling fluids and the associated drill cuttings may be landfarmed on the lease where they were generated with the written permission of the surface owner. Drill cuttings and dewatered water-based drilling fluids may be disposed of by burial at the site where they were generated. Dewatered completion and workover wastes and basic sediment may be disposed of in on-site pits.

A permit is required for oil and gas waste pits and disposal methods not specifically authorized by rule. For instance, emergency saltwater storage pits, gas plant evaporation/retention pits, and collecting pits must be permitted.

RRC rules require that oil and gas waste disposal pits, whether authorized by rule or permit, be designed, constructed, and operated in a manner that will prevent pollution of surface and subsurface waters. Additional disposal practice requirements may be imposed by permit conditions. In most cases, RRC rules prohibit the discharge of oil and gas waste to surface waters without a permit. RRC rules do authorize the discharge of oil-free drill cuttings and drilling fluids into the Gulf of Mexico.

Exemptions

Waste Disposal or Storage Pit Permit. The authority granted to the commission does not include the authority to adopt and enforce rules and orders or issue permits regarding the collection, storage, handling, transportation, processing, or disposal of waste arising out of or incidental to activities associated with gasoline plants, natural gas or natural gas liquid processing plants, pressure maintenance plants, or repressurizing plants if that waste is a hazardous waste as defined by the administrator of the U.S. Environmental Protection Agency pursuant to the federal Solid Waste Disposal Act (TEX. NAT. RES. CODE ANN. §91.101). A person may, without a permit, maintain or use reserve pits, mud circulation pits, completion/workover pits, basic sediment pits, flare pits, fresh makeup water pits, fresh mining water pits, and water condensate pits on condition that only limited types of fluids or wastes are placed within such pits (16 TAC §3.8(d)(4)).

Wastewater Discharge Permit. None.

Variances

Waste Disposal or Storage Pit Permit. No express provisions for variances are contained in 16 TAC §3.8; however, emergency waste disposal and storage pit permit procedures are established in 16 TAC §3.8(d)(6)(F).

Wastewater Discharge Permit. None.

Monitoring and Enforcement

Waste Disposal or Storage Pit Permit and Wastewater Discharge Permit. Members and employees of the commission, on proper identification, may enter public or private property to inspect and investigate conditions relating to the quality of water in the state (TEX. NAT. RES. CODE ANN. §91.1012). Violations may subject a person to administrative penalties of up to $10,000 per day for each violation as well as criminal penalties (TEX. NAT. RES. CODE ANN. §81.0531 and §91.002).

Agency's Authority to Regulate or Condition Listed Action to Satisfy TCMP Policy

Waste Disposal or Storage Pit Permit and Wastewater Discharge Permit. The RRC is required to adopt rules and issue permits as necessary to prevent pollution of surface and subsurface water related to oil and gas exploration and production activities (TEX. NAT. RES. CODE ANN. §91.101).

POLICY CATEGORY 4: CONSTRUCTION AND OPERATION OF SOLID WASTE TREATMENT, STORAGE, AND DISPOSAL FACILITIES

State Agency Action and Managed Uses

TNRCC - Permit for Solid or Hazardous Waste Treatment, Storage, or Disposal (TEX. NAT. RES. CODE ANN. §33.2053(f)(3))

Construction, operation, and maintenance of the solid waste facilities used to store, process, or dispose of solid waste (TEX. HEALTH & SAFETY CODE ANN. §361.061). Solid waste treatment, storage, and disposal facilities include hazardous waste storage or processing facilities, land treatment facilities, waste piles, storage surface impoundments, and landfills. These policies apply to both new facilities and areal expansion of existing facilities.

Policies

Construction and operation of solid waste facilities in the coastal zone shall comply with the policies in this category.

A. A landfill at which hazardous waste is received for a fee shall not be located in a critical area, a critical dune area, a critical erosion area, or the 100-year floodplain of a perennial stream delineated on a flood map adopted by the Federal Emergency Management Agency after September 1, 1985, as zone A1-99, VO, or V1-30. This policy shall not apply to any facility for which either an application or a notice of intent to file an application was filed with the TNRCC as of September 1, 1985.

B. Except as provided in paragraphs A and B of this policy category, a hazardous waste landfill shall not be located in a special hazard area existing before site development except in an area with a flood depth of less than three feet. Any hazardous waste landfill within a special hazard area must be designed, constructed, operated, and maintained to prevent washout of any hazardous waste by a 100-year flood.

   i. The areal expansion of a landfill in a special hazard area may be allowed if the applicant demonstrates that the facility design will prevent the physical transport of any hazardous waste by a 100-year flood event.

   ii. A new commercial hazardous waste management facility landfill unit may not be located in a special hazard area unless the applicant demonstrates that the facility design will prevent the physical transport of any hazardous waste by a 100-year flood.

C. Hazardous waste storage or processing facilities, land treatment facilities, waste piles, and storage surface impoundments shall not be located in special hazard areas unless they are designed, constructed, operated, and maintained to prevent washout of any hazardous waste by a 100-year flood.

D. Hazardous waste land treatment facilities, waste piles, storage surface impoundments, and landfills shall not be located within 1,000 feet of an area subject to active coastal shoreline erosion, if the area is protected by a barrier island or peninsula, unless the design, construction, and operational features of the facility will prevent adverse effects resulting from storm surge and erosion or scouring by water. On coastal shorelines which are subject to active shoreline erosion and which are unprotected by a barrier island or peninsula, a separation distance from the shoreline to the facility must be at least 5,000 feet, unless the design, construction, and operational features of the facility will prevent adverse effects resulting from storm surge and erosion or scouring by water.

E. Hazardous waste storage or processing facilities, land treatment facilities, waste piles, storage surface impoundments, and landfills shall not be located in coastal wetlands or in any CNRA that is the critical habitat of an endangered species of plant or animal unless the design, construction, and operation features of the facility will prevent adverse effects on the critical habitat of the endangered species.

F. Hazardous waste land treatment facilities, waste piles, storage surface impoundments, and landfills shall not be located on coastal barriers.

G. Hazardous waste landfills are prohibited if there is a practicable alternative to such a landfill that is reasonably available to manage the types and classes of hazardous waste which might be disposed of at the landfill.

H. The TNRCC shall not issue a permit for a new hazardous waste management facility or the areal expansion of an existing hazardous waste facility unless it finds that the proposed site, when evaluated in light of proposed design, construction, and operational features, reasonably minimizes possible contamination of coastal waters.

I. New solid waste facilities and areal expansion of existing solid waste facilities shall be sited, designed, constructed, and operated to prevent releases of pollutants that may adversely affect CNRAs and, at a minimum, shall comply with standards established under the Solid Waste Disposal Act (42 U.S.C.A. §6901 *et seq.*).

Management Authority and Administration

Under the authority of the Texas Solid Waste Disposal Act, which is codified in Texas Health and Safety Code, Chapter 361, the TNRCC implements a permitting program for solid waste disposal sites. The TNRCC must comply with the policies in this category when issuing permits and adopting rules governing the construction and operation of solid waste facilities in the coastal zone.

Title 30 TAC Chapter 305 sets forth the standards and requirements for applications, permits, and TNRCC actions to carry out the responsibilities for management of all solid waste treatment, storage, and disposal activities.

Title 30 TAC Chapter 335 establishes standards and enforcement provisions to implement the state hazardous waste program, which regulates, from the point of generation to ultimate

disposal, those wastes which have been identified as hazardous by the EPA in 40 CFR Part 261. Regulations include standards for the location of certain hazardous waste facilities, including certain prohibited locations such as wetlands, barrier islands, and peninsulas; land disposal of hazardous wastes; pollution prevention through hazardous waste source reduction and hazardous waste minimization; and hazardous waste closure, corrective actions, and remediation activities to provide risk reduction to levels protective of human health and the environment.

Sludge use and disposal standards are set forth in 30 TAC Chapter 312. Rules for solid waste disposal facility permits and operations are set forth in 30 TAC Chapter 330. Discharge of pollutants or solid waste to water in the state is prohibited. Permits are required for solid waste disposal facilities, and facilities must follow strict state and federal siting, design, and operation standards. Facilities that process municipal solid waste, such as incinerators, are also regulated by the program.

Exemptions

Permit for Solid or Hazardous Waste Treatment, Storage, or Disposal. The commission may not require a permit for the collection, handling, storage, processing, and disposal of industrial solid waste that is disposed within the boundaries of a tract of land that is: (1) owned or otherwise effectively controlled by the owners or operators of the particular industrial plant, manufacturing plant, mining operation, or agricultural operation from which the waste results or is produced; and (2) located within 50 miles from the plant or operation that is the source of the industrial solid waste. The commission may, however, adopt rules to control the collection, handling, storage, processing, and disposal of the industrial solid waste to protect the property of others, public property and rights-of-way, groundwater, and other rights requiring protection (TEX. HEALTH & SAFETY CODE ANN. §361.090).

Variances

Permit for Solid or Hazardous Waste Treatment, Storage, or Disposal. There is no statutory provision expressly granting variance authority.

Monitoring and Enforcement

Permit for Solid or Hazardous Waste Treatment, Storage, or Disposal. Agents or employees of the commission or local governments have the right to enter, at any reasonable time, public or private property to inspect and investigate conditions concerning solid waste management and control (TEX. HEALTH & SAFETY CODE ANN. §361.032). Persons violating the Solid Waste Disposal Act are subject to administrative penalties of $10,000 per day and civil penalties (TEX. HEALTH & SAFETY CODE ANN. §361.251 and §361.223).

Agency's Authority to Regulate or Condition Listed Action to Satisfy TCMP Policy

Permit for Solid or Hazardous Waste Treatment, Storage, or Disposal. The commission may amend, extend, or renew a permit it issues in accordance with reasonable procedures prescribed by the department or commission, as appropriate (TEX. HEALTH & SAFETY CODE ANN. §361.088).

POLICY CATEGORY 5: PREVENTION, RESPONSE, AND REMEDIATION OF OIL SPILLS

State Agency Action and Managed Uses

GLO - Rules Governing Handling of Oil on Vessels and in Facilities (TEX. NAT. RES. CODE ANN. §33.2051(a))

GLO rules governing prevention of, response to, and remediation of coastal oil spills, and the assessment of damages to natural resources injured as the result of an unauthorized discharge of oil into coastal waters.

Policies

1. The GLO regulations governing prevention of, response to, and remediation of coastal oil spills shall provide for measures to prevent coastal oil spills and to ensure adequate response and removal actions. The GLO regulations for certification of vessels and facilities that handle oil shall be designed to ensure that vessels and facilities are capable of prompt response and adequate removal of unauthorized discharges of oil. The GLO regulations adopted pursuant to the Oil Spill Prevention and Response Act (OSPRA) (TEX. NAT. RES. CODE, Ch. 40), shall be consistent with the State Coastal Discharge Contingency Plan, adopted pursuant to OSPRA, and the National Contingency Plan, adopted pursuant to the Federal Water Pollution Control Act (33 U.S.C.A., §26).

2. GLO rules under OSPRA governing the assessment of damages to natural resources injured as the result of an unauthorized discharge of oil into coastal waters shall provide for reasonable and rational procedures for assessing damages and shall take into account the unique circumstances of the spill incident. The costs of assessing the damages shall not be disproportionate to the value of the injured resources. Plans for restoration, rehabilitation, replacement, or acquisition of equivalent resources shall provide for participation by the public and shall be designed to promote the restoration of the injured resources with all deliberate speed. The GLO rules shall be consistent with other applicable state rules and policies and with the TCMP goals and policies.

Management Authority and Administration

Under the authority of Texas Natural Resources Code, Chapter 40, the GLO promulgated rules (31 TAC Ch. 19) requiring coastal facilities that handle oil to obtain a certificate of spill prevention and response capability from the GLO. The rules require that vessels carrying oil in coastal waters have a spill prevention and response plan approved by the GLO.

The rules also address spill response and remediation, establishing standards for spill response plans, requiring facilities and vessels to maintain access to adequate response equipment and qualified personnel, and providing for the GLO to subject facilities and vessels to announced and unannounced drills and inspections. The GLO also adopted a state coastal contingency plan that established standards for response to oil spills in the coastal zone.

POLICY CATEGORY 6: DISCHARGE OF MUNICIPAL AND INDUSTRIAL WASTEWATER TO COASTAL WATERS

State Agency Action and Managed Uses

TNRCC - Wastewater Discharge Permit
(TEX. NAT. RES. CODE ANN. §33.2053(f)(1))

TNRCC - Permit for a New Concentrated Animal Feeding Operation Located One Mile or Less from a Critical Area or Coastal Waters (TEX. NAT. RES. CODE ANN. §33.2053(f)(2))

The commission issues permits for the point-source discharge of wastewater into or adjacent to waters in the state (TEX. WATER CODE ANN. §26.027). Point source means any discernable confined and discrete conveyance including a discrete fissure, pipe, ditch, channel, tunnel, concentrated animal feeding operation, or vessel or other floating craft from which pollutants or wastes may be discharged. Municipal and industrial wastewater includes waterborne liquid, gaseous, or solid substances that result from any discharge from a publicly owned sewer system, treatment facility, or disposal system, or from any process of industry, manufacturing, trade, or business (TEX. WATER CODE ANN. §26.001).

Policies

The TNRCC shall comply with the policies in this category when adopting rules and authorizing wastewater discharges under Texas Water Code, Chapter 26.

1. TNRCC rules shall:

   A. comply with the requirements of the Clean Water Act, 33 United States Code Annotated, §1251 *et seq.*, and implementing regulations at Code of Federal Regulations, Title 40, which include establishing surface water quality standards in order to protect designated uses of coastal waters, including the protection of uses for water supply, recreational purposes, and propagation and protection of terrestrial and aquatic life, and establishing water-quality-based effluent limits, including toxicity monitoring and specific toxicity or chemical limits as necessary to protect designated uses of coastal waters;

   B. provide for the assessment of water quality on a coastal watershed basis once every two years, as required by the Texas Water Code, §26.0135(d);

   C. to the greatest extent practicable, provide that all permits for the discharge of wastewater within a given watershed or region of a single watershed contain the same expiration date in order to evaluate the combined effects of permitted discharges on water quality within that watershed or region;

   D. identify and rank waters that are not attaining designated uses and establish total maximum daily pollutant loads in accordance with those rankings; and

E. require that increases in pollutant loads to coastal waters shall not:

i. impair designated uses of coastal waters; or
ii. result in degradation of coastal waters that exceed fishable/swimmable quality except in cases where lowering coastal water quality is necessary for important economic or social development.

2. Discharge of municipal and industrial wastewater in the coastal zone shall comply with the following policies.

A. Discharges shall comply with water-quality-based effluent limits.

B. Discharges that increase pollutant loadings to coastal waters shall not impair designated uses of coastal waters and shall not significantly degrade coastal water quality unless necessary for important economic or social development.

C. To the greatest extent practicable, new wastewater outfalls shall be located where they will not adversely affect critical areas.

3. The TNRCC shall consult with the Texas Department of Health when reviewing permit applications for wastewater discharges that may significantly adversely affect oyster reefs.

Management Authority and Administration

Texas Water Code, Chapter 26, states that it is the policy of the state to maintain the quality of water in the state consistent with the public health and enjoyment, the propagation and protection of terrestrial and aquatic life, the operation of existing industries, and the economic development of the state and to require the use of all reasonable methods to implement this policy. The TNRCC is designated as the principal authority in the state on matters relating to water quality. The TNRCC administers regulatory programs related to water quality management and coastal resource protection, including (1) Texas Surface Water Quality Standards (TSWQS); (2) the Texas State Water Quality Management Plan (WQMP); and (3) wastewater permits. The TNRCC must comply with these policies when adopting rules and authorizing wastewater discharges under Texas Water Code, Chapter 26.

The TNRCC sets water quality standards in the state by rule under 30 TAC Chapter 307. The TSWQS are used in conjunction with the wastewater permitting program. The TNRCC must consider the existence and effects of nonpoint-source pollution, toxic materials, and nutrient loading in developing and implementing the standards and related waste load models for water quality. Triennial review of the TSWQS is required by EPA and by §303 of the Clean Water Act.

Water quality standards occur as three classes of criteria:

1. Narrative criteria - qualitative standards or general statements that are used to identify impacts on designated uses and as a regulatory basis for controlling impacts to state

waters. Narrative criteria may address aesthetics, prohibit certain actions or conditions (e.g., "free from substances that produce undesirable or nuisance aquatic life"), or state what is expected to occur in the water (e.g., "water quality and aquatic life shall be as it naturally occurs").

2. Numerical criteria - quantitative standards or numerical values for chemical constituents, physical parameters, or biological conditions established to protect one or more designated uses. These may be values that may not be exceeded (e.g., toxics), values that must be exceeded (e.g., dissolved oxygen), or a combination of the two (e.g., Ph).

3. Designated uses - indicate the existing uses to be protected (e.g., certain aquatic life, water supply, recreation, and navigation).

Each stream segment or water body is either classified, with site-specific numerical and designated use standards, or unclassified, protected under general standards and assigned minimum presumed uses and standards. The classified segment-specific uses include (1) several categories of aquatic life; (2) contact or non-contact recreation; (3) domestic water supply; (4) navigation; and (5) industrial water supply. Most rivers and their major tributaries, major reservoirs, and estuarine waters are classified.

The TSWQS also set forth an antidegradation policy which prohibits increases in pollutant loading that would impair existing water- quality-related uses. The policy sets forth extra protection for high-quality water bodies. It stipulates, in accordance with EPA policy, that no degradation will be allowed in high-quality waters unless the resulting degradation is demonstrated to be economically and socially justified.

The WQMP, which is required by federal legislation and Texas Water Code §26.012, addresses such elements as wastewater facility needs, wastewater facility design, population projections, management agency designation, water quality problem identification, and waste load evaluations. This plan is updated as needed to fill information gaps and to revise certified and approved plans. Federal and state-funded construction projects for wastewater facilities are evaluated for conformance with applicable WQMP recommendations. New wastewater permits, renewals, and amendments are reviewed to determine consistency with the WQMP.

With the exception of the discharge of oil and gas waste to surface waters, which are regulated by the Railroad Commission, any entity that discharges waste into or adjacent to waters of the state, including the land disposal of wastewater by means of irrigation, evaporation, and subsurface injection, must be authorized by the TNRCC by rule, permit, or order. "Discharge permits" refer to the direct discharge of effluent into waters, and "no discharge" permits refer to the disposal of wastewater by irrigation or evaporation.

Municipal wastewater permits are issued to any domestic waste discharger in the form of a new, amended, or renewal permit. Title 30 TAC Chapter 309 establishes minimum standards for effluent quality for treated domestic sewage to maintain the TSWQS. The rules also include siting restrictions for domestic sewage plans. The TNRCC may not issue a permit if the siting restrictions listed in 30 TAC §309.13 are not met.

Title 30 TAC Chapter 317 contains design criteria for municipal sewerage systems which serve as minimum guidelines to be used for comprehensive consideration of sewage collection, treatment, and disposal systems and establishes the minimum design criteria compatible with existing state statutes pertaining to effluent quality.

Industrial wastewater permits are issued to industrial facilities for direct discharge of wastewater or for the land disposal of wastewater by means of irrigation, evaporation, and/or septic systems.

Title 30 TAC Chapter 310 establishes water quality criteria, design, and operational requirements for reuse of reclaimed water (treated effluent) which may be substituted for potable water and/or fresh water. Title 30 Chapter 312 sets forth sludge use and disposal standards. Title 30 Chapter 314 sets forth toxic pollutant effluent standards. Title 30 Chapter 319 sets forth general regulations incorporated into permits, including minimum standards for effluent monitoring and reporting, and hazardous metal effluent limitations.

Waters of the state include groundwater, percolating or otherwise, lakes, bays, ponds, impounding reservoirs, springs, rivers, streams, creeks, estuaries, marshes, inlets, canals, the Gulf of Mexico (inside the territorial limits of the state), and all other bodies of surface water including the beds and banks of all watercourses that are wholly are partially inside or bordering the state or inside the jurisdiction of the state (TEX. WATER CODE ANN. §26.001(5)).

Except as authorized by permit, rule, or order issued by the commission, no person may discharge wastewater into or adjacent to any waters in the state (TEX. WATER CODE ANN. §26.121).

Exemptions

Wastewater Discharge Permit and Permit for a New Concentrated Animal Feeding Operation Located One Mile or Less From a Critical Area or Coastal Waters. None.

Variances

Wastewater Discharge Permit and Permit for a New Concentrated Animal Feeding Operation Located One Mile or Less from a Critical Area or Coastal Waters. None.

Monitoring and Enforcement

Wastewater Discharge Permit and Permit for a New Concentrated Animal Feeding Operation Located One Mile or Less From a Critical Area or Coastal Waters. The members of the commission and their agents may enter any property for the purpose of inspecting and investigating conditions relating to the water quality of the state (TEX. WATER CODE ANN. §26.014). Violations may result in administrative penalties of up to $10,000 per day and civil and criminal penalties (TEX. WATER CODE ANN. §26.136, §26.122, §26.2121).

Agency's Authority to Regulate or Condition Listed Action to Satisfy TCMP Policy

Wastewater Discharge Permit and Permit for a New Concentrated Animal Feeding Operation Located One Mile or Less From a Critical Area or Coastal Waters. After a public hearing, notice of which shall be given to the permittee, the commission may require the permittee to conform to new or additional conditions (TEX. WATER CODE ANN. §26.029).

POLICY CATEGORY 7: NONPOINT-SOURCE (NPS) WATER POLLUTION

State Agency Action and Managed Uses

TSSWCB Regulations Governing Nonpoint-Source Pollution (TEX. NAT. RES. CODE ANN. §33.2051(c))

Agricultural and silvicultural nonpoint-source pollution.

TNRCC - Regulations Governing Nonpoint-Source Pollution (TEX. NAT. RES. CODE ANN. §33.2051(b)(2-3))

On-site sewage disposal systems and underground storage tanks (USTs).

Policies

1. State agencies and subdivisions with authority to manage NPS pollution shall cooperate in the development and implementation of a coordinated program to reduce NPS pollution in order to restore and protect coastal waters.

2. In an area that the TSSWCB identifies as having or having the potential to develop agricultural or silvicultural NPS water quality problems or an area within the coastal zone, the TSSWCB shall establish a water quality management plan certification program that provides, through the local soil and water conservation district, for the development, supervision, and monitoring of voluntary individual water quality management plans for agricultural and silvicultural lands. Each plan must be developed, maintained, and implemented under rules and criteria adopted by the TSSWCB and discharges under such a plan may not cause a violation of state water quality standards established by the TNRCC. The TSSWCB's rules shall certify a plan that satisfies the TSSWCB rules and criteria and discharges which do not cause a violation of state water quality standards established by the TNRCC. This policy is not intended, nor shall it be interpreted, to require the TSSWCB to establish non-voluntary requirements for the development, maintenance, or implementation of individual water quality management plans.

3. TNRCC rules under Texas Health and Safety Code, Chapter 366, governing on-site sewage disposal systems, and TNRCC rules under Texas Water Code, Chapter 26, Subchapter I, governing underground storage tanks, shall require that on-site disposal systems and underground storage tanks be located, designed, operated, inspected, and maintained so as to prevent releases of pollutants that may adversely affect coastal waters.

4. This policy shall not be interpreted or applied so as to require that either a National Pollution Discharge Elimination System (NPDES) permit for stormwater discharges issued under the Clean Water Act, §402(p), or an NPDES permit for a concentrated animal feeding operation, requiring no discharge up to and including a 25-year, 24-hour frequency storm, provide additional NPS pollution control measures in addition to those required in the permit.

Management Authority and Administration

The TSSWCB, under Texas Water Code, Chapter 26, and Agriculture Code, Chapter 201, is the lead authority regarding activity for abating agricultural and silvicultural nonpoint source pollution. Chapter 201 of the Agriculture Code sets out specific responsibilities of the TSSWCB. Under this authority, the agency administers the state's soil and water conservation program and coordinates programs of and provides technical assistance to the soil and water conservation districts. Programs to manage agricultural and silvicultural nonpoint source pollution are carried out through two coordinated mechanism: the "Agricultural/Silvicultural Nonpoint Source Management Program" administered pursuant to the Federal Clean Water Act, and a voluntary water quality management plan development program for private lands through soil and water conservation districts authorized in Section 201.026 of the Agriculture Code. The TSSWCB also administers a complaint resolution process for agricultural and silvicultural nonpoint source pollution as well as a cost share program in priority area as determined by the State Board. Cost share funds are used to assist producers in implementing certain practices included in water quality management plans.

Under Chapter 366 of the Texas Health and Safety Code and 30 TAC Chapter 285, the TNRCC has the authority to promulgate rules and regulate on-site sewage disposal systems. This authority will be exercised in compliance with policies in this category (31 TAC §501.14(g)(3)). Title 30 TAC Chapter 285 establishes the agency's policy that individual on-site sewage treatment facilities must be designed, constructed, and operated to provide adequate sewage treatment and disposal that will not contaminate potable water supplies, threaten the health and welfare of the public, result in a hazard to the state's recreational areas, or result in pollution of groundwater or surface water.

The primary purpose of these regulations is to establish minimally acceptable standards for the construction of on-site sewerage facilities for individual homes, small businesses, recreational areas, institutions, and other activities that do not have access to a central collection system. On-site surface irrigation with treated wastewater is allowed in accordance with TNRCC policy. Dischargers that have any open point discharges to the surface must receive a permit from the TNRCC under 30 TAC Chapter 317. For on-site disposal systems with single or collective daily flows exceeding 5,000 gallons per day, the TNRCC must determine the necessity for a waste discharge permit.

Permitting for on-site sewerage facilities involves standards and criteria established for all aspects of design, construction, installation, operation, and maintenance of a facility for residential development, including single dwellings, mobile home parks, subdivisions, and multi-use developments served by a central sewerage system. Design standards for systems consider topography, soil characteristics, groundwater, flooding, geology, spacing between property lines and other utilities, and clearance from structures and surface improvements. Percolation test procedures are outlined, along with guidelines for construction, operation, and maintenance.

Construction and use of systems not in accordance with these regulations constitute a violation. The rules specifically prohibit cesspools, bore holes or injection wells for domestic sewage disposal, and seepage pits for on-site disposal systems because they tend to create nuisances and

other conditions prejudicial to the public health. In addition, 30 TAC §285.109 sets out penalties under this authority, which are described below.

The TNRCC administers the regulation of underground storage tanks (USTs) under the authority of Texas Water Code, Chapter 26, Subchapter I, and 30 TAC Chapter 334. The purpose of the regulations is to provide a comprehensive regulatory program for UST systems storing hazardous substances and petroleum substances. The TNRCC will administer these regulations in compliance with the policy in 31 TAC §501.14(g)(3).

The rules establish minimum standards and procedures to protect human health and safety and to protect and maintain the quality of the state's groundwater and surface water resources against environmental contamination that could result from releases of harmful substances stored in such tanks. The requirements and provisions apply to registration, design, construction, installation, operation, testing, maintenance, upgrading, record keeping and reporting, removal from service, release monitoring, reporting and corrective action, and other aspects of UST systems.

Technical standards apply to new and existing systems to ensure that their design, installation, and operation will prevent releases due to structural failure or corrosion. The standards provide for spill and overfill prevention, release detection, and approved secondary containment systems for all existing hazardous substance UST systems.

If an investigation, review, or inspection by the TNRCC does not sufficiently demonstrate that the installation, operation, maintenance, corrective action, or any other activity related to a UST system is in accordance with the applicable regulations, the TNRCC is authorized to take enforcement action. The TNRCC may require additional documentation to demonstrate compliance, require additional activities to achieve compliance, and initiate formal enforcement action and seek administrative penalties as prescribed in 30 TAC Chapter 337 and Texas Water Code §26.019.

Under Texas Health and Safety Code Chapter 366 and 30 TAC Chapter 285, the TNRCC has the authority to promulgate rules and regulate on-site sewage disposal systems. This authority will be exercised in compliance with the policies in this category. Title 30 TAC Chapter 285 establishes the agency's policy that individual on-site sewage treatment facilities must be designed, constructed, and operated to provide adequate sewage treatment and disposal that will not contaminate potable water supplies, threaten the health and welfare of the public, result in a hazard to the state's recreational areas, or result in pollution of groundwater or surface water.

The primary purpose of these regulations is to establish minimally acceptable standards for constructing on-site sewerage facilities for individual homes, small businesses, recreational areas, institutions, and other activities that do not have access to a central collection system. On-site surface irrigation of treated wastewater is allowed in accordance with agency policy. Dischargers must obtain a permit from the TNRCC under 30 TAC Chapter 317 for any open point discharges to the surface. For on-site disposal systems with single or collective daily flows of over 5,000 gallons per day, the TNRCC must determine the necessity for a waste discharge permit.

Permitting for on-site sewerage facilities involves standards and criteria established for all aspects of design, construction, installation, operation, and maintenance of a facility for commercial development. Design standards for systems consider topography, soil characteristics, groundwater, flooding, geology, spacing between property lines and other utilities, and clearance from structures and surface improvements. Percolation test procedures are outlined, along with guidelines for construction, operation, and maintenance.

Construction and use of systems not in accordance with these regulations constitute a violation. The rules specifically prohibit cesspools, bore holes, or injection wells for domestic sewage disposal and seepage pits for on-site disposal systems because they tend to create nuisances and other conditions prejudicial to the public health. In addition, 30 TAC §285.109 sets out penalties under this authority.

State agencies with authority to manage various sources of nonpoint pollution that affect coastal waters include the TSSWCB, TNRCC, GLO, TxDOT, and TPWD. These agencies must work together, in accordance with the policy in 31 TAC §501.14(g)(1), described above, along with the interested public, to reduce NPS pollution to restore and protect coastal waters.

The TSSWCB, under Chapter 26 of the Texas Water Code, is the lead authority regarding strategies for abating agricultural and silvicultural nonpoint-source pollution. The TSSWCB is required to determine those areas of the state that either have agricultural nonpoint-source problems or have a potential for such problems and to establish a water quality management plan certification program for these areas. Texas Agriculture Code, Chapter 201, also sets out specific responsibilities of the TSSWCB. Under this authority, the agency administers the state's soil and water conservation program and coordinates and provides technical assistance to soil and water conservation districts. Programs to manage agricultural and silvicultural nonpoint-source pollution are carried out through the "Agricultural/Silvicultural Nonpoint-Source Program for Texas" and a voluntary water quality management plan development program for private lands through soil and water conservation districts. The TSSWCB also manages a cost-share program and the Clean Water Act §319 program for agriculture to assist landowners in implementing management measures.

The GLO is responsible for the siting, design, and construction of marinas on state land and approval of erosion response methods and has the authority to require best management practices to prevent nonpoint-source pollution resulting from these activities.

The GLO is also responsible for cooperating with the TPWD, TNRCC, and other agencies in the development of the State-Owned Coastal Wetland Management Plan, which will address nonpoint-source pollution affecting coastal wetlands (see Chapter Six).

POLICY CATEGORY 8: DEVELOPMENT IN CRITICAL AREAS

State Agency Action and Managed Uses

RRC - Certification of a Federal Permit for the Discharge of Dredged or Fill Material (TEX. NAT. RES. CODE ANN. §33.2053(c)(3))

Dredging and filling activities associated with oil and gas exploration, production, or pipeline construction that require a federal Clean Water Act §404 permit.

TNRCC - Certification of a Federal Permit for the Discharge of Dredge or Fill Material (TEX. NAT. RES. CODE ANN. §33.2053(f)(6))

Dredging and filling operations that require a federal Clean Water Act §404 permit.

SLB - Mineral Lease Plan of Operations (TEX. NAT. RES. CODE ANN. §33.2053(a)(1))

Oil and gas and mineral leases including drilling activities, alterations to the natural landscape, surface and bottom-hole location of the initial well, location of additional planned wells and production facilities, location of shipping fairways and anchorage areas, anticipated routes for pipelines, and location of routes of dredging required for all production-related activities, such as pipelines, well-drilling, and construction of facilities.

GLO - Geophysical or Geochemical Permit (TEX. NAT. RES. CODE ANN. §33.2053(a)(2))

Geophysical exploration means a survey or investigation conducted to discover or locate minerals or oil and gas prospects using magnetic, gravity, seismic, and/or electrical techniques. Geochemical exploration means a survey or investigation conducted to discover or locate minerals or oil and gas prospects using techniques involving soil sampling and analysis (TEX. NAT. RES. CODE ANN. §52.321 and §53.161).

GLO - Miscellaneous Easement (ME) (TEX. NAT. RES. CODE ANN. §33.2053(a)(4))

MEs are required for construction and placement of telephone, telegraph, electric transmission, and power lines; oil pipelines; gas pipelines and sulphur pipelines; other electric lines and pipelines of any nature; irrigation canals, laterals, and water pipelines; roads; and any other purpose the commissioner considers to be in the best interests of the state (TEX. NAT. RES. CODE ANN. §51.291). MEs are also required for electric substations, pumping stations, loading racks, and tank farms on state land other than land owned by the University of Texas System (TEX. NAT. RES. CODE ANN. §51.292).

GLO - Surface Lease
(TEX. NAT. RES. CODE ANN. §33.2053(a)(6))

Unsold public school land and asylum land may be leased for agricultural, grazing, or commercial purposes (TEX. NAT. RES. CODE ANN. §51.121).

SLB - Structure Registration
(TEX. NAT. RES. CODE ANN. §33.2053(a)(7))

Construction of piers by littoral property owners for noncommercial use if pier is 100 feet or less in length and 25 feet or less in width, and requires no filling or dredging (TEX. NAT. RES. CODE ANN. §33.115).

SLB - Coastal Easement
(TEX. NAT. RES. CODE ANN. §33.2053(a)(3))

Dredging of basins and channels on state-owned submerged land; construction of piers, docks, marinas, bulkheads, seawalls, and other waterfront structures on state-owned submerged land. The School Land Board may also grant easement rights to the owner of adjacent littoral property authorizing the placement or location of a structure on coastal public land for purposes connected with the ownership of littoral property (TEX. NAT. RES. CODE ANN. §33.111).

SLB - Coastal Lease
(TEX. NAT. RES. CODE ANN. §33.2053(a)(5))

Coastal public land may be leased to: (1) the Texas Parks and Wildlife Department (TPWD) or to any eligible city or county for public recreational purposes; (2) the TPWD for management of estuarine preserves; (3) any nonprofit, tax-exempt environmental organization approved by the School Land Board for the purpose of managing a wildlife refuge; and (4) any scientific or educational organization or institution for conducting scientific research (TEX. NAT. RES. CODE ANN. §33.105 and §33.109).

SLB - Cabin Permit
(TEX. NAT. RES. CODE ANN. §33.2053(a)(8))

Permitting of limited continued use of previously unauthorized structures on coastal public land if the use is sought by one who is claiming an interest in the structure but is not incident to the ownership of the littoral property (TEX. NAT. RES. CODE ANN. §33.119). Previously unauthorized structures for which permits are obtained may be used only for noncommercial, recreational purposes (TEX. NAT. RES. CODE ANN. §33.128).

SLB - Navigation District Lease
(TEX. NAT. RES. CODE ANN. §33.2053(a)(9))

The School Land Board may lease state-owned land to eligible navigation districts only for purposes reasonably related to the promotion of navigation. Navigation includes marine commerce and immediately related activities, including but not limited to port development;

channel construction and maintenance; industrial site locations, transportation, shipping and storage facilities; pollution abatement facilities; and all other activities necessary or appropriate to the promotion of marine commerce. In applying for leases, districts which will require dredging, filling, or bulkheading must provide, among other requirements, a draft environmental impact statement assessing the effect of the proposed use on the environment, which statement shall generally conform to the requirements of the National Environmental Policy Act. The district must also provide proof satisfactory to the board establishing the public convenience and necessity for acquisition of lands sought to be leased (TEX. WATER CODE ANN. §61.116).

GLO - Agency or Subdivision Wetlands Mitigation Bank
(TEX. NAT. RES. CODE ANN. §33.2053(a)(11))

The GLO, in conjunction with the U.S. Army Corps of Engineers, U.S. Environmental Protection Agency (EPA), U.S. Fish and Wildlife Service, National Marine Fisheries Service, Texas Parks and Wildlife Department, and Texas Natural Resource Conservation Commission (Mitigation Bank Review Team), approves parcels of real property proposed for a mitigation bank (TEX. REV. CIV. STAT. ANN. art. 5421(u) and Interagency Guidelines for Development and Use of Mitigation Banks, GLO et al., 6-93)).

Policies

The TNRCC and the RRC shall comply with the policies in this category when issuing certifications and adopting rules under Texas Water Code, Chapter 26, and the Texas Natural Resources Code, Chapter 91, governing certification of compliance with surface water quality standards for federal actions and permits authorizing development affecting critical areas; provided that activities exempted from the requirement for a permit for the discharge of dredged or fill material, described in Code of Federal Regulations, Title 33, §323.4 and/or Code of Federal Regulations, Title 40, §232.3, including but not limited to normal farming, silviculture, and ranching activities, such as plowing, seeding, cultivating, minor drainage, and harvesting for the production of food, fiber, and forest products, or upland soil and water conservation practices, shall not be considered activities for which a certification is required.

The GLO and the SLB shall comply with the policies in this category when approving oil, gas, or other mineral lease plans of operations or granting surface leases, easements, and permits and adopting rules under the Texas Natural Resources Code, Chapters 32, 33 and 51-53, and Texas Water Code, Chapter 61, governing development affecting critical areas on state submerged lands and private submerged lands, and when issuing approvals and adopting rules under Texas Civil Statutes, article 5421u, for mitigation banks operated by subdivisions of the state.

1. Dredging and construction of structures in, or the discharge of dredged or fill material into, critical areas shall comply with the policies in this category. In implementing this policy, cumulative and secondary adverse effects of these activities will be considered.

    A. These policies shall be applied in a manner consistent with the goal of achieving no net loss of critical area functions and values.

B. Persons proposing development in critical areas shall demonstrate that no practicable alternative with fewer adverse effects is available.

i. The person proposing the activity shall demonstrate that the activity is water-dependent. If the activity is not water-dependent, practicable alternatives are presumed to exist, unless the person clearly demonstrates otherwise.

ii. The analysis of alternatives shall be conducted in light of the activity's overall purpose.

iii. Alternatives may include different operation or maintenance techniques or practices or a different location, design, configuration, or size."

C. In evaluating practicable alternatives, the following sequence shall be applied:

i. Adverse effects on critical areas shall be avoided to the greatest extent practicable.

ii. Unavoidable adverse effects shall be minimized to the greatest extent practicable by limiting the degree or magnitude of the activity and its implementation.

iii. Appropriate and practicable compensatory mitigation shall be required to the greatest extent practicable for all adverse effects that cannot be avoided or minimized.

D. Compensatory mitigation includes restoring adversely affected critical areas or replacing adversely affected critical areas by creating new critical areas. Compensatory mitigation should be undertaken, when practicable, in areas adjacent or contiguous to the affected critical areas (on-site). If on-site compensatory mitigation is not practicable, compensatory mitigation should be undertaken in close physical proximity to the affected critical areas if practicable and in the same watershed if possible (off-site). Compensatory mitigation should also attempt to replace affected critical areas with critical areas with characteristics identical to or closely approximating those of the affected critical areas (in-kind). The preferred order of compensatory mitigation is:

i. on-site, in-kind;

ii. off-site, in-kind;

iii. on-site, out-of-kind; and

iv. off-site, out-of-kind.

E. Mitigation banking is acceptable compensatory mitigation if use of the mitigation bank has been approved by the agency authorizing the development and mitigation credits are available for withdrawal. Preservation through acquisition for public ownership of unique critical areas or other ecologically important areas may be acceptable compensatory mitigation in exceptional circumstances. Examples of this include areas of high priority for preservation or restoration, areas whose functions and values are difficult to replicate, or areas not adequately protected by regulatory programs. Acquisition will normally be allowed only in conjunction with preferred forms of compensatory mitigation.

F. In determining compensatory mitigation requirements, the impaired functions and values of the affected critical area shall be replaced on a one-to-one ratio. Replacement of functions and values on a one-to-one ratio may require restoration or replacement of the physical area affected on a ratio higher than one-to-one. While no net loss of critical area functions and values is the goal, it is not required in individual cases where mitigation is not practicable or would result in only inconsequential environmental benefits. It is also important to recognize that there are circumstances where the adverse effects of the activity are so significant that, even if alternatives are not available, the activity may not be permitted regardless of the compensatory mitigation proposed.

G. Development in critical areas shall not be authorized if significant degradation of critical areas will occur. Significant degradation occurs if:

i. the activity will jeopardize the continued existence of species listed as endangered or threatened, or will result in likelihood of the destruction or adverse modification of a habitat determined to be a critical habitat under the Endangered Species Act, 16 United States Code Annotated, §§1531-1544;

ii. the activity will cause or contribute, after consideration of dilution and dispersion, to violation of any applicable surface water quality standards established under Policy Category 6;

iii. the activity violates any applicable toxic effluent standard or prohibition established under Policy Category 6;

iv. the activity violates any requirement imposed to protect a marine sanctuary designated under the Marine Protection, Research, and Sanctuaries Act of 1972, 33 United States Code Annotated, Chapter 27; or

v. taking into account the nature and degree of all identifiable adverse effects, including their persistence, permanence, areal extent, and the degree to which these effects will have been mitigated pursuant to subparagraphs (C) and (D) of this paragraph, the activity will, individually or collectively, cause or contribute to significant adverse effects on:

I. human health and welfare, including effects on water supplies, plankton, benthos, fish, shellfish, wildlife, and consumption of fish and wildlife;

II. the life stages of aquatic life and other wildlife dependent on aquatic ecosystems, including the transfer, concentration, or spread of pollutants or their byproducts beyond the site, or their introduction into an ecosystem, through biological, physical, or chemical processes;

III. ecosystem diversity, productivity, and stability, including loss of fish and wildlife habitat or loss of the capacity of a coastal wetland to assimilate nutrients, purify water, or reduce wave energy; or

IV. generally accepted recreational, aesthetic or economic values of the critical area which are of exceptional character and importance.

2. Agencies required to comply with this policy will coordinate with one another and with federal agencies when evaluating alternatives, determining appropriate and practicable mitigation, and assessing significant degradation. Those agencies' rules governing authorizations for development in critical areas shall require a demonstration that the requirements of paragraph (1)(A)-(G) of this policy have been satisfied.

3. For any dredging or construction of structures in, or discharge of dredged or fill material into, critical areas that is subject to the requirements of §501.15 of this title (relating to Policy for Major Actions), data and information on the cumulative and secondary adverse affects of the project need not be produced or evaluated to comply with this policy if such data and information is produced and evaluated in compliance with §501.15(b)-(c) of this title (relating to Policy for Major Actions).

Explanation

The TCMP policies for Development in Critical Areas (31 TAC §501.14(h)) contain the primary standards for the evaluation of proposed development in or on coastal wetlands, submerged aquatic vegetation, tidal sand or mud flats, oyster reefs, and hard substrate reefs. The policy is a restatement, in simplified terms, of the standards already being used by the two federal agencies with direct permitting responsibilities over these areas, the U.S. Army Corps of Engineers and the U.S. Environmental Protection Agency. These standards are called the §404(b)(1) Guidelines. By adopting them as the standard for the State of Texas to apply to development in or on coastal wetlands and other critical areas, the Council intends to get all state and federal agencies on the "same page" and thereby reduce interagency conflicts over coastal wetlands.

The basic goal of the policies is no net loss of critical area functions and values. Functions are the physical processes and manifestations of processes that occur in critical areas; for example, the way in which coastal wetlands retain floodwaters after it rains. Value means the benefits that coastal communities actually realize from these functions. Using the previous example, coastal

wetlands have value in reducing the loss of life and damage to property from floods by retaining floodwaters after a heavy rain.

Least Damaging Alternative

An activity subject to the critical areas policy must meet two basic requirements to be consistent with the TCMP. First, the person or entity proposing the project must demonstrate that no practicable alternatives with fewer adverse effects are available. To determine whether this basic requirement is met, it must initially be determined whether the project is water-dependent. Unless the applicant clearly demonstrates otherwise, a project that is not water-dependent is presumed to have practicable alternatives that would be less damaging to the critical area. In other words, an applicant seeking authorization for a non-water-dependent project must make a convincing case that it is not feasible to locate the project outside a critical area.

A project is water-dependent only if it requires direct access or proximity to coastal waters to fulfill the project purpose. Water dependency is determined by looking at the basic purpose of the project. For example, the basic purpose of a hotel is shelter. The basic purpose of a restaurant is to serve food. A typical hotel or restaurant can serve these functions without access to water. Facilities that are water-dependent include public beach use and access facilities, boat slips, docks, breakwaters, marinas, wharves and other vessel loading or off-loading facilities, utility easements, boat ramps, navigation channels and basins, bridges and bridge approaches, revetments, shoreline protection structures, culverts, groins, saltwater barriers, navigational aids, mooring pilings, simple access channels, fish processing plants, boat construction and repair facilities, offshore pipelines, and constructed wetlands below mean high water. Activities that are water-dependent include marine recreation (fishing, swimming, boating, wildlife viewing), industrial uses dependent on marine transportation or requiring large volumes of water that cannot be obtained at inland sites, mariculture, exploration for and production of oil and gas under coastal waters or submerged lands, and certain meteorological and oceanographic activities.

Once it is determined whether alternatives to the project are presumed to exist, the focus shifts to the project's actual impacts. The second step is for the applicant to demonstrate that the project, as proposed, is the least environmentally damaging alternative. It meets this criterion only if all appropriate and practicable steps have been taken to avoid and minimize, to the greatest extent practicable, adverse effects on critical areas. Appropriate and practicable compensatory mitigation will be required for unavoidable adverse effects. Unavoidable adverse effects are those effects from an activity that cannot be avoided or minimized.

Compensatory mitigation is not considered avoidance of adverse effects. Rather, avoidance of adverse effects is preferred over minimization, and minimization of adverse effects is preferred over compensation for them. Compensatory mitigation can include restoration of degraded areas, creation of new critical areas, or preservation of critical areas. Cumulative and secondary adverse effects of a proposed project are considered as well as primary adverse effects.

Significant Degradation

The second basic requirement of the critical areas policy is that a project may not be authorized if it causes significant degradation of critical areas. There are some circumstances where the adverse effects of a project would be so significant that, even if alternatives are not available, the project may not be permitted regardless of the compensatory mitigation proposed. The critical areas policy anticipates those circumstances and defines them as cases of "significant degradation." As defined in the critical areas policy, significant degradation occurs if the project:

- causes or contributes to violation of applicable state water quality or effluent standards under Section 307 of the Clean Water Act or Title 30, Texas Administrative Code, Chapter 307;
- jeopardizes the continued existence of federally listed endangered or threatened species or their critical habitat;
- violates requirements of any federally designated marine sanctuary; or
- causes or contributes to significant adverse effects on human health, on life stages of organisms dependent on the aquatic ecosystem, on ecosystem diversity, productivity, and stability, or on recreational, aesthetic and economic values.

Compensatory Mitigation

Where significant degradation is not likely, whether a project can be authorized hinges frequently on whether compensatory mitigation is practicable. Compensatory mitigation involves replacement of critical area functions and values at a ratio of one-to-one. Functions and values may include fish and wildlife habitat, storage and purification of runoff, lost recreational opportunities, and others. Compensatory mitigation measures include revegetation of disturbed areas, recontouring of land, replacement of oyster reefs, and habitat creation in the form of scrapedown and/or planting and restoration. Although the state's goal is no net loss of functions and values, this result is not required in individual cases where mitigation is not practicable or where it would result in only inconsequential environmental benefits.

Specific mitigation requirements for unavoidable adverse effects will be determined according to the following preferred order.

- on-site (adjacent or contiguous to the affected area), in-kind (restoring or replacing the damaged critical area with critical areas having identical or similar characteristics);
- off-site (generally in the same geographic area, such as the same watershed or ecoregion), in-kind;
- on-site, out-of-kind; and
- off-site, out-of-kind.

Preservation of unique critical areas or other ecologically important areas through acquisition for public ownership may be acceptable compensatory mitigation in exceptional circumstances. In determining whether acquisition is appropriate, consideration must be given to whether the area is of high priority for preservation in the region where it is located, whether the functions and values of the area are difficult to replicate, or whether the area is already adequately protected by regulatory programs.

Mitigation Banking

Under the TCMP, mitigation banking is acceptable compensatory mitigation if use of the bank has been approved by the agency authorizing the development activity and if mitigation credits are available for withdrawal. A mitigation bank is a site where wetlands and/or other aquatic resources are restored, created, enhanced, or in exceptional circumstances, preserved expressly for the purpose of providing compensatory mitigation in advance of authorized impacts to similar resources.

On the Texas coast, an interagency group of federal and state regulatory and resource agencies called the Mitigation Bank Review Team (MBRT) oversees the establishment, use, and operation of mitigation banks. The MBRT is coordinated by the Galveston District of the Corps. Its primary role is to facilitate the establishment of effective, reliable mitigation banks.

Interagency guidelines for the development and use of mitigation banks in the Corps Galveston District were prepared in 1993 by state and federal resource involved in the MBRT. These general guidelines were designed to assist potential bankers in developing acceptable mitigation bank proposals. They required each bank to be created by a memorandum of agreement (MOA) as documentation of agency concurrence on the objectives and administration of the bank.

The MOA describes in detail the physical and legal characteristics of the bank, and how the bank will be established and operated. The MOA is signed by the bank sponsor and agencies represented on the MBRT. The guidelines include a definition section, prerequisites for approval of mitigation bank MOAs, mitigation bank criteria and procedures during the early consultation process, bank location, evaluation of functions and values, components of a site plan, transfer of credits, and bank time limits. These guidelines have been superseded by national guidelines adopted by Corps, EPA, USFWS, NMFS, and USDA on November 20, 1995. However, the national guidelines are similar in nature to the 1993 MBRT guidelines.

Management Authority and Administration

Section 401 Water-Quality Certification

The chief state authority for regulation of coastal wetlands is water-quality certification under §401 of the Clean Water Act (CWA). This process essentially allows the state to determine whether federal permits for discharges into the surface waters of the state will be granted, denied, or conditionally granted. Section 401 certification authority covers all Corps permits under §404 of the CWA,, permits or licenses issued by the Federal Energy Regulatory Commission, and NPDES permits under §402 of the CWA. Section 401 certifications are also required for

activities requiring Corps §§9 and 10 of the Rivers and Harbors Act if the activity may lead to a discharge.

Section 401 Certification in Texas

Wetlands are already included in the definition of "waters in the state" (30 TAC §307.3(a)(45)), and current Surface Water Quality Standards (SWQS) apply to wetlands. In Texas, surface water quality standards are established by the TNRCC and are contained in Chapter 307 of the TNRCC's permanent rules. When combined with the TCMP federal and state consistency review processes, §401 certification will provide comprehensive protection from activities in or near coastal wetlands. This approach not only strengthens the state role in wetland protection, but also reduces duplication of effort and coordinates permit review for applicants. Certification of discharges of dredged or fill materials or construction of structures will be evaluated by application of the elements of the §404(b)(1) Guidelines based on the antidegradation policy in 31 TAC Chapter 307.

Responsibility and authority for issuing §401 certifications in Texas is shared by the TNRCC and RRC. The TNRCC issues §401 certifications for all activities except those related to oil and gas exploration and production. The RRC is responsible for the prevention and abatement of pollution of surface waters associated with oil and gas exploration, development, and production operations (E&P operations), including pipeline transportation of crude oil and natural gas. Thus, the RRC is the §401 certifying agency for issuance of federal permits associated with oil and gas E&P operations. In particular, the RRC is the §401 certifying agency for any Corps permit required:

- to dredge an access channel in order to conduct drilling or production operations in a critical area;
- in connection with construction of a drilling pad or installation of a production platform in a critical area; or
- in connection with construction, operation, or maintenance of a crude oil or natural gas pipeline facility in a critical area.

The TNRCC's and RRC's respective authorities and programs for issuing §401 certifications are the state's primary existing wetlands regulatory authorities. They constitute the component of the TCMP for managing land and water uses that impact coastal wetlands and other critical areas. For purposes of the TCMP, therefore, the most important of the permits subject to TNRCC or RRC certification are those for discharges of dredged and fill material under §404 of the CWA and under §9 and §10 of the Rivers and Harbors Act for those activities in navigable waters that may lead to a discharge. These authorizations are issued by the Corps and include individual permits, general permits, and letters of permission.

TNRCC Process

For some time, provisions of TNRCC rules applicable to §401 certification of activities affecting wetlands have included the following:

- The requirement to conduct a site-specific assessment of uses and standards in response to administrative or regulatory actions by the TNRCC.

- The primary level of antidegradation protection, which states that existing uses will be maintained.

- Narrative criteria for aesthetic, radiological, toxic, nutrient, and salinity parameters.

- Numerical limitations on thermal elevations above ambient conditions.

- Numerical limitations on fecal coliform bacteria to levels which are considered appropriate for contact recreation.

- Acute toxic criteria to protect aquatic life.

- The additional level of protection provided by the antidegradation policy to waters which exceed "fishable/swimmable" quality. This provision of the antidegradation policy would prohibit any activity that would cause degradation of wetlands unless the activity were demonstrated to be socially and economically justified, even if no violations of narrative or numerical standards criteria were anticipated. For wastewater discharges, the antidegradation policy is already used to require an evaluation of alternatives, minimization of impacts, and economic justification if a proposed discharge is expected to cause degradation of high-quality waters. Application of this provision of the antidegradation policy is based on a case-by-case determination of the characteristics of the affected wetlands.

- Chronic numerical toxic criteria to protect aquatic life use. Chronic criteria to protect aquatic life uses will apply wherever aquatic life uses are attainable, including wetlands.

- Numerical human health criteria to protect human consumption of fish. Human health criteria to protect sustainable fisheries, incidental fisheries, or drinking water supplies will apply wherever these uses are attainable, including wetlands.

Effective July 13, 1995, the TNRCC amended its §401 certification rules to incorporate the basic components of the §404(b)(1) Guidelines in a manner consistent with the TCMP critical areas policy. Among other things, the rule now requires avoidance of, minimization of, and compensation for water quality impacts, including the functions and values of wetlands. TNRCC rules expressly affirm the goal of "no net loss" of wetlands.

Chapter 279 of the TNRCC's rules contains both the procedures and criteria for the application, processing and review of state water quality certifications. It provides for public notice, hearing, and comment and requires the TNRCC to coordinate the certification of federal permits and licenses with other state resource agencies.

For actions subject to water quality certification, the TNRCC's executive director will utilize, to the greatest extent practicable, a joint mailed notice issued by Corps, the EPA, or other licensing or permit agency after agreements with those agencies have been reached regarding the content

of the notice and the persons entitled to notice in Texas. If joint notice is not used, the TNRCC will publish notice, which will include mailings to, among others: TPWD, USFWS, TWDB, NMFS, EPA, GLO, and the chairman of the Coastal Coordination Council. The executive director will solicit comments and will consider all comments related to the impacts of the proposed activity submitted in accordance with the rules.

The executive director of the TNRCC will conduct a public hearing on any application for certification if the executive director determines that such a hearing would be appropriate or if such a hearing is requested by any affected person in writing within 30 days after the publication of notice of application. If a public hearing is held, notice will be provided by first class mail to all parties receiving the initial notice of application. Following the hearing, the executive director will consider all comments and determine if the proposed activity will result in any violation of the federal CWA or the criteria in the agency's rules. The executive director may grant, conditionally grant, waive, or deny certification. The final decision will be issued within 60 days from the date the draft permit is mailed, and will be provided to any person or entity requesting notification.

RRC Process

RRC rules (which will take effect when provisions for Council review of individual proposed actions are implemented) base §401 certifications on consistency with the TCMP policies. They provide that notice of a request for §401 certification may be given through a joint notice issued by the Corps or the applicant. The RRC has finalized a joint notice with the Corps. All requests for §401 certification shall be noticed through the Corps.

The RRC will consider all comments on a request for §401 certification that are filed within 30 days of the date notice is given. The RRC may also hold a public meeting to receive comment if it determines that such a meeting is in the public interest. The RRC may grant, conditionally grant, deny, or waive certification. The RRC may waive certification in limited instances, such as where the proposed activity does not fall within the RRC's jurisdiction or the permitting activity involves renewal or amendment of a Corps permit and such renewal or amendment will not authorize impacts to critical areas that materially exceed those authorized under the original permit.

A person opposing issuance of a Corps permit will not be granted a hearing on a certification decision made by the RRC. Grant, conditional grant, or waiver of certification by the RRC will not automatically result in issuance of the permit by the Corps. A grant or waiver of certification, or a conditional certification that is accepted by the applicant, merely lifts a bar to permit issuance. A protestant may have an opportunity to contest issuance of the permit in a hearing conducted by the Corps.

Because denial of certification acts as a bar to permit issuance, a hearing will be held at the applicant's request if certification is denied. If the RRC conditionally grants certification and the applicant objects to any of the conditions, the applicant may request a hearing. If a hearing is held on the certification action, the RRC's action can be appealed to district court by a party to the proceeding. (*See* Texas Government Code, §2001.171.)

Other Authorities

Coastal public land means all or any portion of state-owned submerged land, the water overlying that land, and all state-owned islands or portions of islands in the coastal zone. Submerged land is any land extending from the boundary between the land of the state and the littoral owners seaward to the low-water mark on any saltwater lake, bay, inlet, estuary, or inland water within the tidewater limits, and any land lying beneath the body of water, but shall exclude beaches bordering on the open Gulf of Mexico and the land lying beneath this water (TEX. NAT. RES. CODE ANN. §33.004(6)(11)).

Oil and gas leases may be issued for islands, saltwater lakes, bays, inlets, and marshes owned by the state within tidewater limits; rivers and channels owned by the state; the portion of the Gulf of Mexico within the jurisdiction of the state; all unsold surveyed and unsurveyed public school land; and all land sold with a reservation of minerals to the state under TEX. NAT. RES. CODE ANN. §51.054 in which the state has retained leasing rights. A mineral lease plan of operations is not currently a condition of the lease application process. Applications for mineral leases may contain any information the commissioner requires (TEX. NAT. RES. CODE ANN. §53.015).

Geophysical or geochemical permits are required for all exploration on public school land, which includes all land dedicated to the permanent free school fund and specifically includes land with a mineral classification in which the state has retained the oil and gas interest and areas within tidewater limits (TEX. NAT. RES. CODE ANN. §52.321). Except for a person who has a valid oil and gas lease on public school land, a person may not conduct geophysical and geochemical exploration without a permit (TEX. NAT. RES. CODE ANN. §52.322).

MEs are required for land and water uses described above for MEs across, through, and under unsold public school land, the portion of the Gulf of Mexico within the jurisdiction of the state, the state-owned riverbeds and beds of navigable streams in the public domain, and all islands, saltwater lakes, bays, inlets, marshes, and reefs owned by the state within tidewater limits (TEX. NAT. RES. CODE ANN. §51.291).

Registration requirements apply only to piers of the dimensions described above for structure registrations.

Permits are required for the land uses described above for cabin permits. Permits may not be granted for continued use of a structure located within 1000 feet of: (1) privately owned littoral property, without written consent of the littoral owner; (2) any federal or state wildlife sanctuary or refuge; or (3) any federal, state, county, or city park bordering on coastal public land (TEX. NAT. RES. CODE ANN. §31.124).

Any state agency and all political subdivisions are authorized to establish mitigation banks, subject to GLO approval (TEX. REV. CIV. STAT. ANN. art. 5421(u)).

Exemptions

Certification of a Federal Permit for the Discharge of Dredged or Fill Material. Excepted from this provision are activities exempted from the requirement for a permit for the discharge of

dredged or fill material, described in Code of Federal Regulations, Title 33, §323.4 and/or Code of Federal Regulations, Title 40, §232.3, including but not limited to normal farming, silviculture, and ranching activities such as plowing, seeding, cultivating, minor drainage, and harvesting for the production of food, fiber, and forest products, or upland soil and water conservation practices. A §401 water quality certification is not required for these activities.

Mineral Lease Plan of Operations. Mineral lease plans of operations are not currently a condition for obtaining a mineral lease from the GLO/SLB.

Geophysical of Geochemical Permit. Holders of valid oil and gas leases are not required to have a geophysical or geochemical permit (TEX. NAT. RES. CODE ANN. §52.322).

Miscellaneous Easement, Surface Lease, Coastal Lease, and Navigation District Lease. None.

Coastal Easement, and Structure Registration. Piers over the size specified for structure registrations are subject to the requirement of a coastal easement as specified in (TEX. NAT. RES. CODE ANN. §33.111).

Cabin Permit. No cabin permit may be required for structures, excavations, or other similar structures as long as they are located wholly on the private littoral upland, even though the activities may result in the area being inundated by public water (TEX. NAT. RES. CODE ANN. §33.122).

Agency or Subdivision Wetlands Mitigation Bank. Approval of a wetland mitigation bank is based upon a proposed Memorandum of Agreement (MOA) and the MOA's compliance with national guidelines adopted in November 1995.

Variances

Certification of a Federal Permit for the Discharge of Dredged or Fill Material. The RRC may waive the requirement for water quality certification (16 TAC §3.93).

Certification of a Federal Permit for the Discharge of Dredged or Fill Material. The TNRCC may waive the requirement for water quality certification (30 TAC §279.4).

Mineral Lease Plan of Operations, Geophysical or Geochemical Permit, Miscellaneous Easement, Surface Lease, and Cabin Permit. None.

Structure Registration. All uses described for structure registrations must be registered with the School Land Board (TEX. NAT. RES. CODE ANN. §33.115). There is no statutory provision for a variance from this requirement.

Coastal Easement. There is no statutory provision for varying from the coastal easement requirement.

Coastal Lease. There is no statutory provision for varying from the coastal lease requirement (TEX. NAT. RES. CODE ANN. §33.105).

Navigation District Lease. There is no statutory provision expressly granting variance authority.

Agency or Subdivision Wetlands Mitigation Bank. Approval of a wetland mitigation bank is based on a proposed MOA.

Monitoring and Enforcement

Certification of a Federal Permit for the Discharge of Dredged or Fill Material. Members and employees of the RRC, on proper identification, may enter public or private property to inspect and investigate conditions relating to the quality of water in the state (TEX. NAT. RES. CODE ANN. §91.1012). Violations may subject a person to administrative penalties of up to $10,000 per day for each violation as well as criminal penalties (TEX. NAT. RES. CODE ANN. §81.0531 and §91.002).

Certification of a Federal Permit for the Discharge of Dredged or Fill Material. The members of the TNRCC and their agents are entitled to enter any public or private property at any reasonable time for the purpose of inspecting and investigating conditions relating to the water quality of the state (TEX. WATER CODE ANN. §26.014). Violations may subject a person to administrative penalties of up to $10,000 per day for each violation as well as civil and criminal penalties (TEX. WATER CODE ANN. §26.136, §26.122, and §26.2121).

Mineral Lease Plan of Operations. None.

Geophysical or Geochemical Permit. A violation of the conditions or provisions of the geophysical or geochemical permit is a misdemeanor punishable by a fine of not less than $100 nor more than $1000 per day. (TEX. NAT. RES. CODE ANN. §52.325). All operations are subject to inspection and monitoring by the land commissioner or the commissioner's representatives at any time. Within 30 days of the expiration of the permit, the permittee must file with the commissioner a sworn "summary of activities" report (31 TAC §9.4(f)).

Miscellaneous Easement. Existing MEs must be renewed periodically. Easements may be granted for a term of years. The commissioner may set a perpetual term if it is deemed to be in the best interest of the state (TEX. NAT. RES. CODE §51.296). No person may undertake the activities described above for MEs on state-owned land without an easement from the commissioner or the board. A person without an easement is subject to a penalty of not more than $1,000 per day, the removal of the structure, or the filing of a lien (TEX. NAT. RES. CODE ANN. §51.302).

Surface Lease. Failure to obtain a lease prior to engaging in the actions listed above for surface leases subjects the actor to a fine of no more than $1,000 per day, removal of the structure, and/or filing of a lien on the structure (TEX. NAT. RES. CODE ANN. §51.302). Civil penalties of not more than $200 per day per structure on coastal public lands may be assessed (TEX. NAT. RES. CODE ANN. §33.112).

Structure Registration. Any owner of littoral property who fails to register with the School Land Board the location and dimensions of the pier to be constructed according to the specifications described for structure registrations is subject to a civil penalty of no more than $200 (TEX. NAT. RES. CODE ANN. §33.116).

Coastal Easement. Any construction or placement of a structure on coastal public land without first obtaining a coastal easement from the General Land Office is subject to a civil penalty of not more than $200 (TEX. NAT. RES. CODE ANN. §33.112). Violations can also result in penalties of no more than $1,000 per day per violation, the removal of the structure, or the filing of a lien (TEX. NAT. RES. CODE ANN. §51.302).

Coastal Lease. Engaging in regulated activities without a coastal lease will subject the actor to a civil penalty of not more than $200 (TEX. NAT. RES. CODE ANN. §33.112). Violations can also result in penalties of no more than $1,000 per day per violation, the removal of the structure, or the filing of a lien (TEX. NAT. RES. CODE ANN. §51.302).

Cabin Permit. Failure to obtain a cabin permit is subject to a civil penalty of not less than $50 nor more than $1,000 (TEX. NAT. RES. CODE ANN. §33.120).

Navigation District Lease. If lands leased from the state are used by the navigation district for any purpose or use not approved by the School Land Board, the lease may be terminated and the lands shall revert to the State of Texas (TEX. WATER CODE ANN. §61.116).

Agency or Subdivision Wetlands Mitigation Bank. The Mitigation Bank Review Team (MBRT) must agree to appropriate assessment methods. Selection of the appropriate assessment method will be determined on a case-by-case basis. Methods could include the Wetland Evaluation Technique, Habitat Evaluation Procedures, or other methods determined appropriate by the MBRT, including best professional judgement.

Agency's Authority to Regulate or Condition Listed Action to Satisfy TCMP Policy

Certification of a Federal Permit for the Discharge of Dredged or Fill Material. The Railroad Commission is required to adopt rules and issue permits as necessary to prevent pollution of surface and subsurface water related to oil and gas exploration and production activities (TEX. NAT. RES. CODE ANN. §91.101).

Certification of a Federal Permit for the Discharge of Dredged or Fill Material. After a public hearing, notice of which shall be given to the permittee, the TNRCC may require the permittee to conform to new or additional conditions (TEX. WATER CODE ANN. §26.029).

Mineral Lease Plan of Operations. The Texas land commissioner may include in the lease any provision the commissioner considers necessary for protection of the interests of the state (TEX. NAT. RES. CODE ANN. §53.016(b)).

Geophysical or Geochemical Permit. The commissioner may make rules relating to geophysical or geochemical exploration, permits, or permittees the commissioner considers appropriate (TEX. NAT. RES. CODE ANN. §52.324 and §53.163).

Miscellaneous Easement. The grant of a miscellaneous easement may contain any provisions that the commissioner considers necessary to protect the interests of the state (TEX. NAT. RES. CODE ANN. §51.305).

Surface Lease. If an application for a surface lease is granted, the School Land Board shall determine the reasonable terms, conditions, and considerations for the lease (TEX. NAT. RES. CODE ANN. §33.104).

Structure Registration and Coastal Easement. None.

Coastal Lease. The SLB has the authority to determine the reasonable terms, conditions, and consideration for a coastal lease (TEX. NAT. RES. CODE ANN. §33.104).

Cabin Permit. The School Land Board may not grant an application for a cabin permit which would violate the public policy of this state (TEX. NAT. RES. CODE ANN. §33.129).

Navigation District Lease. After submission of evidence, the School Land Board shall authorize the issuance or denial of the proposed navigation district lease and shall determine any other conditions necessary to best serve the interests of the general public (TEX. WATER CODE ANN. §61.116).

Agency or Subdivision Wetlands Mitigation Bank. The GLO must approve a mitigation bank prior to the establishment and maintenance of such a bank (TEX. REV. CIV. STAT. ANN. art. 5421(u)).

POLICY CATEGORY 9: CONSTRUCTION OF WATERFRONT FACILITIES AND OTHER STRUCTURES ON SUBMERGED LANDS

State Agency Action and Managed Uses

SLB - Mineral Lease Plan of Operations
(TEX. NAT. RES. CODE ANN. §33.2053(a)(1))

Oil and gas and mineral leases including drilling activities, alterations to the natural landscape, surface and bottom-hole location of the initial well, location of additional planned wells and production facilities, location of shipping fairways and anchorage areas, anticipated routes for pipelines, and location of routes of dredging required for all production-related activities, such as pipelines, well-drilling, and construction of facilities.

GLO - Geophysical or Geochemical Permit
(TEX. NAT. RES. CODE ANN. §33.2053(a)(2))

Geophysical exploration means a survey or investigation conducted to discover or locate minerals or oil and gas prospects using magnetic, gravity, seismic, and/or electrical techniques. Geochemical exploration means a survey or investigation conducted to discover or locate minerals or oil and gas prospects using techniques involving soil sampling and analysis (TEX. NAT. RES. CODE ANN. §52.321 and §53.161).

GLO - Miscellaneous Easement (ME)
(TEX. NAT. RES. CODE ANN. §33.2053(a)(4))

MEs are required for construction and placement of telephone, telegraph, electric transmission, and power lines; oil pipelines; gas pipelines and sulphur pipelines; other electric lines and pipelines of any nature; irrigation canals, laterals, and water pipelines; roads; and any other purpose the commissioner considers to be in the best interests of the state (TEX. NAT. RES. CODE ANN. §51.291). MEs are also required for electric substations, pumping stations, loading racks, and tank farms on state land other than land owned by the University of Texas System (TEX. NAT. RES. CODE ANN. §51.292).

GLO - Surface Lease
(TEX. NAT. RES. CODE ANN. §33.2053(a)(6))

Unsold public school land and asylum land may be leased for agricultural, grazing, or commercial purposes (TEX. NAT. RES. CODE ANN. §51.121).

GLO - Structure Registration
(TEX. NAT. RES. CODE ANN. §33.2053(a)(7))

Construction of piers by littoral property owners for noncommercial use if pier is 100 feet or less in length and 25 feet or less in width, and requires no filling or dredging (TEX. NAT. RES. CODE ANN. §33.115).

SLB - Coastal Easement
(TEX. NAT. RES. CODE ANN. §33.2053(a)(3))

Dredging of basins and channels on state-owned submerged land; construction of piers, docks, marinas, bulkheads, seawalls, and other waterfront structures on state-owned submerged land. The School Land Board may also grant easement rights to the owner of adjacent littoral property authorizing the placement or location of a structure on coastal public land for purposes connected with the ownership of littoral property (TEX. NAT. RES. CODE ANN. §33.111).

SLB - Coastal Lease
(TEX. NAT. RES. CODE ANN. §33.2053(a)(5))

Coastal public land may be leased to: (1) the Texas Parks and Wildlife Department (TPWD) or to any eligible city or county for public recreational purposes; (2) the TPWD for management of estuarine preserves; (3) any nonprofit, tax-exempt environmental organization approved by the School Land Board for the purpose of managing a wildlife refuge; and (4) any scientific or educational organization or institution for conducting scientific research (TEX. NAT. RES. CODE ANN. §33.105 and §33.109).

SLB - Cabin Permit
(TEX. NAT. RES. CODE ANN. §33.2053(a)(8))

Permitting of limited continued use of previously unauthorized structures on coastal public land if the use is sought by one who is claiming an interest in the structure but is not incident to the ownership of the littoral property (TEX. NAT. RES. CODE ANN. §33.119). Previously unauthorized structures for which permits are obtained may be used only for noncommercial, recreational purposes (TEX. NAT. RES. CODE ANN. §33.128).

SLB - Navigation District Lease
(TEX. NAT. RES. CODE ANN. §33.2053(a)(9))

The School Land Board may lease state-owned land to eligible navigation districts only for purposes reasonably related to the promotion of navigation. Navigation includes marine commerce and immediately related activities, including but not limited to port development; channel construction and maintenance; industrial site locations, transportation, shipping and storage facilities; pollution abatement facilities; and all other activities necessary or appropriate to the promotion of marine commerce. In applying for leases, districts which will require dredging, filling, or bulkheading must provide, among other requirements, a draft environmental impact statement assessing the effect of the proposed use on the environment, which statement shall generally conform to the requirements of the National Environmental Policy Act. The district must also provide proof satisfactory to the board establishing the public convenience and necessity for acquisition of lands sought to be leased (TEX. WATER CODE ANN. §61.116).

GLO - Agency or Subdivision Wetlands Mitigation Bank
(TEX. NAT. RES. CODE ANN. §33.2053(a)(11))

The GLO, in conjunction with the U.S. Army Corps of Engineers, U.S. Environmental Protection

Agency (EPA), U.S. Fish and Wildlife Service, National Marine Fisheries Service, Texas Parks and Wildlife Department, and Texas Natural Resource Conservation Commission (Mitigation Bank Review Team), approves parcels of real property proposed for a mitigation bank (TEX. REV. CIV. STAT. ANN. art. 5421(u) and Interagency Guidelines for Development and Use of Mitigation Banks, GLO et al., 6-93)).

Policies

The GLO and the SLB, in governing development on state submerged lands, shall comply with the policies in this category when approving oil, gas, and other mineral lease plans of operations and granting surface leases, easements, and permits and adopting rules under the Texas Natural Resources Code, Chapters 32, 33 and 51-53, and Texas Water Code, Chapter 61.

1. Development on submerged lands shall comply with the policies in this category.

   A. Marinas shall be designed and, to the greatest extent practicable, sited so that tides and currents will aid in flushing of the site or renew its water regularly.

   B. Marinas designed for anchorage of private vessels shall provide facilities for the collection of waste, refuse, trash, and debris.

   C. Marinas with the capacity for long-term anchorage of more than ten vessels shall provide pump-out facilities for marine toilets, or other such measures or facilities that provide an equal or better level of water quality protection.

   D. Marinas, docks, piers, wharves and other structures shall be designed and, to the greatest extent practicable, sited to avoid and otherwise minimize adverse effects on critical areas from boat traffic to and from those structures.

   E. Construction of docks, piers, wharves, and other structures shall be preferred instead of authorizing dredging of channels or basins or filling of submerged lands to provide access to coastal waters if such construction is practicable, environmentally preferable, and will not interfere with commercial navigation.

   F. Piers, docks, wharves, bulkheads, jetties, groins, fishing cabins, and artificial reefs (including artificial reefs for compensatory mitigation) shall be limited to the minimum necessary to serve the project purpose and shall be constructed in a manner that:

      i. does not significantly interfere with public navigation;

      ii. does not significantly interfere with the natural coastal processes which supply sediments to shore areas or otherwise exacerbate erosion of shore areas;

      iii. avoids and otherwise minimizes shading of critical areas and other adverse effects.

G. Facilities shall be located at sites or designed and constructed to the greatest extent practicable to avoid and otherwise minimize the potential for adverse effects from:

i. construction and maintenance or other development associated with the facility;

ii. direct release to coastal waters and critical areas of pollutants form oil or hazardous substance spills or stormwater runoff; and

iii. deposition of airborne pollutants in coastal waters and critical areas.

H. Where practicable, pipelines, transmission lines, cables, roads, causeways, and bridges shall be located in existing rights-of-way or previously disturbed areas if necessary to avoid or minimize adverse effects and if it does not result in unreasonable risks to human health, safety, and welfare.

I. To the greatest extent practicable, construction of facilities shall occur at sites and times selected to have the least adverse effects on recreational uses of CNRAs and on spawning or nesting seasons or seasonal migrations of terrestrial and aquatic wildlife.

J. Facilities shall be located at sites which avoid the impoundment and draining of coastal wetlands. If impoundment or draining cannot be avoided, adverse effects to the impounded or drained wetlands shall be mitigated in accordance with the sequencing requirements of Policy Category 8. To the greatest extent practicable, facilities shall be located at sites at which expansion will not result in development in critical areas.

K. Where practicable, piers, docks, wharves, bulkheads, jetties, groins, fishing cabins, and artificial reefs shall be constructed with materials that will not cause any adverse effects on coastal waters or critical areas.

L. Developed sites shall be returned as closely as practicable to pre-project conditions upon completion or cessation of operations by the removal of facilities and restoration of any significantly degraded areas, unless:

i. the facilities can be used for public purposes or contribute to the maintenance or enhancement of coastal water quality, critical areas, beaches, submerged lands, or shore areas; or

ii. restoration activities would further degrade CNRAs.

M. Water-dependent uses and facilities shall receive preference over those uses and facilities that are not water-dependent.

N. Nonstructural erosion response methods such as beach nourishment, sediment bypassing, nearshore sediment berms, and planting of vegetation shall be preferred instead of structural erosion response methods.

O. Major residential and recreational waterfront facilities shall to the greatest extent practicable accommodate public access to coastal waters and preserve the public's ability to enjoy the natural aesthetic values of coastal submerged lands.

P. Activities on submerged land shall avoid and otherwise minimize any significant interference with the public's use of and access to such lands.

Q. Erosion of Gulf beaches and coastal shore areas caused by construction or modification of jetties, breakwaters, groins, or shore stabilization projects shall be mitigated to the extent the costs of mitigation are reasonably proportionate to the benefits of mitigation. Factors that shall be considered in determining whether the costs of mitigation are reasonably proportionate to the cost of the construction or modification and benefits include, but are not limited to, environmental benefits, recreational benefits, flood or storm protection benefits, erosion prevention benefits, and economic development benefits.

2. To the extent applicable to the public beach, these policies are supplemental to any further restrictions or requirements relating to the beach access and use rights of the public.

Management Authority and Administration

The SLB, according to rules set out in 31 TAC Chapter 155, grants easements for the construction of waterfront structures on state submerged land. The SLB must comply with the TCMP policies in §501.14(I) by virtue of their inclusion in 31 TAC Ch. 16 when granting a coastal easement and when adopting rules pursuant to the siting, design, and construction of these structures.

The SLB reviews projects to ensure conformity with the policies, practices, and procedures in these rules. In addition, SLB rules contain more specific guidelines for evaluating a proposed waterfront structure include siting to avoid restriction of water circulation, navigation, or public use of the waters; design considerations such as joint use of a moorage facility by a subdivision, motel, or multiple dwelling, and the use of a pier or catwalk in preference to solid fills to provide needed access across biologically productive shallows and marshes to navigable waters; and requirements that facilities provide proper handling of waste, refuse, and petroleum products where applicable, as required by the TNRCC.

Under 31 TAC §155.3, an owner of adjacent littoral property must obtain an easement from the SLB prior to the placement or location of a structure on state submerged lands for purposes connected with the ownership of littoral property. The owner of littoral property may construct a pier which is not to be used for commercial purposes and does not exceed 100 feet in length or 25 feet in width by obtaining a one-time structure registration from the SLB. While a permit is

not required, the location and dimensions of the pier must be included in the structure registration. No filling or dredging is permitted without an easement from the SLB.

The SLB, according to rules set out in 31 TAC Chapter 155, grants easements for the construction of marinas on state-owned submerged land and for associated dredging of basins and channels. The SLB must comply with the policies in this category when granting a coastal easement or adopting rules for marina activities. The SLB reviews projects to ensure their conformity with the policies, practices, and procedures in these rules. Specific guidelines for evaluating a proposed marina include project siting to minimize dredging, disruption of currents, and the need for excavation of shore areas. Project design considerations include extending dockage to deep water as an alternative to dredging for navigational access, avoiding dead-end or deep canals without flushing, and designing turning basins or navigation channels to prevent long-term degradation of water quality. Marinas are also required to provide adequate facilities for waste disposal.

The alignment of channels or canals should make maximum use of natural or existing channels. Design and alignment should also minimize disruption of natural sheetflow, water flow, and drainage systems. Dredging is to be conducted in a manner that minimizes turbidity. Canals and basins are to avoid oyster reefs and highly productive wetland areas. Dredging of channels through highly productive coastal public lands is discouraged, and such channels are approved only in unusual circumstances.

All marina development on coastal public lands must be undertaken in a manner that will prevent pollution. The easement holder is responsible for using all reasonable means for recapturing all pollutants, and for all damage to public and private property from pollution caused by failure to provide adequate facilities for waste and garbage.

The SLB, according to rules set out in 31 TAC Chapter 155, grants easements for the construction of piers, docks, wharves, and other waterfront structures on state submerged land. The SLB must comply with the policies in this category when granting a coastal easement or adopting rules pursuant to the siting, design, and construction of these structures.

The SLB reviews projects to ensure conformity with the policies, practices, and procedures in these rules. Specific guidelines for evaluating a proposed pier, dock, or wharf include siting to avoid restriction of water circulation, navigation, or public use of the waters; design considerations, such as joint use of a moorage facility by a subdivision, motel, or multiple dwelling, and the use of a pier or catwalk in preference to solid fills to provide needed access across biologically productive shallows and marshes to navigable waters; and requirements that facilities provide proper handling of waste, refuse, and petroleum products where applicable, as required by the TNRCC.

Under 31 TAC §155.3, an easement must be obtained from the SLB by the owner of adjacent littoral property prior to the placement or location of a structure on coastal public lands for purposes connected with the ownership of littoral property. The owner of littoral property may construct a pier which is not for commercial purposes and does not exceed 100 feet in length or 25 feet in width by obtaining a one-time structure registration from the SLB. While a permit is

not required, the location and dimensions of any pier must be included in the structure registration. No filling or dredging is permitted without an easement from the SLB.

The SLB, according to rules set out in 31 TAC Chapter 155, grants easements for the construction of jetties, groins, breakwaters, bulkheads, and seawalls on state submerged land. The SLB must comply with the policies in this category when granting a coastal easement and when adopting rules pursuant to the siting, design, and construction of these structures. The SLB reviews projects to ensure conformity with the policies, practices, and procedures in these rules.

Specific guidelines for evaluating a proposed jetty, groin, or breakwater include an analysis to ensure that the structure does not create adverse sediment transportation patterns that induce erosion or undesirable shoaling in adjacent areas, and that the structure does not unduly interfere with public use. In general, bulkheads or seawalls should be located no further seaward than the mean high water line and designed so that reflected wave energy does not destroy stable marine bottom or constitute a safety hazard. Where possible, sloping riprap is to be used rather than a vertical seawall or bulkhead. Bulkhead construction should avoid hard angle turns that may collect trash or cause shoaling or flushing problems. Bulkhead construction is normally denied if it will lead to the destruction of a significant public marsh or grassflat.

Section 501.14(I)(1)(Q) requires mitigation of erosion due to construction or modification of jetties, breakwaters, groins, or shore stabilization projects to the extent the costs of mitigation are reasonably proportionate to the benefits of mitigation. The intent of this provision is to require mitigation when the benefits of the mitigation are reasonably proportionate to both the costs of the modification or construction and the costs of the mitigation. However, mitigation is not required in individual cases where it is not cost-effective or where it would result in only inconsequential benefits.

Under Chapter 51 of the Texas Natural Resources Code and 31 TAC Chapter 13, the GLO may lease public land for commercial purposes, including recreational activity, under the terms and conditions set by the commissioner. Approvals of leases under this authority must be in compliance with these policies.

Under Chapter 33 of the Texas Natural Resources Code and 31 TAC Chapter 155, easements may be granted for structures on coastal public lands, including those for purposes of public recreation. Easements under this authority must be in compliance with the policies in this category. The rules governing easements for the construction of public recreational facilities require that certain criteria be considered. Filling for a proposed structure in a marsh or submerged aquatic vegetation is generally denied. Authorization of such filling will only be considered for a water-dependent use or public use on relatively unproductive public lands. Shoreline fills should be designed and located so that no significant damage to existing ecological values or natural resources and no alteration of natural currents will occur. Perimeters of fills should be stabilized with vegetation, retaining walls, riprap, or other mechanisms to prevent erosion. Material should be of such quality that it will not cause water quality degradation.

Coastal public land means all or any portion of state-owned submerged land, the water overlying that land, and all state-owned islands or portions of islands in the coastal zone. Submerged land

is any land extending from the boundary between the land of the state and the littoral owners seaward to the low-water mark on any saltwater lake, bay, inlet, estuary, or inland water within the tidewater limits, and any land lying beneath the body of water, but shall exclude beaches bordering on the open Gulf of Mexico and the land lying beneath this water (TEX. NAT. RES. CODE ANN. §33.004(6)(11)).

Oil and gas leases may be issued for islands, saltwater lakes, bays, inlets, and marshes owned by the state within tidewater limits; rivers and channels owned by the state; the portion of the Gulf of Mexico within the jurisdiction of the state; all unsold surveyed and unsurveyed public school land; and all land sold with a reservation of minerals to the state under TEX. NAT. RES. CODE ANN. §51.054 in which the state has retained leasing rights. A mineral lease plan of operations is not currently a condition of the lease application process. Applications for mineral leases may contain any information the commissioner requires (TEX. NAT. RES. CODE ANN. §53.015).

Geophysical or geochemical permits are required for all exploration on public school land, which includes all land dedicated to the permanent free school fund and specifically includes land with a mineral classification in which the state has retained the oil and gas interest and areas within tidewater limits (TEX. NAT. RES. CODE ANN. §52.321). Except for a person who has a valid oil and gas lease on public school land, a person may not conduct geophysical and geochemical exploration without a permit (TEX. NAT. RES. CODE ANN. §52.322).

MEs are required for land and water uses described above for MEs across, through, and under unsold public school land, the portion of the Gulf of Mexico within the jurisdiction of the state, the state-owned riverbeds and beds of navigable streams in the public domain, and all islands, saltwater lakes, bays, inlets, marshes, and reefs owned by the state within tidewater limits (TEX. NAT. RES. CODE ANN. §51.291).

Permits are required for the land uses described above for cabin permits. Permits may not be granted for continued use of a structure located within 1000 feet of: (1) privately owned littoral property, without written consent of the littoral owner; (2) any federal or state wildlife sanctuary or refuge; or (3) any federal, state, county, or city park bordering on coastal public land (TEX. NAT. RES. CODE ANN. §31.124).

Any state agency and all political subdivisions are authorized to establish mitigation banks, subject to GLO approval (TEX. REV. CIV. STAT. ANN. art. 5421(u)).

Exemptions

Mineral Lease Plan of Operations. Mineral lease plans of operations are not currently a condition for obtaining a mineral lease from the GLO/SLB.

Geophysical of Geochemical Permit. Holders of valid oil and gas leases are not required to have a geophysical or geochemical permit (TEX. NAT. RES. CODE ANN. §52.322).

Miscellaneous Easement, Surface Lease, Coastal Lease, and Navigation District Lease. None.

Coastal Easement, and Structure Registration. Piers over the size specified for structure registrations are subject to the requirement of a coastal easement as specified in (TEX. NAT. RES. CODE ANN. §33.111).

Cabin Permit. No cabin permit may be required for structures, excavations, or other similar structures as long as they are located wholly on the private littoral upland, even though the activities may result in the area being inundated by public water (TEX. NAT. RES. CODE ANN. §33.122).

Agency or Subdivision Wetlands Mitigation Bank. Approval of a wetland mitigation bank is based upon a proposed Memorandum of Agreement (MOA) and the MOA's compliance with national guidelines adopted in November 1995.

Variances

Mineral Lease Plan of Operations, Geophysical or Geochemical Permit, Miscellaneous Easement, Surface Lease, and Cabin Permit. None.

Structure Registration. All uses described for structure registrations must be registered with the School Land Board (TEX. NAT. RES. CODE ANN. §33.115). There is no statutory provision for a variance from this requirement.

Coastal Easement. There is no statutory provision for varying from the coastal easement requirement.

Coastal Lease. There is no statutory provision for varying from the coastal lease requirement (TEX. NAT. RES. CODE ANN. §33.105).

Navigation District Lease. There is no statutory provision expressly granting variance authority.

Agency or Subdivision Wetlands Mitigation Bank. Approval of a wetland mitigation bank is based on a proposed MOA.

Monitoring and Enforcement

Mineral Lease Plan of Operations. None.

Geophysical or Geochemical Permit. A violation of the conditions or provisions of the geophysical or geochemical permit is a misdemeanor punishable by a fine of not less than $100 nor more than $1000 per day. (TEX. NAT. RES. CODE ANN. §52.325). All operations are subject to inspection and monitoring by the land commissioner or the commissioner's representatives at any time. Within 30 days of the expiration of the permit, the permittee must file with the commissioner a sworn "summary of activities" report (31 TAC §9.4(f)).

Miscellaneous Easement. Existing MEs must be renewed periodically. Easements may be granted for a term of years. The commissioner may set a perpetual term if it is deemed to be in

the best interest of the state (TEX. NAT. RES. CODE §51.296). No person may undertake the activities described above for MEs on state-owned land without an easement from the commissioner or the board. A person without an easement is subject to a penalty of not more than $1,000 per day, the removal of the structure, or the filing of a lien (TEX. NAT. RES. CODE ANN. §51.302).

Surface Lease. Failure to obtain a lease prior to engaging in the actions listed above for surface leases subjects the actor to a fine of no more than $1,000 per day, removal of the structure, and/or filing of a lien on the structure (TEX. NAT. RES. CODE ANN. §51.302). Civil penalties of not more than $200 per day per structure on coastal public lands may be assessed (TEX. NAT. RES. CODE ANN. §33.112).

Structure Registration. Any owner of littoral property who fails to register with the School Land Board the location and dimensions of the pier to be constructed according to the specifications described for structure registrations is subject to a civil penalty of no more than $200 (TEX. NAT. RES. CODE ANN. §33.116).

Coastal Easement. Any construction or placement of a structure on coastal public land without first obtaining a coastal easement from the General Land Office is subject to a civil penalty of not more than $200 (TEX. NAT. RES. CODE ANN. §33.112). Violations can also result in penalties of no more than $1,000 per day per violation, the removal of the structure, or the filing of a lien (TEX. NAT. RES. CODE ANN. §51.302).

Coastal Lease. Engaging in regulated activities without a coastal lease will subject the actor to a civil penalty of not more than $200 (TEX. NAT. RES. CODE ANN. §33.112). Violations can also result in penalties of no more than $1,000 per day per violation, the removal of the structure, or the filing of a lien (TEX. NAT. RES. CODE ANN. §51.302).

Cabin Permit. Failure to obtain a cabin permit is subject to a civil penalty of not less than $50 nor more than $1,000 (TEX. NAT. RES. CODE ANN. §33.120).

Navigation District Lease. If lands leased from the state are used by the navigation district for any purpose or use not approved by the School Land Board, the lease may be terminated and the lands shall revert to the State of Texas (TEX. WATER CODE ANN. §61.116).

Agency or Subdivision Wetlands Mitigation Bank. The Mitigation Bank Review Team (MBRT) must agree to appropriate assessment methods. Selection of the appropriate assessment method will be determined on a case-by-case basis. Methods could include the Wetland Evaluation Technique, Habitat Evaluation Procedures, or other methods determined appropriate by the MBRT, including best professional judgement.

Agency's Authority to Regulate or Condition Listed Action to Satisfy TCMP Policy

Mineral Lease Plan of Operations. The Texas land commissioner may include in the lease any provision the commissioner considers necessary for protection of the interests of the state (TEX. NAT. RES. CODE ANN. §53.016(b)).

Geophysical or Geochemical Permit. The commissioner may make rules relating to geophysical or geochemical exploration, permits, or permittees the commissioner considers appropriate (TEX. NAT. RES. CODE ANN. §52.324 and §53.163).

Miscellaneous Easement. The grant of a miscellaneous easement may contain any provisions that the commissioner considers necessary to protect the interests of the state (TEX. NAT. RES. CODE ANN. §51.305).

Surface Lease. If an application for a surface lease is granted, the School Land Board shall determine the reasonable terms, conditions, and considerations for the lease (TEX. NAT. RES. CODE ANN. §33.104).

Structure Registration and Coastal Easement. None.

Coastal Lease. The SLB has the authority to determine the reasonable terms, conditions, and consideration for a coastal lease (TEX. NAT. RES. CODE ANN. §33.104).

Cabin Permit. The School Land Board may not grant an application for a cabin permit which would violate the public policy of this state (TEX. NAT. RES. CODE ANN. §33.129).

Navigation District Lease. After submission of evidence, the School Land Board shall authorize the issuance or denial of the proposed navigation district lease and shall determine any other conditions necessary to best serve the interests of the general public (TEX. WATER CODE ANN. §61.116).

Agency or Subdivision Wetlands Mitigation Bank. The GLO must approve a mitigation bank prior to the establishment and maintenance of such a bank (TEX. REV. CIV. STAT. ANN. art. 5421(u)).

POLICY CATEGORY 10: DREDGING AND DREDGED MATERIAL DISPOSAL AND PLACEMENT

State Agency Action and Managed Uses

TNRCC - Certification of a Federal Permit for the Discharge of Dredged or Fill Material (TEX. NAT. RES. CODE ANN. §33.2053(f)(6))

Dredging and filling operations that require a federal permit under §404 of the CWA.

RRC - Certification of a Federal Permit for the Discharge of Dredged or Fill Material (TEX. NAT. RES. CODE ANN. §33.2053(c)(3))

Dredging and filling activities associated with oil and gas exploration, production, or pipeline construction that require a federal CWA §404 permit.

TxDOT - Acquisition of a Site for the Placement or Disposal of Dredged Material from, or the Expansion, Relocation, or Alteration of, the Gulf Intracoastal Waterway (TEX. NAT. RES. CODE ANN. §33.2053(D)(1))

Texas Transportation Commission acquisitions, including but not limited to easements and rights-of-way for dredged material disposal sites and for channel expansion, relocation, or alteration (TEX. REV. CIV. STAT. ANN. art. 5415e-2, §6(c), Texas Coastal Waterway Act of 1975).

SLB - Mineral Lease Plan of Operations (TEX. NAT. RES. CODE ANN. §33.2053(a)(1))

Oil and gas and mineral leases including drilling activities, alterations to the natural landscape, surface and bottom-hole location of the initial well, location of additional planned wells and production facilities, location of shipping fairways and anchorage areas, anticipated routes for pipelines, and location of routes of dredging required for all production-related activities, such as pipelines, well-drilling, and construction of facilities.

GLO - Geophysical or Geochemical Permit (TEX. NAT. RES. CODE ANN. §33.2053(a)(2))

Geophysical exploration means a survey or investigation conducted to discover or locate minerals or oil and gas prospects using magnetic, gravity, seismic, and/or electrical techniques. Geochemical exploration means a survey or investigation conducted to discover or locate minerals or oil and gas prospects using techniques involving soil sampling and analysis (TEX. NAT. RES. CODE ANN. §52.321 and §53.161).

GLO - Miscellaneous Easement (TEX. NAT. RES. CODE ANN. §33.2053(a)(4))

MEs are required for construction and placement of telephone, telegraph, electric transmission,

and power lines; oil pipelines; gas pipelines and sulphur pipelines; other electric lines and pipelines of any nature; irrigation canals, laterals, and water pipelines; roads; and any other purpose the commissioner considers to be in the best interests of the state (TEX. NAT. RES. CODE ANN. §51.291). MEs are also required for electric substations, pumping stations, loading racks, and tank farms on state land other than land owned by the University of Texas System (TEX. NAT. RES. CODE ANN. §51.292).

GLO - Surface Lease
(TEX. NAT. RES. CODE ANN. §33.2053(a)(6))

Unsold public school land and asylum land may be leased for agricultural, grazing, or commercial purposes (TEX. NAT. RES. CODE ANN. §51.121).

SLB - Structure Registration
(TEX. NAT. RES. CODE ANN. §33.2053(a)(7))

Construction of piers by littoral property owners for noncommercial use if pier is 100 feet or less in length and 25 feet or less in width, and requires no filling or dredging (TEX. NAT. RES. CODE ANN. §33.115).

SLB - Coastal Easement
(TEX. NAT. RES. CODE ANN. §33.2053(a)(3))

Dredging of basins and channels on state-owned submerged land; construction of piers, docks, marinas, bulkheads, seawalls, and other waterfront structures on state-owned submerged land. The School Land Board may also grant easement rights to the owner of adjacent littoral property authorizing the placement or location of a structure on coastal public land for purposes connected with the ownership of littoral property (TEX. NAT. RES. CODE ANN. §33.111).

SLB - Coastal Lease
(TEX. NAT. RES. CODE ANN. §33.2053(a)(5))

Coastal public land may be leased to: (1) the Texas Parks and Wildlife Department (TPWD) or to any eligible city or county for public recreational purposes; (2) the TPWD for management of estuarine preserves; (3) any nonprofit, tax-exempt environmental organization approved by the School Land Board for the purpose of managing a wildlife refuge; and (4) any scientific or educational organization or institution for conducting scientific research (TEX. NAT. RES. CODE ANN. §33.105 and §33.109).

SLB - Cabin Permit
(TEX. NAT. RES. CODE ANN. §33.2053(a)(8))

Permitting of limited continued use of previously unauthorized structures on coastal public land if the use is sought by one who is claiming an interest in the structure but is not incident to the ownership of the littoral property (TEX. NAT. RES. CODE ANN. §33.119). Previously unauthorized structures for which permits are obtained may be used only for noncommercial, recreational purposes (TEX. NAT. RES. CODE ANN. §33.128).

SLB - Navigation District Lease
(TEX. NAT. RES. CODE ANN. §33.2053(a)(9))

The School Land Board may lease state-owned land to eligible navigation districts only for purposes reasonably related to the promotion of navigation. Navigation includes marine commerce and immediately related activities, including but not limited to port development; channel construction and maintenance; industrial site locations, transportation, shipping and storage facilities; pollution abatement facilities; and all other activities necessary or appropriate to the promotion of marine commerce. In applying for leases, districts which will require dredging, filling, or bulkheading must provide, among other requirements, a draft environmental impact statement assessing the effect of the proposed use on the environment, which statement shall generally conform to the requirements of the National Environmental Policy Act. The district must also provide proof satisfactory to the board establishing the public convenience and necessity for acquisition of lands sought to be leased (TEX. WATER CODE ANN. §61.116).

GLO - Agency or Subdivision Wetlands Mitigation Bank
(TEX. NAT. RES. CODE ANN. §33.2053(a)(11))

The GLO, in conjunction with the U.S. Army Corps of Engineers, U.S. Environmental Protection Agency (EPA), U.S. Fish and Wildlife Service, National Marine Fisheries Service, Texas Parks and Wildlife Department, and Texas Natural Resource Conservation Commission (Mitigation Bank Review Team), approves parcels of real property proposed for a mitigation bank (TEX. REV. CIV. STAT. ANN. art. 5421(u) and Interagency Guidelines for Development and Use of Mitigation Banks, GLO et al., 6-93).

TPWD - Permit for Disturbing Marl, Sand, Shell, or Gravel on State-Owned Land
(TEX. NAT. RES. CODE ANN. §33.2053(h)(3))

TPWD issues permits for the taking of marl, sand, gravel, shell, or mudshell from the submerged lands of the state (PARKS & WILDLIFE CODE ANN. §86.002).

Policies

The TNRCC and the RRC shall comply with the policies below when issuing certifications and adopting rules under Texas Water Code, Chapter 26, and the Texas Natural Resources Code, Chapter 91, governing certification of compliance with surface water quality standards for federal actions and permits authorizing dredging or the discharge or placement of dredged material.

TxDOT shall comply with the policies in this category when adopting rules and taking actions as local sponsor of the Gulf Intracoastal Waterway under Texas Civil Statutes, article 5415e-2. The exercise of eminent domain by the Texas Transportation Commission under Article 5415e-2 must relate to the maintenance, expansion, relocation, or alteration of the main channel, not including tributaries or branches, of the shallow-draft navigation channel running from the Sabine River southward along the Texas coast to the Brownsville Ship Channel near Port Isabel that is generally referred to as the Gulf Intracoastal Waterway (GIWW).

The GLO and the SLB shall comply with the policies in this category when approving oil, gas, and other mineral lease plans of operations and granting surface leases, easements, and permits and adopting rules under the Texas Natural Resources Code, Chapters 32, 33, and 51-53, and Texas Water Code, Chapter 61, for dredging and dredged material disposal and placement.

The TPWD shall comply with the policies in this category when adopting rules at 31 TAC Chapter 57 (relating to Fisheries) governing dredging and dredged material disposal and placement. The TPWD shall comply with the policies in 31 TAC §501.14(j)(8) when adopting rules and issuing permits under Texas Parks and Wildlife Code, Chapter 86, governing the mining of sand, shell, marl, gravel, and mudshell.

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

   A. Dredging and dredged material disposal and placement shall not cause or contribute, after consideration of dilution and dispersion, to violation of any applicable surface water quality standards established under Policy Category 6.

   B. Except as otherwise provided in subparagraph (D) of this paragraph, adverse effects on critical areas from dredging and dredged material disposal or placement shall be avoided and otherwise minimized, and appropriate and practicable compensatory mitigation shall be required, in accordance with Policy Category 8.

   C. Except as provided in subparagraph (D) of this paragraph, dredging and the disposal and placement of dredged material shall not be authorized if:

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

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

      iii. significant degradation of critical areas under Policy Category 8 would result.

   D. A dredging or dredged material disposal or placement project that would be prohibited solely by application of subparagraph (C) of this paragraph may be allowed if it is determined to be of overriding importance to the public and

national interest in light of economic impacts on navigation and maintenance of commercially navigable waterways.

2. Adverse effects from dredging and dredged material disposal and placement shall be minimized as required in paragraph (1) of this policy. Adverse effects can be minimized by employing the techniques in this paragraph where appropriate and practicable.

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

      i. locating and confining discharges to minimize smothering of organisms;

      ii. locating and designing projects to avoid adverse disruption of water inundation patterns, water circulation, erosion and accretion processes, and other hydrodynamic processes;

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

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

      v. discharging materials at sites where the substrate is composed of material similar to that being discharged;

      vi. locating and designing discharges to minimize the extent of any plume and otherwise control dispersion of material; and

      vii. avoiding the impoundment or drainage of critical areas.

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

      i. disposal or placement of dredged material in a manner that maintains physiochemical conditions at discharge sites and limits or reduces the potency and availability of pollutants;

      ii. limiting the solid, liquid, and gaseous components of material discharged;

iii. adding treatment substances to the discharged material; and

iv. adding chemical flocculants to enhance the deposition of suspended particulates in confined disposal areas.

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

i. use of containment levees and sediment basins designed, constructed, and maintained to resist breaches, erosion, slumping, or leaching;

ii. use of lined containment areas to reduce leaching where leaching of chemical constituents from the material is expected to be a problem;

iii. capping in-place contaminated material or, selectively discharging the most contaminated material first and then capping it with the remaining material;

iv. properly containing discharged material and maintaining discharge sites to prevent point and nonpoint pollution; and

v. timing the discharge to minimize adverse effects from unusually high water flows, wind, wave, and tidal actions.

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

i. where environmentally desirable, distributing the material in a thin layer;

ii. orienting material to minimize undesirable obstruction of the water current or circulation patterns;

iii. using silt screens or other appropriate methods to confine suspended particulates or turbidity to a small area where settling or removal can occur;

iv. using currents and circulation patterns to mix, disperse, dilute, or otherwise control the discharge;

v. minimizing turbidity by using a diffuser system or releasing material near the bottom;

vi. selecting sites or managing discharges to confine and minimize the release of suspended particulates and turbidity and maintain light penetration for organisms; and

vii. setting limits on the amount of material to be discharged per unit of time or volume of receiving waters.

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

i. using appropriate equipment, machinery, and operating techniques for access to sites and transport of material, including those designed to reduce damage to critical areas;

ii. having personnel on site adequately trained in avoidance and minimization techniques and requirements; and

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

F. Adverse effects on plant and animal populations from dredging and dredged material disposal or placement can be minimized by:

i. avoiding changes in water current and circulation patterns that would interfere with the movement of animals;

ii. selecting sites or managing discharges to prevent or avoid creating habitat conducive to the development of undesirable predators or species that have a competitive edge ecologically over indigenous plants or animals;

iii. avoiding sites having unique habitat or other value, including habitat of endangered species;

iv. using planning and construction practices to institute habitat development and restoration to produce a new or modified environmental state of higher ecological value by displacement of some or all of the existing environmental characteristics;

v. using techniques that have been demonstrated to be effective in circumstances similar to those under consideration whenever possible and, when proposed development and restoration techniques have not yet advanced to the pilot demonstration stage, initiating their use on a small scale to allow corrective action if unanticipated adverse effects occur;

vi. timing dredging and dredged material disposal or placement activities to avoid spawning or migration seasons and other biologically critical time periods; and

vii. avoiding the destruction of remnant natural sites within areas already affected by development.

G. Adverse effects on human use potential from dredging and dredged material disposal or placement can be minimized by:

i. selecting sites and following procedures to prevent or minimize any potential damage to the aesthetically pleasing features of the site, particularly with respect to water quality;

ii. selecting sites which are not valuable as natural aquatic areas;

iii. timing dredging and dredged material disposal or placement activities to avoid the seasons or periods when human recreational activity associated with the site is most important; and

iv. selecting sites that will not increase incompatible human activity or require frequent dredge or fill maintenance activity in remote fish and wildlife areas.

H. Adverse effects from new channels and basins can be minimized by locating them at sites:

i. that ensure adequate flushing and avoid stagnant pockets; or

ii. that will create the fewest practicable adverse effects on CNRAs from additional infrastructure such as roads, bridges, causeways, piers, docks, wharves, transmission line crossings, and ancillary channels reasonably likely to be constructed as a result of the project; or

iii. with the least practicable risk that increased vessel traffic could result in navigation hazards, spills, or other forms of contamination which could adversely affect CNRAs;

iv. provided that, for any dredging of new channels or basins subject to the requirements of Policy Category 20, data and information on minimization of secondary adverse effects need not be produced or evaluated to comply with this subparagraph if such data and information is produced and evaluated in compliance with Policy Category 20.

3. Disposal or placement of dredged material in existing contained dredge disposal sites identified and actively used as described in an environmental assessment or environmental impact statement issued prior to the effective date of this chapter shall be presumed to comply with the requirements of paragraph (1) of this policy category unless modified in design, size, use, or function.

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

   A. If the costs of the beneficial use of dredged material are reasonably comparable to the costs of disposal in a non-beneficial manner, the material shall be used beneficially.

   B. If the costs of the beneficial use of dredged material are significantly greater than the costs of disposal in a non-beneficial manner, the material shall be used beneficially unless it is demonstrated that the costs of using the material beneficially are not reasonably proportionate to the costs of the project and benefits that will result. Factors that shall be considered in determining whether the costs of the beneficial use are not reasonably proportionate to the benefits include, but are not limited to:

      i. environmental benefits, recreational benefits, flood or storm protection benefits, erosion prevention benefits, and economic development benefits;

      ii. the proximity of the beneficial use site to the dredge site; and

      iii. the quantity and quality of the dredged material and its suitability for beneficial use.

   C. Examples of the beneficial use of dredged material include, but are not limited to:

      i. projects designed to reduce or minimize erosion or provide shoreline protection;

      ii. projects designed to create or enhance public beaches or recreational areas;

      iii. projects designed to benefit the sediment budget or littoral system;

      iv. projects designed to improve or maintain terrestrial or aquatic wildlife habitat;

      v. projects designed to create new terrestrial or aquatic wildlife habitat, including the construction of marshlands, coastal wetlands, or other critical areas;

      vi. projects designed and demonstrated to benefit benthic communities or aquatic vegetation;

      vii. projects designed to create wildlife management areas, parks, airports, or other public facilities;

      viii. projects designed to cap landfills or other waste disposal areas;

ix. projects designed to fill private property or upgrade agricultural land, if cost-effective public beneficial uses are not available; and

x. projects designed to remediate past adverse impacts on the coastal zone.

5. If dredged material cannot be used beneficially as provided in paragraph (4)(B) of this policy, to avoid and otherwise minimize adverse effects as required in paragraph (1) of this policy, preference will be given to the greatest extent practicable to disposal in:

   A. contained upland sites;

   B. other contained sites; and

   C. open water areas of relatively low productivity or low biological value.

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

7. Emergency dredging shall be allowed without a prior consistency determination as required in the applicable consistency rule when:

   A. there is an unacceptable hazard to life or navigation;

   B. there is an immediate threat of significant loss of property; or

   C. an immediate and unforeseen significant economic hardship is likely if corrective action is not taken within a time period less than the normal time needed under standard procedures. The Council secretary shall be notified at least 24 hours prior to commencement of any emergency dredging operation by the agency or entity responding to the emergency. The notice shall include a statement demonstrating the need for emergency action. Prior to initiation of the dredging operations the project sponsor or permit-issuing agency shall, if possible, make all reasonable efforts to meet with Council's designated representatives to ensure consideration of and consistency with applicable policies in this category. Compliance with all applicable policies in this category shall be required at the earliest possible date. The permit-issuing agency and the applicant shall submit a consistency determination within 60 days after the emergency operation is complete.

8. Mining of sand, shell, marl, gravel, and mudshell on submerged lands shall be prohibited unless there is an affirmative showing of no significant impact on erosion within the coastal zone and no significant adverse effect on coastal water quality or terrestrial and aquatic wildlife habitat within any CNRA.

Explanation

31 TAC §501.14(j) contains the TCMP policy on dredging and disposal and placement of dredged material. It incorporates the TCMP critical areas policy in 31 TAC §501.14(h). Together, these two subsections are intended to incorporate into the TCMP the substance of the standards currently applied by the U.S. Army Corps of Engineers and the U.S. Environmental Protection Agency to the discharge of dredged or fill material into coastal waters. These standards are called the §404(b)(1) Guidelines because they are mandated by §404 of the federal CWA.

The content of the two different subsections varies because each applies to slightly different categories of activities and CNRAs. The policy in 31 TAC §501.14(h) applies to the construction of structures in and the filling of critical areas, which is equivalent to the term "special aquatic sites" under the §404(b)(1) Guidelines. Critical areas are coastal wetlands, submerged aquatic vegetation, tidal sand or mud flats, oyster reefs, and hard substrate reefs. In contrast, the policy in 31 TAC §501.14(j) applies to a narrower category of activities, but a broader category of CNRAs. It applies only to dredging and disposal and placement of dredged material. In addition to critical areas, however, it applies to coastal waters, submerged lands, coastal shore areas, and Gulf beaches.

The dredging policy contains a special provision that is designed to incorporate into the TCMP an equivalent to §404(b)(2) of the federal CWA. Section 404(b)(2) applies when a dredging activity does not comply with the §404(b)(1) Guidelines and therefore cannot be authorized. In that case, the costs of any potential impairment to navigation resulting from not performing the dredging, whether it be a physical impairment or an economic impairment, must also be considered. If the costs of not dredging outweigh the benefits, the dredging may be authorized.

The TCMP reflects this provision at 31 TAC §501.14(j)(1)(D). It provides that if a dredging activity would be prohibited solely by 31 TAC §501.14(j)(1)(C), which mirrors the full mitigation sequence and significant degradation provisions of the §404(b)(1) Guidelines, it may be authorized if the economic consequences of failure to dredge the waterway in question would be detrimental to the public and national interest. However, the dredging must still comply with the provisions of 31 TAC §501.14(j)(1)(A) and (B), which respectively requires that impacts must be avoided and minimized to the greatest extent practicable and prohibits the violation of state water quality standards.

It is anticipated that this exceptional provision will be rarely raised and even more rarely applied. If this provision were to be invoked, it would have to be included in the consistency determination for the dredging activity prepared by the permit applicant or federal agency proposing the activity. Therefore, that applicant or agency bears the burden of demonstrating that the provision applies to the dredging in question. In making these decisions, the Council will consider the relevant statements of national interest in Chapter Seven, including specifically that from the Corps relating to dredging.

The TCMP establishes new state-level requirements for beneficial use of dredged material. Section 501.14(j)(4)(B) requires that dredged material from commercially navigable waterways be used beneficially, unless it costs "significantly greater" than disposal or placement in a

nonbeneficial manner and the resulting benefits do not justify the costs. This section also establishes factors to consider if the costs of the beneficial use of dredged material are "significantly greater" than the costs of disposal in a non-beneficial manner.

The Council and the Corps recognize that review of current maintenance dredging practices should be phased in so that the Corps's and local sponsors' existing planning and budgeting cycles may programmatically address these practices. Application of these policies to maintenance dredging activities will take place through implementation of the Memorandum of Agreement (MOA) Between the Council and the Corps (Regarding Review of Coastal Maintenance Dredging Activities, dated October 27, 1994).

The MOA phases in application of these policies in several ways. First, maintenance dredging projects in commercially navigable waterways in the coastal zone will be reviewed over the first three to five years after federal approval of the TCMP. Second, if the Council finds a maintenance dredging project inconsistent, the MOA requires the Council and the Corps to engage in an alternative dispute resolution process for a period of up to two years. Third, the final consistency determination for the project may include a schedule for implementing changes to current maintenance dredging practices required for a project to be consistent with the TCMP.

These three provisions are designed to mitigate situations where changes to current maintenance dredging practices will be required and funds are not immediately available to implement the changes. They are intended to provide flexibility for the Corps, local sponsors, the state, and others to plan, budget for, and seek the necessary funding for the incremental costs under 31 TAC §501.14(j)(4)(B) or other provisions of the dredging and dredged material disposal and placement policy.

It is the Council's goal to promote beneficial use of dredged material where it is prudent, feasible, and cost-effective, while allowing the continued construction, operation, and maintenance of commercially navigable waterways. If the project is a maintenance project included in the MOA, the Council would consider the cost factors under 31 TAC §501.14(j)(4)(B) within the MOA process. Under §VII.D. of the MOA, the initial consistency determination for the project may include a schedule for implementing a beneficial use project. This schedule would be designed to allow sufficient time to seek necessary funding for incremental costs when a beneficial use is prudent, feasible, and cost effective, but funds for the incremental costs are not immediately available. If the federal sponsor, local sponsors, and if applicable, the other entities sponsoring the beneficial use project cannot obtain funding for the incremental cost of a beneficial use project, the cost/benefit analysis required by 31 TAC §501.14(j)(4)(B) would include consideration of any increased cost to dredging due to deferred maintenance, safety risks to navigation, vessel draft restrictions, the potential for closure of a commercially navigable waterway from the failure to dredge, and the cost to local, state, and national economies due to closure of a commercially navigable waterway. These costs would be considered "costs of the beneficial use" under 31 TAC §501.14(j)(4)(B). The Council would consider them in the context of a revised consistency determination to be submitted without consideration of a beneficial use project. The Corps would submit this to the Council under §VIII.C of the MOA after good faith efforts have failed to obtain funds.

Management Authority and Administration

Chapter 86 of the Parks and Wildlife Code authorizes the TPWD to manage and protect marl, sand, gravel, shell, and mudshell located in the beds of state-owned waterways. TPWD rules under 31 TAC Chapter 57 establish procedures for the issuance of permits for the taking of these resources. The TPWD will comply with the policy in 31 TAC §501.14(j)(8) and (9) when adopting rules and issuing permits under this authority.

In accordance with TPWD rules, a permit cannot be issued without findings on navigation, conservation, economics, general environmental concerns, fish and wildlife values, recreation, and relative public and private benefits. The rules require that the following criteria be considered in the evaluation of a permit request:

1. whether the operation under the proposed permit will damage or injure oysters, oyster beds, or fish-inhabited waters;

2. whether the operation will damage or injuriously affect any island, reef, bar, channel, creek, or bayou used for frequent or occasional navigation, or change any current that will affect navigation; and

3. the requirements of industry for such sedimentary materials and the relative value of their commercial use to the state.

Other criteria considered include whether granting the permit will have a material adverse effect on recreational activity, commercial fishing, or the general seafood industry in the area of the permit and the effect, if any, on navigation in the area of the permit. The list of criteria is discretionary and is not exclusive, so that the TPWD may consider other factors as appropriate for individual permits.

Several exemptions from the requirements to obtain a permit or pay for dredged material are provided. Dredging necessary or incidental to navigation and dredging under state or federal authority is exempt. The holder of an oil and gas lease executed by the state is not required to obtain a permit. Entities obtaining sand or gravel to be used on public roads and streets are exempt from the requirement to pay the state for materials. The taking of sediment from areas near a seawall for any purpose other than that necessary or incidental to navigation or dredging under state or federal authority is prohibited.

If, after granting a permit, the TPWD finds that the use of excessive equipment is causing siltation or other damage to oysters, oyster beds, or fish-inhabited waters, the quantity and/or type of equipment used in a particular area may be limited. Failure or refusal to comply with the terms of the permit or the violation of any law or condition pertaining to the taking of marl, sand, and/or gravel will result in immediate termination or revocation of all rights conferred in or claimed under the permit, and the permit may be canceled by the TPWD.

By virtue of their incorporation in 31 TAC Ch. 16, the GLO and SLB must comply with the policies in this category when approving oil, gas, and other mineral lease plans of operations;

granting surface leases, easements, and permits; and adopting rules under Chapters 32, 33, and 51-53 of the Texas Natural Resources Code and Chapter 61 of the Texas Water Code for dredging and dredged material disposal and placement. The policies in 31 TAC Ch. 16 reflect the mitigation sequencing and other provisions of the §404(b)(1) Guidelines.

The GLO and the SLB are the management entities for activities on state-owned lands under the authority of chapters 32, 33, and 51-53 of the Texas Natural Resources Code.

Under 31 TAC Chapter 155, easements are issued to lessees for dredging of channels to allow access to the holder of any surface or mineral interests in coastal public lands for purposes necessary or appropriate to the use of such interests. In addition to the policies in 31 TAC, Chapter 155 establishes standards and criteria for the siting, design, and construction of dredged channels and dredged material disposal. To the extent feasible, project plans should utilize piers or catwalks to reach deeper water areas rather than channels or canals. A channel or basin should be designed to ensure adequate flushing and to prevent the creation of pockets or other hydraulic conditions which would cause stagnant water pockets. Dredging for navigational access should be well planned to prevent excavation of an unnecessary channel. Where several landowners are to be served by a project, peripheral canals leading to a central navigational channel should be considered rather than separate access channels for each waterfront landowner. The alignment of a channel or canal should make maximum use of a natural or existing channel. Design and alignment should minimize disruption of natural sheetflow, water flow, and drainage systems and avoid oyster reefs and highly productive wetland areas. Any proposal to dredge a channel through highly productive coastal public lands is discouraged and will be approved only in unusual circumstances. Dredging should be conducted in a manner that minimizes turbidity and dispersal of dredged material.

Guidelines for dredged material disposal include placement, to the extent possible, of all dredged material on suitable uplands above mean high water, and location of disposal areas in areas of relatively low productivity above the mean high water line. Any toxic material should be disposed of in an upland area behind impervious dikes unless detoxification is undertaken. Open-water and deep-water disposal should be considered as alternatives only if upland alternatives are not feasible and should be seriously considered only after careful consultation with concerned agencies. Habitat creation and improvement should be considered when only minor environmental damage would result.

Under 31 TAC Chapter 13, miscellaneous easements are granted for rights-of-way across public lands for oil and gas pipelines, transmission lines, roads, and other linear facilities. Surface leases are granted for the construction of commercial facilities and other non-waterfront structures. These authorizations must comply with the policies in this category if such structures or facilities involve dredging or disposal and placement of dredged material.

In the Texas Coastal Waterway Act of 1975, TxDOT received a mandate to carry out a state coastal policy relating to navigation. As part of this policy, the state declared its support of environmentally sound shallow-draft navigation in the state's coastal waters. It is also state policy to strive to prevent the waste of both publicly and privately owned natural resources and to prevent or minimize adverse impacts to the environment. The state also pledged to maintain, preserve, and enhance wildlife and fisheries. The legislation specifically authorized TxDOT to

acquire by gift, purchase, or condemnation any property or interest in property deemed necessary to fulfill its responsibilities under this authority, including easements and rights-of-way for dredged material disposal sites and channel expansion, relocation, or alteration. TxDOT is also responsible for evaluating the Gulf Intracoastal Waterway (GIWW), including the importance of the waterway, principal problems of the waterway, significant modifications to the waterway, and specific recommendations for legislative action.

Amendments to the Texas Coastal Waterway Act in 1995 allow the Texas Transportation Commission, through TxDOT, to enter into agreements with the U.S. Army Corps of Engineers to participate in the cost of a project to beneficially use material dredged from the GIWW.

TxDOT has organized a state interagency committee of natural and economic resource agencies to help address problems and to recommend solutions concerning the GIWW. The committee also assists in the selection of dredged material disposal sites. As a means of selecting environmentally and operationally suitable sites, TxDOT appoints a task force consisting of representatives from state agencies, the Corps of Engineers, and federal resource protection agencies. After a site has met the approval of the task force, the Corps of Engineers coordinates the environmental approval process in accordance with the National Environmental Policy Act. The opinions and recommendations of the task force are advisory in nature.

The 1975 legislation mandates that public hearings be held to receive evidence and testimony concerning the desirability of the proposed acquisition of any property or interest in property for any dredged material disposal site, or for the widening, relocation, or alteration of the main channel of the GIWW. Based on public testimony and environmental findings, TxDOT makes a determination on the proposed use of the property.

TxDOT must comply with the policies in this category when adopting rules and taking actions as local sponsor of the Gulf Intracoastal Waterway under Texas Civil Statutes, article 5415e-2.

The commission is the state agency responsible for issuing certifications pursuant to §401 of the federal CWA to ensure that federal permits for dredging and filling activities comply with Texas Water Quality Standards. No person may conduct any activity under federal permit or license which may result in any discharge into or adjacent to waters in the state unless the person has received a certification (30 TAC §279.4).

In accordance with the federal CWA §404, any entity intending to discharge dredged or fill material into the waters of the U.S., including wetlands, must obtain a permit from the U.S. Army Corps of Engineers. All §404 permits must receive a water quality certification from the RRC under §401 of the CWA for dredging activities associated with oil and gas exploration, development, and production, including transportation by pipeline or from the TNRCC for all other dredging activities. The §401 water quality certification attests that a proposed activity resulting in a discharge to surface waters will not cause a violation of the state's water quality standards set out in 30 TAC Chapter 307. The TNRCC and the RRC must comply with the policies in this category when issuing water quality certifications and adopting rules under Chapter 26 of the Texas Water Code and Chapter 91 of the Texas Natural Resources Code, governing certification of compliance with surface water quality standards for federal actions and permits authorizing dredging or the discharge or placement of dredged material.

The TNRCC's §401 water quality certification review process has been strengthened by clarifying the TNRCC's policy on wetlands protection and by providing consistency between related state and federal rules (30 TAC §279.11). The TNRCC regulations incorporate a mitigation sequence to avoid, minimize, and compensate for adverse impacts on wetlands. The Railroad Commission has adopted rules for a §401 water quality certification process similar to the process adopted by the TNRCC.

The RRC is the state agency responsible for issuing certifications pursuant to §401 of the federal CWA to ensure that federal permits for dredging and filling activities associated with oil and gas exploration, production, or pipeline construction comply with Texas Water Quality Standards.

The TPWD must comply with the policies in this category when adopting rules under 31 TAC Chapter 57 (relating to fisheries) governing dredging and dredged material disposal and placement. The rules under Chapter 57 recognize that wetland areas are of indispensable value to fish and wildlife. Section 57.1 provides guidance to staff commenting on permits for dredging or advocating methods of disposal of dredged material to minimize detrimental environmental effects. Section 57.141 provides that the TPWD will oppose wetland channelization and drainage as a general practice.

Exemptions

Certification of a Federal Permit for the Discharge of Dredged or Fill Material. Excepted from this provision are activities exempted from the requirement for a permit for the discharge of dredged or fill material, described in Code of Federal Regulations, Title 33, §323.4 and/or Code of Federal Regulations, Title 40, §232.3, including but not limited to normal farming, silviculture, and ranching activities such as plowing, seeding, cultivating, minor drainage, and harvesting for the production of food, fiber, and forest products, or upland soil and water conservation practices. A §401 water quality certification is not required for these activities.

Acquisition of a Site for the Placement or Disposal of Dredged Material From, or the Expansion, Relocation, or Alteration of, the Gulf Intracoastal Waterway. None.

Mineral Lease Plan of Operations. Mineral lease plans of operations are not currently a condition for obtaining a mineral lease from the GLO/SLB.

Geophysical of Geochemical Permit. Holders of valid oil and gas leases are not required to have a geophysical or geochemical permit (TEX. NAT. RES. CODE ANN. §52.322).

Miscellaneous Easement, Surface Lease, Coastal Lease, and Navigation District Lease. None.

Coastal Easement, and Structure Registration. Piers over the size specified for structure registrations are subject to the requirement of a coastal easement as specified in (TEX. NAT. RES. CODE ANN. §33.111).

Cabin Permit. No cabin permit may be required for structures, excavations, or other similar structures as long as they are located wholly on the private littoral upland, even though the

activities may result in the area being inundated by public water (TEX. NAT. RES. CODE ANN. §33.122).

Agency or Subdivision Wetlands Mitigation Bank. Approval of a wetland mitigation bank is based upon a proposed Memorandum of Agreement (MOA) and the MOA's compliance with national guidelines adopted in November 1995.

Permit for Disturbing Marl, Sand, Shell, or Gravel on State-Owned Land. Several exemptions apply to the use of marl, sand, gravel, shell, and mudshell for public purposes, such as seawalls and state oil and gas leases (PARKS & WILDLIFE CODE ANN. Ch. 86).

Variances

Certification of a Federal Permit for the Discharge of Dredged or Fill Material. The RRC may waive the requirement for water quality certification (16 TAC §3.93).

Certification of a Federal Permit for the Discharge of Dredged or Fill Material. The TNRCC may waive the requirement for water quality certification (30 TAC §279.4).

Acquisition of a Site for the Placement or Disposal of Dredged Material From, or the Expansion, Relocation, or Alteration of, the Gulf Intracoastal Waterway. None.

Mineral Lease Plan of Operations, Geophysical or Geochemical Permit, Miscellaneous Easement, Surface Lease, and Cabin Permit. None.

Structure Registration. All uses described for structure registrations must be registered with the School Land Board (TEX. NAT. RES. CODE ANN. §33.115). There is no statutory provision for a variance from this requirement.

Coastal Easement. There is no statutory provision for varying from the coastal easement requirement.

Coastal Lease. There is no statutory provision for varying from the coastal lease requirement (TEX. NAT. RES. CODE ANN. §33.105).

Navigation District Lease. There is no statutory provision expressly granting variance authority.

Agency or Subdivision Wetlands Mitigation Bank. Approval of a wetland mitigation bank is based on a proposed MOA.

Permit for Disturbing Marl, Sand, Shell, or Gravel on State-Owned Land. None.

Monitoring and Enforcement

Certification of a Federal Permit for the Discharge of Dredged or Fill Material. Members and employees of the RRC, on proper identification, may enter public or private property to

inspect and investigate conditions relating to the quality of water in the state (TEX. NAT. RES. CODE ANN. §91.1012). Violations may subject a person to administrative penalties of up to $10,000 per day for each violation as well as criminal penalties (TEX. NAT. RES. CODE ANN. §81.0531 and §91.002).

Certification of a Federal Permit for the Discharge of Dredged or Fill Material. The members of the TNRCC and their agents are entitled to enter any public or private property at any reasonable time for the purpose of inspecting and investigating conditions relating to the water quality of the state (TEX. WATER CODE ANN. §26.014). Violations may subject a person to administrative penalties of up to $10,000 per day for each violation as well as civil and criminal penalties (TEX. WATER CODE ANN. §26.136, §26.122, and §26.2121).

Acquisition of a Site for the Placement or Disposal of Dredged Material From, or the Expansion, Relocation, or Alteration of, the Gulf Intracoastal Waterway. Not applicable.

Mineral Lease Plan of Operations. None.

Geophysical or Geochemical Permit. A violation of the conditions or provisions of the geophysical or geochemical permit is a misdemeanor punishable by a fine of not less than $100 nor more than $1000 per day. (TEX. NAT. RES. CODE ANN. §52.325). All operations are subject to inspection and monitoring by the land commissioner or the commissioner's representatives at any time. Within 30 days of the expiration of the permit, the permittee must file with the commissioner a sworn "summary of activities" report (31 TAC §9.4(f)).

Miscellaneous Easement. Existing MEs must be renewed periodically. Easements may be granted for a term of years. The commissioner may set a perpetual term if it is deemed to be in the best interest of the state (TEX. NAT. RES. CODE §51.296). No person may undertake the activities described above for MEs on state-owned land without an easement from the commissioner or the board. A person without an easement is subject to a penalty of not more than $1,000 per day, the removal of the structure, or the filing of a lien (TEX. NAT. RES. CODE ANN. §51.302).

Surface Lease. Failure to obtain a lease prior to engaging in the actions listed above for surface leases subjects the actor to a fine of no more than $1,000 per day, removal of the structure, and/or filing of a lien on the structure (TEX. NAT. RES. CODE ANN. §51.302). Civil penalties of not more than $200 per day per structure on coastal public lands may be assessed (TEX. NAT. RES. CODE ANN. §33.112).

Structure Registration. Any owner of littoral property who fails to register with the School Land Board the location and dimensions of the pier to be constructed according to the specifications described for structure registrations is subject to a civil penalty of no more than $200 (TEX. NAT. RES. CODE ANN. §33.116).

Coastal Easement. Any construction or placement of a structure on coastal public land without first obtaining a coastal easement from the General Land Office is subject to a civil penalty of not more than $200 (TEX. NAT. RES. CODE ANN. §33.112). Violations can also result in

penalties of no more than $1,000 per day per violation, the removal of the structure, or the filing of a lien (TEX. NAT. RES. CODE ANN. §51.302).

Coastal Lease. Engaging in regulated activities without a coastal lease will subject the actor to a civil penalty of not more than $200 (TEX. NAT. RES. CODE ANN. §33.112). Violations can also result in penalties of no more than $1,000 per day per violation, the removal of the structure, or the filing of a lien (TEX. NAT. RES. CODE ANN. §51.302).

Cabin Permit. Failure to obtain a cabin permit is subject to a civil penalty of not less than $50 nor more than $1,000 (TEX. NAT. RES. CODE ANN. §33.120).

Navigation District Lease. If lands leased from the state are used by the navigation district for any purpose or use not approved by the School Land Board, the lease may be terminated and the lands shall revert to the State of Texas (TEX. WATER CODE ANN. §61.116).

Agency or Subdivision Wetlands Mitigation Bank. The Mitigation Bank Review Team (MBRT) must agree to appropriate assessment methods. Selection of the appropriate assessment method will be determined on a case-by-case basis. Methods could include the Wetland Evaluation Technique, Habitat Evaluation Procedures, or other methods determined appropriate by the MBRT, including best professional judgement.

Permit for Disturbing Marl, Sand, Shell, or Gravel on State-Owned Land. Persons violating the provisions of Chapter 86 are subject to penalties of $500 per day. (PARKS & WILDLIFE CODE ANN. §86.020).

Agency's Authority to Regulate or Condition Listed Action to Satisfy TCMP Policy

Certification of a Federal Permit for the Discharge of Dredged or Fill Material. The Railroad Commission is required to adopt rules and issue permits as necessary to prevent pollution of surface and subsurface water related to oil and gas exploration and production activities (TEX. NAT. RES. CODE ANN. §91.101).

Certification of a Federal Permit for the Discharge of Dredged or Fill Material. After a public hearing, notice of which shall be given to the permittee, the TNRCC may require the permittee to conform to new or additional conditions (TEX. WATER CODE ANN. §26.029).

Acquisition of a Site for the Placement or Disposal of Dredged Material From, or the Expansion, Relocation, or Alteration of, the Gulf Intracoastal Waterway. Section 6(d) of article 5415e-2 requires the Texas Transportation Commission to coordinate with appropriate state and federal agencies whenever its proposed acquisitions will potentially have a significant environmental impact or effect on coastal public lands, coastal marshes and similar areas, wildlife, or fisheries.

Mineral Lease Plan of Operations. The Texas land commissioner may include in the lease any provision the commissioner considers necessary for protection of the interests of the state (TEX. NAT. RES. CODE ANN. §53.016(b)).

Geophysical or Geochemical Permit. The commissioner may make rules relating to geophysical or geochemical exploration, permits, or permittees the commissioner considers appropriate (TEX. NAT. RES. CODE ANN. §52.324 and §53.163).

Miscellaneous Easement. The grant of a miscellaneous easement may contain any provisions that the commissioner considers necessary to protect the interests of the state (TEX. NAT. RES. CODE ANN. §51.305).

Surface Lease. If an application for a surface lease is granted, the School Land Board shall determine the reasonable terms, conditions, and considerations for the lease (TEX. NAT. RES. CODE ANN. §33.104).

Structure Registration and Coastal Easement. None.

Coastal Lease. The SLB has the authority to determine the reasonable terms, conditions, and consideration for a coastal lease (TEX. NAT. RES. CODE ANN. §33.104).

Cabin Permit. The School Land Board may not grant an application for a cabin permit which would violate the public policy of this state (TEX. NAT. RES. CODE ANN. §33.129).

Navigation District Lease. After submission of evidence, the School Land Board shall authorize the issuance or denial of the proposed navigation district lease and shall determine any other conditions necessary to best serve the interests of the general public (TEX. WATER CODE ANN. §61.116).

Agency or Subdivision Wetlands Mitigation Bank. The GLO must approve a mitigation bank prior to the establishment and maintenance of such a bank (TEX. REV. CIV. STAT. ANN. art. 5421(u)).

Permit for Disturbing Marl, Sand, Shell, or Gravel on State-Owned Land. The Parks and Wildlife Commission shall manage, control, and protect marl and sand of commercial value and all gravel, shell, and mudshell located within the tidewater limits of the state and on islands within those limits, and within the freshwater areas of the state not embraced by a survey of private land, and on islands within those areas (PARKS & WILDLIFE CODE ANN. §86.001).

POLICY CATEGORY 11: CONSTRUCTION IN THE BEACH/DUNE SYSTEM

State Agency Action and Managed Uses

GLO - Certification of Local Government Beach Access or Dune Protection Plan (TEX. NAT. RES. CODE ANN. §33.2053(a)(10))

Certain local governments are required to adopt and implement programs for the preservation of dunes and enhancement of use of and access to and from public beach (31 TAC §15.3(a)). The plans regulate activities that could destroy or promote erosion of public beaches and other coastal public resources. They encourage environmentally sound erosion response methods and discourage methods such as rigid shorefront structures which can have a harmful impact on the environment (31 TAC §15.1(5)).

Local Government - Dune Protection Permit that Authorizes Construction Activity that is Located 200 Feet or Less Landward of the Line of Vegetation and that Results in the Disturbance of more than 7,000 Square Feet of Dunes or Dune Vegetation, Construction Activity that Results in the Disturbance of more 7,500 Cubic Yards of Dunes, or a Coastal Shore Protection Project Undertaken on a Gulf Beach or 200 Feet or Less Landward of the Line of Vegetation that Affects more than 500 Linear Feet of Gulf Beach (TEX. NAT. RES. CODE ANN. §§33.2053(I)(1)-(3))

Damaging, destroying, or removing a sand dune or portion of a sand dune seaward of a dune protection line or within a critical dune area or killing, destroying, or removing in any manner any vegetation growing on a sand dune seaward of a dune protection line or within a critical dune area (TEX. NAT. RES. CODE ANN. §63.091). Prohibited land and water use: construction of any barrier, obstruction, or restraint that will interfere with the public's right to enter, leave, or use any public beach or any larger area abutting on or contiguous to a public beach if the public has acquired a right of use or easement or has retained a right by virtue of continuous right in the public (TEX. NAT. RES. CODE ANN. §61.013).

Local Government - Beachfront Construction Certificate that Authorizes Construction Activity that is Located 200 Feet or Less Landward of the Line of Vegetation and that Results in the Disturbance of More than 7,000 Square Feet of Dunes or Dune Vegetation, a Coastal Shore Protection Project Undertaken on a Gulf Beach or 200 Feet or Less Landward of the Line of Vegetation that Affects More than 500 Linear Feet of Gulf Beach, or a Closure, Relocation, or Reduction in Existing Public Beach Access or Public Beach Access Designated in an Approved Local Government Beach Access Plan, Other than for a Short Term(TEX. NAT. RES. CODE ANN. §§33.2053(I)(1),(3), and (4))

The certificate regulates construction that could destroy and erode public beaches and other coastal public resources (31 TAC §15.1(5)).

Policies

The GLO shall comply with the policies in this category when certifying local government dune protection and beach access plans and adopting rules under the Texas Natural Resources Code,

Chapters 61 and 63. Local governments required by the Texas Natural Resources Code, Chapters 61 and 63, and 31 TAC Chapter 15 (relating to Coastal Area Planning) to adopt dune protection and beach access plans shall comply with the applicable policies in this category when issuing beachfront construction certificates and dune protection permits.

Construction in critical dune areas and adjacent to Gulf beaches shall comply with the policies in this category.

A. Construction within a critical dune area that results in the material weakening of dunes and material damage to dune vegetation shall be prohibited.

B. Construction within critical dune areas that does not materially weaken dunes or materially damage dune vegetation shall be sited, designed, constructed, maintained, and operated so that adverse "effects" (as defined in 31 TAC §15.2, relating to Coastal Area Planning) on the sediment budget and critical dune areas are avoided to the greatest extent practicable. Practicability shall be determined by considering the effectiveness, scientific feasibility, and commercial availability of the technology or technique. Cost of the technology or technique shall also be considered. Adverse effects (as defined in 31 TAC Chapter 15, relating to Coastal Area Planning) that cannot be avoided shall be:

   i. minimized by limiting the degree or magnitude of the activity and its implementation;

   ii. rectified by repairing, rehabilitating, or restoring the adversely affected dunes and dune vegetation; and

   iii. compensated for on-site or off-site by replacing the resources lost or damaged seaward of the dune protection line.

C. Rectification and compensation for adverse effects that cannot be avoided or minimized shall provide at least a one-to-one replacement of the dune volume and vegetative cover, and preference shall be given to stabilization of blowouts and breaches and on-site compensation.

D. The ability of the public, individually and collectively, to exercise its rights of use of and access to and from public beaches shall be preserved and enhanced.

E. Nonstructural erosion response methods such as beach nourishment, sediment bypassing, nearshore sediment berms, and planting of vegetation shall be preferred instead of structural erosion response methods. Subdivisions shall not authorize the construction of a new erosion response structure within the beach/dune system, except for a retaining wall located more than 200 feet landward of the line of vegetation. Subdivisions shall not authorize the enlargement, improvement, repair or maintenance of existing erosion response structures on the public beach. Subdivisions shall not authorize the repair or maintenance of existing erosion response structures within 200 feet landward of

the line of vegetation except as provided in 31 TAC 15.6(d) of this title (relating to Concurrent Dune Protection and Beachfront Construction Standards).

Management Authority and Administration

Under Chapter 61 of the Texas Natural Resources Code and 31 TAC Chapter 15, the GLO and the Office of the Attorney General (OAG) are responsible for protecting the public's right to use and have access to and from the public beach, and for providing standards to the local governments certifying that construction on land adjacent to the Gulf of Mexico is consistent with such public rights.

Coastal development is the primary activity the GLO manages under the Open Beaches Act (Chapter 61 of the Texas Natural Resources Code), the Dune Protection Act (Chapter 63 of the Texas Natural Resources Code), and Texas Water Code, Chapter 16. GLO jurisdiction extends to the construction of public, residential, commercial, and industrial structures that affect the critical dune areas, Gulf beaches, and coastal hazard areas. Amendments to the above-mentioned acts in 1991 required the GLO to promulgate rules for the protection of coastal sand dunes and to ensure the public's right to use of and access to the public beach. The GLO must comply with the policies in this category when certifying local government dune protection and beach access plans.

The beachfront construction certification area is the land adjacent to and landward of public beaches and lying in the area either up to the first public road not parallel to the beach, or the area up to 1,000 feet of mean high tide, whichever distance is greater (31 TAC §15.3(c)). Critical dune areas are all dunes and dune complexes located within 1,000 feet of mean high tide of the Gulf of Mexico (31 TAC §15.3(d)). Local governments without certified plans cannot permit construction within the jurisdiction of the Dune Protection and Open Beaches Acts (31 TAC §15.3(p)).

Local governments have direct management authority over coastal development but are subject to GLO and OAG oversight. The Open Beaches Act and Dune Protection Act require local governments to adopt dune protection and beach access plans that comply with the GLO rules for management of the beach/dune system. Local governments can fund, directly engage in, or permit construction activities affecting the beach/dune system. Local governments required by the Texas Natural Resources Code, Chapters 61 and 63, and 31 TAC Chapter 15 (relating to Coastal Area Planning) to adopt dune protection and beach access plans must comply with the GLO rules and the policies in this category when issuing beachfront construction certificates and dune protection permits.

The beachfront construction certification area is the land adjacent to and landward of public beaches and lying in the area either up to the first public road not parallel to the beach, or the area up to 1,000 feet of mean high tide, whichever distance is greater (31 TAC §15.3(c)).

Critical dune areas are within 1,000 feet of mean high tide and are essential to the protection of state-owned land, public beaches, and submerged land (TEX. NAT. RES. CODE ANN. §63.121). Permits are required within the critical dune area or seaward of the dune protection line (TEX. NAT. RES. CODE ANN. §63.0091).

Exemptions

Certification of Local Government Beach Access or Dune Protection Plan. National park areas, national wildlife refuges, or other designated national natural areas; state park areas, state wildlife refuges, or other designated state natural areas; and beaches on islands and peninsulas not accessible by public road or ferry are exempt from local government plans (31 TAC §15.3(q)).

Beachfront Construction Certificate. Beachfront certification for construction does not prevent any agency or subdivision of the state or federal government from erecting or maintaining any groin, seawall, barrier, pass, channel, jetty, or other structure as an aid to navigation, protection of the shore, fishing, safety, or other lawful purpose authorized by the constitution or laws of Texas or the United States (TEX. NAT. RES. CODE ANN. §61.022).

Dune Protection Permit. The following activities are exempt from permit requirements but are subject to requirements of the Open Beaches Act and local laws: (1) exploration for and production of oil and gas and reasonable and necessary activities directly related to such exploration and production; (2) grazing livestock and reasonable and necessary activities directly related to grazing; and (3) recreational activities other than operation of a recreational vehicle (31 TAC §15.3(s)(2)).

Variances

Certification of Local Government Beach Access or Dune Protection Plan. There is no provision authorizing variances from the requirements for certification of local government plans.

Dune Protection Permit and Beachfront Construction Certificate. A local government shall inform the GLO and the FEMA regional representative before it issues any variance from FEMA regulations or allows any activity in variance of FEMA's regulations (31 TAC §15.6(e)(2)).

Monitoring and Enforcement

Certification of Local Government Beach Access or Dune Protection Plan. Any person or local government who violates the Dune Protection Act, the Open Beaches Act, or a permit or a certificate condition is liable to the GLO for a civil penalty of not more than $1,000 per violation per day (31 TAC §15.9).

Beachfront Construction Certificate. Any person or local government who violates a certificate condition is liable to the GLO for a civil penalty of not more than $1,000 per day (31 TAC §15.9). The GLO may assist the attorney general in enforcement (TEX. NAT. RES. CODE ANN. §61.011).

Dune Protection Permit. Any person or local government who violates the Dune Protection Act, the Open Beaches Act, or a permit or certificate condition is subjected to a civil penalty of not less than $50 nor more than $1,000 per violation per day (31 TAC §15.9).

Agency's Authority to Regulate or Condition Listed Action to Satisfy TCMP Policy

Certification of Local Government Beach Access or Dune Protection Plan. The commissioners court or other governing body of the municipality may include in a permit the terms and conditions it finds necessary to assure the protection of life, natural resources, and property (TEX. NAT. RES. CODE ANN. §63.055).

Beachfront Construction Certificate. Certification is issued pursuant to the public policy of the state which upholds the public right to ingress and egress to and from state-owned beaches within the scope described under "Agency Action and Managed Uses" above. The public policy forbids interference with safe and healthy use of state beaches (TEX. NAT. RES. CODE ANN. §61.011).

Dune Protection Permit. The commissioners court or governing body of the municipality may include in a permit the terms and conditions it finds necessary to assure the protection of life, natural resources, and property (TEX. NAT. RES. CODE ANN. §63.055).

POLICY CATEGORY 12: DEVELOPMENT IN COASTAL HAZARD AREAS

Policies

1. Subdivisions participating in the National Flood Insurance Program shall adopt ordinances or orders governing development in special hazard areas under Texas Water Code, Chapter 16, Subchapter I, and Texas Local Government Code, Chapter 240, Subchapter Z, that comply with construction standards in regulations at Code of Federal Regulations, Title 44, Parts 59-60, adopted pursuant to the National Flood Insurance Act, 42 United States Code Annotated, §§4001 *et seq.*

2. Pursuant to the standards and procedures under the Texas Natural Resources Code, Chapter 33, Subchapter H, the GLO shall adopt or issue rules, recommendations, standards, and guidelines for erosion avoidance and remediation and for prioritizing critical erosion areas.

Management Authority and Administration

The National Flood Insurance Program is a voluntary federal program in which local governments may participate. The purpose of the program is to make flood insurance coverage available for those communities that encourage sound land use by minimizing exposure of property to flood loss. Local governments have the state authority to implement the federal regulations under Texas Water Code, Chapter 16, Subchapter I, governing flood insurance, and Texas Local Government Code, Chapter 240, Subchapter Z, governing land use regulation for flood control in coastal counties. The construction standards under Code of Federal Regulations, Title 44, Parts 59-60, adopted pursuant to the National Flood Insurance Act (42 U.S.C.A. §4001 *et seq.*) establish minimum bottom-floor elevations and require that structures be designed for resistance to wind and water loads.

Under Texas Natural Resources Code, Chapter 33, the GLO is responsible for coordinating a plan and promulgating rules for coastal erosion avoidance and remediation. See "Shoreline Erosion Response" in Chapter Six, "Special Planning."

POLICY CATEGORY 13: DEVELOPMENT WITHIN COASTAL BARRIER RESOURCE SYSTEM UNITS AND OTHERWISE PROTECTED AREAS ON COASTAL BARRIERS

State Agency Action and Managed Uses

TNRCC - Creation of a Special Purpose District or Approval of Bonds for the Purpose of Construction of Infrastructure on Coastal Barriers (TEX. NAT. RES. CODE ANN. §33.2053(f)(4))

Levee improvement districts are created to construct and maintain levees along rivers, streams, and creeks; regulate drainage; and perform other improvements of reclaimed land (TEX. WATER CODE ANN. §57.091). Irrigation districts are created to deliver untreated water for irrigation and to provide for drainage of lands (TEX. WATER CODE ANN. §58.121). Navigation districts are created for purposes reasonably related to the promotion of navigation (TEX. WATER CODE ANN. §61.116). Special utility districts may be created to provide water to towns, cities, and other political subdivisions of this state, to private business entities, and to individuals (TEX. WATER CODE ANN. §65.012). Stormwater control districts are created to control stormwater and floodwater and to prevent area and downstream flooding in all or part of a watershed (TEX. WATER CODE ANN. §66.012).

TxDOT - Transportation Construction Project or Maintenance Program (TEX. NAT. RES. CODE ANN. §33.2053(d)(2))

Texas Transportation Commission approvals of plans for the location, construction, and maintenance of the state highway system and public roads and of the location, construction, and maintenance of individual state highway system projects.

Policies

TNRCC rules and approvals for the creation of special districts and for infrastructure projects funded by issuance of bonds by water, sanitary sewer, and wastewater drainage districts under Texas Water Code, Chapter 50; water control and improvement districts under Texas Water Code, Chapter 50; municipal utility districts under Texas Water Code, Chapter 54; regional plan implementation agencies under Texas Water Code, Chapter 54; special utility districts under Texas Water Code, Chapter 65; stormwater control districts under Texas Water Code, Chapter 66; and all other general and special law districts subject to and within the jurisdiction of the TNRCC, shall comply with the policies in this category.

TxDOT rules and approvals under Texas Civil Statutes, article 6663 *et seq.*, governing planning, design, construction, and maintenance of transportation projects, shall comply with the policies in this category.

Development of new infrastructure or major repair of existing infrastructure within or supporting development within Coastal Barrier Resource System Units and Otherwise Protected Areas designated on maps dated October 24, 1990, under the Coastal Barrier Resources Act, 16 United States Code Annotated, §3503(a), shall comply with the policies in this category.

A. Development of publicly funded infrastructure shall be authorized only if it is essential for public health, safety, and welfare, enhances public use, or is required by law.

B. Infrastructure shall be located at sites at which reasonably foreseeable future expansion will not require development in critical areas, critical dunes, Gulf beaches, and washover areas within Coastal Barrier Resource System Units or Otherwise Protected Areas.

C. Infrastructure shall be located at sites that to the greatest extent practicable avoid and otherwise minimize the potential for adverse effects on critical areas, critical dunes, Gulf beaches, and washover areas within Coastal Barrier Resource System Units or Otherwise Protected Areas from:

   i. construction and maintenance of roads, bridges, and causeways; and

   ii. direct release to coastal waters, critical areas, critical dunes, Gulf beaches, and washover areas within Coastal Barrier Resource System Units or Otherwise Protected Areas of oil, hazardous substances, or stormwater runoff.

D. Where practicable, infrastructure shall be located in existing rights-of-way or previously disturbed areas to avoid or minimize adverse effects within Coastal Barrier Resource System Units or Otherwise Protected Areas.

E. Development of infrastructure shall occur at sites and times selected to have the least adverse effects practicable within Coastal Barrier Resource System Units or Otherwise Protected Areas on critical areas, critical dunes, Gulf beaches, and washover areas and on spawning or nesting areas or seasonal migrations of commercial, recreational, threatened, or endangered terrestrial or aquatic wildlife.

Management Authority and Administration

The TNRCC has the statutory authority to create and supervise certain water and water-related districts and to approve the issuance and sale of bonds for a district's construction of infrastructure in accordance with Texas Water Code, Chapters 50-52, 54, 65, and 66. TNRCC rules and approvals for the creation of special districts or for infrastructure projects funded by issuance of bonds by water, sanitary sewer, and wastewater drainage districts; water control and improvement districts; municipal utility districts; regional plan implementation agencies; special utility districts; stormwater control districts; and all other general and special law districts within the TNRCC's jurisdiction must comply with the policies in this category.

A district may include the area in all or part of any one or more counties including all or part of any cities and other public agencies. The land composing a district is not required to be contiguous, but may consist of separate bodies of land separated by land that is not included in the district (TEX. WATER CODE ANN. §65.013).

The purpose of the TNRCC's oversight of district creation and projects is to ensure that the districts fulfill their obligation under article III, §52, and article XVI, §59, of the Texas Constitution to conserve and develop the natural resources of the state in a manner not contrary

to the public health, safety, and welfare. Regulations in 30 TAC Chapters 293 and 301 authorize the TNRCC to review certain information when deciding whether to approve creation of a district or the use of bonds to finance construction of infrastructure. This includes the location of the infrastructure, land and floodwater elevations, areas to be filled, existing hydrologic conditions, floodplain boundaries, and the effects of the infrastructure on stormwater runoff and water quality.

TxDOT rules and approvals governing planning, design, construction, and maintenance of transportation projects under Texas Civil Statutes, article 6663 *et seq.*, must comply with the policies in this category. TXDOT's authorities and guidelines regarding transportation projects are described in this chapter under Policy Category 16, "Transportation."

The Texas Transportation Commission is authorized to locate, construct, maintain, and operate the state highway system (TEX. REV. CIV. STAT. ANN. art. 6674w-1). This authority includes the power of eminent domain (TEX. REV. CIV. STAT. ANN. art. 6674w-3).

Exemptions

Creation of a Special Purpose District or Approval of Bonds for the Purpose of Construction of Infrastructure on Coastal Barriers. None.

Transportation Construction Project or Maintenance Program. None.

Variances

Creation of a Special Purpose District or Approval of Bonds for the Purpose of Construction of Infrastructure on Coastal Barriers. None.

Transportation Construction Project or Maintenance Program. None.

Monitoring and Enforcement

Creation of a Special Purpose District or Approval of Bonds for the Purpose of Construction of Infrastructure on Coastal Barriers. The executive director of the TNRCC has access to all the financial records of a special purpose district (TEX. WATER CODE ANN. §50.376). Special purpose districts are required to undergo annual audits which are subject to review by the executive director of the TNRCC (TEX. WATER CODE ANN. §50.371 *et seq.*). Districts which do not comply with the audit requirements are subject to civil penalties of $100 per day (TEX. WATER CODE ANN. §50.374).

Transportation Construction Project or Maintenance Program. Not applicable.

Agency's Authority to Regulate or Condition Listed Action to Satisfy TCMP Policy

Creation of a Special Purpose District or Approval of Bonds for the Purpose of Construction of Infrastructure on Coastal Barriers. If a proposed district does not conform to legal requirements or is not feasible, practicable, necessary, or a benefit to the land in the

district, the TNRCC may deny the creation of the district (TEX. WATER CODE ANN. §65.021).

Transportation Construction Project or Maintenance Program. The Texas Transportation Commission is required to conduct environmental reviews of all highway projects not otherwise subject to the National Environmental Policy Act (42 U.S.C.A. §4321 *et seq.*). The environmental review process provides for public comment, the analysis of project alternatives, the evaluation of direct and indirect effects, and the mitigation of environmental harm (TEX. REV. CIV. STAT. ANN. art. 6673g and 43 TAC §§11.80-11.90). The Commission is also required to adopt a memorandum of understanding with each state agency that has responsibilities for the protection of the natural environment so as to coordinate the review of the environmental impacts of highway projects.

POLICY CATEGORY 14: DEVELOPMENT IN STATE PARKS, WILDLIFE MANAGEMENT AREAS, OR PRESERVES

State Agency Action and Managed Uses

TPWD - Development by a Person Other than the Texas Parks and Wildlife Department that Requires the Use or Taking of any Public Land in a State Park, Wildlife Management Area, or Preserve
(TEX. NAT. RES. CODE ANN. §33.2053(h)(4))

Development efforts in state parks, wildlife management areas, and preserves, including the construction of park improvements and access roads. All state parks, wildlife management areas, and preserves within the coastal zone are covered.

Policies

Development by a person other than the Texas Parks and Wildlife Department that requires the use or taking of any public land in such areas shall comply with Parks and Wildlife Code Chapter 26.

Management Authority and Administration

Chapter 26 of the Parks and Wildlife Code limits development on protected lands. The statute states that a governmental entity of the state may not approve any program or project that requires the use or taking of any public land designated and used as a park, recreation area, scientific area, wildlife refuge, or historic site unless the approving entity determines that (1) there is no feasible and prudent alternative to the use or taking of such land; and (2) the program or project includes all reasonable planning to minimize harm to the land, for purposes for which it is designated, resulting from the use or taking. There are also provisions for consideration of local preferences for the area, public notice, public hearings, and judicial reviews. The Parks and Wildlife Commission's environmental policy directs the TPWD to use sound principles of natural resource management in all activities and in operation of department facilities.

The Texas Coastal Preserve System established in October 1987 can be used to protect and restore specific state-owned areas for their conservation, ecological, and aesthetic values. The Coastal Preserve System was established through a Memorandum of Agreement (MOA) between the General Land Office and the Texas Parks and Wildlife Department. The MOA provides for: (1) a coastal preserve coordinator to be designated at each agency to ensure that all concerns are addressed, (2) development of a list of candidate sites with suggested goals and management activities to most effectively preserve the target natural resources, and (3) public meetings to be held near suggested preserve sites for open discussion of coastal preserve goals and management activities and for receipt of comments.

To date, four coastal preserves have been designated. South Bay is a 3,419-acre estuarine area at the southernmost extreme of the Laguna Madre. It comprises seagrass, algal flats, and mangrove habitats and a unique oyster population that has adapted to high salinity levels. Welder Flats is

an area of approximately 1,480 acres of submerged land across San Antonio Bay from the Aransas National Wildlife Refuge. This area is an important whooping crane habitat.

Armand Bayou is a 2,000-acre recreation and wilderness area adjacent to the Armand Bayou Nature Center in Harris County. It is surrounded by the heavy urban development of the Houston area. Christmas Bay, a shallow, 4,173-acre embayment adjacent to the Brazoria National Wildlife Refuge, is relatively unaffected by human activity. Though 15 threatened or endangered species have been seen in the area, the bay is best known for the mounds of oyster and clam shells that remain on its shores as evidence of previous occupation by the now extinct Karankawa Indians.

Exemptions

Development by a Person Other than the Texas Parks and Wildlife Department that Requires the Use or Taking of any Public Land in a State Park, Wildlife Management Area, or Preserve. None.

Variances

Development by a Person Other than the Texas Parks and Wildlife Department that Requires the Use or Taking of any Public Land in a State Park, Wildlife Management Area, or Preserve. Not applicable.

Monitoring and Enforcement

Development by a Person Other than the Texas Parks and Wildlife Department that Requires the Use or Taking of any Public Land in a State Park, Wildlife Management Area, or Preserve. The state auditor reviews contracts for construction and development on state properties including state parks, wildlife management areas, and preserves.

Agency's Authority to Regulate or Condition Listed Action to Satisfy TCMP Policy

Development by a Person Other than the Texas Parks and Wildlife Department that Requires the Use or Taking of any Public Land in a State Park, Wildlife Management Area, or Preserve. The department has broad authority to regulate planning for and development of park projects (31 TAC §59.31).

POLICY CATEGORY 15: ALTERATION OF COASTAL HISTORIC AREAS

State Agency Action and Managed Uses

THC - Permit for Destruction, Alteration, or Taking of a Coastal Historic Area (TEX. NAT. RES. CODE ANN. §33.2053(E)(1))

A permit is required for the taking, altering, damaging, destroying, salvaging, or excavating of state archeological landmarks. Permits are also required for site-assessment-related activities, such as surveys, testing, excavation, and preservation activities and for specially designated archeological landmarks on private property, as well as American Indian or aboriginal paintings (13 TAC §41.20 and §41.2).

THC - Review of a Federal Undertaking Affecting a Coastal Historic Area (TEX. NAT. RES. CODE ANN. §33.2053(E)(2))

Federal undertakings affecting property listed in the National Register or affecting property eligible for inclusion in the National Register. Such properties are nationally significant for their illustration or commemoration of the history or prehistory of the United States (36 CFR Part 800 and 36 CFR Part 60).

Policies

The Texas Historical Commission shall comply with the policies in this category when adopting rules and issuing permits under the Texas Natural Resources Code, Chapter 191, governing alteration of coastal historic areas. The THC shall comply with the policies in this category when issuing reviews under the National Historic Preservation Act, §106 (16 U.S.C.A. §470f), and the regulations enacted pursuant thereto (36 CFR Chapter 1, Part 63).

1. Development affecting a coastal historic area shall avoid and otherwise minimize alteration or disturbance of the site unless the site's excavation will promote historical, archaeological, educational, or scientific understanding.

Management Authority and Administration

The enabling legislation of the Texas Historical Commission directs the agency to protect and preserve the cultural resources of Texas. Cultural resources include archaeological sites, historical sites, and shipwrecks on land or underwater. For projects strictly on private property, the agency offers historic preservation advice. If the project requires a federal permit or involves federal funding, regardless of the land ownership, THC applies federal guidelines and rules under §106 of the National Historic Preservation Act (16 U.S.C.A. §470 *et seq.*). A permit is required for the taking, altering, or destruction of cultural resources on public land. The Texas Antiquities Code includes enforcement with misdemeanor criminal penalties (TEX. NAT. RES. CODE Chapter 191, §171) and injunctive relief (TEX. NAT. RES. CODE Chapter 191, §172). Members of the public also can file charges under Texas Natural Resources Code, Chapter 191, §173.

The THC must comply with the policies in this category when adopting rules and issuing permits under the Texas Natural Resources Code, Chapter 191, governing alteration of coastal historic areas. The THC must comply with the policies in this category when issuing reviews under the National Historic Preservation Act, §106 (16 U.S.C.A. §470f), and the regulations enacted pursuant thereto (36 CFR Part 800).

The Texas Historical Commission regulates and protects all State Archeological Landmarks under the Antiquities Code of Texas. The commission issues permits for this purpose. Civil and criminal penalties are provided for unpermitted destruction, damage, modification, or alteration of State Archeological Landmarks.

A State Archeological Landmark includes any cultural resource or site located in, on, or under the surface of any lands belonging to or controlled by the state, including submerged lands, or owned by any county, city, or other political subdivision of the state, as defined in the Texas Natural Resources Code, Title 9, Chapter 191, §191.003(4).

Through the consultation process, the federal agency and the state historic preservation officer (SHPO) consider alternatives to the proposed federal undertaking to avoid or otherwise minimize adverse impacts on both listed sites and eligible sites.

Exemptions

Permit for Destruction, Alteration, or Taking of a Coastal Historic Area. All landmarks require a permit except nonpublic interior spaces of historical structures. The public interior spaces which are not exempt are those which were originally intended for public use or those which are of overriding importance to the public because of any significant historical, architectural, cultural, or ceremonial value (13 TAC §41.22(a)(4)).

Review of a Federal Undertaking Affecting a Coastal Historic Area. The National Historic Preservation Act (NHPA) calls for federal agencies to take historic properties into account in their undertakings, and allows state consultation (through the THC) and public involvement in historic preservation matters. The term "undertaking" takes on a specific and important meaning in the NHPA, and applies only to federal agencies.

"Undertaking" means any project, activity, or program that can result in changes in the character or use of historic properties. The project, activity, or program must be under the direct or indirect jurisdiction of a federal agency or licensed or assisted by a federal agency. Undertakings include new and continuing projects, activities, or programs and any of their elements not previously considered under §106 of the NHPA (36 CFR, Part 800).

Thus, if there is no direct or indirect federal involvement in a project, activity, or program, these are not considered undertakings, and are exempted from regulation under the NHPA.

The Antiquities Code of Texas has jurisdiction over all state-owned or state-controlled lands, as defined above. Actions, projects, activities or programs taking place on privately owned lands are thus exempt from regulation under the Code.

Variances

Permit for Destruction, Alteration, or Taking of a Coastal Historic Area. No power to waive the responsibility of obtaining a permit is granted to the commission (TEX. NAT. RES. CODE ANN. §191.054).

Review of a Federal Undertaking Affecting a Coastal Historic Area. None.

Monitoring and Enforcement

Permit for Destruction, Alteration, or Taking of a Coastal Historic Area. Permits are usually granted for a period of two years or less (13 TAC §41.17(c)). Any member or agent of the commission and any officer in charge of land owned by the state may, at any time, visit the investigation site under permit and examine the permit, records, materials, and specimen being recovered (13 TAC §41.18).

Failure to comply with the rules of the commission or the terms of a permit may result in the cancellation of the permit by the commission and the immediate removal of all personnel and equipment from the site (13 TAC §41.3).

Review of a Federal Undertaking Affecting a Coastal Historic Area. The Commission seeks to ensure that all federal agencies proposing federal undertakings affecting listed and eligible sites in Texas comply with the consultation requirements of the NHPA and with any agreed alternatives following from such consultations.

Agency's Authority to Regulate or Condition Listed Action to Satisfy TCMP Policy

Permit for Destruction, Alteration, or Taking of a Coastal Historic Area. TEX. REV. CIV. STAT. ANN. art. 6145-9 authorizes the commission to provide for a system of permits and contracts for salvage of treasures embedded in the earth and the excavation or study of archeological and historical sites and objects.

Review of a Federal Undertaking Affecting a Coastal Historic Area. Before approval of a federal undertaking, the federal agency proposing the action must consult with the SHPO. The federal agency is not obligated to adopt the alternatives or conditions the SHPO proposes but is obligated to comply with applicable TCMP policies.

POLICY CATEGORY 16: TRANSPORTATION

State Agency Action and Managed Uses

TxDot - Transportation Construction Project or Maintenance Program (TEX. NAT. RES. CODE ANN. §33.2053(d)(2))

Texas Transportation Commission approvals of plans for the location, construction, and maintenance of the state highway system and public roads and of the location, construction, and maintenance of individual state highway system projects.

Policies

TxDOT rules and project approvals under Texas Civil Statutes, articles 6663b and 6663c, and Texas Civil Statutes, article 6674a *et seq.*, governing transportation projects within the coastal zone, shall comply with the policies in this category.

Transportation construction projects and maintenance programs within the coastal zone shall comply with the policies in this category.

A. Pollution prevention procedures shall be incorporated into the construction and maintenance of transportation projects to minimize pollutant loading to coastal waters from erosion and sedimentation, use of pesticides and herbicides for maintenance of rights-of-way, and other pollutants from stormwater runoff.

B. Transportation projects shall be located at sites that to the greatest extent practicable avoid and otherwise minimize the potential for adverse effects from construction and maintenance of additional roads, bridges, causeways, and other development associated with the project; and direct release to CNRAs of pollutants from oil or hazardous substance spills, contaminated sediments or stormwater runoff.

C. Where practicable, transportation projects shall be located in existing rights-of-way or previously disturbed areas if necessary to avoid or minimize adverse effects.

D. Where practicable, transportation projects shall be located at sites at which future expansion will not require development in coastal wetlands except where such construction is determined to be essential for evacuation in the case of a natural disaster.

E. Construction and maintenance of transportation projects shall avoid the impoundment and draining of coastal wetlands. If impoundment or draining cannot be avoided, adverse effects to the impounded or drained wetlands shall be mitigated in accordance with the sequencing requirements of Policy Category 8.

F. Construction of transportation projects shall occur at sites and times selected to have the least adverse effects practicable on recreational uses of CNRAs and on spawning or nesting seasons or seasonal migrations of terrestrial or aquatic species.

G. Beach-quality sand from maintenance of roadways adjacent to Gulf beaches shall be beneficially used by placement on Gulf beaches where practicable. Where placement on Gulf beaches is not practicable, the material shall be placed in critical dune areas.

Management Authority and Administration

TxDOT is responsible for statewide transportation plans and activities, including highways, aviation, mass transportation, railroads, high-speed rail, and water traffic under the authority of Texas Civil Statutes, articles 6663b and 6663c, and Texas Civil Statutes article 6674a *et seq.* Specific activities include the planning, construction, operation, and maintenance of the state highway and public road system (including associated bridges, culverts, and rights-of-way) and coordinating the planning, environmental review, land acquisition, and construction activities for general aviation non-reliever airports. TxDOT rules and project approvals governing transportation projects within the coastal zone must comply with the policies in this category.

Title 43, TAC, Chapter 11 sets out rules for highway planning, construction, operation and maintenance; interagency coordination and public involvement; and procedures for environmental assessments and environmental impact statements. Mechanisms to manage the planning and development of highways and roads are included in the *Procedures Manual for Highway Project Planning and Development*, which also sets up coordination procedures for all environmental concerns. Standards specifications include measures for erosion and sedimentation control, waste disposal, earthwork, and revegetation during construction. Funds can be withheld if a project does not meet specifications. Procedures for maintenance of highways are included in the *Maintenance and Operations Division Procedures Manual.*

Planning, design, construction, and improvement activities of general aviation airports are reviewed in accordance with NEPA and FAA guidelines, and appropriate environmental permits must be obtained prior to implementation. All airport construction projects must adhere to standard FAA construction guidelines and specifications, which also include measures for erosion and sedimentation control and stormwater runoff prevention.

The Texas Transportation Commission is authorized to locate, construct, maintain, and operate the state highway system (TEX. REV. CIV. STAT. ANN. art. 6674w-1). This authority includes the power of eminent domain (TEX. REV. CIV. STAT. ANN. art. 6674w-3).

Exemptions

Transportation Construction Project or Maintenance Program. None.

Variances

Transportation Construction Project or Maintenance Program. None.

Monitoring and Enforcement

Transportation Construction Project or Maintenance Program. Not applicable.

Agency's Authority to Regulate or Condition Listed Action to Satisfy TCMP Policy

Transportation Construction Project or Maintenance Program. The Texas Transportation Commission is required to conduct environmental reviews of all highway projects not otherwise subject to the National Environmental Policy Act (42 U.S.C.A. §4321 *et seq.*). The environmental review process provides for public comment, the analysis of project alternatives, the evaluation of direct and indirect effects, and the mitigation of environmental harm (TEX. REV. CIV. STAT. art. 6673g and 43 TAC §§11.80-11.90).

The Commission is also required to adopt a memorandum of understanding with each state agency that has responsibilities for the protection of the natural environment so as to coordinate the review of the environmental impacts of highway projects.

POLICY CATEGORY 17: EMISSION OF AIR POLLUTANTS

State Agency Action and Managed Uses

TNRCC - Rules governing emissions of air pollutants (TEX. NAT. RES. CODE ANN. §33.2051(b)(1))

Policies

TNRCC rules under Texas Health and Safety Code, Chapter 382, governing emissions of air pollutants, shall comply with regulations at Code of Federal Regulations, Title 40, adopted pursuant to the Clean Air Act, 42 United States Code Annotated, §7401 *et seq.*, to protect and enhance air quality in the coastal area so as to protect CNRAs and promote the public health, safety, and welfare.

Management Authority and Administration

Texas Health and Safety Code, Chapter 382, also referred to as the Texas Clean Air Act, establishes the authority of the TNRCC to adopt any rules necessary to carry out its duties under the Act, including the establishment of air quality standards and of a permitting program for air emissions. The TNRCC is also designated as the agency responsible for developing a comprehensive plan for proper control of air pollution sources.

Regulations in 30 TAC Chapters 111-114 address the control of air pollution from particulate matter, sulfur compounds, toxic materials, and mobile sources. Title 30, Chapter 115, addresses the control of air pollution from volatile organic compounds such as petroleum refining and petrochemical processes, solvent-using processes, and other miscellaneous industrial sources. Title 30, Chapter 116, sets forth permit requirements for new construction or modification, including detailed information concerning permit requirements, responsibility for obtaining a permit or exemption, consideration for granting permits to construct and operate facilities, special conditions, exempted facilities, and emergency orders for damaged facilities.

POLICY CATEGORY 18: APPROPRIATIONS OF WATER

State Agency Action and Managed Uses

TNRCC - New Permit for an Annual Appropriation of 5,000 or More Acre-Feet of Water Within the Program Boundary or 10,000 or More Acre-Feet of Water Outside the Program Boundary but Within 200 Stream Miles of the Coast (TEX. NAT. RES. CODE ANN. §33.2053(f)(8))

No person may appropriate any state water or begin construction of any work designed for the storage, taking, or diversion of water without first obtaining a permit from the TNRCC to make the appropriation (TEX. WATER CODE ANN. §11.121).

TNRCC - Amendment to a Water Permit for an Increase in an Annual Appropriation of 5,000 or More Acre-Feet of Water Within the Program Boundary or 10,000 or More Acre-Feet of Water Outside the Program Boundary but Within 200 Stream Miles of the Coast (TEX. NAT. RES. CODE ANN. §33.2053(f)(9))

All holders of permits must obtain permission to change the use, the place of use, purpose of use, point of diversion, rate of diversion, acreage to be irrigated, or otherwise alter a water right (TEX. WATER CODE ANN. §11.122).

TNRCC - Declaration of an Emergency and Request for an Emergency Release of Water (TEX. NAT. RES. CODE ANN. §33.2053(f)(7))

Upon a determination by the TNRCC that an emergency exists, the Texas Water Development Board may release unappropriated water and other water of the state stored in any facility acquired by and under the control of the board to relieve any emergency condition arising from drought, severe water shortage, or public calamity (TEX. WATER CODE ANN. §16.195). Facilities from which water may be released that can effectively relieve the emergency conditions arising from drought, severe water shortage, or public calamity.

Policies

The TNRCC rules and authorizations under Texas Water Code, Chapter 11, governing review and action on applications for new permits or amendments proposing changes to existing permits for diversions or impoundments of state water within 200 stream miles of the coast, and TNRCC rules and approvals governing creation of districts and issuance of district bonds for levee and flood control projects within the coastal zone, shall comply with the policies in this category.

Impoundments and diversion of state water within 200 stream miles of the coast, to commence from the mouth of the river thence inland, shall comply with the policies in this category.

A. The TNRCC shall administer the law so as to promote the judicious use and maximum conservation and protection of the quality of the environment and the natural resources of the state. It is the public policy of the state to provide for the conservation and

development of the state's natural resources, including:

i. the control, storage, preservation, and distribution of the state's storm and floodwaters and the waters of its rivers and streams for irrigation, power, and other useful purposes;

ii. the reclamation and irrigation of the state's arid, semiarid, and other land needing irrigation;

iii. the reclamation and drainage of the state's overflowed land and other land needing drainage;

iv. the conservation and development of its forest, water, and hydroelectric power;

v. the navigation of the state's inland and coastal waters; and

vi. the maintenance of a proper ecological environment of the bays and estuaries of Texas and the health of related living marine resources.

B. In this policy category, "beneficial inflows" means a salinity, nutrient, and sediment loading regime adequate to maintain an ecologically sound environment in the receiving bay and estuary system that is necessary for the maintenance of productivity of economically important and ecologically characteristic sport or commercial fish and shellfish species and estuarine life upon which such fish and shellfish are dependent.

C. In its consideration of an application for a permit to store, take, or divert water, the TNRCC shall assess the effects, if any, of the issuance of the permit on the bays and estuaries of Texas. For permits issued within an area that is within 200 river miles of the coast, to commence from the mouth of the river thence inland, the TNRCC shall include in the permit, to the greatest extent practicable when considering all public interests, those conditions considered necessary to maintain beneficial inflows to any affected bay and estuary system.

D. For the purposes of making a determination under paragraph (C), the TNRCC shall consider among other factors:

i. the need for periodic freshwater inflows to supply nutrients and modify salinity to preserve the sound environment of the bay or estuary, using any available information, including studies and plans specified in and other studies considered by the TNRCC to be reliable; together with existing circumstances, natural or otherwise, that might prevent the conditions imposed from producing benefits;

ii. the ecology and productivity of the affected bay and estuary system;

iii. the expected effects on the public welfare of not including in the permit some or all of the conditions considered necessary to maintain the beneficial inflows to the affected bay or estuary;

iv. the quantity of water requested and the proposed use of water by the applicant, as well as the needs of those who would be served by the applicant;

v. the expected effects on the public welfare of the failure to issue all or part of the permit being considered; and

vi. for the purposes of this policy, the declarations as to preferences for competing uses of water as found in Texas Water Code, §11.024 and §11.033, as well as the public policy statement in paragraph (A).

E. In its consideration of an application to store, take, or divert water, the TNRCC shall consider the effect, if any, of the issuance of the permit on existing instream uses and water quality of the stream or river to which the application applies. The TNRCC shall also consider the effect, if any, of the issuance of the permit on fish and wildlife habitats.

F. On receipt of an application for a permit to store, take, or divert water, the TNRCC shall send a copy of the permit application and any subsequent amendments to the TPWD. In making a final decision on any application for a permit, the TNRCC, in addition to other information, evidence, and testimony presented, shall consider all information, evidence, or testimony presented by the TPWD and the TWDB.

G. Permit conditions relating to beneficial inflows to affected bays and estuaries and instream uses may be suspended by the TNRCC if the TNRCC finds that an emergency exists and cannot practically be resolved in other ways. Before the TNRCC suspends a permit, it must give written notice to the TPWD of the proposed suspension. The TNRCC shall give the TPWD an opportunity to submit comments on the proposed suspension within 72 hours from such time and the TNRCC shall consider those comments before issuing its order imposing the suspension.

H. In its consideration of an application for a permit under this policy, the TNRCC shall assess the effects, if any, of the issuance of the permit on water quality in coastal waters. In its consideration of an application for a permit to store, take, or divert water in excess of 5,000 acre-feet per year, the commission shall assess the effects, if any, of the issuance of the permit on fish and wildlife habitats and may require the applicant to take reasonable actions to mitigate adverse effects on such habitat. In determining whether to require an applicant to mitigate adverse effects on a habitat, the TNRCC may consider any net benefit to habitat produced by the project. The TNRCC shall offset against any mitigation required by the United States Fish and Wildlife Service pursuant to Code of Federal Regulations, Title 33, §§320-330, any mitigation authorized by this policy.

I. Unappropriated water and other water of the state stored in any facility acquired by and under the control of the TWDB may be released without charge to relieve any emergency condition arising from drought, severe water shortage, or other calamity, if the TNRCC first determines the existence of the emergency and requests the TWDB to release the water.

J. Five percent of the annual firm yield of water in any reservoir and associated works constructed with state financial participation within 200 river miles of the coast, to commence from the mouth of the river thence inland, is appropriated to the TPWD for use to make releases to bays and estuaries and for instream uses, and the TNRCC shall issue permits for this water to the TPWD under procedures adopted by the TNRCC. This applies only to reservoirs and associated works on which construction begins on or after September 1, 1985. This policy does not limit or repeal any other authority of or law relating to the TPWD or the TNRCC.

K. The TWDB, in coordination with the TNRCC and TPWD, shall identify ways to assist in providing flows to meet instream needs, including protection of water quality, protection of terrestrial or aquatic wildlife habitat, and bay and estuary inflow needs, in the implementation of the Texas Water Bank, Texas Water Code, Chapter 15, Subchapter K. This may include, but not be limited to, the purchase by the TPWD and/or the TWDB of water rights deposited in the Texas Water Bank in order to provide for existing instream uses and beneficial inflows to bays and estuaries if funds are available and such purchase is not prohibited by law. The TNRCC shall facilitate the approval of any necessary permit amendments to achieve this purpose.

L. An applicant for a new or amended water right permit shall submit a water conservation plan in accordance with 30 TAC §295.9 (relating to Conservation Plan). The TNRCC shall consider the information contained in the conservation plan in determining whether any feasible alternative to the proposed appropriation exists, whether the proposed amount to be appropriated as measured at the point of diversion is reasonable and necessary for the proposed use, the term and other conditions of the water right and to ensure that reasonable diligence will be used to avoid waste and achieve water conservation. Based upon its review, the TNRCC may deny or grant, in whole or in part, the requested appropriation.

Management Authority and Administration

The TNRCC has sole authority for the regulation and management of surface water rights in Texas, as authorized by Chapter 11 of the Texas Water Code. The TNRCC rules and authorizations governing review and actions on applications for new permits, or amendments proposing changes to existing permits for diversion or impoundments of state water within 200 stream miles of the coast, must comply with the policies in 31 TAC §501.14(r). TNRCC rules and approval governing the creation of districts and issuance of district bonds for levee and flood control projects within the coastal zone must also comply with these policies.

Title 30, Chapter 288, of the Texas Administrative Code establishes guidelines and minimum requirements for water conservation plans required by the TNRCC regulatory programs, including water rights administration. Title 30, Chapter 295, contains content and notice requirements for a water right application. Title 30, Chapter 299, establishes regulations to provide for the safe construction, maintenance, repair, and removal of dams. Title 30, Chapter 301, contains procedures for authorizing the construction of a levee or other improvement, including channel improvements, drainage works, and other projects on, along, or near any stream in order to control, regulate, or otherwise change the floodwater of the stream.

Title 30, Chapter 297, sets forth conditions, restrictions, limitations, and/or provisions reasonably necessary for TNRCC approval or denial of a new or amended water right permit and defines the limits and responsibilities of all water right holders. For water right applications within 200 stream miles of the coast, the TNRCC must include in the water right permit those conditions necessary to maintain beneficial inflows to any affected bay and estuary system. On an application to amend a water right, including an amendment for the sale or transfer of conserved water, the commission must consider the instream needs for water quality, aquatic and riparian habitat, bays and estuaries, and other public purposes. The TNRCC may reserve from appropriation water necessary to protect these instream uses by placing limitations and conditions on the amended water right. These may include stream flow restrictions to protect existing water right holders, water quality, aquatic fish and wildlife habitat, inflows for bays and estuaries, and recreational uses; habitat mitigation measures; and water conservation measures.

The commission regulates all waters of the state, including every bay or arm of the Gulf of Mexico and including any water imported from any source outside the boundaries of the state for use in the state and which is transported through the beds and banks of any navigable stream within the state or by utilizing any facilities owned or operated by the state (TEX. WATER CODE ANN. §11.021).

Exemptions

New Permit for an Annual Appropriation of Water and Amendment to a Water Permit. A person who is drilling and producing petroleum and conducting operations associated with drilling and producing petroleum may take a certain amount of state water from the Gulf of Mexico and adjacent bays and arms of the Gulf of Mexico without a permit (TEX. WATER CODE ANN. §11.142). Without obtaining a permit a person engaged in mariculture on land may take a certain amount of state water from the Gulf of Mexico and adjacent bays and arms of the Gulf of Mexico (TEX. WATER CODE ANN. §11.1421).

Declaration of an Emergency and Request for an Emergency Release of Water. None.

Variances

New Permit for an Annual Appropriation of Water and Amendment to a Water Permit. None.

Declaration of an Emergency and Request for an Emergency Release of Water. None.

Monitoring and Enforcement

New Permit for an Annual Appropriation of Water and Amendment to a Water Permit. Permit conditions may be suspended by the commission if an emergency exists and cannot practically be solved in other ways (TEX. WATER CODE §11.148). Persons unlawfully using state water may be subject to civil penalties of $1,000 per day (TEX. WATER CODE ANN. §11.082).

Declaration of an Emergency and Request for an Emergency Release of Water. The Texas Parks and Wildlife Commission and other resource agencies of the state may monitor for emergency conditions and may petition the commission for an emergency determination where circumstances warrant.

Agency's Authority to Regulate or Condition Listed Action to Satisfy TCMP Policy

New Permit for an Annual Appropriation of Water and Amendment to a Water Permit. The TNRCC may require amendment of the application, maps, or other materials to achieve necessary compliance (TEX. WATER CODE ANN. §11.129).

Declaration of an Emergency and Request for an Emergency Release of Water. Where emergency conditions are adversely affecting an estuary or other coastal natural resource area, an emergency determination may be issued to address such adverse effects.

POLICY CATEGORY 19: LEVEE AND FLOOD CONTROL PROJECTS

State Agency Action and Managed Uses

TNRCC - Levee Improvement or Flood Control Projects (TEX. NAT. RES. CODE ANN. §33.2053(f)(5))

The TNRCC must approve construction, attempted construction, or maintenance of any levee or other such improvement on, along, or near any stream of this state that is subject to floods, freshets, or overflows so as to control, regulate, or otherwise change the floodwater of the stream (TEX. WATER CODE ANN. §16.233). The TNRCC must approve levee improvement district proposed plans of reclamation, which include the application filed by a levee improvement district. The application is composed of the U.S. Army Corps of Engineers district engineer's reclamation report, which shall include economic data, maps, profiles, and results of land surveys, and the preliminary plan for levees or other improvements (30 TAC §301.4).

Policies

TNRCC rules and approvals for the levee construction, modification, drainage, reclamation, channelization, or flood- or floodwater-control projects, pursuant to the Texas Water Code, §16.236, shall comply with the policies in this category.

1. Drainage, reclamation, channelization, levee construction or modification, or flood- or floodwater-control infrastructure projects shall be designed, constructed, and maintained to avoid the impoundment and draining of coastal wetlands to the greatest extent practicable. If impoundment or draining of coastal wetlands cannot be avoided, adverse effects to the wetlands shall be mitigated in accordance with the sequencing requirements found in the critical areas policy.

Management Authority and Administration

TNRCC rules and approvals for levee construction or modification, drainage, reclamation, channelization, or flood or floodwater control projects, pursuant to Texas Water Code §16.236, must comply with the policies in this category. Texas Water Code §16.236 requires that the TNRCC approve plans before anyone can construct or maintain a levee or other such improvement on, along, or near any state stream that is subject to floods, freshets, or overflows in order to control, regulate, or otherwise change the floodwater of the stream. 30 TAC Chapter 301 establishes rules for TNRCC review and approval of levee district reclamation plans and plans for levees and other improvements, such as channel improvements and drainage works. The TNRCC may approve, approve with modifications, or disapprove the following specific plans.

1. **Preliminary Engineering Plans for Levees or Other Improvements Pursuant to Texas Water Code Chapter 16**. These plans should clearly reflect the design concept and indicate how the design was developed, including the location and extent of the proposed works; the location and ownership of similar existing works such as levees, channels, reservoirs, and dams; ownership of properties that are within or adjacent to, or that may be affected by, the project; and

certain flood data. The purpose of the review of these plans is to determine whether a project appears safe and is compatible with existing hydraulic conditions in the area. 30 TAC §301.34 establishes criteria for approval of preliminary engineering plans. These include structural integrity; compatibility with existing hydraulic conditions; consideration of possible deleterious effects; safety to ensure that the project will not increase flooding or divert waters in such a way that any person's life or property will be endangered or subjected to significantly increased flooding or will create a public hazard; protection of third parties' rights; and consideration of topographic and hydrographic conditions.

2. **Final Engineering Plans and Specifications for Levees or Other Improvements Pursuant to Texas Water Code §16.236.** Title 30, Texas Administrative Code, §301.38 establishes specific requirements for final channel excavation plans and final levee and dike construction plans.

3. **As-Built Plans.** These are the engineering plans and specifications for levees or other improvements that reflect the structures as actually built and for which preliminary plans were approved.

4. **Proposed Plans of Reclamation.** A proposed plan of reclamation is an application filed by a levee improvement district and composed of the district engineer's reclamation report. Upon approval, a proposed plan becomes a plan of reclamation.

Projects must be inspected during construction and receive final certification by the TNRCC that they are in compliance with approved plans. Failure to comply with approved plans and specifications during construction, enlargement, repair, or alteration may result in revocation of the approval and/or civil penalties. The TNRCC may order the structure removed to eliminate a safety hazard to life and property.

Exemptions

Levee Improvement or Flood Control Projects. No commission approval is required for dams constructed by a person on his/her own property which impounds or contains 200 acre-feet of water or less, certain levees within the corporate limits of a city or town or within a political subdivision which has qualified for the National Flood Insurance Program as authorized by the National Flood Service, or projects implementing soil and water conservation practices approved by a soil and water conservation district (TEX. WATER CODE ANN. §16.236).

Texas Water Code §16.236 exempts the following projects.

1. Dams permitted by the TNRCC, recognized as valid by final decree in a proceeding under Subchapter G, Chapter 11 of the Texas Water Code or authorized by Texas Water Code §11.142.

2. Levees or other improvements within the corporate limits of a city or town, provided (a) plans of construction and/or maintenance are approved by the city or town, and (b) the city or town requires that plans be in substantial compliance with rules and standards adopted by the TNRCC.

3. Levees or improvements within the boundaries of any political subdivision which has qualified for the National Flood Insurance Program, provided (a) plans for the construction and/or maintenance are approved by the political subdivision, and (b) the political subdivision requires that such plans be in substantial compliance with rules and standards adopted by the TNRCC.

4. Projects implementing soil and water conservation practices in an approved conservation plan, provided that the governing board of a soil and water conservation district finds that the practices do not significantly affect stream flooding conditions on, along, or near a state stream.

The TNRCC should be notified about these projects but is not required to approve the plans. Exempt projects located within the corporate limits of a city or town or within the boundaries of a political subdivision can be appealed by potentially affected parties to the TNRCC. If the appeal is accepted by the TNRCC for a hearing, the project is reviewed according to the TNRCC procedural rules (30 TAC Chapter 301). The commission regulates all activities specified in paragraph 1 within the state.

Variances

Levee Improvement or Flood Control Projects. Any person seeking a variance is required to file a petition with the commission. A person must have demonstrated continuous and substantial progress toward compliance before the date of petition (30 TAC §101.15).

Monitoring and Enforcement

Levee Improvement or Flood Control Projects. Representatives of the executive director of the commission may enter any land or go on any water with appropriate equipment for the purpose of surveillance and inspection with reference to the proposed location of levees or other improvements (30 TAC §301.2). Persons in violation of an approval requirement are subject to civil penalties of $100 per day (TEX. WATER CODE ANN. §16.236).

Agency's Authority to Regulate or Condition Listed Action to Satisfy TCMP Policy

Levee Improvement or Flood Control Projects. The executive director may request any additional pertinent information from the applicant which he deems necessary to evaluate the effects of a proposed project before the submission of the application to the commission (30 TAC §301.35).

POLICY CATEGORY 20: POLICY FOR MAJOR ACTIONS

1. For purposes of these policy categories, "major action" means an individual agency or subdivision action listed in §505.11 of this title (relating to Actions and Rules Subject to the Coastal Management Program), §506.12 of this title (relating to Federal Actions Subject to the Coastal Management Program), or §505.60 of this title (relating to Local Government Actions Subject to the Coastal Management Program), relating to an activity for which a federal environmental impact statement under the National Environmental Policy Act, 42 United States Code Annotated, §4321 *et seq.* is required.

2. Prior to taking a major action, the agencies and subdivisions having jurisdiction over the activity shall meet and coordinate their major actions relating to the activity. The agencies and subdivisions shall, to the greatest extent practicable, consider the cumulative and secondary adverse effects, as described in the federal environmental impact assessment process, of each major action relating to the activity.

3. No agency or subdivision shall take a major action that is inconsistent with the goals and policies of this chapter. In addition, an agency or subdivision shall avoid and otherwise minimize the cumulative adverse effects to CNRAs of each of its major actions relating to the activity.

POLICY CATEGORY 21: ADMINISTRATIVE POLICIES

1. Agency and subdivision rules and ordinances subject to the TCMP goals and policies, as provided in 31 TAC §501.10 (relating to Compliance with Goals and Policies), shall:

   A. require applicants to provide information necessary for an agency or subdivision to make an informed decision on a proposed action listed in 31 TAC §505.11 (relating to Actions and Rules Subject to the Coastal Management Program) or 31 TAC §505.60 (relating to Local Government Actions Subject to the Coastal Management Program);

   B. identify the monitoring established to ensure activities authorized by actions listed in 31 TAC §505.11 (relating to Actions and Rules Subject to the Coastal Management Program) or 31 TAC §505.60 (relating to Local Government Actions Subject to the Coastal Management Program) comply with all applicable requirements;

   C. identify circumstances in which agencies and subdivisions have the authority to issue variances from standards or requirements for the protection of CNRAs, including the grounds for granting variances; and

   D. take into account the national interest as defined in the Texas Submission Document, Chapter Nine.

2. A threshold for referral adopted by an agency under the provisions of 31 TAC Chapter 505 (relating to Council procedures for consistency reviews) of this title shall be set at a level that is reasonably calculated to ensure that actions that may have unique and significant adverse effects on CNRAs are above the threshold for referral.

E. Advisory Policies

The TCMP recommends that the following policies be observed within the TCMP boundary.

Planning

P-1 Local governments are encouraged to protect CNRAs and guide development to areas where the necessary infrastructure already exists.

P-2 Local governments are encouraged to develop comprehensive plans or regional master plans that set appropriate density limits in specified coastal areas and allow for adequate open space.

P-3 Local governments are encouraged to develop comprehensive plans, economic development plans, or master plans that address the appropriate location and design of tourist attractions.

P-4 Local governments are encouraged to develop comprehensive plans, master plans, or other appropriate means to discourage development in designated coastal hazard areas and other areas specifically protected under the TCMP.

P-5 The appropriate state agencies are encouraged to pursue or provide funding for studying the feasibility of transporting sediment impounded behind watershed dams to the estuaries and the Gulf of Mexico.

P-6 Local and regional governments are encouraged to develop outdoor recreation plans or master plans that allow for the orderly and environmentally sustainable development of outdoor recreation opportunities necessary for coastal citizens and tourists.

P-7 State-designated regional planning agencies are encouraged to develop planning guides or regional plans that address the overall growth of the coastal zone, area-wide problems, and issues of common concern.

Acquisition

A-1 State agencies, local governments, federal agencies, and private nonprofit entities are strongly encouraged to acquire coastal lands (including coastal wetlands) to conserve CNRAs.

Conservation/Preservation

CP-1 Local governments are encouraged to develop plans or other mechanisms that designate areas for preservation of CNRAs and for educational and scientific research on CNRAs where commercial development will be limited to activities supporting these management functions (e.g., ecotourism).

CP-2 Local governments and state agencies are encouraged to work cooperatively with landowners to further the goals and policies of the TCMP, including considering the use of economic incentives whenever possible.

CP-3 Local governments are strongly encouraged to establish water conservation programs.

CP-4 Consideration should be given to the reuse of dredged material disposal sites for such purposes as the development of public parks, recreation areas, bird sanctuaries, or other wildlife habitat.

Restoration

R-1 Restoration of previously degraded or destroyed coastal wetlands is strongly encouraged.

R-2 Restoration and stabilization of eroding shorelines with vegetation is encouraged.

R-3 Restoration of urban waterfront areas is encouraged.

Research/Education

RE-1 Research and education about living and other natural resources of the coast, including terrestrial and aquatic wildlife habitat and coastal processes, is encouraged as long as it does not adversely affect CNRAs.

RE-2 Research on coastal management issues (e.g., cumulative and secondary adverse effects of resource uses) and conflicts between competing uses is strongly encouraged.

Pollution Prevention/Recycling

PP-1 Source reduction, recycling, and pollution prevention are strongly encouraged.

PP-2 Waterfront facility operators are encouraged to establish recycling programs and to provide recycling containers on the premises.

Coastal Hazard Areas

CH-1 Designated coastal hazard areas should be used passively, such as for parks or open space, rather than for intensive development.

CH-2 Floodplain and watershed management and other nonstructural solutions to flooding should receive preference over the erection of dams or flood control structures.

CH-3 Environmentally compatible restoration of eroded coastal shorelines is encouraged.

CH-4 Where effective, sediment bypassing is encouraged in the construction and retrofitting of dams on rivers that flow into the coastal zone, and at new and existing jetties, groins, and other structures that interrupt sediment transport to the coastal sand budget.

CH-5 Removal of existing erosion response structures having a negative impact on natural coastal processes is encouraged.

CH-6 Activities that accelerate the natural coastal erosion process or increase coastal flood hazards should be avoided.

CH-7 The placement of sand on Gulf beaches (e.g., from the maintenance of roadways or public rights-of-way) where it can benefit the coastal sand budget is encouraged.

CH-8 Local governments and state and federal agencies, in issuing approvals for or undertaking coastal and shore protection projects, are encouraged to require a monitoring program to study the effects of the projects on CNRAs and natural coastal processes.

CH-9 Local governments are encouraged to develop long-range plans for financing and executing beach nourishment projects.

CH-10 The use of setbacks by local governments for new construction in eroding coastal shore areas is encouraged.

CH-11 The relocation of structures threatened by coastal shoreline erosion is encouraged.

CH-12 Local governments and state agencies are encouraged to avoid investing in infrastructure or facilities that support development in critical erosion areas.

CH-13 In areas of subsidence, local governments and state agencies are encouraged to ensure that critical areas and coastal shore areas are maintained by appropriate management of groundwater resources.

CH-14 Construction in washover areas is discouraged.

CH-15 The minimizing of boat wakes to reduce coastal shoreline erosion is encouraged.

Coastal Barriers

CB-1 Construction on coastal barriers should avoid adverse effects on critical areas, Gulf beaches, critical dune areas, coastal hazard areas, and washover areas.

CB-2 Construction on coastal barriers should be sited to avoid or minimize the potential for adverse effects on critical areas, Gulf beaches, critical dune areas, coastal hazard areas, or washover areas.

CB-3 Local governments and state agencies are encouraged to restrict the expenditure of state and local funds for infrastructure on undeveloped coastal barriers not within the Coastal Barrier Resources System or otherwise protected areas.

Coastal Shore Areas

CSA-1 Local governments are encouraged to protect coastal shore areas that provide habitat protection, protect uplands from erosion and coastal flooding, prevent degradation of coastal water quality from stormwater runoff, and protect public access.

CSA-2 Local governments are encouraged to permit construction only in shore areas where it will not adversely affect critical areas, Gulf beaches, critical dune areas, coastal hazard areas, or washover areas.

CSA-3 Runoff from construction located within coastal shore areas should be controlled to avoid adverse effects on critical areas, Gulf beaches, critical dune areas, coastal hazard areas, and washover areas.

CSA-4 Local governments are encouraged to promote the use of vegetated buffers between construction within coastal shore areas and critical areas, Gulf beaches, critical dune areas, coastal hazard areas, or washover areas.

CSA-5 Construction within coastal shore areas should be sited to avoid or minimize the potential for adverse effects on critical areas, Gulf beaches, critical dune areas, coastal hazard areas, or washover areas.

CSA-6 Local governments are encouraged to consider sea level rise (projected for 50 years) in designing and constructing new development.

Water Quality

WQ-1 Persons engaged in agriculture are encouraged to employ best management practices to prevent nonpoint-source pollution.

WQ-2 Local governments are encouraged to use best management practices to avoid or minimize nonpoint-source pollution from urban areas.

WQ-3 Reduced use of pesticides and fertilizers for agriculture and in residential and commercial areas is encouraged to reduce contamination of surface waters.

Public Access/Recreation

PA-1 The recreational and conservation potential of surplus federal lands near CNRAs should be given priority when a decision on the disposition of the land is being made.

PA-2 Local governments are encouraged to improve public access to bay shores.

PA-3 Safe public access for fishing in coastal waters from bridge ramps is encouraged.

PA-4 Boaters are encouraged to avoid adversely affecting submerged aquatic vegetation and coastal wetlands (e.g., propwashing and scarring).

PA-5 The use of personal motorized craft in a manner that will adversely affect critical areas is discouraged.

Visual/Scenic Access

V-1 Provisions for scenic buffer areas around active industrial sites in or near CNRAs are encouraged.

V-2 Visual compatibility of new facilities/activities in or near CNRAs with surrounding natural resources and development is encouraged (e.g., scale, height, materials, color, texture, and geometry of building and site design).

V-3 Scenic vistas of the Gulf, beaches, wetlands, and other CNRAs should be preserved.

V-4 Structures which are visually compatible with natural surroundings should be utilized in recreational areas (e.g., building and grounds design, materials, and color) in or near CNRAs.

V-5 Removal of abandoned structures from CNRAs is encouraged.

Fisheries Management

F-1 Designation of artificial reef development zones is encouraged.

Construction/Development

CD-1 Drainage plans and construction measures for industrial, commercial, and residential development in or near CNRAs should provide for the lessening or elimination of erosion, water quality degradation, and other negative impacts on adjacent CNRAs.

CD-2 Design and construction options which promote dune creation, dune vegetation, or revegetation of coastal wetlands are encouraged.

CD-3 The use of marsh buggies in critical areas is discouraged.

CD-4 Locating new nuclear energy facilities and nuclear fuel processing facilities outside the TCMP boundary is encouraged because proximity to coastal waters increases exposure to hurricanes, tidal surges, and other coastal hazards that could damage such facilities and create the risk of contamination of CNRAs.

CD-5 In siting residential development, developers and builders are encouraged to locate structures away from designated coastal hazard areas and to provide a buffer between development and coastal shore areas.

CD-6 Persons engaged in industrial, commercial, and residential development and associated activities in the coastal zone are encouraged to locate such development and activities in areas where adequate human resources and infrastructure already exist.

CD-7 The provision of buffer areas around CNRAs to protect the resource and enhance the visual compatibility of development is encouraged.

CD-8 Persons engaged in development and construction in the coastal zone are encouraged to reduce the discharge of total suspended solids (TSS) during construction by the use of erosion and sediment control best management practices (BMPs) which are approved under the EPA NPDES stormwater control program.

CD-9 Persons engaged in development and construction in the coastal zone are encouraged to avoid activities that contribute to erosion and sediment loss.

CD-10 Persons engaged in development or construction in the coastal zone are encouraged to preserve areas that provide important water quality benefits or that are necessary to maintain riparian areas and aquatic life.

CD-11 Persons, local governments, and state and federal agencies engaged in development or construction in the coastal zone are encouraged to protect the integrity of water bodies and natural drainage systems.

CD-12 Persons, local governments, and state and federal agencies engaged in development and construction in the coastal zone are encouraged to reduce erosion and retain sediment on-site during and after construction.

CD-13 Local governments and state and federal agencies charged with regulating construction and other development are encouraged to conduct a cost/benefit analysis comparing the economic benefits of the development with its economic costs, including the environmental costs resulting from any adverse effects of the development on CNRAs.

Silviculture/Agriculture

SA-1 Persons engaged in agriculture in the coastal zone are encouraged to implement the range and pasture components of a Conservation Management System as defined in the Field Office Technical Guide of the USDA Natural Resources Conservation Service by applying the progressive planning approach to reduce soil erosion.

SA-2 Persons engaged in silviculture are encouraged to plan and operate normal ongoing forestry activities (including harvesting, road design and construction, site preparation and regeneration, and chemical management) to adequately protect aquatic functions of forested coastal wetlands.

SA-3 Persons engaged in silviculture and agriculture are encouraged to use best management practices developed by the Texas Agricultural Extension Service, Texas Agricultural Experiment Station, Texas Forest Service, State Soil and Water Conservation Board, and USDA Natural Resources Conservation Service to avoid and minimize adverse effects on CNRAs.

CHAPTER FIVE.
ENSURING COMPLIANCE WITH PROGRAM POLICIES

A. Introduction

The TCMP is implemented through agencies' and subdivisions' existing legal authorities. Each agency or subdivision which exercises a networked authority is legally bound to comply with the goals and policies of the TCMP. This obligation is set out in §33.205(a) of the Act:

> "An agency or subdivision that takes an agency or subdivision action listed in §33.2051 or §33.2053 that may adversely affect a coastal natural resource area shall comply with the goals and policies of the coastal management program."

The Act and Council rules identify the agencies and their authorities that are networked into the TCMP. This enhances enforceability of the TCMP by clearly delineating the scope of the TCMP. Section 33.2051 of the Act lists the permits and other individual authorizations that are subject to this requirement. Adoption and amendment of rules governing these authorizations, as well as certain other rules, are listed in §33.2053 and also constitute actions subject to this requirement. Chapter 501 includes citations for the statutes under which these authorizations are issued and these rules are adopted.

B. Consistency of Agency Rules: the Council's Primary Tool

The Council has the authority and ability to review proposed permits and other individual agency actions listed in §33.2051 for compliance with the TCMP. However, the Council's primary means of enforcing the goals and policies of the TCMP will be review and certification of the agency rules listed in §33.2053. The Council will certify agency rules that "incorporate or otherwise require compliance with" the goals and policies. Because an agency must comply with its own rules, incorporating the goals and policies into agency rules ensures that the agency will exercise its networked authorities consistent with the TCMP. Simply put, if an agency's rules are consistent, then its actions should be consistent.

To encourage agencies to seek certification of rules, the Act provides incentives in the form of more restrictive procedural prerequisites for Council review of agency actions. If an agency obligates itself in its rules to comply with the TCMP, the Council can comfortably limit its authority to review that agency's actions. The incentives are integral to the TCMP's design because they allow the Council's finite time and resources to be focused on formulation of policy. As designed, the Council should be directly involved in implementation of policy only when an individual agency action involves potentially large or serious impacts or an agency displays a pattern of failing to comply with the TCMP.

1. Incentives for Rule Certification: Thresholds

Once an agency's rules are certified, the agency can adopt "consistency review thresholds," which are quantitative or qualitative measures of the potential impacts an action may have on coastal resources. Thresholds limit the council's authority to review an agency's actions.

Thresholds must be reasonably calculated to describe actions with "unique and significant" effects. The Council can review an action below thresholds only if it is the subject of a formal adjudicative hearing under the Administrative Procedure Act (APA) (TEX. GOV. CODE ANN. Chapter 2001) and may directly and adversely affect a critical area, critical dune area, coastal preserve, or gulf beach.

2. Rule Certification Procedures

An agency follows the same procedures to receive Council approval of thresholds that it follows to obtain Council certification of rules or rule amendments under Chapter 505 of the Council's rules. This chapter allows for certification of existing rules, new rules, and rule amendments. While the procedures are somewhat different, the result of certification is the same for all of these.

Whether or not an agency intends to seek certification of a proposed new rule or rule amendment, the Act and Council rules requires the rule or amendment to comply with the TCMP goals and policies. Section 505.22 also requires the agency to notify the council of the proposed rule or amendment. Before a rule or amendment is adopted, the public and Council members will submit to the agency any comments on the consistency of the rule or amendment.

The agency may request "pre-certification review" of a proposed new rule or amendment. The purpose of pre-certification review is to maximize opportunities to coordinate agency rules, to facilitate effective and efficient implementation of the TCMP, and to identify and correct possible inconsistencies in the draft rule or draft rule amendment prior to its proposal and publication in the *Texas Register*.

Upon adoption of the new rule or rule amendment, the agency may submit it to the Council for certification of consistency with the TCMP goals and policies. Under 31 TAC §505.23(c), an agency may seek expedited certification of a rule or rule amendment if the agency provides appropriate notice in advance that it will seek expedited review and if it has submitted the draft rule or rule amendment to the Council for pre-certification review.

If the Council finds that the rule incorporates or otherwise requires the agency to comply with the applicable TCMP goals and policies, the Council issues a written certification of the rule. If the rule is not consistent with the TCMP goals and policies, the Council issues a written statement denying certification of the rule with recommended changes that would result in rule certification.

The Council may deny certification based only on the consistency issues raised in comments to the agency from: (1) the Council and the public during the pre-certification review period; (2) the public during the public comment period for the proposed rule; or (3) the Executive Committee during expedited review. Additionally, the Council may also deny certification if, upon adoption, substantial changes are made to the proposed rule or rule amendment that raise new consistency issues.

The Council's denial must be written and must include recommendations to make the rule or amendment consistent, as specified under 31 TAC §505.23(b). It is anticipated that the

Council and the agency will work to correct any deficiency during the period after the agency has decided to adopt the amendment but before the amendment takes legal effect. By law, this period is at least 20 days after the adopted rule is published in the *Texas Register*.

3. Ensuring Compliance: Decertification

The Council's main administrative compliance mechanism is issuance of a "Notice of Program Deficiency." The Council may issue the notice either if an agency fails to take corrective action after the Council has denied certification of a rule or amendment, or if the Council finds that an agency has implemented certified rules in a manner that is inconsistent with the goals and policies of the TCMP. The Council may make the latter finding either in response to an agency rulemaking action or on its own initiative.

In accordance with 31 TAC §505.25, the notice must set forth the alleged deficiency, the basis for alleging the deficiency, and any recommended steps the agency should take to correct the deficiency within a specified time period. The time allowed to correct the deficiency will be determined on a case-by-case basis, taking into account the scope of the program or rule and the nature of the deficiencies. The adequacy of an agency's corrective response will be similarly judged. To be adequate, the response must satisfactorily explain why the alleged deficiency does not exist, implement the Council's recommendations, or propose other ways to correct the deficiency.

If the Council finds the alleged deficiencies have not been corrected or adequately explained, it can then vote to revoke the agency's rule certification with respect to those parts of the agency's rules affected by the amendment. Once the Council revokes certification, the agency does not receive the benefits of thresholds specified under 31 TAC §505.21 and many of the procedural prerequisites for referral of actions to the Council under 31 TAC §505.32 do not apply.

Decertification results in invalidation of the agency's thresholds, resulting in a greater likelihood that the Council may review individual agency actions. Consequently, decertification is a powerful administrative tool to ensure that agencies comply with the TCMP on an ongoing basis. It constitutes the Council's determination that closer Council scrutiny of the agency's future actions is needed to ensure the agency properly implements the TCMP.

It is not the Council's sole remedy, however. Therefore, Council rules do not make revocation of certification mandatory. This allows the Council to pursue other remedies. For example, the Council may seek an attorney general's opinion on the validity of the agency rule or enter into alternative dispute resolution with the agency.

The Council or an affected party may also challenge the consistency of an agency rule or rule amendment judicially under the APA. The Coastal Coordination Act requires certain agency rules to be consistent with the goals and policies of the TCMP. Section 2001.038 of the APA authorizes actions for declaratory judgments challenging the validity of agency rules. Whether or not it has requested certification, the agency must affirm that it has taken into account the goals and policies of the TCMP by issuing a reasoned determination that the rule or rule

amendment is consistent with the TCMP goals and policies. This provides the basis for a challenge under the APA.

Agencies seeking certification of rules have entered into memoranda of agreement or passed resolutions committing to seek Council certification of the consistency of any future amendments to their rules. The agreements and resolutions are contained in Appendix E.

While an important component of TCMP implementation, enforcement of the TCMP is not dependent upon certification of agency rules. An action subject to the program must be consistent with the goals and policies of the TCMP, regardless of whether or not the agency rules governing that action have been certified.

C. Consistency of Permits and Other Individual Actions

Section 33.205(b) of the Coastal Coordination Act requires that agencies and subdivisions proposing an action subject to the program affirm that the action is consistent with the goals and policies of the TCMP. This determination must be in writing in the order, permit, or other document approving or authorizing the action. Therefore, rules, orders, permits, or authorizations must contain the conditions, restrictions or limitations necessary to justify the determination of consistency.

There is only one exception to the requirement that an action be consistent with the goals and policies of the TCMP. Under 31 TAC §501.30, consistency is not required if an agency determines that adverse effects from an action will be neither direct nor significant. A finding of no direct and significant adverse effect is a form of the consistency determination under §33.205(b) of the Act and is therefore subject to administrative and judicial challenges in the same manner as an agency consistency determination.

The finding of no direct and significant adverse effect on coastal natural resource areas under (CNRAs) 31 TAC §505.30(c) is very specific to the facts and circumstances of each proposed action. By definition, the term "direct" pertains simply to causation and the term "significant" relates simply to whether an impact is measurable. Therefore, an action has a direct and significant adverse effect if detectable or observable impacts on CNRAs can be causally linked to the activity authorized by the action.

There will be few circumstances in which actions above thresholds will qualify for the 31 TAC §505.30(c) exception. By definition, these actions are anticipated to have appreciable impacts. Under 31 TAC §501.13(b), actions above thresholds are those that "may have significant impacts." The only situation in which findings of no significant adverse effects should be made for actions above thresholds are those cases in which an agency adopts a zero threshold. Overall, large numbers of findings under 31 TAC §505.30(c) are not anticipated.

1. Means of Ensuring Consistency of Individual Actions

There are three independent and effective means of enforcing the goals and policies of the TCMP, each based on the consistency determination required by §33.205(b) of the Act.

1. The networked agencies and subdivisions can take administrative action against private parties to enforce the existing authorities that are linked together into the TCMP. For example, permit conditions necessary to achieve TCMP consistency can be enforced through all means available to networked agencies. These existing enforcement powers typically include assessment of administrative penalties and fines or revocation of the agency authorization or approval. If administrative action does not achieve compliance, the agency or subdivision can pursue civil or criminal litigation through referral of the matter to the attorney general.

2. The Council can administratively review agency and subdivision consistency determinations. If the Council disagrees with an agency's or subdivision's determination and the agency or subdivision does not correct the problem, the Council can pursue litigation through referral of the matter to the attorney general.

3. Third parties (citizens, agencies, or local governments) who would be affected by an agency consistency determination can administratively challenge it. For example, an affected party can challenge agency consistency determinations in a formal adjudicative hearing or contested case hearing before an agency. Affected parties can also pursue litigation to challenge the result of the hearing.

These three enforcement techniques are described in more detail below.

2. Action by a Networked Agency or Subdivision

Networked agencies and subdivisions bear primary responsibility for implementing the TCMP. They ensure that land and water uses affecting the coastal zone comply with the TCMP goals and policies. The duty of each line agency to enforce the TCMP is clear in the Act. Section 33.208(a) of the Act mandates that the agency or subdivision with jurisdiction over a proposed action "shall enforce" the provisions of the TCMP applicable to that action.

Existing law authorizes each networked agency to undertake administrative enforcement actions for violation of the terms or conditions of a permit issued under authorities networked in the TCMP. (See, for example, Chapter 361, Texas Health and Safety Code (Texas Solid Waste Disposal Act); Chapter 382, Texas Health and Safety Code (Texas Clean Air Act); and Chapter 26, Texas Water Code (Texas Water Quality Act).) In 1991, the Texas Legislature adopted far-reaching amendments to the statutes cited above providing for strong criminal sanctions for violations of these statutes.

Each agency exercising a networked authority is bound by the Act and Chapter 505 to conformance with the relevant enforceable policies in the TCMP. Listed permits or authorizations must contain the conditions, restrictions or limitations necessary to ensure they are consistent with the TCMP goals and policies, as affirmed by the consistency determination the Act requires to be included in the permit or authorization. These conditions, restrictions, or limitations can serve as the basis for administrative enforcement actions by networked agencies as required by §33.208(a) of the Act.

If administrative remedies are not successful, the agency can refer the matter to the attorney general to seek judicial sanctions under these statutes. While the Council has no direct authority to review enforcement decisions by agencies and subdivisions, a pattern of failure to enforce can constitute inconsistent implementation of the TCMP goals and policies and result in issuance of a Notice of Program Deficiency by the Council.

3. Action by a Non-Networked Agency or Subdivision

The TCMP is designed to ensure that all state agencies and subdivisions will adhere to the TCMP goals and policies, even those that are not directly networked into the program. Any action or authorization which may adversely affect a CNRA--whether undertaken by a networked or non-networked agency or subdivision--must be consistent with the TCMP. All actions which may adversely affect a CNRA are specifically listed in the enabling legislation and the TCMP rules. These actions must be consistent with the TCMP, regardless of whether the entity seeking approval for the action is a person, corporation, or a networked or non-networked agency or subdivision.

The list of state and subdivision actions subject to the TCMP is comprehensive. For example, TxDOT transportation projects may adversely affect CNRAs and are thus specifically listed in the statute and TCMP rules. In addition, the Chairman of the Texas Transportation Commission sits on the Council, ensuring effective coordination of transportation projects. Construction of wastewater treatment projects is also subject to the TCMP, even though the allocation of State Revolving Fund monies by the Texas Water Development Board is not an action subject to the TCMP. Operation of a wastewater treatment plant requires at least one permit subject to the TCMP--a wastewater discharge permit. As in this example, actions by non-networked agencies which affect CNRAs are thus effectively managed through the TCMP.

4. Council Review of Individual Actions

The Act grants the Council authority to review agency and subdivision consistency determinations regarding proposed permits and other individual actions. The Council reviews ensure that these authorizations contain the conditions and restrictions necessary for consistency with the TCMP goals and policies. Pursuant to the Coastal Coordination Act Section 33.205(3), agency denial of an action is not subject to review by the Council. However, applicants whose permit is denied may still appeal the agency decision under existing state procedures inlcuding the Texas Administrative Procedures Act.

The function of the Council, however, is not simply to second-guess agencies and subdivisions. Rather, it is to resolve potentially time-consuming, costly conflicts among agencies, subdivisions, affected parties, permit applicants, and others. Consequently, the existence of a significant unresolved dispute over a proposed action's consistency with the goals and policies of the TCMP is a substantive prerequisite for Council review. If all parties agree that an action complies with the goals and policies, there is no need for the Council to take action.

The consistency determination required by §33.205(b) serves as the basis for Council review. The agency's determination and the conditions, restrictions, or limitations necessary to

support it, must be developed and integrated into the agency's process for evaluating and informing the public of the proposed action. This ensures that consistency issues are not set aside until the last moment or only raised on Council review. It also creates an avenue for affected parties, including the public, to comment on an agency's implementation of the state's uniform coastal policies. It is the means of calling to the Council's attention any unresolved conflicts over the proposed action.

The Act and Council rules include a "preliminary review" process which gives agencies, subdivisions, and applicants the opportunity to request recommendations with respect to the consistency of a proposed action. The preliminary review process is expected to resolve disputes over the consistency of proposed actions and therefore reduce the number of proposed actions referred to the Council for resolution. Either an agency proposing a permit or other individual action or the permit applicant may request a preliminary finding that the permit or action "is likely to be found consistent" with the goals and policies of the TCMP.

The Act also provides for the Council to establish a process by which an "individual or small business" may request and receive assistance in filing applications for permits or other proposed actions. An individual or small business can also obtain a preliminary finding of consistency. The preliminary review and permitting assistance processes allow the Council members to interact with and obtain information from the agency or subdivision with jurisdiction over the proposed action regarding the approvability of the proposed action.

The EC can issue a preliminary consistency finding only after accepting and considering public comment, and if sufficient information is available to evaluate the consistency of the action. For the EC to issue an unqualified finding, an administratively complete application must be filed and the permitting agency must have had the opportunity to fully and accurately describe both the proposed activity and its impacts on CNRAs, consider the public comments, and produce a draft permit or provide some other document containing all applicable conditions or limitations to be placed on the activity. To the extent this information is not available to the EC, the EC must place the appropriate qualifications on any findings it issues.

The term "likely to be found consistent" means that the proposed permit or action would be found consistent if reviewed by the Council. If the EC issues a preliminary finding of consistency, the Council may review the proposed action only if the agency or subdivision has substantially changed the permit or action subsequent to the issuance of the preliminary finding.

The Act and Council rules also establish the procedures by which a proposed action may come before the Council for formal review. These procedural requirements ensure that consistency issues are raised early and are clearly and unambiguously articulated so that the networked agency or subdivision can resolve them. They also ensure that disputes elevated to the Council are significant. The agency or subdivision, not the Council, has the first obligation to resolve the consistency dispute in this networked program. Unless there are clear and substantial questions about that determination, the Council will defer to the agency or subdivision.

The Council may review proposed actions if the following three conditions are met:

- The consistency determination for the proposed action is contested by: (1) a Council member or an agency that was a party in a formal hearing under the APA, or in an alternative dispute resolution process; or (2) a Council member or other person by the

  filing of written comments with the agency before the action was proposed, if the proposed action is one for which a formal hearing under the APA is not available.

- A person described in the paragraph above files a request for referral within ten days after the agency has proposed the action for which consistency review is sought alleging a significant unresolved dispute regarding the proposed action's consistency with the goals and policies of the TCMP.

- Any three regular members of the Council agree, within 13 days after the agency has proposed the action for which referral has been requested, that there is a significant unresolved dispute regarding the consistency of the proposed action with the goals and policies of the TCMP and the matter is placed on the agenda for a Council meeting.

The decision of the Council to review a proposed action is purely discretionary; therefore, no one has a right to have the Council review a proposed action except the Council members themselves.

Once an agency's rules have been certified and consistency review thresholds are in effect, additional conditions must be met before the Council may review a proposed action below the threshold:

- The action must directly and adversely affect a critical area, critical dune area, coastal preserve, or gulf beach and if a state agency has contested the consistency determination under the APA. The Council may not review an action below a threshold if it is the type of action to which the remedies under the APA do not apply.

The Council must consider and act on a matter referred as described above before the 26th day after the date the agency or subdivision proposed the action. An action subject to the contested case provisions of the APA is proposed when notice of a decision or order is issued. The proposed action is deemed consistent and approved by the Council unless the Council determines the action to be inconsistent with the TCMP by an affirmative vote of at least two-thirds of the members of the Council (eight votes).

If, after review, the Council finds that an action is inconsistent with TCMP goals and policies, the Council reports its findings to the agency or subdivision. The findings must specify how the action is inconsistent and recommend how it can be modified to comply. Section 33.206(b) requires the agency or subdivision to review and act on the findings, which carry great legal weight. An agency or subdivision may elect to cure the inconsistency in a manner other than that specifically recommended by the Council. However, the agency or subdivision must notify the Council of its decision within 20 days of the date the agency or subdivision received the Council's findings.

The Council retains the authority to review an action again following the agency's or subdivision's consideration of its findings. If the Council again finds the action inconsistent, the Council is authorized to pursue remedies through the attorney general. Section 33.206(c) directs the Council to refer the matter to the attorney general. As is the attorney general's prerogative as the state's chief legal officer, the attorney general then determines whether to file suit. The Act requires the decision to be publicly justified. Section 33.206(c) requires this decision to be made in the form of an official opinion. The attorney general must issue an opinion before the 26th day after the date the Council requested the opinion. If the attorney general finds the action inconsistent, under §33.208(b) the agency or subdivision must then implement the Council's recommendations or the matter is litigated. The attorney general can sue only agencies and subdivisions on the Council's behalf, not private parties.

At any time, the Council and, if a suit is filed, the attorney general, may enter into a settlement agreement with the agency or subdivision. If such an agreement is reached, the Council may rescind its request for an opinion from the attorney general or, if a suit has been filed, the attorney general may drop the suit.

The Act contemplates that the process for Council review is complete before the permit or other agency or subdivision action in question is final and vests the applicant with the legal right to conduct activities. Additionally, §33.206(c) states that the agency or subdivision is stayed from taking the proposed until the attorney general issues the opinion. Accordingly, 31 TAC §505.37 provides that pending Council review of an action, no person may conduct activities authorized by the agency action that would irreparably alter or damage a coastal natural resource area identified in the applicable policy.

5. Third Party Action

The APA and other state authorities provide another basis for enforcement of the TCMP goals and policies. They provide the basis for aggrieved parties to challenge an agency consistency determination in both administrative and judicial forums. The APA provides that:

> "A decision that may become final under §2001.144 must include findings of fact and conclusions of law, separately stated. Findings of fact may be based only on the evidence and on matters that are officially noticed. Findings of fact, if set forth in statutory language, must be accompanied by a concise and explicit statement of the underlying facts supporting the findings. If a party submits under a state agency rule proposed findings of fact, the decision shall include a ruling on each proposed finding" (§2001.141).

The determination that an action or authorization is consistent with the TCMP under 31 TAC §505.30 is a conclusion of law that must be supported by the facts and law in the agency record. Therefore, it can be challenged by an affected party in a contested case before either the agency or the State Office of Administrative Hearings, and ultimately in state court. The APA specifically grants affected parties the right to judicially challenge an agency's final decision as follows:

> "A person who has exhausted all administrative remedies available within the

agency and who is aggrieved by a final decision in a contested case is entitled to judicial review under this chapter" (§2001.171).

To meet the requirements of the APA and other laws enacted to guarantee the citizens of Texas input into government decision making, agencies have adopted rules giving potentially aggrieved third parties various procedural rights with respect to proposed permits and other actions. The particular requirements of these rules vary between agencies and permits. Generally, they require various forms of public notice of proposed actions, require agencies to provide opportunities for public comment, and specify how a contested case hearing is triggered.

The public has notice, comment, and hearing opportunities and the right to a contested case hearing under the APA with regard to the following actions that are subject to the TCMP: PUC certificate of convenience and necessity; THC permit for alteration of state archaeological landmark; TNRCC wastewater discharge permits, water rights permits, solid/hazardous waste disposal permits, creation of special districts, and approval of levee and flood control projects; RRC wastewater discharge permits and waste disposal permits; and TPWD oyster leases and marl/sand/shell/gravel permits. The APA allows an affected party to appeal an agency decision based on a contested case hearing to district court.

Under common law, all agencies and subdivisions are subject to an action for injunctive relief based on the allegation that they are not complying with applicable rules or statutes, such as the Act or the goals and policies of the TCMP. Moreover, certain agencies' authorizing statutes go farther and specifically authorize a person or entity aggrieved by an act of the agency to seek judicial relief. The School Land Board is subject to suit under §33.173, Texas Natural Resources Code, and the TNRCC is subject to suit under §5.531, Texas Water Code. In addition, §26.124, Texas Water Code, grants local governments and TPWD the broad authority to sue to seek injunctive relief or civil penalties in cases where there is a violation or a threat of a violation of either a rule, permit, or order of the TNRCC or the general statutory prohibition against impairing water quality. This provision provides the legal basis for TNRCC's issuance of certifications for federal dredge or fill permits. A local government may sue when the violation occurs or would occur within its geographic jurisdiction. TPWD may sue when the violation would affect aquatic life or wildlife.

Agency rules and statutes provide the public with other public notice and comment opportunities. With regard to TNRCC and RRC certification of federal permits for the discharge of dredged or fill material, both agencies' rules require public notice of proposed certifications to be issued and afford the public the right to comment to the agency. Both agencies' rules also include the opportunity for a nonadjudicative public hearing on proposed certifications. Similarly, TxDOT rules require it to pursue a public scoping and planning process for its highway projects that is very similar to the process required under the National Environmental Policy Act.

Council rules also contain provisions specifically designed to facilitate public review and comment on agency consistency determinations. For actions above thresholds for referral, 31 TAC §505.30(c) requires agencies to provide comprehensive information justifying their consistency determinations. Section 505.30(d) requires public notices to contain a specific statement that the proposed action is subject to the TCMP.

All governing boards and commissions of state agencies and subdivisions are subject to the Open Meetings Act (Chapter 551, TEX. GOV. CODE ANN.). Under this Act, the board or commission can take an action subject to the TCMP only in a public meeting. The board or commission must give at least seven days advanced notice of the meeting. Generally, agencies include in the notice the location and type of activity to be authorized to apprise those potentially affected by the decision of its impacts. Actions of the SLB and TTC that are subject to the TCMP must be authorized in public meetings that are subject to the Act. In addition, the actions of the Council must be taken in a public meeting that is subject to the Act.

GLO issuance of miscellaneous easements, surface leases, and geophysical and geochemical permits, and approval of mitigation banks are not subject to any public notice and comment requirements. However, it is the practice of the GLO to solicit public input into these actions, as well as to coordinate these actions with other resource agencies. Because the activity to be authorized frequently requires approval by an agency that issues some form of public notice (for example, the Corps), the GLO typically receives public comment through the other agency's process. Under the Open Beaches Act, the GLO certifies local government dune protection and beach access plans by amendment to the GLO beach/dune rules. Therefore, the public is afforded the notice and comment opportunities provided by the APA for agency rulemaking actions.

D. City and County Management of the Beach/Dune System

The rules governing the Council's review of local government actions basically follow the structure of the rules governing the Council's review of agency actions described above. Several differences are noteworthy. First, the exclusive list of actions in §33.2053 includes only two local government actions, the issuance of dune protection permits and the issuance of beachfront construction certificates for large projects in the beach and dune area. Second, because the goals and policies of the TCMP reflect the GLO's rules governing the management of the beach/dune system (31 TEX. ADMIN. CODE Chapter 15), the consistency determination required of local governments by §33.204(b) is the same as the findings required by the GLO's beach/dune system rules.

Under 31 TAC §505.68, once the GLO has certified a local government's dune protection and beach access plan, the Council rules presume that the local government's consistency determination is valid. This presumption places the burden on the person challenging the consistency determination to show an inconsistency. Under both the Open Beaches Act and the Dune Protection Act, the attorney general, the GLO, or the county or district attorney are authorized to sue to enforce either act and can therefore ensure compliance with the goals and policies, whether a local government plan has been certified.

E. Federal Consistency Review

1. Introduction

The Coastal Zone Management Act requires federal agencies to act consistently with federally approved state coastal management programs. Federal consistency review is the

process by which the state can review an action undertaken, licensed, permitted, or funded by a federal agency to ensure the consistency of the action with the enforceable policies of its

program. If the state finds a given action to be inconsistent with the enforceable policies, with few exceptions, the action cannot be undertaken.

The federal regulations in 15 CFR Part 930, based on §307 of the Coastal Zone Management Act, set specific procedures states must follow when conducting federal consistency reviews. The federal regulations include procedures for consistency reviews of: (1) activities undertaken by the federal government, including development projects; (2) federally licensed or permitted activities; (3) Outer Continental Shelf (OCS) exploration, development, and production activities; and (4) federal assistance to state and local governments (fig. 2).

In addition, the federal regulations delineate a process for mediation of disputes between the state and federal agencies or applicants to federal agencies. These regulations also establish procedures for review of the state's consistency determinations by the U.S. Department of Commerce.

To promote efficiency and to streamline the process, the Texas federal consistency review process will be tailored to the state's through the use of memoranda of agreement, general consistency agreements, interagency coordination groups (ICGs), and general concurrences.

2. Federal Decisions Covered by the TCMP (15 CFR §§930.33. 930.34, 930.53, 930.74, and 930.95)

The Coastal Coordination Act requires the Council to adopt procedural rules for the review of federal actions, activities, and OCS plans that incorporate the federal requirements for consistency review. State law defines the federal decisions subject to Council review as: (1) "federal agency activities;" (2) "federal agency actions" and (3) "Outer Continental Shelf (OCS) plans." By definition, these terms cover the four types of federal activities listed under the federal regulations.

State Term	Federal Term
Federal agency activity	Federal activity, including development projects Federal assistance
Federal agency action	Federal license or permit
Outer Continental Shelf Plan	Outer Continental Shelf Plan

The Act defines "federal agency action" to mean a license or permit that a federal agency may issue that represents the proposed federal authorization, approval, or certification needed by an applicant to begin an activity.

The Act defines "federal agency activity" to mean a function performed by or for a federal agency in the exercise of its statutory responsibility, including financial assistance, the planning, construction, modification, or removal of a public work, facility, or any other structure; and the acquisition, use, or disposal of land or water resources, but not the issuance of a federal license or permit. Federal financial assistance is further defined in the consistency review rule to be "limited to federal programmatic requirements for project level funding."

The Act defines "outer continental shelf plan" as a plan for the exploration or development of, or production from, an area leased under the Outer Continental Shelf Lands Act and the rules adopted under that Act that is submitted to the Secretary of the Interior after federal approval of the coastal management program.

Federal regulations (15 CFR §930.34(a)) require federal agencies to provide the state with a consistency determination for all federal activities that may affect coastal natural resource areas, even if the Council does not review the activity. The state has listed federal actions and activities subject to review by the Council. This list is intended to provide notice to federal agencies and applicants for federal permits and licenses and federal financial assistance. The list may be amended through rulemaking after the Council consults with the affected federal agency and receives approval from the Assistant Administrator of the National Oceanic and Atmospheric Administration. In addition to publishing the list as part of its regulations, the Council will provide copies of the list, and any amendments, to federal agencies and units of state or local government affected by the list.

Unlike the list of state agency and subdivision actions subject to Council review, the federal list is not exclusive. The federal regulations encourage the state to monitor unlisted federal actions and activities affecting the coastal zone. The Council may choose to review an unlisted federal agency action or federal assistance. If the Council so chooses, it must determine whether it wishes to review that type of action or assistance in the future. To preserve its ability to review, the Council must amend its rules to list the action or assistance. If the action or assistance is not added to the rule, the Council may not review that type of action or assistance again (31 TAC §506.12(f)).

The list includes actions, activities, and OCS plans both inside and outside the coastal zone. The geographic scope of review of federal actions outside the boundaries is limited to Outer Continental Shelf waters for actions seaward of the coastal boundary. The list of federal actions, activities, and OCS plans subject to federal consistency review is in 31 TAC §506.12 (part of Appendix C, Rules for State, Local, and Federal Consistency Review) (fig. 2).

The Council rules include a provision for a one-time determination of consistency for a federal agency action or federal assistance. Under this provision, an action taken by a state agency or subdivision or federal agency to implement an activity described in an application for federal assistance or for a federal license or permit that the Council has determined to be consistent will not be subject to review by the Council if the action is described in sufficient detail in the application.

FIGURE 2

PROPOSED FEDERAL CONSISTENCY TIME LINES

Federal Activities (except federal assistance)

DAY	1		45	60
	Federal agency submits consistency determination	(30-day public notice and comment period included in first 45 days)	Council decision, extension, or consistency presumed	Council agrees or disagrees

Federal Actions

DAY	1		45	90
	Applicant submits consistency certification	(30-day public notice and comment period included in first 45 days)	Council refers (extension) or action presumed consistent	Council concurs or objects

Outer Continental Shelf Plans

DAY	1		45	90
	Secretary of the Interior forwards copy of plan and consistency certification	(30-day public notice and comment period included in first 45 days)	Council refers (extension) or plan presumed consistent	Council concurs or objects

Federal Assistance

DAY	1	30	45	60
	SSPOC forwards copy of application	Chairman must refer or application presumed consistent (certain applications require a decision at this point)	Council concurs or objects (NOI submitted)	Council concurs or objects (NOI not submitted)

3. General Process for Federal Consistency Review

Federal agencies and applicants for federal permits must provide to the Council a consistency determination or consistency certification for all actions inside or outside the coastal zone that will affect any land or water use or natural resource of the coastal zone. The Coastal Coordination Act requires the Council to issue the final decision on whether the state concurs with the applicant's consistency certification or the federal agency's consistency determination. The Act directs the GLO to assist the Council in carrying out its duties. For federal consistency review matters, the GLO will provide administrative support to the Council.

The Council's public notice and comment procedures are essentially the same for federal agency activities, federal agency actions, and Outer Continental Shelf plans. All consistency certifications and determinations will be received by the Council secretary. Immediately upon receipt, the secretary will publish public notice in the *Texas Register*. The notice will request public comments on consistency within 30 days of the notice. The chairman or three members of the Council may extend the public comment period and schedule a public hearing on a consistency matter. In certain instances, the Council may issue public notice jointly with the federal agency having the authority to permit or license the activity.

Concurrently with publication of the notice, the Council secretary will route the certification or determination to the Council members and their staff. The GLO staff will begin reviewing the certification or determination for consistency with all the TCMP goals and policies. The GLO staff will also review all public comments as they are received. If it appears that a proposed federal action or activity could present new, unique, or significant problems with regard to consistency with the TCMP or could otherwise be controversial, the GLO will begin to coordinate with other Council members or their staffs at the earliest opportunity. This coordination could involve meetings of the EC, PAG, or other interagency meetings.

After evaluating the consistency determination or certification, reviewing public comment, and coordinating with other Council members or their staffs, the GLO staff will develop a summary of public comments and a recommendation for approval by the Council chairman. The chairman will recommend that the Council concur with the certification or agree with the determination, unless a significant unresolved consistency dispute has been found. In that case, the chairman will recommend that the Council object to the certification or determination and place the matter on the Council agenda for formal review.

The Council secretary will send the chairman's recommendation and the public comment summary to all Council members. The Council members will then decide whether to formally review the matter. At least three Council members must agree to place the matter on the agenda, otherwise the action is deemed consistent. For example, the Council would formally review the matter if the chairman recommended agreeing with a federal agency consistency determination, but three members disagreed and requested that the secretary place the matter on the agenda of a Council meeting.

If the Council does not refer the matter for review, consistency is conclusively presumed after the deadline has lapsed (see fig. 2 for deadlines). If the matter is referred, the secretary will place it on the agenda of the next regular meeting of the Council. If the next regular meeting is

scheduled after the time period for the Council decision ends, the chairman or any three regular members will call a special meeting of the Council, to be held before the end of the time period. The secretary will notify the Council members, applicant, federal agency, and other affected parties of the Council's decision concerning referral immediately upon issuance of the decision.

The Council's public meetings will serve as the public hearings for those actions which the Council chooses to review. Council meetings are held quarterly on the first Thursday of February, May, August, and November. In addition, the chairman or any three members may convene special meetings. Public notice of the Council meeting must be posted at the office of the Secretary of State no later than eight days before the meeting. The public notice will include the meeting agenda.

At the Council meeting, the Council will review the consistency certification or determination, the public comment, the chairman's recommendation, and the responses or recommendations of other Council members. The Council will also solicit further public comment at the meeting. The Council will then make its finding regarding consistency. A two-thirds vote of the Council is required to object to or disagree with a consistency certification or determination. The governor, with the assistance of the chair of the Council, may seek mediation of disagreements between the state and the applicant or federal agency over the consistency of a federal agency action, activity, or OCS plan.

GLO staff will provide technical assistance to applicants for federal actions and any person submitting an OCS plan to ensure that the proposed activities will be conducted in a manner consistent with the TCMP. This assistance will be available both before and during TCMP consistency review. The assistance includes making the TCMP document available to the public.

4. Federal Activities and Development Projects (15 CFR §§930.35(c) and §930.40)

Federal agencies considering the approval of a federal agency activity or development project listed in 31 TAC §506.12 must provide to the Council secretary a consistency determination at least 90 days before final approval.

Federal activities are required to be "consistent to the maximum extent practicable" with the goals and policies of the TCMP. For purposes of federal consistency review, "consistent to the maximum extent practicable" means that federal activities and development projects must be fully consistent with the federally approved TCMP unless compliance is prohibited by requirements of existing law applicable to the federal agency's operations. If a federal agency asserts that compliance with the TCMP is prohibited by law, it must clearly describe in its negative determination the statutory provisions, legislative history, or other legal authority which limits the federal agency's discretion to comply with the provisions of the TCMP.

When more than one federal agency is involved in conducting or supporting a federal activity or its associated facilities or is involved in a group of federal activities related to each other because of their geographic proximity, the agencies are encouraged to prepare the consistency determination jointly. In such situations, the consistency determination must be transmitted to the Council secretary at least 90 days before final decisions are taken by any of the

participating agencies.

The federal agency's consistency determination must include: (1) a brief statement indicating whether the proposed activity or development project will be undertaken in a manner consistent to the maximum extent practicable with the TCMP; (2) a detailed description of the activity or development project, its associated facilities, and their effects on coastal natural resource areas; and (3) comprehensive data and information sufficient to support the federal agency's consistency determination. The statement must be based upon an evaluation of the relevant provisions of the TCMP. The amount of detail in the evaluation statement, activity description, and supporting information must be commensurate with the expected effects of the activity CNRAs.

Where a joint consistency determination is prepared, the determination must indicate whether each of the proposed activities is consistent to the maximum extent practicable with the TCMP and must include information on each proposed activity sufficient to support the consistency determination.

The consistency determination must be based on the following: (1) the activity (e.g., project siting and construction); (2) its direct effects (e.g., air, water, waste discharges); (3) associated facilities (e.g., proposed siting and construction of access roads, connecting pipelines, support buildings); and (4) the direct effects of the associated facilities (e.g., erosion, wetlands, and beach access impacts). While nonassociated facilities (e.g., recreational housing which is induced by, but not necessarily related to, a federal harbor dredging project) must be included within the consistency determination's description of the direct effects of the activity, federal agencies are not responsible for evaluating the consistency of such facilities.

Under federal law, federal agencies should adequately consider advisory policies; however, the Council cannot base its finding of consistency on these policies. If federal standards for an activity are stricter than the standards set in the TCMP, the federal agency will apply its stricter standards.

a. Federal Activities: Negative Determinations (15 CFR §930.35(d))

A federal agency must notify the Council secretary if it intends to file a negative determination, at least 90 days before final approval of the activity. A negative determination is required if a federal agency finds that a consistency determination is not required for a federal activity that is the same as or similar to activities for which consistency determinations have been prepared in the past or for which the federal agency undertook a thorough consistency assessment and developed initial findings on the effects of the activity.

b. Federal Activities: General Consistency Determinations (15 CFR §930.37(b))

Federal agencies are allowed to develop a general consistency determination for repeated activities other than development projects (e.g., ongoing maintenance or waste disposal) that cumulatively may have a direct effect on coastal natural resource areas. This allows federal agencies to avoid issuing separate consistency determinations for each incremental action. The incremental actions must be repetitive or periodic, must be substantially similar in nature, and

must not directly affect CNRAs when performed separately. If a general consistency determination is issued, then the federal agency must periodically consult with the Council to discuss the manner in which the incremental actions are being undertaken.

Under section 506.28, the Council may issue a general consistency agreement in response to a general consistency determination. These agreements may be issued only for a repeated activity other than a development project that cumulatively has a direct effect upon the coastal zone.

c. Consistency Determinations for Proposed Development Projects (15 CFR §930.37(c))

A federal agency may provide one consistency determination when it has sufficient information to determine the consistency of a proposed development project from planning to completion. If the decisions for a proposed project are to be made in phases based on developing information, with each subsequent phase subject to federal agency discretion to implement alternative decisions based on the information, a consistency determination will be required for each major decision. It is the responsibility of the federal agency to ensure that the development project continues to be consistent with the TCMP to the maximum extent practicable throughout the project's various phases.

d. Federal Activities: Determinations for Activities Initiated Prior to Federal Approval of the TCMP (15 CFR §930.38)

A consistency determination is required for ongoing federal activities (other than development projects initiated prior to federal approval of the TCMP) that can be reassessed and modified by the federal agency. In such cases, the federal agency must provide the secretary of the Council with a consistency determination no later than 120 days after TCMP approval.

Additionally, federal agencies must provide a consistency determination to the secretary of the Council for major, phased federal development project decisions which are made following TCMP approval that are related to development projects initiated prior to approval. Federal agencies are required to consider the effects on CNRAs not fully evaluated at the outset of the project. This provision does not apply to phased federal decisions which were specifically described, considered, and approved prior to TCMP approval (e.g., in a final environmental impact statement issued pursuant to NEPA).

e. Federal Activities: Council Referral and Review Procedures (15 CFR §§930.41 and 930.42)

Upon receipt of a consistency determination, the Council has 45 days within which to notify the federal agency of its agreement or disagreement with the determination (see fig. 2). The Council will review a consistency determination if any three members of the Council agree the determination presents a significant unresolved issue regarding consistency with the goals and policies of the TCMP and place the matter on the agenda of a meeting of the Council for review. If the Council does not place the federal agency activity on the agenda of a Council meeting for review within the 45-day period, the Council chair must inform the federal agency of the status of the matter and the basis for further delay and request an extension of time to review

the matter.

The federal agency is required to approve the first 15-day extension. However, the federal agency may agree to an extension exceeding 15 days or to an additional extension period based on the complexity and magnitude of the information contained in the consistency determination (see "General Consistency Determinations"). The federal agency cannot take final action sooner than 90 days from the issuance of the consistency determination to the Council unless both the federal agency and the state agency agree to an alternative period.

If the Council votes to disagree with the consistency determination, it must include in its response to the federal agency its reasons for the disagreement and supporting information. The Council response must explain how the proposed activity will be inconsistent with the specific elements of the TCMP and describe alternative measures (if they exist) which, if adopted by the federal agency, would allow the activity to proceed in a manner consistent to the maximum extent practicable with the TCMP.

If the Council's disagreement is based on the federal agency's failure to supply sufficient information, the Council's response must describe the nature of the information requested and the necessity of having such information to determine the consistency of the federal activity with the TCMP. The Council is required to send the Assistant Administrator a copy of the responses which describe disagreements with the federal agency consistency determination.

f. Special Consistency Review Process for Development Projects for which an Interagency Coordination Group is Formed

The Council's consistency review rules establish a special consistency review procedure for federal development projects. It is modelled after the successful interagency coordination process employed by the Port of Houston Authority and the Galveston District of the U.S. Army Corps of Engineers in planning the deepening and widening of the Houston-Galveston Navigation Channels in Galveston Bay. This project is one of the most significant federal agency undertakings ever planned for Texas' coastal zone.

After years of sometimes contentious planning, in 1990 the Galveston District created the Interagency Coordination Team (ICT) in conjunction with the nonfederal sponsor of the Houston-Galveston Navigation Channels. Made up of state and federal resource agencies, the ICT was formed to assist the Port and the Corps in project design, and drafting environmental documentation to fully address all environmental concerns. The ICT was integrally involved in assessing the project's impacts and developing plans to protect and restore Galveston Bay. Because it was based on consensus decision-making, the ICT process resulted in a proposed project that enjoys broad support among the public and state and federal resource agencies.

To encourage other federal agencies to pursue this type of consensus-based process, the Council adopted 31 TAC §506.28(b). This provision is intended to fold the consistency review process into the overall project assessment and design process. A federal agency must establish an "interagency coordination group (ICG)," like the ICT established for the Houston-Galveston Navigation Channels project. Basically, 31 TAC §506.28(b) offers federal agencies a *quid pro quo*. If the federal agency agrees to make its project assessment and design decisions

collaboratively through a public process, the Council agrees to make its consistency decision through that same process.

To take advantage of 31 TAC §506.28(b), a federal agency must ensure that the following prerequisites are met:

- The ICG's purview must extend to the overall impacts and design of the federal development project, not solely to the consistency determination. (See 31 TAC §506.11, definition of "Interagency Coordination Group").

- Voting members of the ICG must include the nonfederal project sponsor and all state and federal resource agencies with jurisdiction over the project. (See 31 TAC §506.11, definition of "Interagency Coordination Group"). This must include at least three Council member agencies. (See 31 TAC §506.28.)

- The ICG process must contain opportunities for participation by citizens and local governments. (See 31 TAC §506.11, definition of "Interagency Coordination Group").

- The majority of Council agency representatives on the ICG must find the project consistent with the goals and policies of the TCMP. In addition, the ICG must find the project consistent. (See 31 TAC §506.28.)

- The federal agency must adopt the ICG's consistency finding and submit it to the Council. (See 31 TAC §506.28.)

The ICG process includes opportunities for participation by citizens and local governments. First, 31 TAC §505.11 anticipates that the federal agency will include representatives of the public and affected interest groups in the early "scoping" phase of the project, when alternatives are evaluated and designed and the federal agency chooses a preferred alternative. Second, public participation will take place through the public notice and comment opportunities provided by the National Environmental Policy Act (NEPA). The federal agency's NEPA environmental assessment (EA) or environmental impact statement (EIS) for the project must address the CZMA consistency requirement. Since the public will be able to review and comment on the EA or EIS, the public can review and comment on the consistency of the project. The full Council will seek public comment on the consistency of the project in coordination with the NEPA process. In addition, the Council representatives serving on the ICG will report to the full Council at its quarterly public meetings.

Another provision, 31 TAC §506.28(c), also relates to the proposed plan for deepening and widening of the Houston-Galveston Navigation Channels. Essentially, it recognizes that the Houston-Galveston Navigation Channels Project constitutes the Port's and the Galveston District's comprehensive long-term plan to make all dredging related to these channels consistent with the goals and policies of the TCMP.

To keep the channels at their proper depths until this comprehensive plan is implemented, however, it is likely that there will be a need for periodic maintenance dredging. An October 1994 memorandum of agreement (MOA) between the Council and the Galveston District

establishes a process for consistency review of federal maintenance dredging over the next five years. The products of the reviews under the MOA are long-term plans for the maintenance dredging of each commercial waterway project in the coastal zone.

The Houston-Galveston Navigation Channels Project already provides such a plan that is consistent with the goals and policies of the TCMP. Therefore, the TCMP calls for a special process for obtaining a consistency agreement for maintenance dredging of the channel in the interim between federal approval of the TCMP and implementation of the plan. Under 31 TAC §506.28(c), interim maintenance dredging associated with the Houston-Galveston Navigation Channels Project is presumed to be consistent with 31 TAC §501.14(j)(1) and the associated provisions of the TCMP's dredging and dredged material placement policy, including the beneficial use provisions. This provision creates a substantive presumption of consistency, not a procedural exception. Therefore, it requires the interim maintenance dredging of the Houston Galveston Navigation Channels Project to undergo a consistency review under the MOA referred to in 31 TAC §506.24(c) to determine if it meets the conditions in 31 TAC §506.28(c) for a presumption of consistency.

Thereafter, if the interim maintenance dredging takes place in a manner that is substantially consistent with the current environmental assessment or environmental impact statement for the project, and the project is not modified, then the maintenance dredging project shall be presumed substantively consistent with all provisions of the dredging and dredged material placement policy.

5. Federal Agency Actions (15 CFR §§930.50, 930.57, and 930.58)

Applicants for federal actions listed in 31 TAC §506.12 must conduct the proposed federal action in a manner that is consistent with the goals and policies of the TCMP. Applicants must submit a consistency certification to the Council secretary upon filing the application with the federal agency. The consistency certification must read as follows:

> "The proposed federal agency action is consistent with the TCMP goals and policies and will be conducted in a manner consistent with such program."

In addition to the consistency certification, the applicant for a federal action must furnish the state with: (1) a detailed description of the proposed action and its associated facilities adequate to permit an assessment of their probable effects on coastal natural resources; (2) a list identifying all federal, state, and local permits or authorizations subject to the TCMP and required for the proposed action and its associated facilities; (3) a brief assessment relating the probable effects of the proposed action and its associated facilities on CNRAs to the relevant elements of the TCMP; and (4) a brief set of findings, derived from the assessment, indicating that the proposed activity, its associated facilities, and their effects are all consistent with the goals and policies of the TCMP. A copy of the federal application and all supporting material provided to the federal agency may be submitted to meet the requirements of (1) above if the materials contain the required information.

Maps, diagrams, technical data, and other relevant material must be submitted when a written description will not adequately describe the proposed activity. The applicant must give

appropriate weight to the goals and policies of the TCMP. The proposed activity must be consistent with the enforceable policies. Federal regulations require the applicant to adequately consider "encouragement" or advisory policies of the TCMP; however, the Council cannot base its finding of consistency on these policies.

At the request of the applicant, the state will provide assistance for developing the assessment and findings required in (2) and (3) above.

Upon receipt of an administratively complete consistency certification, the Council will conduct a consistency review of the activity. If the activity is found to be consistent, the Council will issue a consistency concurrence. A federal agency may, if allowed under federal law or regulation, continue its permitting or authorization process and issue the permit if the application meets federal requirements upon the issuance of a concurrence or a conclusive presumption of concurrence.

To avoid delays, applicants for federal licenses and permits must, to the extent practicable, consolidate related federal and state license and permit activities subject to consistency review. Council objection to one or more of the federal license or permit activities submitted for consolidated review does not prevent the applicant from receiving federal agency approval for those federal license and permit activities found to be consistent.

To avoid duplication and delays in consistency reviews of equivalent state and federal permits, a provision of the federal consistency review rule allows the Council to direct that one or the other of the permits be reviewed for consistency, but not both. Equivalent state and federal permits are those that authorize the same activities because they have as their legal foundation the same or very similar statutory origins. For example, a U.S. Environmental Protection Agency NPDES permit would be equivalent to a state TNRCC or RRC wastewater discharge permit. These permits cover the same activities--discharge of pollutants into waters of the United States--and are related legally. Both TNRCC and RRC are using their statutory wastewater discharge authorities to obtain authorization from EPA to operate the NPDES program in Texas in lieu of EPA. A second example is federal U.S. Army Corps of Engineers permits for the discharge of dredged or fill material and state TNRCC and RRC certifications of compliance with water quality standards. They cover the same activities and are both based on requirements of the federal Clean Water Act.

If an equivalent state permit falls below the threshold for referral established under the state consistency review rule (Chapter 505, Subchapter B), the Council may only determine the agency or subdivision action's consistency by using the process provided in 31 TAC Chapter 505 (relating to Council Procedure for State Consistency with Coastal Management Goals and Policies). If an equivalent state permit is for a proposed action above the threshold for referral established under the state consistency review rule (Chapter 505, Subchapter B), the Council may determine the consistency of the agency or subdivision action or of the federal license or permit, but not both.

The chairman or three members of the Council must notify the applicant if additional information is required to review the consistency certification. If the chairman or three members of the Council have not notified the applicant of the need for more information within 15 days of

receipt of the certification, the certification will be considered complete for purposes of commencement of Council review.

a. Federal Agency Actions: Council Referral and Review Procedures (15 CFR §§930.60, 930.63, and 930.64 and 31 TAC §§506.33 and 506.34)

Federal regulations limit the time within which the states can issue consistency concurrences or objections to six months from receipt of the consistency certification. The Council will review any consistency certification for a federal action that any three members agree presents a significant unresolved dispute regarding consistency with the goals and policies of the TCMP. The consistency certification must be referred within 45 days of receipt of an administratively complete consistency certification. If a consistency certification has not been referred within 45 days, the action is conclusively presumed to be consistent. Although federal regulations allow the Council to take 90 days to refer the consistency certification and 180 days to concur with or object to the certification, the Council compressed the time schedule to conform procedures for review of federal actions to the procedures for review of state and subdivision actions.

If a decision has not been issued within 45 days following receipt of an administratively complete consistency certification, the applicant and the federal agency must be notified in writing of the status of the matter and the basis for further delay.

If three members of the Council refer the matter to the Council for review, the Council must review and make a finding regarding the consistency of the proposed action with the TCMP within 90 days following receipt of the administratively complete consistency certification. If the activity described in the consistency certification is found to be inconsistent with the TCMP goals and policies, the Council will issue a consistency objection.

The only basis on which the Council may object to a consistency certification is: (1) the proposed activity is inconsistent with the goals and policies of the TCMP, or (2) the applicant failed to provide the required information and data listed in this chapter after receiving a written request from the state.

Council objections will describe: (1) how the proposed activity is inconsistent with the specific elements of the TCMP; (2) alternative measures (if they exist) which, if adopted by the applicant, would permit the proposed activity to be conducted in a manner consistent with the TCMP; (3) the nature of the information requested and the necessity of having such information to determine the consistency of the proposed activity if the objection is on the grounds of insufficient information; and (4) a statement informing the applicant of a right of appeal to the Secretary of the U.S. Department of Commerce if the proposed activity is inconsistent with the TCMP but consistent with the objectives or purposes of the CZMA or is necessary in the interest of national security.

Following receipt of a consistency objection, the federal agency shall not proceed with the federal action except under special circumstances described later in this chapter. If the

federal agency determines that an application will not be approved while the state is conducting its consistency review, the federal agency must immediately notify the applicant and the chairman.

The Council will work with the applicant and the federal agency during the consistency review period to resolve any disputes concerning the proposed federal agency action and to agree on conditions, which, if met by the applicant, will result in state concurrence and meet federal permit requirements.

b. Federal Agency Actions: General Concurrence (15 CFR §930.53(c) and 31 TAC §506.35)

The Council reserves the right to issue a general concurrence for minor federal agency actions that are individually inconsequential but that will cumulatively result in adverse effects on CNRAs. Minor federal agency actions that satisfy the conditions of the general concurrence are not subject to the consistency certification requirements of the previous section.

6. Outer Continental Shelf Plans (15 CFR §§930.74, 930.76, and 930.77 and 31 TAC §506.40)

OCS plans submitted to the Secretary of the Interior or a designee must include consistency certifications ensuring consistency with the TCMP of the federal actions that will be taken to authorize activities described in the OCS plan. The consistency certification must read as follows:

> "The proposed activities described in detail in this plan comply with Texas' approved coastal management program and will be conducted in a manner consistent with such program."

The person submitting the OCS plan must identify all federal agency actions described in detail in the plan which are subject to federal consistency review and be satisfied that the proposed federal agency actions will be consistent with the goals and policies of the TCMP before submitting the consistency certification.

In addition to the consistency certification, the person submitting the plan must furnish the Council secretary with the following: (1) a detailed description of the proposed activities and their associated facilities adequate to permit an assessment of their probable effects on CNRAs; (2) a list identifying all federal, state, and local actions subject to the TCMP and required for the proposed activities and their associated facilities; (3) a brief assessment relating the probable effects of the proposed activities and their associated facilities on CNRAs to the relevant elements of the TCMP; and (4) a brief set of findings, derived from the assessment, indicating that federal actions proposed to authorize each of the proposed activities will be consistent with the goals and policies of the TCMP.

Maps, diagrams, technical data, and other relevant material must be submitted when a written description will not adequately describe the proposed activity. The person submitting the plan must give appropriate weight to the goals and policies of the TCMP. The proposed activities must be consistent with the enforceable policies of the TCMP. Federal regulations

require the applicant to adequately consider advisory policies of the TCMP; however, the Council cannot base its concurrence regarding consistency on these policies.

The person submitting the OCS plan is responsible for furnishing the Council with a copy of the plan (excluding proprietary information) and consistency certification. (See §506.40).

Persons submitting OCS plans are strongly encouraged to work with other federal agencies in an effort to include, for consolidated state agency review, consistency certifications and supporting data and information applicable to OCS-related federal agency actions affecting CNRAs which are not required to be described in detail in OCS plans but which are subject to TCMP consistency review. If the person does not consolidate such OCS-related federal agency actions with the TCMP consistency review of the OCS plan, such activities will remain subject to TCMP consistency review under the requirements for federal agency actions.

The chairman or three members of the Council must notify the person submitting the plan if additional information is required to review the consistency certification. If the chairman or three members of the Council have not notified the person of the need for more information within 15 days of receipt of the certification, the certification will be considered complete for purposes of commencement of Council review.

a. OCS Plans: Council Referral and Review Procedures (15 CFR §§930.79, 930.80, and 930.81 and 31 TAC §§506.42, 506.43, and 506.44)

Federal regulations state that the Council must issue consistency concurrences or objections within six months of receipt of the consistency certification. The Council will review any consistency certification for a federal action described in detail in the OCS plan that three members of the Council agree presents a significant unresolved issue regarding consistency with the goals and policies of the TCMP. Three members of the Council must refer the consistency certification within 45 days of receipt of an administratively complete consistency certification. If a decision has not been made by the Council within 45 days, then the Council chairman must notify the person submitting the plan, the Secretary of the Interior, and the Assistant Administrator of the reason for the delay. If the Council does not refer the consistency certification within 45 days of receipt of the certification, the Council's concurrence with the consistency certification is conclusively presumed.

If the certification is referred, the Council must review and find whether the proposed action is consistent with the goals and policies of the TCMP within 90 days of the date the Council secretary received the certification. If the action described in the consistency certification is found to be inconsistent with the TCMP goals and policies by a two-thirds majority of the Council, the Council will issue a consistency objection.

The only basis on which the Council may object to a consistency certification is: (1) the proposed action is inconsistent with the goals and policies of the TCMP; or (2) the applicant failed to provide the required information listed under "Procedures for Outer Continental Shelf Plans" after receiving a written request from the state.

Council objections will provide a separate discussion for each objection and describe: (1)

how the proposed action will be inconsistent with the TCMP goals and policies; (2) alternative measures (if they exist) which, if adopted by the applicant, would permit the proposed action to be conducted in a manner consistent with the TCMP; (3) the nature of the information requested and the necessity of having such information to determine the consistency of the proposed action if the objection is on the grounds of insufficient information; and (4) a statement informing the applicant of a right of appeal to the Secretary of the U.S. Department of Commerce if the proposed action is inconsistent with the TCMP but consistent with the objective or purposes of the CZMA or is necessary in the interest of national security.

Following receipt of a consistency objection, the federal agency cannot take the federal action when it is proposed except under special circumstances described later in this chapter. A Council objection to one or more of the OCS-related federal actions submitted for consolidated review does not prevent the person from receiving federal agency approval for: (1) those OCS-related federal actions found to be consistent with the TCMP; and (2) the federal actions described in detail in the OCS plan, provided the Council concurs with the consistency certification for such plan. Similarly, a Council objection to the consistency certification for an OCS plan does not prevent the person from receiving federal agency approval for those OCS-related federal actions determined by the Council or conclusively presumed to be consistent with the TCMP.

The Council will work with the applicant and the federal agency during the consistency review period to resolve any problems with the proposed action and to agree on conditions, which, if met by the applicant, will result in state concurrence and meet federal permit requirements.

If the Council finds that the actions described in detail in the OCS plan are consistent with the TCMP goals and policies and issues a concurrence, or if concurrence is conclusively presumed, the person who submitted the plan will not be required to submit additional consistency certifications and supporting information for Council consistency review at the time federal applications are actually filed for the federal actions to which the concurrence applies.

A person who submits an OCS plan which receives TCMP concurrence must send the Council secretary copies of applications for actions described in detail in the OCS plan. To allow the state to monitor the activities, these applications must be sent to the Council secretary after they are filed. Confidential and proprietary material within such applications need not be included.

b. Amended or New OCS Plans (15 CFR §§930.83-930.85)

If the Council objects to a person's OCS plan and an appeal under Subpart H of 15 CFR Part 930 is unsuccessful, the person must submit an amended or new plan to the Secretary of the Interior and to the Council secretary along with a consistency certification and information necessary to support the new consistency determination. The information must specifically describe the modifications made to the original OCS plan, and how the modifications will ensure that all of the proposed federal actions described in detail in the amended or new plan will be conducted in a manner consistent with the goals and policies of the TCMP.

Consistency review for amended or new plans begins upon receipt of a copy of the amended or new OCS plan, consistency certification, and accompanying information. If no decision is issued within the review period, the Council is conclusively presumed to concur with the person's consistency certification. The consistency review requirements for OCS plans described above apply to consistency review of amended or new OCS plans.

c. Compliance with OCS Plans (15 CFR §930.86)

The U.S. Department of the Interior and the Council are required to cooperate in their efforts to monitor federally licensed and permitted activities described in detail in OCS plans to make certain that such activities continue to conform to both federal and state requirements.

If Council members find that a person is failing substantially to comply with an approved OCS plan subject to the requirements described above, and that such failure involves the conduct of activities affecting CNRAs in a manner that is not consistent with the approved TCMP, the Council may review the matter.

If the Council finds that the person is failing substantially to comply with an approved OCS plan, the Council will inform the Minerals Management Service. The claim must include: (1) a description of the specific activity involved and the alleged lack of compliance with the OCS plan, and (2) a request for appropriate remedial action. A copy of the claim must be sent to the person and the Assistant Administrator.

If, after a reasonable time following the request for remedial action, the Council maintains that the person is failing to comply substantially with the OCS plan, the governor or the Council may file a written objection with the Secretary of Commerce. If the Secretary of Commerce finds that the person is failing to comply substantially with the OCS plan, the person must submit an amended or new OCS plan along with a consistency certification and supporting information to the Secretary of the Interior and to the secretary of the Council.

Following such a finding by the Secretary of Commerce, the person must comply with the originally approved OCS plan, or with interim orders issued jointly by the Secretary of Commerce and the Minerals Management Service, pending approval of the amended or new OCS plan. The review process for amended or new OCS plans applies to further Council review of the consistency certification for the amended or new plan.

A person will be found to have failed substantially to comply with an approved OCS plan if the Council claims, and the Secretary of Commerce finds, that one or more of the activities described in detail in the OCS plan which affects CNRAs are being conducted or are having an effect on CNRAs substantially different from that originally described by the person in the plan or accompanying information and, as a result, that the activities are no longer being conducted in a manner consistent with the TCMP.

The Secretary of Commerce may make a finding that a person has failed substantially to comply with an approved OCS plan only after providing a reasonable opportunity for the person and the Secretary of the Interior to review the Council's objection and to submit comments for the Secretary of Commerce's consideration.

7. State and Local Government Applications for Federal Assistance (15 CFR §§930.94, 930.95 and 31 TAC §506.50)

The Council will use the Texas Review and Comment System (TRACS) and its time frames to review state and local government applications for federal assistance. The Texas Review and Comment System is the intergovernmental review process established under Executive Order 12372. TRACS establishes a statewide system that provides state and local officials opportunities to review and comment upon state plans, applications for federal or state financial assistance, and environmental impact statements related to projects or programs that affect their jurisdiction before the proposals are approved or funded.

While state and local government applicants for federal assistance programs must undertake their proposed activities in a manner consistent with the goals and policies of the TCMP, the procedural and information requirements for applicants for federal assistance are those established by rule for TRACS (1 TAC §§5.191-5.253).

The responsibility for providing copies of the application to the Council rests with the State Single Point of Contact (SSPOC), established in TRACS to provide a clearinghouse for intergovernmental review. Upon receiving an application or a notice of intent to file an application from a state or local government for federal assistance listed under 31 TAC §506.12 of the federal consistency rule, the SSPOC will forward copies of the application or notice of intent to the secretary of the Council.

a. Federal Assistance: Council Referral and Review Procedures (15 CFR §§930.96-930.98 and 31 TAC §§506.51 and 506.52)

The Council will review state and local government applications for federal assistance that three regular members refer to the Council. The Council must issue a consistency concurrence or objection within 60 days of the date the SSPOC received the application if no Notice of Intent was submitted. If a Notice of Intent was submitted by the applicant to the SSPOC prior to submitting the application, the Council must issue a decision within 45 days of the date the SSPOC received the application. Noncompetitive continuation grant applications must be reviewed by the Council within 30 days of the SSPOC's receipt of the application.

If the Council concurs with the proposed project, the federal agency may grant the federal assistance to the applicant agency. Notwithstanding Council concurrence with the proposed project, the federal agency may deny assistance to the applicant agency. Federal agencies should not delay processing applications pending receipt of Council approval or objection. If a federal agency determines that an application will not be approved, it must immediately notify the applicant agency and the Council secretary.

If the Council objects to the proposed project, the Council secretary will notify the applicant agency, federal agency, and Assistant Administrator of the objection. Council objections must describe: (1) how the proposed project is inconsistent with specific elements of the TCMP; and (2) alternative measures (if they exist) which, if adopted by the applicant agency, would permit the proposed project to be conducted in a manner consistent with the TCMP goals and policies.

A Council objection may be based on a determination that the applicant agency has failed, following a written Council request, to supply necessary information. If the Council objects on the grounds of insufficient information, the objection must describe the nature of the information requested and the necessity of having such information to determine the consistency of the activity with the TCMP goals and policies.

Council objections must include a statement informing the applicant agency of a right of appeal to the Secretary of Commerce on the grounds described in Subpart H of Part 930 of the federal regulations. Following receipt of a Council objection, the federal agency cannot approve assistance for the activity except as provided in Subpart H of 15 CFR, Part 930.

The Council will monitor proposed federal assistance activities not listed in the TCMP rules. It will immediately notify all applicant agencies, federal agencies, and any other affected agency or office identified in the intergovernmental review process of proposed activities which can reasonably be expected to affect the TCMP area and which the Council is reviewing for consistency with the TCMP. Notification will also be sent by the secretary of the Council to the Assistant Administrator. The Council must inform the parties of objections within the time period permitted under the intergovernmental review process; otherwise the Council waives its right to object to the proposed activity.

If, within the permitted time period, the Council notifies the federal agency of its objection to a proposed federally assisted activity, the federal agency cannot provide assistance to the applicant agency except as provided in Subpart H, unless the Assistant Administrator disapproves the Council's decision to review the activity. The Assistant Administrator is guided by the provisions of §§930.54(c) and (d).

8. Mediation of Disputes by the Secretary of Commerce (15 CFR, Part 930, Subpart G)

If a serious disagreement arises between a federal agency and the Council while conducting federal consistency review, the Secretary of Commerce may be requested to mediate the disagreement. Secretarial mediation is available for: (1) license and permit disputes; (2) previously reviewed federal license and permit activities; (3) negative consistency determination disputes (for direct federal actions); (4) disputes concerning proposed direct federal actions; (5) previously reviewed direct federal actions; (6) federal assistance disputes; and (7) previously reviewed federal assistance activities.

The use of informal means for resolving disputes is encouraged by the federal statute and will be pursued by the Council whenever a disagreement arises. When informal means do not resolve the disagreement, the procedures established under 15 CFR, Part 930, Subpart G and TEX. NAT. RES. CODE §33.206(g) will be followed.

9. Secretarial Review Related to the Objectives or Purposes of the Act and National Security Interests (15 CFR, Part 930, Subpart H)

Under federal regulation, the Secretary of Commerce may review a federal license or permit activity, including those described in detail in an OCS plan, or a federal assistance activity

which the Council has found to be inconsistent with the TCMP and find the activity to be permissible if it satisfies the following: (1) the activity furthers one or more of the competing national objectives or purposes contained in §302 or §303 of the CZMA; (2) when performed separately or when its cumulative effects are considered, it will not cause adverse effects on CNRAs substantial enough to outweigh its contribution to the national interest; (3) the activity will not violate any requirements of the Clean Air Act, as amended, or the Clean Water Act, as amended; and (4) there is no reasonable alternative available (e.g., location or design) which would permit the activity to be conducted in a manner consistent with the TCMP.

Additionally, an activity will be found permissible by the Secretary of Commerce if it is necessary in the interest of national security. The federal regulations of 15 CFR, Part 930, Subpart H establish procedures that must be followed to file an appeal for Secretarial review.

10. Review by the Assistant Administrator on Behalf of Interested Parties (15 CFR, Part 930, Subpart I)

The federal regulations establish procedures for interested parties to notify the Assistant Administrator of federal actions which are believed (1) to be inconsistent with the TCMP but which are not found to be so by the federal agency or the Council, and (2) to have been incorrectly determined to be inconsistent with the TCMP. The subpart also provides for the reporting of any federal actions found by the Assistant Administrator to be inconsistent with the TCMP and for the performance review of state implementation of the federal consistency provisions of 15 CFR, Part 930.

CHAPTER SIX.
SPECIAL PLANNING ELEMENTS

A. Shorefront Planning

1. Access to Gulf Beaches

The Texas Open Beaches Act (TEX. NAT. RES. CODE ANN. §61.011 *et seq.*) "declares and affirms" the public's right to "free and unrestricted" access to and from "the state-owned beaches bordering on the seaward shore of the Gulf of Mexico." On the "wet beach," between the mean low and mean high tide lines, the public enjoys an access right by virtue of state ownership and public trust. Above the high tide line, across the "dry beach" to the vegetation line, the public enjoys an access right or public easement under common law concepts such as custom, prescriptive right, and dedication. This dry beach easement is usually demonstrated by the long-standing public use of nearly all parts of the Texas Gulf Coast.

Under the Open Beaches Act, the burden of proof rests with the private landowner rather than with the beach user in the event of a conflict regarding public traversal or use of private land. The act prohibits the erection of any physical barrier that would impede public access to the beach and any written or oral claim that the public beach is private property or that the public does not have the right of access to it.

The Open Beaches Act applies only to Gulf beaches. There are 367 miles of open Gulf shoreline in Texas. Under the Open Beaches Act, 293 miles are open for public use. Of these, 173 miles are considered easily accessible; that is, accessible by driving along the shore or by walking no more than one mile from a point that can be reached by a two-wheel-drive vehicle (Texas Energy and Natural Resources Advisory Council, 1982).

The lead enforcement official for public beach rights under the Open Beaches Act is the Texas Attorney General, who may act independently or on the request of the Commissioner of the General Land Office. Other enforcement officials are the pertinent county attorney, district attorney, or criminal district attorney. Remedies under the Act include (1) injunctions to remove and prevent encroachments or other interferences with public beach access, (2) declaratory judgements to clarify public and private rights, and (3) civil penalties.

The Open Beaches Act directs the GLO to promulgate coastwide rules covering the acquisition of beach accessways, beach user fees, protection of the public easement from erosion, vehicular traffic on public beaches, contents of local beach access and use plans, and guidelines for construction on land adjacent to public beaches. These rules (31 TAC §§15.1-15.10) were adopted by the GLO on February 18, 1993.

Coastal counties and municipalities are also required to develop dune protection and beach access plans conforming to the GLO rules. These local plans were to be submitted to the GLO by August 16, 1993, for a 60-day review to determine their compliance with the adopted rules. Counties and municipalities whose plans are certified have ordinance power over beachfront development, beach fees, and vehicular prohibitions. Amendments to the certified

plans must be submitted to the attorney general and the land commissioner for review. The commissioner will certify an amendment if the action is consistent with the GLO rules and the local beach access plan.

No person may engage in construction landward of and adjacent to a public beach without proper certification. Applicants are required to obtain, from the appropriate city or county local government, a beachfront construction certificate which certifies that the activity is consistent with the Open Beaches Act and will not obstruct public access to or use of the beach. For construction in critical dune areas, an applicant must obtain a dune protection permit from the proper local authority. This dune protection permit certifies that the activity will not materially weaken dunes or dune vegetation seaward of the local government's dune protection line.

The attorney general, independently or at the request of the land commissioner or any county, district, or district criminal attorney, can file suit to prevent uncertified activity. In the same suit, the attorney general, land commissioner, or local attorney can recover penalties and costs for removing the obstruction from the public easement. The violator is liable for a civil penalty of not less than $50 nor more than $1000 a day. Coastal areas within state or national parks are exempt from the planning directive.

One required element of the local plan is a description and map of all accessways to the public beach. Another element is a vehicular control plan which describes short- and long-term goals, beach user fees, dune protection for new beach accessways, and identification of fee and non-fee areas. If a local government proposes to close the beach to vehicles, the beach access plan must detail the provisions that will be made for equal or better access. Standards for preserving and enhancing public beach use and access are included in the GLO rules (31 TAC 15.7(g)). The GLO will use information in the local plans to compile an inventory of beach access points and will enter this information into its geographic information system database.

2. Access to Bayshores and Coastal Waters

Texas does not have a regulatory equivalent of the Open Beaches Act for bay shorelines. Access to public bayshore areas (federal, state, county, or city parks and refuges) is protected by the various public entities that own and operate recreational facilities. Chapter 33 of the Texas Natural Resources Code gives priority to public access to and use of coastal waters over individual use. Bayshore access afforded by public highway rights-of-way is protected by the Texas Department of Transportation (TxDOT). TxDOT adheres to a policy of allowing these rights-of-way to be used for access to the bayshores as long as such usage does not create a hazard to public safety.

The Texas Outdoor Recreation Plan (TORP, 1990), developed by the TPWD, notes that there is considerable access to saltwater resources in the Houston/Galveston area but that access to Galveston Bay should be improved. Saltwater resources are abundant along the "Golden Crescent" and "Coastal Bend" regions of the Texas coast, but many areas lack access or facilities or are overcrowded. The TPWD oversees the state's boat ramp construction program, which offers matching grants to local sponsors.

The Galveston Bay National Estuary Program (GBNEP) included in its Comprehensive Conservation and Management Plan (CCMP), called the Galveston Bay Plan, provisions for the development and implementation of a shoreline access plan. In its five-year study of Galveston Bay, the GBNEP found that public access to the Galveston Bay shoreline needs to be improved and set the goal of improving public access (Galveston Bay Plan, April 1995, Action Plan SM-5). The plan recommends increasing access to public bay shorelines and improving public shoreline parks and other special public areas in a manner consistent with protection of the ecosystem.

3. Enforceable Policies and Legal Authorities

The General Land Office, Office of the Attorney General, and coastal municipalities and counties manage access to coastal waters or beaches or certify activities for compliance with the Open Beaches Act (TEX. NAT. RES. CODE ANN. §61.001 *et seq.*; 31 TAC §§15.1-15.10).

4. Funding Programs

The GLO rules for management of the beach/dune system allow local governments with approved dune protection and beach access plans to collect fees for use of the public beach. These fees may be applied to the acquisition and maintenance of off-beach parking and accessways (31 TAC §15.8(f)). State grants for enhancement of access and facilities are available to coastal communities from the TPWD's Land and Water Conservation Fund and Texas Recreation and Parks Account.

B. Shoreline Erosion Response

1. Introduction

The Texas coastline is composed of barrier islands, ancient deltaic headlands, chenier plains, peninsulas, bays and estuaries, and natural and man-made passes. These are dynamic environments, constantly reshaped by the natural processes of erosion and accretion. They are dependent on the balance between sea level, sediment supply, and wave and tidal energy for stability.

Erosion is a subject of primary concern on the Texas coast, where it has serious adverse effects on beaches and bayshores and contributes to habitat degradation and loss. Prime tourist beaches are vanishing; the Gulf Intracoastal Waterway is threatened by the possibility of a major breach at Sargent Beach; and agricultural and industrial lands, infrastructure, and homes are being destroyed. The erosion is attributed to relative rise in sea level and to the fact that the sediment removed by wave energy exceeds that supplied to the beach by longshore currents. Humans also contribute to erosion by altering natural sedimentation patterns through development and shoreline stabilization.

Rivers are the primary source of sand for the building of barriers and beaches in the western Gulf of Mexico. Climate change has caused natural reductions in the sediment supply, but human activities have exacerbated the problem. Flood-control structures have blocked sediment transport in many rivers.

Only small sections of the Texas Gulf shoreline have been stabilized by erosion-response structures. Hard or rigid structures erected to prevent or slow erosion or protect the shoreline include jetties, groins, breakwaters, rubble mounds, riprap, seawalls, bulkheads, retaining walls, and revetments. Erosion-response structures protect property against erosion. But while landward properties may benefit, adjacent bayshore property or beaches and dunes may not. Wave energy reflected by the structures enhances erosion at the structure's base and end points. Overtopping and scouring by waves can undermine a seawall and eventually cause it to collapse. Any erosion-response structure that protrudes into the intertidal zone alters the sediment budget by either intercepting sand transported by longshore currents or preventing sand from entering the littoral system.

Erosion rates vary along the Texas Gulf Coast. Trends in shoreline change are determined from topographic map, aerial photo, and beach profile data spanning a time period of decades or longer. Average rates of shoreline erosion can be significant, including greater than 5 feet per year along nearly 14 miles of the Jefferson County coastline, 24 feet per year at Sargent Beach; nearly 13 feet per year at Packery Channel on north Padre Island; and up to 7 feet per year at South Padre Island (Morton, 1975; Morton, 1993).

Erosion is not confined to the Texas Gulf beaches; it also affects the bay systems, where it causes the loss of agricultural, industrial, and residential lands and productive wetlands. Shoreline erosion rates have been measured for about half of the state's bay shorelines, including those of Galveston, Matagorda, San Antonio, Copano, and Corpus Christi bays. In total, about two-thirds of Texas bay shores are eroding at rates of two to nine ft/yr (Morton and Paine, 1990).

2. Identifying and Assessing Shoreline Erosion

In 1973, the 63rd Texas Legislature directed the Bureau of Economic Geology (BEG) at the University of Texas at Austin to calculate the erosion rates along the Texas Gulf shoreline. The outcome was a series of published reports (Morton, 1974 and 1975; Morton and Pieper, 1975a, 1975b, 1977; Morton et al., 1976).

In 1991, recognizing that coastal erosion was a significant problem, the 71st Texas Legislature passed Senate Bill 1053, designating the Texas General Land Office as the lead state agency to coordinate erosion avoidance and remediation for the Texas coast. The GLO, in cooperation with state and federal agencies and local governments, is developing a coastwide policy for managing coastal erosion to identify Texas Gulf beaches that are eroding and rank them from most to least critical, and to implement a comprehensive long-term management plan for the restoration of the state's critically eroding beaches. This coastwide erosion plan will be submitted to the legislature with recommended actions.

In 1993, the BEG published Open-File Report 93-1, "Shoreline Movement Along Developed Beaches of the Texas Gulf Coast: A Users' Guide to Analyzing and Predicting Shoreline Changes." This report included a corresponding historical shoreline change map (Morton, 1993). Together, these documents describe historical shoreline changes for most of the developed sections of the Texas coastline. Copies of the map are available for public review at local government planning offices and at the GLO.

The BEG report will be one of the tools used for identification and ranking of critical erosion areas and the development of the coastwide erosion plan. Other criteria that will be considered in ranking eroding areas and mitigating coastal erosion are: shoreline length and width, type of sediment, and coastal processes (wind direction, wave height, period, and direction, and tidal range); potential impacts on structures, public infrastructure, local economy, and natural resources, and the benefits gained by protecting them; public support and involvement; feasibility and cost of restoring the eroded shoreline; environmental impacts of restored shorelines on the beach, nearshore, or dunes; distance from an inlet or pass; the projected life of any proposed erosion response project; the amount of public subsidy and the public and private benefits; and existing shoreline beach nourishment or maintenance programs.

Because the cost of restoring eroding areas is high and funding is limited, priorities must be set. The coastwide erosion response plan will be the basis for prioritization of shore protection and restoration projects.

3. Management of Eroding Areas

Shorefront property commands the highest price but carries with it the greatest risks of flooding and erosion. Most coastal landowners can tell if their property is eroding. Usually, what they recognize is short-term shoreline changes caused by storms or human activities. The GLO has defined an eroding area as "a portion of the shoreline which is experiencing a historical erosion rate of greater than two ft/yr based on published data of the University of Texas at Austin, Bureau of Economic Geology."

Applicants proposing construction in eroding areas, which are designated for special management, must follow strict guidelines. Structures must be elevated on pilings in accordance with FEMA standards and designed for feasible relocation; with limited exception, permittees may not pave or alter the ground below the lowest habitable floor; financial assurance to fund eventual relocation (flood insurance) must be supplied; and structures must be designed to minimize impacts on natural hydrology and not cause erosion. Private erosion response structures are prohibited for Gulf-fronting properties except for retaining walls located at least 200 feet landward of the line of vegetation. These restrictions are established by the GLO rules for management of the beach/dune system (31 TAC §15.6(f)). Eroding areas have not been formally designated by the state; however, local governments have included the special provisions governing construction in their dune protection and beach access plans. The coastwide erosion plan will include recommendations for erosion response and will identify critical erosion areas and the conditions where structural erosion control is appropriate.

4. Enforceable Policies and Legal Authorities

The GLO, the Office of the Attorney General, the Corps of Engineers, and coastal municipalities and counties manage or permit shorefront development and shore protection projects (31 TAC §§15.1-15.10; TEX. NAT. RES. CODE ANN. Ch. 33; and 33 U.S.C. §1251 *et seq.* (West 1986 and Supp. 1993)).

The School Land Board issues leases and easements for structures on state-owned lands that may increase the erosion hazard. A use or activity that may exacerbate erosion on state-owned land must be approved in advance by the SLB. GLO staff conduct a site visit and work with the applicant to determine the best method of erosion response based on a hierarchy of stabilization techniques. The SLB currently may allow construction of some groins, bulkheads, seawalls, detached breakwaters, and revetments along the state's bay shores if they are determined to be the most appropriate erosion response method. Of the structural erosion-response methods, riprap is preferred for bayshores because the material provides habitat for aquatic life and helps absorb wave energy. Overall, however, the GLO encourages the use of nonstructural methods for shoreline stabilization. The GLO's Surface Damage Fund has enabled coastal Soil and Water Conservation Districts to successfully protect eroded bay shorelines with temporary wave barriers and marsh grass plantings. This program, developed in coordination with the U.S. Department of Agriculture's Natural Resources Conservation Service, has also been successful in educating the public about the impacts of coastal and shoreline erosion.

The GLO rules for management of the beach/dune system (31 TAC §§15.1-15.10) prohibit individual Gulf-front property owners from erecting erosion response structures. A retaining wall may be permitted 200 feet landward of the natural vegetation line.

The Coastal Management Program rules also contain the following enforceable policy:

> "Erosion of Gulf beaches and coastal shore areas caused by construction or modification of commercial navigable waterways or jetties, breakwaters, groins, or shore stabilization projects designed to support or to maintain commercially navigable waterways shall be mitigated to the extent the

costs are reasonably proportionate to the benefits. Factors to be considered in determining whether the costs of the mitigation are reasonably proportionate to the benefits include environmental benefits, recreational benefits, flood or storm damage prevention benefits, economic development benefits, and all other benefits that will be realized or lost."

5. Funding

There is a need for a dedicated and permanent funding source for implementation of a shore protection and restoration program in Texas. Project funding is now a local initiative, shared with the state and federal government when possible.

C. Energy Facility Siting

1. Introduction

The responsibility for developing energy plans and for permitting the siting and operation of energy facilities is shared among several federal, state, and local agencies, and different permitting processes apply to various types of energy facilities. In §304(6) of the Coastal Zone Management Act of 1972, as amended, the term "energy facilities" is defined as any equipment or facility which is or will be used primarily in the exploration for, or the development, production, conversion, storage, transfer, processing, or transportation of, any energy resource, or for the manufacture, production, or assembly of equipment, machinery, products, or devices which are involved in any of these activities.

The term includes, but is not limited to: (1) electric generating plants; (2) petroleum refineries and associated facilities; (3) gasification plants; (4) facilities used for the transportation, conversion, treatment, transfer, or storage of liquefied natural gas; (5) uranium enrichment or nuclear fuel processing facilities; (6) oil and gas facilities, including platforms, assembly plants, storage depots, tank farms, crew and supply bases, and refining complexes; (7) facilities, including deepwater ports, for the transfer of petroleum; (8) pipelines and transmission facilities; and (9) terminals which are associated with any of the aforementioned.

The CZMA requirements for inclusion of an energy facility siting process in the state's coastal management program are found in §923.13 of the regulations. The state must develop a planning process capable of anticipating and managing impacts from energy facilities likely to be located in, or that directly and significantly affect, the coastal zone. In developing this process, the state must:

- identify energy facilities likely to locate in, or to directly and significantly affect, coastal natural resource areas;
- establish procedures for assessing the suitability of sites, including evaluation of the costs and benefits of proposed and alternative sites in terms of state and national interest, as well as local concerns;
- identify enforceable state policies, authorities, and techniques for managing energy facilities and their impacts; and
- identify the process by which public and private parties will be involved in energy facility planning and siting.

  In describing the process for involvement of public and private parties in the siting process, the state must:

- identify the organization, structure, and procedure by which energy facility planning and siting decisions are carried out in the state;

- explain the respective roles of relevant local, state, and federal agencies, their relationship to the lead agency and the CMP requirements, and the role of other interested and affected parties in consistency review; and

- provide a clear and detailed description of the administrative procedures and decision points where national interests shall be considered. (See Part II, Chapter Seven, Consideration of the National Interest and Activities of Regional Benefit).

2. Energy Facilities Likely to Locate on the Texas Coast

The Texas Gulf Coast is slowly recovering from the economic devastation of the oil price collapse in the early 1980s. Oil and, increasingly, natural gas remain mainstays of the region's economy in the 1990s, but the Gulf Coast is less dependent on the various facets of the oil and gas industry for its economic vitality. In general, the trend of crude oil production is downward. The average 7.2 million barrels/month of domestic crude production during the first six months of 1992 is the lowest level of production in more than 30 years (Texas Comptroller of Public Accounts, 1992). Natural gas production, however, remained constant over the ten-year period ending in 1993, with a yearly production averaging 5.6 trillion cubic feet (Railroad Commission of Texas, 1994). Natural gas production should play a greater role in the Texas economy because of conversion of state agency and metropolitan transit authority vehicles to cleaner-burning alternative fuels.

To meet the continuing demand, energy production off the Texas coast will continue. Increasing economic activity, population growth, and an improving standard of living will contribute to a 15 percent rise in the demand for energy services from 1990 to 2010 (Energy Information Administration, 1993).

Activities in the domestic energy market have slowed since the early 1980s, and existing energy facility infrastructure on the Texas coast appears adequate to handle current needs. However, it is anticipated that in addition to drilling new wells and workover of old wells, future needs may include:

- oil and gas facilities, including platforms, assembly plants, storage depots, tank farms, crew and supply bases, and refining complexes;
- chemical and petrochemical complexes;
- electric generating plants;
- pipeline and transmission facilities;
- gasification plants;
- geothermal plants;
- ethanol plants;
- terminals associated with all of the above; and
- supporting infrastructure, such as manufacturing, production, or assembly plants.

Resolution of issues pertaining to the treatment, storage, and disposal of radioactive waste will continue to affect schedules for the siting and licensing of high-level and low-level radioactive waste disposal facilities and transportation infrastructure. In addition, new science

and engineering facilities and environmental cleanup and waste management facilities will be important in the future.

3. Procedures for Assessing the Suitability of Sites

Energy facility planning and management is shared by local and state governments through the zoning, permitting, and consistency review processes. Through Special Planning Elements (§501.14(b) of the CMP goals and policies), consistency requirements (Chapters 505 and 506), and the issuance of permits and leases, the state will ensure that suitable sites for major energy facilities are chosen and developed according to the goals and policies of the CMP.

In addition, the GLO coordinates the use of the Resource Management Code (RMC) system. For each tract, state and federal agency biologists, archaeologists, and engineers have listed sensitive natural resources such as oyster reefs, bird rookery islands, and important aquatic nursery areas. The RMCs alert users to other considerations that may also affect tract development plans, such as the presence of archaeological shipwrecks, federal navigation channel rights-of-way, and federally protected endangered species. The codes assigned to each submerged state land tract indicate recommended guidelines for activities within the tract boundaries. Codes are recommended by the Corps of Engineers, National Marine Fisheries Service, U.S. Fish and Wildlife Service, Texas Historical Commission, and Texas Parks and Wildlife Department. The majority of the codes are designed to protect biologically sensitive areas, but some promote navigational safety, preserve recreational values, and safeguard archaeological and cultural features. To the extent that they have jurisdiction, local governments are encouraged to apply these siting criteria to projects brought before them in the early stages of planning.

RMCs serve several purposes. First, they inform lessees and their project planners about sensitive biologic habitats and other features of concern on state-owned submerged lands (6,000 tracts) in the bays and estuaries of the Texas coast and in the Gulf of Mexico. Second, they also inform lessees and project planners about the specific concerns that state and federal resource agencies have regarding these sensitive areas. This helps prevent potential resource use conflicts associated with the development of a state tract early in the planning process and therefore helps protect CNRAs.

The RMCs are updated and published in the "Notice for Bids" sent to a mailing list of approximately 1,600 interested parties and industry before the semiannual sealed-bid lease sales held by the SLB in April and October. The notice lists all state-owned submerged tracts nominated for lease and contains the lease, bid form, and instructions for bidding.

4. Enforceable State Policies, Authorities, and Techniques for Managing Energy Facilities and Their Impacts

Texas' approach to siting may be called "management of impacts." The state sets performance standards to maintain the quality of the human and natural environment. These performance standards are embodied in the policies of the CMP and implementing agencies, and they are administered through the permitting process.

For example, §501.14(b)(1)(B) of the CMP goals and policies, regarding oil and gas production on state submerged lands and on private submerged lands, states that lessees, easement holders, and permittees shall construct facilities in a manner that avoids impoundment or draining of coastal wetlands if practicable, and shall mitigate any adverse effects on coastal wetlands impounded or drained in accordance with the sequencing requirements in §501.14(h), Development in Critical Areas. Adherence to this policy by agencies issuing permits for proposed activities that may adversely affect critical areas will maintain environmental quality and permit more accurate estimates of the impacts of proposed projects. The system will also provide for accountability in decision-making: review criteria, findings, and justifications will be provided to the applicant and interested parties.

The GLO already has adequate jurisdiction over energy facility siting on state-owned land. As steward of Public School Fund land, the GLO determines whether a proposed use of the land is appropriate. The SLB and the commissioner of the GLO are authorized to make final decisions about permitting the use of this land.

The GLO and the SLB have authority over the siting of oil and gas exploration and production facilities in the bays and estuaries, as well as offshore to the three-marine-league line (approximately 10.36 miles), under Chapters 32, 33, 51, 52, and 53 of the Texas Natural Resources Code and rules of the GLO and SLB (31 TAC §§9, 13, & 155). The SLB is authorized to permit and regulate the placement, design, construction, and use of structures that extend onto coastal public submerged land from adjacent land not owned by the state and to prescribe reasonable filing fees and fees for the granting of leases, easements, and permits. The SLB may grant leases for public purposes; easements for the placement of structures for purposes connected with the ownership of littoral property and for the construction of channels, wharves, docks, and marinas; and channel easements to the holder of any surface or mineral interest in coastal public submerged land for purposes necessary or appropriate to the use of the interest.

Energy leasing has historically been a major part of the GLO's activities. The Energy Division operates under administrative rules governing oil, gas, and hard mineral leasing. These rules require energy leases to be consistent with the CMP. Guidelines drafted for subsurface leasing in CNRAs will become policy through the rulemaking process. Requirements for plans of operations will be adopted in rule form and will become binding on lessees through inclusion in lease contracts. The GLO already requires approved plans of operations for hard mineral leasing. In addition, activities within a state coastal preserve (state-owned submerged land leased to TPWD for management) are subject to limitations on the use of the surface, including a requirement that activities be consistent with the management plan designed for the area.

To inventory and regulate oil and gas facilities already sited on the coast, the Oil Spill Prevention and Response Act of 1991 requires operators of waterfront and offshore facilities that drill, pump, store, handle, or transfer oil in Texas to apply for a discharge prevention and response certificate. The GLO set spill prevention and response standards for these facilities in rules, and the facilities must be certified in order to operate. A facility is not permitted to operate without this certificate. As of August 1993, the GLO had issued 241 Coastal Facility Certificates.

The GLO regulates seismic exploration as well as siting of all facilities including canals, pipelines, and platforms on state-owned submerged lands.

The following agencies regulate energy-related activities and structures on state and private land:

- U.S. Army Corps of Engineers - dredging and filling in waters of the United States including wetlands.

- Railroad Commission of Texas - tidal disposal of oil and gas waste, drilling permits, 401 certification of federal dredge and fill permits and federal oil and gas NPDES permits, solid waste disposal permits (including Class II injection and disposal well permits), and administration of pipeline safety regulations for intrastate pipelines.

- U.S. Environmental Protection Agency - National Pollutant Discharge Elimination System (NPDES) permits.

- Federal Energy Regulatory Commission - construction and temporary permitting of pipelines.

- U.S. Department of Transportation - safety standards, design, installation, inspection, emergency plans and procedures, operations, and maintenance in transportation of natural gas and hazardous liquids pipelines.

- U.S. Coast Guard - lighting, location, and apparatus operating requirements for pipelines, platforms, artificial islands, fixed structures, and navigational and free-floating structures.

The Council's input into proposed siting decisions will be through the CMP consistency process and through agency actions subject to the CMP. Siting of energy facilities, such as petrochemical plants and utilities, will be subject to the regulatory authorities for permitting of such facilities, including:

- water rights and water uses (TNRCC);
- wastewater permits (TNRCC);
- underground storage tanks (TNRCC);
- solid and hazardous waste disposal (TNRCC);
- air emissions (TNRCC);
- structures on state-owned submerged land (GLO/SLB);
- siting and operation of nuclear and fossil-fuel power plants and transmission lines (DOE);
- floodplain construction (FEMA and rules and ordinances of local governments);
- electric power generation, transportation, and distribution (PUC); and
- facility certification for oil spill pollution prevention (GLO).

5. Public and Private Party Participation in the Energy Facility Planning and Siting Process

The public may attend meetings of all state agencies. If an agency's response to a citizen's concern is unsatisfactory, the issue may be subject to adjudicatory hearings or other

dispute resolution processes and may, as set forth in the consistency rule, ultimately be referred to the Coastal Coordination Council.

In Texas, the Open Records Act (Chapter 552 TEX. GOV. CODE ANN.) provides the public with ample opportunity to request information from state government. The Open Records Act sets very specific time frames within which an agency must respond to a request, and it shields from inspection only a few, very specific documents. The Open Meetings Act (Chapter 551 TEX. GOV. CODE ANN.) requires agencies' governing boards to act in public meetings and provides the interested public full notice of and opportunity to comment on matters to be deliberated on and actions to be taken at these meetings. This information typically includes the type of activity to be authorized and it location. Finally, those agencies whose actions are subject to the Administrative Procedure Act (Chapter 2001 TEX. GOV. CODE ANN.) have adopted rules giving the public further notice, comment, and public hearing opportunities. For a more detailed explanation of these provisions, see Part II, Chapter Five, Ensuring Compliance with Program Policies.

The involvement of federal, state, and local governments, the public, and regional agencies in the development and implementation of the CMP and in energy facility siting are described in Part II, Chapter Eight, Public Participation and Federal Agency Consultation.

D. Coastal Wetlands Management

1. Introduction

Coastal wetlands are an integral part of estuarine ecosystems and have tremendous biologic and economic value. Texas wetlands serve as nursery grounds for over 95 percent of the recreational and commercial fish species found in the Gulf of Mexico; they provide breeding, nesting, and feeding grounds for more than a third of all threatened and endangered animal species and support many endangered plant species; and they provide permanent and seasonal habitat for a great variety of wildlife, including 75 percent of North America's bird species.

Coastal wetlands also perform many chemical and physical functions. Wetlands temporarily retain certain pollutants such as suspended material, excess nutrients, toxic chemicals, and disease-causing microorganisms. Marshes can filter nitrates and phosphates from rivers and streams that receive wastewater effluent. Some pollutants associated with the trapped material in wetlands may be converted by biochemical processes to less harmful forms, may even remain buried, and may be taken up by the wetland plants and either recycled or transported from the area. Wetlands help reduce erosion by absorbing and dissipating wave energy, binding and stabilizing sediments, and increasing sediment deposition. Primarily because of their topography or position in the landscape, wetlands can reduce, capture, and retain surface-water runoff, thus providing storage capacity and overall protection during periods of flooding. Wetlands also promote groundwater recharge by diverting, slowing, and storing surface water, thus allowing infiltration and percolation of water into the saturated zone.

2. Status and Trends

Estimates of wetland acreage in the 19 coastal counties in 1979 range from 611,760 acres of fresh, brackish, and salt marshes (TPWD, 1988) to approximately 1.8 million acres of salt, brackish, fresh, forested, and scrub-shrub wetlands (Field et al., 1991). This valuable resource is disappearing at an alarming rate. The TPWD estimates that 35 percent of the state's coastal marshes were lost between 1950 and 1979 (TPWD, 1988). The total loss of marshes in the river deltas since the 1950s amounts to about 21,000 acres, or 29 percent of the river-delta marsh area existing in the mid-1950s (White and Calnan, 1990). In the Galveston Bay system, from the 1950s to 1989, there was a net loss of 33,400 acres, which amounts to 19 percent of the wetlands that existed in the 1950s (White et al., 1993). The rate of loss, however, declined over time, from about 1,000 acres per year between 1953 and 1979 to about 700 acres per year between 1979 and 1989.

3. Probable Causes of Loss and Degradation

Wetland loss results from both natural processes and human activities. Table 2 lists the probable causes of loss and degradation for the entire state, and Table 3 lists the causes and their relative importance for the Galveston Bay system. Between the 1950s and 1989, subsidence (primarily from groundwater withdrawal and, in some isolated areas, oil and gas production) and relative sea-level rise converted 26,400 acres of emergent wetlands in the Galveston Bay system, or about 30 percent of the total gross loss (88,500 acres), to open water and barren flats (White et al., 1993). Approximately 5,700 acres of emergent wetlands in the Galveston Bay system were

Table 2

Statewide Causes of Wetland Loss and Degradation

(Modified from TPWD, 1988)

HUMAN THREATS	
Direct:	
1.	Drainage for crop and timber production and mosquito control.
2.	Dredging and stream channelization for navigation channels, flood protection, shoreline floodplain housing development, and reservoir maintenance.
3.	Filling for dredged spoil and other solid waste disposal, roads and highways, and commercial, residential, and industrial development.
4.	Construction of dikes, dams, levees, and seawalls for flood control, water supply, irrigation, and storm protection.
5.	Discharges of materials (e.g., pesticides, herbicides, and other pollutants) into wetlands.
6.	Mining of wetland soils for peat, coal, gravel, phosphate, and other materials.
Indirect:	
1.	Sediment diversion by dams, deep channels, and other structures.
2.	Hydrologic alterations by canals, spoil banks, roads, and other structures.
3.	Subsidence due to extraction of groundwater, oil, gas, sulphur, and other minerals.
4.	Erosion from boat wakes.
NATURAL THREATS	
1.	Sea level rise.
2.	Droughts.
3.	Hurricanes and other storms.
4.	Erosion.
5.	Biotic effects (e.g., muskrat, nutria, grass carp, and goose "eat-outs").

Table 3

Causes of Wetland Loss and Degradation in the Galveston Bay System

(Modified from White et al., 1993)

HUMAN THREATS	
Direct:	
1.	Drainage for crop production and expansion of upland range land. (Major)*
2.	Dredging and stream channelization for navigation channels, flood protection, coastal housing developments, and reservoir maintenance. (Moderate)
3.	Filling for dredged spoil and other solid waste disposal, roads and highways, and commercial, residential, and industrial development. (Moderate)
4.	Construction of dikes, levees, and seawalls for flood control, water supply, industrial purposes, irrigation, and storm protection. (Major)
5.	Discharges of materials (e.g., pesticides, herbicides, other pollutants, nutrient loading from domestic sewage and agricultural runoff, and sediments from dredging and filling, and agricultural and other land development) into waters and wetlands. (Undetermined)
6.	Mining of wetland soils for sand, gravel, peat, and other materials. (Minor)
Indirect:	
1.	Sediment diversion by dams, deep channels, and other structures. (Undetermined)
2.	Hydrologic alterations by canals, spoil banks, roads, and other structures. (Undetermined)
3.	Subsidence due to extraction of groundwater, oil, gas, sulphur, and other minerals. (Major)
4.	Saltwater intrusion resulting from indirect threats noted above. (Undetermined)
5.	Erosion from boat wakes.
NATURAL THREATS	
1.	Subsidence (including natural rise of sea level). (Minor)
2.	Droughts. (Undetermined)
3.	Hurricanes and other storms. (Undetermined)
4.	Erosion. (Moderate)
5.	Biotic effects (e.g., muskrat, nutria, grass carp, and goose "eat-outs"). (Undetermined)

* Relative importance of causes shown in parenthesis.

converted to upland urban use (oil and gas facilities, residential development, etc.) between the 1950s and 1989. During this same period, approximately 35,600 acres of fresh or palustrine emergent marshes in the Galveston Bay system were transformed to uplands (White et al., 1993). Approximately 33 percent of the gross loss in emergent wetlands is attributed to the conversion of marshes to upland rangeland and cropland. The percentage of loss in the Galveston Bay system due to agricultural development is lower than the national average, which is estimated at 87 percent from the mid-1950s to mid-1970s, and 54 percent from the mid-1970s to mid-1980s (White et al., 1993).

Subsidence is the overriding cause of wetland loss along some river delta marshes, such as the San Jacinto River. (White and Calnan, 1990). In the Neches River valley, a combination of factors, including subsidence, relative sea-level rise, fault movement, channel dredging, dredged material disposal along levees, and impoundment of sediments along streams, has probably contributed to wetland loss (White and Calnan, 1990).

4. State-Owned Coastal Wetlands Conservation Plan and Other Wetland Management Efforts

Approximately sixty percent of wetlands, seagrasses, and critical areas within the coastal zone are on public lands. With the passage of S.B. 1054 in 1991, the state adopted a goal of "no overall net loss" of these areas. The TPWD and GLO are developing a State-Owned Coastal Wetlands Conservation Plan (SOCWCP) to achieve the immediate goal of no net loss and, in the long term, a net gain of coastal wetlands. S.B. 1054 limits the SOCWCP to wetlands that underlie or lie adjacent to tidal waters and that are owned by the state.

The SOCWCP contains both regulatory and nonregulatory components. The wetland management components in the SOCWCP include:

a. Inventories

The USFWS is using November and December 1992 and February and March 1993 color infrared aerial photography to update National Wetland Inventory (NWI) maps (scale 1:24,000) for coastal Texas. Previous inventories were conducted using 1950s, 1978/1979, and 1989 photography. Wetlands will be delineated and classified according to Cowardin (1979) on 463 U.S. Geological Survey 7.5-minute maps for 21 coastal counties. County atlases will be produced for each of the 21 counties and will include wetland values and conditions, fish and wildlife utilizing the wetlands, and lists of wetland plants and hydric soils. In addition, the USFWS is conducting a National Status and Trends study in coastal Texas. The goal of the study is to produce comprehensive, statistically valid acreage estimates of wetland losses and gains for the time period between the 1950s and the 1990s.

The TPWD is also classifying and monitoring wetlands using satellite thematic mapper imagery and applying the NOAA CoastWatch Change Analysis Program protocol (Thomas and Ferguson, 1990). In addition, the TPWD is developing guidelines for sensitive wetlands that will provide the basis for regulations regarding such coastal issues as oil spill prevention and response, natural resource damage assessment, mitigation, and acquisition. The TPWD is using a wide range of data--including fisheries, waterfowl, and wetland habitats--to identify and assess sensitive wetlands. Both the USFWS and TPWD inventories will be used to help determine the status and trends of wetland resources.

b. Restoration

In addition to comprehensive inventories to help monitor wetland status and trends, inventories of coastal wetland restoration sites within watersheds are also being conducted. The GLO has identified sites for wetland restoration in the Dickinson Bay/Bayou watershed in the Houston-Galveston area and is developing restoration plans for the sites. The use of dredged material to restore and create wetlands in the Galveston Bay system is a key component of the Houston-Galveston Navigation Channels Project, which is the plan for expanding the commercial waterways of Galveston Bay. Also, the Galveston Bay Plan is promoting the development of a beneficial use program for dredged material which includes funding mechanisms to meet the added costs of handling and processing the material and eliminates nonbeneficial disposal of dredged material. The plan includes a goal of restoring or creating 15,000 acres of wetland in the Galveston Bay area within 10 years (Galveston Bay Plan, April 1995, p. 41).

Wetland restoration efforts are being expanded to other coastal watersheds, and a number of coastal wetland restoration projects and plans are underway. For example:

- The State Soil and Water Conservation Board is conducting a watershed demonstration project in western Fort Bend County that includes interaction with private landowners in the development of plans for wetland conservation and restoration. The project is focusing on restoring "prior-converted" cropland.

- The TPWD is the nonfederal sponsor of a project to restore the Salt Bayou Marsh in Jefferson County to historical intermediate salinities. The Corps of Engineers is the federal project sponsor. Planning is also underway to restore wetland ecosystems within the lower Neches wetlands in Orange County and Mad Island wetlands in Matagorda County. Also, the North American Waterfowl Management Plan and the Gulf Coast Joint Ventures are currently underway as a cooperative effort among the TPWD and other public and private groups.

- The Bureau of Reclamation is conducting a demonstration project in the Rincon Bayou/Nueces River delta marshes. The project is designed to complement the ongoing Nueces Estuary Regional Wastewater Planning Study sponsored by the City of Corpus Christi, the state, and several local entities. The objective of the project is to provide more frequent release of fresh water and accompanying nutrients and sediment, thus increasing productivity in the Nueces-Corpus Christi estuary.

- The Galveston Bay Foundation is developing a program to restore or enhance approximately 15,000 feet of shoreline at several sites in the Clear Lake drainage. The program involves industry, government agencies, conservation groups, and hundreds of volunteers. By incorporating volunteers, the program additionally provides an educational opportunity to increase public awareness of wetland resources and their values.

An important new voluntary program for wetland restoration is the Wetlands Reserve Program (WRP) administered by the Farm Services Agency of the U.S. Department of Agriculture. For fiscal year 1994, the program was funded at $66.75 million to enroll up to

75,000 acres in 20 states, including Texas. Under the WRP, permanent easements are purchased from participating owners of farmed wetlands. The program provides for the restoration and protection of farmed wetlands that were converted to farmland before December 23, 1985; croplands adjacent to eligible wetlands that are deemed necessary as buffer areas to protect the functional values of the wetlands being restored; and riparian areas that link eligible wetlands. Participating WRP landowners agree to accept no more than fair market value of their land for agricultural use in return for a lump-sum payment and cost-share assistance for implementation of wetland restoration practices. Specified compatible uses are permitted on the restored acreage by the landowner and successors.

c. Relative Sea-Level Rise and the Sediment Budget

In some areas of the coast, such as the Houston-Galveston area, relative sea-level rise has had a significant effect on coastal wetlands (White et al., 1993). Relative sea-level rise refers to a rise in sea level with respect to the surface of the land, whether it is caused by actual sea-level rise or land-surface subsidence. Relative sea-level rise has two components: a lesser component of eustatic (global) sea-level rise that is estimated to be about 1.2 mm/yr, and a more significant component of land-surface subsidence, which varies along the Texas coast from approximately 5 to 13 mm/yr.

Rates of relative sea-level rise are considerably higher than this in areas undergoing human-induced subsidence due to the extraction of underground fluids (groundwater and oil and gas), such as the Houston-Galveston and Beaumont-Port Arthur areas. Up to 3 m (10 ft) of human-induced subsidence occurred in the Houston-Galveston area between 1906 and 1987 (Gabrysch and Coplin, 1990). Between the 1950s and 1979, more than 1,389 acres of bottomland hardwoods and marshes in the lower reaches of the San Jacinto River area were displaced by open water (White et al., 1993). The lower reach of the San Jacinto River is near the heart of the subsidence bowl in the Houston-Galveston area. Through efforts of the Harris-Galveston Coastal Subsidence District to curtail groundwater pumping in the Houston-Galveston area, subsidence rates have decreased in some places from a high of 122 mm/yr (0.4 ft/yr) for the period of 1964 to 1973 to about 67 mm/yr (0.22 ft/yr) from 1978 to 1987. In the Beaumont-Port Arthur area, saltwater intrusion into fresh/intermediate marshes is a result of relative sea level rise. Saltwater intrusion results in tidal scouring and loss of vegetated wetlands and organic soils.

The effects of relative sea-level rise on coastal wetlands have been exacerbated by river basin projects such as dams and freshwater impoundments that reduce the volume of sediment transported to marshes. If the sediment supply is insufficient, marsh sedimentation rates may not keep pace with relative sea-level rise, and the marsh will eventually be replaced by open water. In the Trinity River area, rates of estimated relative sea-level rise have outpaced marsh sedimentation rates, and vegetated areas are being replaced by open water and barren flats (White and Calnan, 1990). Dams and impoundments can reduce flooding and prevent the overbank sediment deposition necessary for marsh maintenance. Reduced freshwater inflow and/or increased tidal exchange can also allow saltwater intrusion, which can either kill fresh and brackish marshes or alter plant community structure.

Sea-level rise may not only alter the geomorphology of coastal habitats, but may also alter biochemical processes when saltwater submerges marshes and uplands (Zimmerman et al., 1991). This inundation can change the way marshes function as habitat.

The CMP defines relative sea-level rise as an adverse effect under the program policies. Adverse effects on critical areas are to be avoided to the greatest extent practicable, and if they cannot be avoided, they are to be mitigated. Adverse effects include detrimental alterations that increase losses of shore areas or other coastal natural resource areas from a rise in sea level with respect to the surface of the land, whether caused by actual sea-level rise or land surface subsidence.

The CMP contains two encouragement policies addressing relative sea-level rise and the sediment budget.

- Local governments are encouraged to incorporate sea-level rise (projected for 50 years) into the design and the construction of new development.

- Sediment bypassing is encouraged in the construction and retrofitting of dams on rivers that flow into the coastal zone, and at new and existing jetties, groins, and other structures that interrupt sediment transport to the coastal sand budget.

Sediment bypassing systems involve the interception of bedload materials at or above the heads of reservoirs and the channeling of these materials around lakes to the river bed below the dams (King, 1990). A draft action plan in the Comprehensive Conservation and Management Plan for the Galveston Bay estuary calls for "exploring the feasibility of remobilizing sediment impounded behind watershed dams and transporting this material to the estuary."

d. Freshwater Inflow

Texas bays and estuaries provide diverse habitats with salinities ranging from fresh to brackish in the river deltas and near river and stream mouths to poly- or euryhaline near Gulf inlets. These diverse conditions favor different vegetation and organisms living in or adjacent to the estuaries.

Coastal wetland communities also show well-defined salinity gradients both from north to south along the coast and within each estuarine system. Freshwater, intermediate, and brackish-water marshes are most extensive along the upper coast in the Beaumont-Port Arthur and Houston-Galveston areas, where freshwater inflows are typically much higher than on the lower coast. Salt marshes are extensive south of the Galveston Bay area. Within each estuarine system, freshwater and intermediate marshes and bottomland hardwoods occupy river drainages and deltas, grading into brackish-water marshes near the estuary. Saltwater marshes are most common on the bayward side of barrier islands and peninsulas and along the mainland shores of narrow bays.

In recognition of the importance of fresh water to the state, including the bay-estuary-lagoon system, the Texas Legislature directed the TWDB to develop a Texas Water Plan as a guide to the conservation and development of the state's water resources. The first Texas Water Plan, adopted in 1969, called for an estimated 2.5 million acre-feet of supplemental freshwater

inflows annually to Texas' bay-estuary-lagoon system. The TWDB regularly updates the plan to meet current water needs and anticipated future needs. The plan currently emphasizes water supply, treatment, distribution, and conservation, and the collection and treatment of wastewater.

In preparation for the Texas Water Plan, the legislature directed the TWDB, in cooperation with the TNRCC, TPWD, and GLO, to collect comprehensive physical, chemical, and biological data on the effects of freshwater inflows upon the bay-estuary-lagoon system. The comprehensive studies and data resulted in a series of reports covering the state's seven major estuarine systems. The results included preliminary estimates of freshwater inflows needed from major Texas rivers to meet management alternatives for coastal ecosystems.

The 69th Texas Legislature assigned the responsibility for water rights permitting to the Texas Water Commission (now part of the TNRCC) and authorized the TPWD to be a party in hearings on applications for permits to store, take, or divert water. The legislature directed the Water Commission to consider effects on the bay-estuary-lagoon system for all water rights permits. The legislature also directed the TWDB and TPWD to establish and maintain a continuous data collection and evaluation program and conduct studies and analyses to determine bay conditions that provide a sound ecological environment. To achieve the goal of a sound ecological environment in coastal bays, special conditions will be required in state permits to store, take, or divert water. These conditions will regulate the quantity and timing of water use and be designed to ensure that salinity and nutrient levels and sediment supplies are adequate through time to provide an environment for the maintenance of bay-estuary-lagoon wetlands and organisms.

The TPWD has a statutory requirement for mitigation, and its policy covers only relatively large water resource development projects. The Parks and Wildlife Commission seeks full mitigation for fish and wildlife losses resulting from water resource development projects in excess of 5,000 acre-ft/yr (TEX. WATER CODE §11.151). Mitigation measures include improving lands to replace hunter opportunity loss and using fishery management techniques (PARKS & WILD. CODE ANN. §57.141). Mitigation can include acquisition and management of fish and wildlife habitats or specific measures such as improvement of spawning and nursery habitats. In determining whether to require an applicant to mitigate adverse impacts on a habitat, the commission may consider any net benefit to the habitat produced by the project.

The bay-estuary-lagoon system is a valued resource contributing to the welfare and economy of Texas and to the fish and wildlife that inhabit coastal wetlands and open waters. High-quality freshwater inflows and accompanying nutrients and sediments delivered in amounts and seasons similar to historical patterns are important to the maintenance of habitats and fish and wildlife. The CMP policies in §501.14(r), Appropriations of Water, will ensure adequate freshwater inflows to help maintain an ecologically sound environment in bay-estuary-lagoon systems.

e. Nonpoint Pollution

Coastal wetlands are altered by pollutants from upstream and local runoff and, in turn, change the quality of water flowing out of them. Wetlands are capable of assimilating and purging pollutants from the water, but amounts of sediment, nutrients, and pesticides from

watersheds that overload a wetland's assimilative ability can drastically alter the biological makeup of a wetland (Kusler et al., 1994).

Some discharges into coastal waters are almost immediately toxic to coastal wetlands. Discharges of oil, for example, can kill coastal wetlands (Webb et al. 1981); less apparent is the sometimes slow degradation of wetland quality due to urban or agricultural runoff of nonpoint-source pollutants, including sediment, nutrients, oxygen-demanding compounds, oil and grease, and others. Information on the cumulative effects of these pollutants on coastal wetland quality is limited.

To help protect wetlands from nonpoint-source pollution, Texas has a nonpoint-source pollution control program that is incorporated into the CMP. The state program will be closely coordinated with other existing state and local water quality plans and programs.

f. Acquisition

A comprehensive strategy for coastal wetland acquisition is being developed. Texas can protect and manage coastal wetlands through acquisition, but the state's acquisition efforts have been limited, primarily by a lack of funds for purchase and management of the resources. State law requires that priorities be set for the acquisition of coastal wetlands. This plan has not yet been developed to focus on the most important, scarce, and vulnerable coastal wetlands. The Galveston Bay Plan also recognizes the need to identify and rank wetland habitats for acquisition. For example, the Plan has a habitat protection objective of placing 50,000 acres of Galveston Bay area wetlands and floodplains in public ownership over the next 20-years (Galveston Bay Plan, April 1995, p. 42). Texas should have a strong coastal wetlands acquisition program to complement federal acquisition efforts.

Two state statutes provide authority for wetland acquisition. The Texas Waterfowl Stamp Act empowers the TPWD to acquire, lease, or develop waterfowl habitat in the state. The funds for such activities are to come from the sale of state waterfowl stamps. Since 1981, the TPWD has used revenues from the sale of Texas duck stamps and art prints to buy, lease, and develop waterfowl habitats. In FY 1992, the agency spent about $1.5 million for wetland acquisition (Fiscal Notes, 1993).

The Coastal Wetland Acquisition Act (TEX. NAT. RES. CODE ANN. Chapter 33, Subchapter G) designates the TPWD as the "acquiring agency" for coastal wetlands. The GLO's role is to work with the TPWD in certifying coastal wetlands most essential to the public interest and assigning priorities for their acquisition. The GLO, with funding from the EPA Wetlands Program State Development Grants and assistance from the TPWD, is developing a Coastal Wetlands Priority Acquisition Plan that will: (1) create the framework, criteria, and guidance for identifying coastal wetlands on a regional or watershed basis for acquisition; (2) identify areas and/or acreages of coastal wetlands by region or watershed for acquisition; and (3) identify possible funding sources.

g. Education

Education is vital in building public support for wetlands protection. To increase public awareness of and appreciation for the state's wetland resources, the GLO, in cooperation with other state and federal agencies and private organizations, has developed a wetland outreach strategy as part of the SOCWCP's outreach education program. The GLO is producing public outreach materials on (1) wetland functions and values; (2) wetland status and trends; (3) regulatory methods to protect wetlands, including the SOCWCP, the CMP, and the state and federal regulatory process; and (4) nonregulatory methods to protect, restore, and enhance wetlands. In 1992, the GLO hosted wetland workshops focusing primarily on current wetland regulation. The GLO will hold additional public workshops on coastal wetlands with guest speakers from both regulatory and nonregulatory organizations. The focus of the workshops will be the importance of wetlands and the role of the CMP in protecting them.

The Outreach and State Programs Section of the Wetlands Strategies and State Programs Branch in EPA's Wetlands Division initiated celebration of American Wetlands Month each May to increase the public's awareness of wetlands and to encourage people to become more involved in wetland protection efforts nationally as well as locally. May has been officially proclaimed Wetlands Month in Texas since 1992. The annual May issue of the Texas CMP Newsletter has been dedicated to coastal wetlands.

The TPWD and GLO have produced a brochure, "Boating and Seagrasses," containing information about the functions, values, status, and trends of seagrasses; boating techniques to protect seagrasses; general boating safety practices; and seagrass species, with drawings to help with identification. This educational brochure is intended to help protect seagrasses from damage from boaters operating in shallow bay-estuary-lagoon systems.

h. Local Government Participation

Local governments play a critical role in wetlands protection. Most of the decisions affecting development are made at the local level, and local governments are often best equipped to address local wetland resource protection concerns. Several local governments along the Texas coast are pursuing the development of multi-objective wetland management plans. These local governments are seeking guidance to ensure that their plans are consistent with the state's wetland protection initiatives. In response to this need, the GLO secured a grant from the EPA Wetlands Program for FY '95 to develop a model coastal wetlands protection plan for local governments.

The Model Coastal Wetlands Protection Plan is intended for the leaders and citizens of coastal communities who are concerned about balancing development with wetland resource protection. The purpose of the plan is to familiarize local leaders with existing wetland protection mechanisms, offer new and innovative approaches for local wetland protection, and provide guidance for selecting and implementing management strategies which not only meet the community's objectives for wetland protection, but are consistent with the state's no net loss goal.

Incentives for wetland protection by private landowners are also needed, since many wetlands on the Texas coast are privately owned. A program of public-private partnerships will

facilitate conservation by private landowners. The state must identify the needs of the landowners, inform them of existing incentive programs at the local, state, and federal levels, and impress upon them the value of preserving and restoring wetland habitats. This program can be a critical component of any program developed to slow or stop the loss of inland wetlands.

i. Coordination of Enforceable State Policies and Authorities

State agencies having responsibilities for coastal wetlands include the TNRCC, TPWD, RRC, and GLO. Their enforceable policies and authorities are described in Chapter Four. Because the primary wetlands management program is that administered by the Corps of Engineers, most interagency coordination takes place through the Corps permit issuance process. Interagency coordination in the Corps process begins with the bimonthly joint evaluation meetings at the Corps' District Office in Galveston, Texas. The evaluation meetings are an opportunity for both state and federal agency staff to evaluate and comment on projects affecting wetlands in the Corps' Galveston District. The agencies may schedule on-site field inspections with applicants, and, if necessary, determine mitigation requirements.

The Corps, EPA, and U.S. Coast Guard have elected to participate with the TNRCC in a joint public notice procedure to inform the public of both the request for the federal permit and the concurrent review by the TNRCC for the purpose of providing §401 water-quality certification. The RRC issues §401 water quality certification for §404 permits related to oil and gas activities and has negotiated the form of a joint notice with the EPA and the Corps. These processes are described in more detail in Chapter Four.

The TPWD has primary responsibility for protecting the state's fish and wildlife resources. It comments on §10/404 permit applications submitted to the Corps and may provide comments to the TNRCC for use in evaluating §401 water-quality certification requests. If the TPWD staff determines that a wetland area has unique aesthetic or ecological qualities, dredged material disposal techniques that would adversely affect the area will be opposed and alternate sites recommended. Where the TPWD staff determines that detrimental environmental effects can be minimized, the implementation of disposal techniques that result in minimization will be recommended. Ecological need is a major determining factor in decision-making.

The GLO is the state agency responsible for the management of state-owned lands. The agency is proprietary, not regulatory. The GLO's constitutional and statutory missions are both to conserve the natural resources on state lands and to generate revenue by collecting fees for the use of that land lands. State-owned lands extend from mean high tide in bays and lagoons to three marine leagues (10.36 miles) offshore in the Gulf of Mexico. Activities covered by state easements or leases include floating piers, wharves, docks, jetties, groins, breakwaters, artificial reefs, fences, posts, retaining walls, levees, ramps, cabins, shelters, landfills, excavations, canals, channels, and roads.

The GLO routinely participates in the bimonthly Corps joint-agency evaluation meetings to identify proposed activities that may involve the use of state-owned lands. The GLO obtains copies of the Corps permit applications that appear to include state-owned land and submits them to the GLO surveying division for a formal determination of state ownership. If it is determined that state-owned lands are involved, the GLO sends the Corps permit applicant an "Application

Packet." This informs the applicant that a state instrument is required for the use of state-owned land in connection with the proposed project. The applicant sends the completed application with the requested information to the appropriate GLO field office, which reviews the application for accuracy and completeness and notifies the applicant of any additional requirements. GLO coastal field inspectors conduct an on-site investigation of the proposed project, either independently or, more commonly, in conjunction with the other state and federal agencies that take part in the Corps process.

The field report is basically an "environmental assessment" of the proposed project that describes any impacts the project could have on state-owned lands. The report provides recommendations on fee assessments, mitigation, and/or project modification. Any project alterations, relocation, or mitigation requirements requested are thoroughly coordinated with the applicant and other state and federal agencies to ensure consistency.

An Interagency Quality Management Board (QMB) is currently coordinating an effort by the Corps' Galveston District to improve the Corps permitting processes. The QMB is reviewing the current regulatory system, including the agency input/decision-making process, regulatory overlaps and conflicts, the applicant orientation process, the field review process, agency commitment of resources, compliance monitoring and enforcement, endangered species monitoring, and CMP consistency. The goal of the QMB is to assure resource protection and public service by improving the effectiveness, efficiency, and predictability of the Corps regulatory processes and associated federal/state processes within the Galveston District.

j. The TCMP: Improving Coordination Through Uniform Policies and Consistency Review Process

Activities affecting coastal wetlands are regulated by overlapping and fragmented policies, goals, and authorities of federal and state agencies, which can reduce the effectiveness of wetland management. The purpose of the CMP is to create a higher level of coordination among the component programs. That coordination level will be achieved through the state and federal consistency review processes and oversight of the program by the Council.

The state consistency review process (Part II, Chapter Five, Ensuring Compliance with Program Policies) will provide a formalized method for reviewing all proposed state agency and subdivision actions that may adversely affect coastal wetlands and for determining if those proposed actions are consistent with the goals and policies of the CMP (Part II, Chapter Four, Program Goals and Policies). The federal consistency review process (Part II, Chapter Five, Ensuring Compliance with Program Polcies) will provide an additional level of state/federal coordination for proposed federal agency decisions, such as planning federal development projects, issuing federal licenses or permits such as the Corps §10/404 permit, granting federal financial assistance to local governments, and any approving plans for exploration or development of, or production from, any area leased under the Outer Continental Shelf Lands Act.

k. Long-Range Navigational Dredging and Dredged-Material Disposal Plan

Dredging and dredged-material disposal can be detrimental to coastal wetlands and fish and wildlife. In the Galveston Bay system, conversion of emergent coastal wetlands occurred in several areas in conjunction with dredging and filling to create navigation channels and upland sites for residential development (White et al., 1993). White et al. (1993) reported that wetland losses due to dredging of channels and wetland filling in the Virginia Point USGS quadrangle totaled approximately 2,000 acres between the 1950s and 1989.

The SOCWCP will include a comprehensive, long-term management strategy for dredging and disposal and placement of dredged materials that is environmentally, technically, and economically sound. This plan will be developed through consistency review of federal maintenance dredging of commercial waterways.

E. Areas for Preservation or Restoration

Section 923.22 of the U.S. Department of Commerce regulations on Coastal Zone Management require coastal management programs to include procedures whereby specific areas may be designated for the purpose of preserving or restoring them for their conservation, recreational, ecological, historical or aesthetic values.

In Texas, there are procedures for designating areas for preservation or restoration (APRs) as wildlife management areas, scientific areas, state parks, state recreation areas, state historical areas (i.e., state historical parks, state historical sites, and state historic structures), state natural areas, state fishing piers, state natural landmarks, critical erosion areas, coastal wetlands, and preserves, educational and scientific areas, and wildlife refuges on coastal public lands.

1. Texas Parks & Wildlife Department

The Texas Parks and Wildlife Department (TPWD) has the greatest authority for designating areas for preservation or restoration. The TPWD's designations are intended to provide areas for outdoor recreation, natural area preservation, and historic preservation.

a. State Parks

State parks are defined in 31 TAC §59.63 as spacious areas of outstanding natural or scenic character, often containing historical, archeological, ecological or geological values, selectively developed to provide opportunities for compatible types of resource-oriented recreation. State parks generally include a minimum of 1,000 acres. Before approving a park master development plan, the TPWD is required to hold a public hearing to receive comments on the plan in an area near the location of the new park site.

b. State Recreation Areas

State Recreation Areas are areas in a relatively natural state having the best available scenic and recreational qualities. These areas are usually associated with water resources and developed to provide a variety of resource-oriented, unstructured, outdoor recreation opportunities serving regional or statewide needs. A State Recreation Area normally includes a minimum of 50 acres of land within its boundaries, but may include less in the case of an extraordinary recreation resource of statewide significance. State Recreation Areas are selected on a priority basis to best meet the outdoor recreation demands of the state in conformity with the Texas Outdoor Recreation Plan.

c. State Natural Areas

State Natural Areas are areas retaining to a major degree their unique or natural character established primarily for the perpetual preservation of outstanding ecological, biological, geological, or scenic features of statewide significance, which may be used in a manner consistent with their continued preservation for the public purposes of scientific research, education, aesthetic enjoyment, and dispersed primitive recreation. State Natural Areas are selected on a priority basis determined by statewide significance, natural condition, and the degree to which the resource is endangered by misuse or outside encroachment. Unique areas

currently unrepresented in the public domain receive a higher priority than areas that duplicate the primary significance of a site presently preserved in public ownership.

d. State Fishing Piers

State Fishing Piers are established along the Texas Gulf Coast and in Texas bays to provide regional recreational fishing opportunities. Usually, these structures lack sufficient land base to support extensive recreational development. State Fishing Piers are often selected to take advantage of existing structures, such as abandoned causeways and are established as opportunities arise.

e. State Natural Landmarks

State Natural Landmarks are features of outstanding scenic, ecological, geological, or physiographical significance which possess physical integrity and have a recognized value in illustrating or interpreting the natural heritage of the state. State Natural Landmarks may be publicly or privately owned, but reasonable assurance of future protection of the feature must be obtained. Natural landmarks will be acquired by TPWD only when they may be operated as a subunit of an existing state park.

f. Wildlife Management Areas

TPWD is authorized to acquire, develop, maintain, and operate wildlife management areas. The Department may manage, along sound biological lines, wildlife and fish found on any land the department has or may acquire as a wildlife management area. The department is allowed to regulate hunting, fishing, and recreational activities in wildlife management areas.

g. Scientific Areas

TPWD is authorized to promote and establish a state system of scientific areas for the purposes of education, scientific research, and preservation of flora and fauna of scientific or educational value.

2. Texas Historical Commission

The Texas Historical Commission has responsibility for locating, protecting, and preserving all sites, objects, buildings, pre-twentieth century shipwrecks, and locations of historical, archeological, educational, or scientific interest in any way related to the inhabitants, pre-history, history, natural history, government, or culture, in, on, or under any of the land in the State of Texas, including the tidelands, submerged land, and the bed of the sea within the jurisdiction of the State of Texas.

a. State Historical Areas

State historical areas are all parks, sites, and structures established for the preservation and interpretation of prehistoric and historic resources of particular statewide or national significance. State Historical Areas include state historical parks, state historic sites, and state historic structures.

- State historical parks are areas established primarily to preserve and interpret sites, events, persons or objects and which are of sufficient size to completely include the historic features yet permit development of substantial recreational facilities.

- State historic sites are areas, usually limited in size, established to preserve and interpret sites, events, persons, or objects.

- State historic structures are areas established to preserve structures embodying the distinguishing characteristics of an architectural type, which is inherently valuable for the study of a period, style, or method of construction.

To be considered for acquisition, historic sites and structures must evidence a significant association with the broad history of the state. TPWD will recommend for acquisition historic sites which will complement a balanced interpretation of the heritage of Texas. State Historical Areas are organized chronologically, such as Paleo-Indian Texas (prior to 7000 B.C.), Early Exploration and Colonization (1528-1800), Victorian Texas (1875-1901) and thematically (e.g., architecture, arts, ethnic culture, and political affairs).

b. State Archeological Landmarks

Sunken or abandoned pre-twentieth century ships and wrecks of the sea, and any part or the contents of them, and all treasure imbedded in the earth, located in, on, or under the surface of land belonging to the State of Texas, including its tidelands, submerged land, and the beds of its rivers and the Gulf of Mexico within state jurisdiction are declared by state law to be State Archeological Landmarks and are eligible for designation.

Sites, objects, buildings, artifacts, implements, and locations of historical, archeological, scientific, or educational interest, as well as archeological sites of every character that are located in, on, or under the surface of any lands belonging to the state or to any county, city, or political subdivision of the state are State Archeological Landmarks and are eligible for designation. To be designated a State Archeological Landmark, a structure or building must be listed on the National Register of Historic Places.

3. General Land Office and Texas Parks and Wildlife Department

The General Land Office and the Texas Parks and Wildlife Department share a role in two initiatives to designate areas for preservation and restoration. Under §33.105, TEX. NAT. RES. CODE ANN., the state-owned submerged lands underlying the bays and estuaries of the coastal zone, known as coastal public land, may be leased to TPWD for estuarine preserves. Chapter 14, TEX. PARKS & WILD. CODE ANN., directs the GLO and TPWD to develop the State-Owned Wetland Conservation Plan.

a. Coastal Preserves

The GLO has entered into a Memorandum of Agreement (MOA) with the TPWD for the creation and management of a coastal preserve system. The coastal preserve system protects unique coastal areas and fragile biological communities, including important colonial bird

nesting sites. The MOA allows the GLO and TPWD to hold public meetings near suggested preserve sites for open discussion of coastal preserve goals and management activities and to receive public comment. The information acquired at such meetings is synthesized, and proposed sites and management activities are presented to the School Land Board and Parks and Wildlife Commission for their consideration as coastal preserve leases.

b. Coastal Wetlands

The State-Owned Wetland Conservation Plan calls for the development of a plan to inventory sites for potential compensatory mitigation, enhancement, restoration, and acquisition to meet the goal of "no net loss" of state-owned coastal wetlands. The plan will include processes and criteria for designating these sites. The Coastal Wetlands Acquisition Act provides that the GLO will certify coastal wetlands "most essential to the public interest" and assign priorities for their acquisition. The act directs TPWD, the designated acquiring agency, to accept grants, gifts, or devises of land; to acquire fee and lesser interests in coastal wetlands by purchase or condemnation; and to manage acquired interests "in a manner that will preserve and protect the productivity and integrity of the land as coastal wetland."

The Coastal Wetlands Acquisition Plan establishes a Coastal Wetland Rating system for Acquisition that includes consideration of the following criteria: vegetation communities; overall quality; threat of destruction/degradation; proximity/contiguity; functions and values of wildlife/aquatic habitat; public use; hunting/fishing potential; floodflow/stormwater alteration; water quality protection; and shoreline protection.

The GLO is also developing a framework for identifying coastal wetlands suitable for restoration activities. Restoration is defined by EPA as the "process of returning a significantly disturbed or totally altered site to its previously existing functional condition by some action of man (e.g., prior converted cropland or farmed wetlands reestablished as bottomland hardwood forested wetlands)." Identifying such coastal wetlands will involve the use of GIS and status and trends analysis.

4. Texas General Land Office

The GLO manages coastal public lands. The GLO is also the lead state agency for responding to coastal erosion.

a. Refuges and Scientific Areas

Section 33.105, TEX. NAT. RES. CODE ANN., authorizes coastal public lands to be leased to nonprofit environmental organizations for wildlife refuges, or to scientific or educational organizations or institutions for conducting scientific research.

b. Critical Erosion Areas

The GLO is mandated by law to develop a coastwide erosion response plan. As part of the plan, the GLO is proposing the designation of Critical Erosion Areas. The GLO's rules for management of the beach/dune system (31 TAC §§15.1-15.10) define "eroding areas" as "a portion of the shoreline which is experiencing a historical erosion rate of greater than two ft/yr

based on published data of the University of Texas at Austin, Bureau of Economic Geology." An eroding area is proposed to be considered critical when the rate of erosion exceeds two ft/yr and poses a threat to:

- public infrastructure or areas of national importance,
- public beach access and recreation,
- traffic safety,
- private property, or
- habitat.

To rank critical erosion areas in a reasonably quantifiable manner, the following factors and ratings are proposed to be considered (HIGH = 3 pts., MED = 2 pts., LOW = 1 pt.). Areas with higher point totals should receive higher priority for funding.

1. Evacuation routes and public safety

HIGH -	Evacuation routes are closed due to shoreline erosion, and beach travel is closed.
MED -	Evacuation routes are open, or reasonably safe beach travel is threatened.
LOW -	Evacuation routes are open, and beach travel is open.

2. Public access and recreation

HIGH -	Public access and use is halted due to erosion.
MED -	Public access and use is threatened.
LOW -	Public access and use is not affected.

3. Federal/state/local economic impact

HIGH -	Erosion is the main reason for a decrease in annual tourist dollars and in the tax base.
MED -	Erosion is partly the reason for decreased revenues.
LOW -	Erosion is not a reason for decreased revenues.

4. Public/private property value

HIGH -	The total value of threatened property exceeds $100,000, or habitable structures are in imminent danger of collapse due to erosion.
MED -	The total value of threatened property is equal to or less than $100,000, and/or structures are located within the eroding area boundary.
LOW -	Property values have not decreased, and/or the structures are located landward of the eroding area boundary.

5. Existing shoreline protection (restored, natural, vs. armored)

HIGH -	The shoreline is in its natural state, and no shore protection program has been implemented.
MED -	The shoreline has been restored by beach nourishment.
LOW -	The shoreline is armored.

6. Historical erosion rate

HIGH -	Greater than five ft/yr.
MED -	Greater than two feet and less than five ft/yr.
LOW -	Stable or accreting.

7. Loss of wildlife areas/endangered species

HIGH -	Wildlife and endangered species habitat is being lost due to erosion.
MED -	Wildlife and endangered species habitat is imminently threatened.
LOW -	No habitat is threatened.

8. Human impacts

HIGH -	Erosion is mainly attributed to human impacts (for example, coastal structures or shipping).
MED -	Erosion is attributed to a mixture of human impacts and natural processes.
LOW -	Erosion is mainly attributed to natural processes.

Once the critical erosion areas have been ranked according to their criticality, the next step is to consider the type of erosion response project that may be planned. Should a competitive funding source become available at some point in the future, proposed erosion response projects should be ranked on a benefit-to-cost ratio on the basis of the following benefits:

- Preserves coastal sand dunes
- Provides storm protection
- Protects navigation
- Provides recreation
- Provides potential tourism income
- Protects the tax base
- Benefits downdrift shorelines

F. Plan Coordination

Section 923.56 of the NOAA program approval regulations requires the state to coordinate the contents of its coastal management program with local, areawide, and interstate plans. The purpose of the coordination requirement is to identify any "conflicts with those plans of a regulatory nature" and the means to resolve those conflicts.

The regulations require the state to identify the plans and entities that will be the subject of this coordination. The first list below identifies known plans and the entities the GLO has contacted concerning coordination with the CMP. The second list identifies entities whose jurisdiction is regional which are included in CMP coordination efforts.

1. Identified Plans

The following Plans were identified for cooridnation:

a. Waste treatment facility or management plans under §§201 and 208 of the Clean Water Act* - TNRCC

b. Local floodplain management plans under the National Flood Insurance Program* - FEMA

c. Regional and interstate highway plans* - TxDOT

d. Fishery management plans under the Fisheries Conservation and Management Act* - TPWD and the Gulf of Mexico Fishery Management Council

e. National Estuary Program CCMPs - TNRCC

f. Regional solid waste management plans - TNRCC

g. Texas Outdoor Recreation Plan - TPWD

h. Texas Water Plan/Trans-Texas Water Plan - TNRCC/TWDB

i. Local government beach access/dune protection plans - GLO/AG

j. Clean Air Act State Implementation Plans (SIPs) - TNRCC

k. Plans under §319 of the Clean Water Act - TNRCC, TSSWCB

l. Outer Continental Shelf Development Plans -- Department of the Interior, Minerals Management Service

* Cited in NOAA regulations as a minimum requirement.

2. Other Agencies Contacted

a. Harris-Galveston Coastal Subsidence District

b. Gulf Coast Waste Disposal Authority

c. Harris County Flood Control District

d. All regional councils and councils of government in the coastal zone.

For the most part, coordination between the CMP and local, areawide, and interstate plans has been accomplished through the interagency and intergovernmental groups and processes created for development of the CMP. Most of the entities identified above were represented on the local government focus group, the Federal Agency Task Force, or the State Agency Task Force. Therefore, discussion of any conflicts between the CMP and local, areawide, or interstate plans has occurred during discussions of the CMP consistency process and the CMP goals and policies in meetings of those groups. There are no known conflicts between these plans and the CMP which have not been resolved.

CHAPTER SEVEN.
CONSIDERATION OF THE NATIONAL INTEREST AND ACTIVITIES OF REGIONAL BENEFIT

A. Consideration of the National Interest

Section 306(d)(8) of the CZMA and 15 CFR §923.52 of the coastal zone management development and approval regulations (Federal Register, Vol. 44, No. 61, March 28, 1979) require that states give adequate consideration to the national interest in planning for and managing the coastal zone, including the siting of facilities which are of greater than local significance. Section 307(b) of the CZMA requires that the views of federal agencies principally affected by a state's coastal management program be adequately considered.

These requirements establish a reciprocal state-federal relationship in which the state, by providing relevant federal agencies with the opportunity for full participation and by giving full consideration to their interests in the Texas coast during program development (see Part II, Chapter Eight, Public Participation and Federal Agency Consultation), can administer the federal consistency provisions of §§307(c) and (d) of the CZMA once the TCMP is approved (see Part II, Chapter Five, Ensuring Compliance with Program Policies). In order to meet these requirements, the TCMP must:

- describe the national interest in the planning for and siting of facilities considered during program development;
- identify the sources relied upon for a description of the national interest;
- identify how and where the consideration of the national interest is reflected in the TCMP; and
- describe the process for continued consideration of the national interest in the planning for and siting of facilities during program implementation.

Recognizing the distinct and irreplaceable nature of the nation's coast, the United States Congress found in Section 302 of the CZMA:

- There is a national interest in the effective management, beneficial use, protection, and development of the coastal zone.
- The coastal zone is rich in a variety of natural, commercial, recreational, ecological, industrial, and aesthetic resources of immediate and potential value to the present and future well-being of the nation.

Thus, the primary focus for the consideration of the national interest under the federal Coastal Zone Management Program is the balance between providing for facilities and activities which are in the national interest and protecting coastal resources, which are also in the national interest.

1. Identification of Facilities of National Interest

The facilities of national interest were identified by reviewing federal and state laws and regulations, federal agency policy statements and strategic goals, and comments from the TCMP Federal Agency Task Force (FATF), the TCMP State Agency Task Force, and TCMP focus groups. In addition, statements of national interest were solicited from the heads of federal agencies, as required by 15 CFR §923.51(d)(3). A summary of the statements received is provided in this chapter. In addition to certain facilities of national interest, various coastal natural resources were identified by federal agencies or in federal laws as being of national interest.

Therefore, the following coastal facilities, activities, and resources are considered by Texas to be of national interest:

- National defense and aerospace facilities and activities
- Energy exploration, production, and transmission facilities and associated activities
- Transportation facilities and activities
- Water resources development facilities and activities
- Water, air, and land pollution control facilities and activities
- Natural and technological hazard control activities
- Recreational facilities and activities
- Coastal natural resources
  - wetlands
  - fish and wildlife species and habitats
  - threatened and endangered species and habitats
  - cultural, historical, and archeological areas
  - natural hazard areas
  - barrier islands

2. Management of Facilities of National Interest

In accordance with the TCMP rules, any conflict between national interests in the coastal zone will be resolved through the TCMP policies and through the rules and regulations of the agencies responsible for implementing the TCMP policies for specific activities or resources. In addition, the federal consistency review process includes procedures for mediation of conflicts between competing national interests.

The national interest will be considered during program implementation through the authorities of the state agencies and the oversight authority of the Council. The TCMP policy for consideration of the national interest requires that state agencies and political subdivisions include such consideration when undertaking or authorizing an activity that may adversely affect CNRAs (see 31 TAC §501.13(4)). Agencies, in reviewing applications, will consider the national interest as reflected in the regulations and policies. Agencies will also consider comments concerning the national interest from the public and the appropriate federal agencies when making a decision on a permit application.

3. How the National Interest Is Addressed by the TCMP

a. Defense and Aerospace Facilities and Activities

Many of the goals and policies of the TCMP apply to national defense and aerospace facilities and activities if they are not on federal land (excluded from the program) or if they are on federal land and adversely affect CNRAs. The TCMP recognizes that national security requirements and capabilities may, in the future, require new or expanded defense facilities. The TCMP will not seek to question the national security justification, but will strive to ensure that facilities and activities are consistent with the TCMP goals and policies without impairing the mission of national security. When necessary, federal consistency mediation procedures will be sought in accordance with 15 CFR §923.54.

TCMP policies found in 31 TAC §501.14 (relating to Policies for Specific Activities and Coastal Natural Resources) which may address national defense and aerospace facilities are those for: (1) construction and operation of solid waste treatment, storage, and disposal facilities; (2) development in critical areas; (3) construction of waterfront facilities and other structures on submerged lands; (4) construction in the beach/dune system; (4) development in special hazard areas; (5) development on coastal barriers; (6) alteration of coastal historic areas; (7) transportation projects; and (8) dredging and dredged material disposal and placement.

b. Energy Exploration and Production and Transmission Facilities and Activities

The energy facilities and activities considered to be in the national interest are those defined in 15 CFR §923.52(c) of the CZMA regulations. They include electric generating facilities; oil sand gas facilities, pipelines, and transmission facilities; gasification plants; petroleum refineries and associated facilities; petroleum transfer facilities, including deepwater ports; and nuclear fuel processing facilities. TCMP policies found in 31 TAC §501.14 (relating to Policies for Specific Activities and Coastal Natural Resources) that may address energy exploration, production, and transmission activities include those for: (1) construction of electric generating and transmission facilities; (2) construction, operation, and maintenance of oil and gas exploration and production facilities; (3) discharge of wastewater and disposal of waste from oil and gas exploration and production activities; (4) construction and operation of solid waste treatment, storage, and disposal facilities; (5) oil spill prevention, response, and remediation; (6) discharge of municipal and industrial wastewater to coastal waters; (7) development in critical areas; (8) construction of waterfront facilities and other structures on submerged lands; (9) construction in the beach/dune system; (10) development in special hazard areas; (11) development on coastal barriers; (12) development in coastal parks; (13) alteration of coastal historic areas; (14) transportation projects; (15) appropriations of water; and (16) dredging and dredged material disposal and placement.

In addition, the Energy Facility Siting Process (Part II, Chapter Six) provides a comprehensive discussion of the regulatory authority, policies, and planning process for facilities and activities associated with energy production and transmission.

c. Transportation Facilities and Activities

Transportation has been identified as in the national interest for purposes of national defense, economic development, and recreation. Transportation facilities and activities of national interest include interstate highways, railroads, airports, navigation channels (particularly the Gulf Intracoastal Waterway), bridges, ports (including deepwater ports), commercial shipping, and recreational boating. TCMP policies found in 31 TAC §501.14 (relating to Policies for Specific Activities and Coastal Natural Resources) that may address transportation facilities and activities are those for: (1) prevention, response, and remediation of oil spills; (2) nonpoint-source water pollution; (3) development in critical areas; (4) construction of waterfront facilities and other structures on submerged lands; (5) construction in the beach/dune system; (6) development in special hazard areas; (7) development on coastal barriers; (8) development in coastal parks; (9) alteration of coastal historic areas; (10) transportation projects; and (11) dredging and dredged material disposal and placement.

d. Water Resources Development Facilities and Activities

Water resources development facilities and activities identified to be of national interest include reservoirs and dams, dikes, levees, and flood and erosion control structures. The following policies, found in 31 TAC §501.14 (relating to Policies for Specific Activities and Coastal Natural Resources), may address water resources development activities which are in the national interest: (1) development in critical areas; (2) construction of waterfront facilities and other structures on submerged lands; (3) development in coastal hazard areas; (4) development on coastal barriers; (5) alteration of coastal historic areas; (6) appropriations of water; (7) levee and flood control projects; (8) dredging and dredged material disposal and placement; and (9) nonpoint-source water pollution.

e. Water, Air, and Land Pollution Control Facilities and Activities

Water, air, and land pollution control is a key element of the TCMP and may be addressed in the following TCMP policies, found in 31 TAC §501.14 (relating to Policies for Specific Activities and Coastal Natural Resources): (1) construction of electric generating and transmission facilities; (2) construction, operation, and maintenance of oil and gas exploration and production facilities; (3) discharge of wastewater and disposal of waste from oil and gas exploration and production activities; (4) construction and operation of solid waste treatment, storage, and disposal facilities; (5) prevention, response, and remediation of oil spills; (6) discharge of municipal and industrial wastewater to coastal waters; (7) nonpoint-source water pollution; (8) development in critical areas; (9) construction of waterfront facilities and other structures on submerged lands; (10) development on coastal barriers; (11) transportation projects; (12) emission of air pollutants; (13) appropriations of water; and (14) dredging and dredged material disposal and placement.

f. Management of Natural and Technological Hazards

The management of natural and technological hazards was identified by several federal agencies as being of national interest. In addition, the need to manage coastal hazards under the TCMP is given emphasis through the designation of special hazard areas, critical dune areas,

critical erosion areas, coastal barriers, Gulf beaches, and coastal shore areas as CNRAs. TCMP policies found in 31 TAC §501.14 (relating to Policies for Specific Activities and Coastal Natural Resources) that may be relevant to this issue of national interest include: (1) construction of electric generating and transmission facilities; (2) construction, operation, and maintenance of oil and gas exploration and production facilities; (3) discharge of wastewater and disposal of waste from oil and gas exploration and production activities; (4) construction and operation of solid waste treatment, storage, and disposal facilities; (5) prevention, response, and remediation of oil spills; (6) discharge of municipal and industrial wastewater to coastal waters; (7) development in critical areas; (8) construction of waterfront facilities and other structures on submerged lands; (9) construction in the beach/dune system; (10) development in special hazard areas; (11) development on coastal barriers; (12) transportation projects; and (13) dredging and dredged material disposal and placement.

g. Recreational Facilities and Activities

In addition to specific TCMP policies that promote and protect recreational opportunities on the coast, recreational areas are given special emphasis through the designation of the following CNRAs: Gulf beaches; coastal historic areas; coastal parks; coastal wetlands; oyster reefs; hard substrate reefs; submerged lands; submerged aquatic vegetation; tidal sand and mud flats; waters of the open Gulf of Mexico; and waters under tidal influence. TCMP policies found in 31 TAC §501.14 (relating to Policies for Specific Activities and Coastal Natural Resources) that may address the protection or promotion of recreational opportunities include: (1) construction of electric generating and transmission facilities; (2) construction, operation, and maintenance of oil and gas exploration and production facilities; (3) discharge of wastewater and disposal of waste from oil and gas exploration and production activities; (4) construction and operation of solid waste treatment, storage, and disposal facilities; (5) prevention, response, and remediation of oil spills; (6) discharge of municipal and industrial wastewater to coastal waters; (7) development in critical areas; (8) construction of waterfront facilities and other structures on submerged lands; (9) construction in the beach/dune system; (11) development on coastal barriers; (12) development in coastal parks; (13) alteration of coastal historic areas; (14) transportation projects; (15) appropriations of water; and (16) dredging and dredged material disposal and placement.

h. Coastal Natural Resources

Federal agencies identified wetlands; fish and wildlife species and their habitats; threatened and endangered species and their habitats; cultural, historical, and archaeological sites; coastal natural hazard areas; and barrier islands as resources of national interest. Most of these resources are defined as CNRAS and, as such, are afforded a more refined management status under the TCMP.

Living resources, except for oyster reefs, are not expressly listed as CNRAs; however, the important habitats that support living resources are specifically managed through the TCMP policies and implementing agencies' regulations. Several individual policies also address special concerns for living resources. For example, 31 TAC §501.14(h), Development in Critical Areas; 31 TAC §501.14(i), Construction of Waterfront Facilities and Other Structures on Submerged Lands; and 31 TAC §501.14(r), Appropriations of Water, address protection of the productivity,

diversity, and life cycles of coastal living resources. Texas' recognition of the national interest in fisheries is also reflected in the state's participation on the Gulf of Mexico Fishery Management Council, established by the federal Fishery Conservation and Management Act of 1976. To avoid conflicts between national and state interests, the TPWD is authorized to issue additional regulations that might be needed to comply with this act.

4. Summary of National Interest Statements Received from Federal Agencies

a. U.S. Department of Agriculture (USDA)

The Natural Resources Conservation Service maintains that the U.S. Department Agriculture has a national interest in water resources development, encompassing such activities as flood control, erosion control, the construction of dams, dikes, levees, etc., and wetlands.

b. U.S. Department of Commerce (USDOC)

(1) Economic Development Administration (EDA): The EDA furthers the national interest in the planning for and the siting of facilities through the discretionary award of assistance for local projects which are consistent with overall local planning to enhance economic development, and upon which there is the opportunity for state and metropolitan area review and comment.

(2) National Marine Fisheries Service (NMFS): The mission of NMFS is stewardship of the nation's living marine resources. NMFS has primary federal responsibility for the conservation, management, and development of living marine resources and for the protection of certain marine mammals and endangered species under numerous federal laws. NMFS also has responsibilities to the U.S. commercial and marine recreational fishing industry, including fishermen; to the states; and to the general public. Under these responsibilities, NMFS seeks to achieve continued optimum utilization of living marine resources for the benefit of the nation.

c. U.S. Department of Defense (DOD)

The DOD's national interest is in the provision of national defense and in the establishment of new or expanded defense siting on land, in the air, and on or under the water.

(1) Air Force: The Air Force requests that the state program recognize that national defense is an essential element of national interest and is one of the high-priority uses of air, land, and water resources.

(2) Army: The Army maintains that Army Reserve Centers should be considered areas of national interest because they are a vital part of our national defense.

(3) Navy: National interests in the coastal zone include installations and activities used for defense and defense training because they directly support the ability of the Navy to carry out its Joint Mission of Littoral Warfare. Joint Littoral Warfare is the ability to

mass overwhelming force and deliver it ashore to influence, deter, contain, and overcome an enemy. Amphibious forces with their supporting units give the Commander the ability to establish another front of operations against an enemy. Tasks implicit in this mission include, but are not limited to, mine countermeasures operations, anti-submarine warfare, and anti-surface warfare. The area of control to support operations in the littoral area extends from the shore to the open ocean and inland from the shore over that area that can be supported and defended directly from the sea. The intent of this mission is to transition forces from an oceanic transit to regional support. The ability to train in this mission area and maintain those forces is vital to mission success.

(4) Army Corps of Engineers: The Army Corps of Engineers has national interest in facilities and programs administered by the Galveston District which identify areas of federal involvement in the coastal zone. National interest includes maintenance of federally authorized navigation channels, implementation of the regulatory actions including Section 10 of the Rivers and Harbors Act and Section 404 of the Clean Water Act, responding to national emergencies, and support of military functions within the State of Texas. This involvement does not constitute "overriding" national concern except in the case of a national emergency, when navigation projects would be a vital part of a defense program.

d. U.S. Department of Energy (DOE)

Access to domestic energy resources is a matter of national interest. Production of domestic gas and oil resources has strategic value to the U.S. It creates high-wage jobs, enhances overall U.S. global competitiveness, preserves the environment, bolsters the economy by preventing the export of American purchasing power and savings and improving the balance of trade, and increases energy security by reducing vulnerability to supply disruption of the U.S. or its allies. It also preserves U.S. gas and oil exploration and development technology leadership and spreads the use of the best environmental standards to the rest of the world.

e. U.S. Department of the Interior (DOI)

(1) U.S. Fish and Wildlife Service (USFWS): The USFWS statement of national interest includes the conservation, management, and enhancement of fish and wildlife resources, particularly migratory waterfowl, anadromous fish, and endangered and threatened species populations and their habitats, as well as aquatic and wetland ecosystems and water quality.

(2) National Park Service (NPS): The NPS, under its Organic Act of 1916, is charged with managing the parks to "conserve the scenery and the natural and historic objects and the wildlife therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for future generations." The General Authorities Act of 1970 defined the National Park System as including all the areas administered by the NPS "for park, monument, historic, parkway, recreational, or other purposes."

(3) Minerals Management Service (MMS): As a bureau of the Department of the Interior, the Minerals Management Service's primary responsibilities are to manage the mineral resources located on the nation's Outer Continental Shelf (OCS), collect revenue from the federal OCS and onshore federal and Indian lands, and distribute those revenues.

f. Federal Emergency Management Agency (FEMA)

FEMA's mission is to assist state and local governments, individuals, and volunteers in being prepared to save lives and protect real and personal property from natural and technological hazards. In executing these responsibilities, FEMA seeks to achieve a partnership with state and local governments, industry, individuals, first responders, volunteers, and other federal agencies.

g. U.S. Geological Survey (USGS)

USGS has a national interest in the following coastal natural resources and activities: the definition of the hydrodynamics, flow, sedimentation, and salinity of coastal systems; the development of predictive computer models to assist in managing these systems; assessment of hydrology, water quality, ecology and use of coastal surface water and groundwater resources; investigations of coastal water-resource contamination by point and nonpoint sources; and mapping of wetlands, floodplains, tidal boundaries, bathymetry, and hydrogeology, aided by the use of geographic information system technology.

h. Federal Energy Regulatory Commission (FERC)

FERC regulates the construction and operation of hydropower facilities located on navigable waters or otherwise within federal jurisdiction; the construction and operation of natural gas facilities; the interstate sale of natural gas for resale and transportation; and the interstate transportation of crude oil and petroleum products. FERC also regulates interstate sales for resale and transmission of electric power and the rates, terms, and conditions of such sales and transmission; certifies qualifying facilities under Section 210 of the Public Utility Regulatory Policies Act; and makes exempt wholesale generator determinations under Section 32(a) of Public Utility Holding Company Act.

i. General Services Administration (GSA)

The GSA is responsible for acquiring, constructing, and disposing of facilities for federal agencies and the courts, as well as providing goods and services. The acquisition and management of the buildings and land required by federal agencies to conduct government business are done in the national interest. GSA's interests are those of proprietor and lessor. The functions performed by the agencies occupying GSA-controlled space may also be of national interest.

j. U.S. Nuclear Regulatory Commission (NRC)

The NRC is responsible for the licensing and related regulation of nuclear facilities and materials. The NRC's principal concern is to assure public and occupational radiological health

and safety and environmental compatibility. The NRC has no overriding national interest in locating a site within the coastal zone.

k. U.S. Department of Transportation (USDOT)

USDOT's national interest includes construction, maintenance, operation, and improvement of the nation's transportation systems on and under the land, on and under the water, and in the air. Of special interest in the coastal zone are deepwater ports and oil and hazardous substance pollution prevention and response. USDOT's general policy is to assure protection, preservation, and enhancement of the nation's wetlands to the fullest extent practicable.

(1) U.S. Coast Guard (USCG): The USCG's activities include aid to navigation, boating safety, national defense, bridge administration, maritime law enforcement, marine environmental protection and response, marine safety (including marine inspection and licensing), port safety and security, search and rescue, and waterways management.

(2) Federal Highways Administration (FHWA): The FHWA's activities include planning and providing for improvement of the national highway system, including emergency evacuation routes.

(3) Research and Special Programs Administration (RSPA): RSPA activities include research and analysis of transportation and socioeconomic effects and regulating hazardous materials transportation issues, including pipeline safety.

(4) Maritime Administration (MARAD): MARAD's activities include fostering the development of the American merchant marine to meet national security and domestic and foreign commerce needs, development of ports and intermodal transportation systems, and maintaining the National Defense Reserve Fleet.

l. Department of Health and Human Services (HHS)

(1) Centers for Disease Control and Prevention (CDC): The HHS has no facilities, programs, or projects of national interest within the Texas coastal zone at this time. Should a need to address the national interest in the area of public health arise, that interest would be addressed through coordination with the Texas Department of Health and the HHS Region VI office.

m. U.S. Environmental Protection Agency (EPA)

EPA's national interest in the coastal zone is in protecting human health and environmental quality. EPA provides standards and regulations affecting water resources, as well as controls on pesticides and toxic substances, solid waste disposal, and abandoned hazardous waste sites. Its interest is to maintain a strong federal floor of protection while providing substantial involvement of state and local government and the public in decisionmaking.

B. Activities of Regional Benefit

Section 306(d)(12) of the CZMA requires the state to ensure that local government regulations do not unreasonably restrict or exclude land and water uses of regional benefit. The TCMP must identify those activities which are determined to be of regional benefit and demonstrate how state legal authority will ensure that these activities are not unreasonably excluded by local government action from locating in the coastal zone.

Following guidance in the federal CZMA regulations (15 CFR §923.12), activities are considered to be of regional benefit in the Texas coastal zone if they:

- have been identified as "Activities Affecting CNRAs" in 31 TAC §501.2 of the TCMP rules, and
- result in a multi-county environmental, economic, social, or cultural benefit.

Unreasonable restriction or exclusion of an activity by local government action is that which is arbitrary and capricious. It involves a local decision not based on rational or legal factors and implies an exclusion that is a detriment to the region.

1. Identification of Activities of Regional Benefit

Based on the above criteria, the following activities have been identified as Activities of Regional Benefit:

a. Energy Exploration, Production, and Transmission
   - Electric generating facilities
   - Oil and gas exploration, production, transfer, storage, and refining

b. Regional Waste Treatment Facilities
   - Industrial wastewater treatment and disposal
   - Municipal wastewater treatment and disposal, including package plants and composting plants
   - Sewage collection lines
   - Oil and gas waste management facilities

c. Regional Water Supply Facilities
   - Reservoirs and groundwater pumping stations
   - Water distribution and transmission pipelines and canals
   - Regional water treatment facilities for drinking water

d. Recreation and Wildlife Management
   - State beaches and associated public facilities
   - State parks and associated public facilities
   - State wildlife management areas
   - Coastal preserves
   - National seashore areas

e. Transportation Facilities
   - State and federal highways and expressways
   - Railroads
   - Airports
   - Ports
   - Navigation channels, particularly the Gulf Intracoastal Waterway

f. Recreational and Commercial Fisheries

g. Farming and Ranching
   - Livestock grazing
   - Range management
   - Crop production
   - Wildlife management
   - Agricultural product processing

2. Management Authority

Historically, local exclusion of uses of regional benefit has not been an issue in Texas. Local municipalities have traditionally welcomed new facilities rather than excluding them through municipal zoning authority. Coastal counties, with the exception of Cameron and Willacy, do not have zoning authority that could exclude facilities of regional benefit from unincorporated areas.

Procedural requirements ensure that state authorities have adequate notice and opportunity to respond to actions proposed by local governments that might affect uses of regional benefit. County and municipal decisions must be made in public meetings held after due notice (TEX. REV. STAT. ANN. art. 6252-13a, Vernon Supp. 1978).

In general, the activities identified as being of regional benefit are under direct state and/or federal management, which will ensure that local actions do not unreasonably restrict or exclude them from the coastal zone. These legal state authorities include state permitting, such as permitting of regional waste treatment facilities; direct management, such as TPWD authority over state wildlife management areas and parks; easements issued by the GLO on state lands for such uses as energy production or navigation channels; and state purchase or condemnation of land for such purposes as highway and railroad rights-of-way.

CHAPTER EIGHT.
PUBLIC PARTICIPATION
AND FEDERAL AGENCY CONSULTATION

A. Background

In passing the Coastal Zone Management Act of 1972, Congress recognized the overlapping interests of federal, state, and local governments in the nation's coastal resources. The CZMA establishes a unique partnership between federal, state, and local governments and the public to ensure opportunities for public participation in the allocation, protection, and management of coastal resources.

The federal regulations, citing Section 303 of the CZMA, declare that it is national policy for all federal agencies engaged in programs affecting the coastal zone to cooperate and participate with state and local governments and regional agencies in achieving the purposes of the act (15 CFR §923.50 (a)). The general public, state and federal agencies, local governments, regional agencies, and interest groups must be allowed the opportunity for full participation during program development and must be allowed to provide further comment during the program review and approval process.

This chapter describes how the public, state and federal agencies, local governments, regional agencies, and interest groups were involved throughout TCMP development and will be kept involved during program implementation.

B. Direct Public Participation During Program Development

Varied opportunities for direct public participation and agency involvement in the development of the TCMP have been offered through such mechanisms as the Executive Committee and committees formed by the Coastal Coordination Council, state and federal agency task forces, business, industry, local government and citizen focus groups, and public hearings and information sessions held in coastal cities.

1. Executive Committee of the Coastal Coordination Council

On August 6, 1992, the Coastal Coordination Council established the Executive Committee (EC) to coordinate implementation of Council directives; develop and review policies, issues, and coastal management matters of state concern; and take public comment. Each Council member appointed a representative to serve.

The EC's monthly meetings, subject to the Open Meetings Act and the Texas Administrative Procedure Act, provided a frequent public forum for discussion of issues related to the development and implementation of the TCMP. The public was invited to comment on agenda items and was given the opportunity to comment on other issues during each meeting.

In addition to encouraging public comment, the EC provided for greater participation by state agencies not represented on the Council by establishing interagency work groups to address specific coastal issues and to develop policy recommendations for EC and Council consideration. The EC convened work groups on the TCMP boundary, the critical area program, and the state consistency review process.

The Council's proposed rules, adopted by the Council on October 5, 1995, will continue use of the EC during program implementation.

2. Focus Groups

Focus groups were established to promote early participation in the TCMP by the regulated community, primary interest groups, and other groups potentially affected by the TCMP. Focus groups are used to give diverse interests a clear understanding of the program development process and to help them formulate and convey their positions on proposals, policies, and procedures.

The functions of the focus groups are to: (1) educate their constituents about the TCMP and keep them informed about the program; (2) review TCMP working documents, proposed rules, and other products and provide comments to Council staff, representing, insofar as possible, a consensus of their constituents; and (3) maintain contact with interest group constituents and act as ongoing liaisons with the TCMP. The TCMP focus groups represent the following interests:

- Agriculture
- Boating industry
- Chemical industry
- Coastal foundations
- Commercial fishing
- Dredging industry
- Environmental interests
- Forestry
- Local government
- Oil and gas industry
- Port authorities
- Real estate and economic development
- Research and extension
- Sportfishing
- Utilities

3. Public Meetings, Workshops, and Presentations

Public meetings and workshops held in coastal cities and Austin have provided the general public and interest groups with information about the TCMP and the specific coastal resources and activities managed by the program. Throughout the development process, the GLO staff has made formal presentations and given informal talks to groups as varied as the Texas Chemical Council, the Texas Farm Bureau, and the South Texas Mayors' Association.

4. Public Participation in Rulemaking

The state's commitment to comprehensive public participation was evident in the formulation of the GLO's statewide rules for management of the beach/dune system, an important component of the TCMP. These rules provide guidance for local government entities in writing the local beach access and dune protection plans required by state law.

Public comment on the basic concepts of beach and dune system management was first obtained from participants in the Dune Protection Training Workshops held during the summer of 1992. Suggestions from the workshop participants were incorporated into the draft GLO rules.

Formal public hearings on the proposed rules were held in Austin, South Padre Island, Galveston, Corpus Christi, Beaumont, and Surfside Beach during the fall of 1992. During the public comment period, which was extended to accommodate a larger-than-anticipated response, the Council received close to 1,000 comments on the proposed rules. The rules were revised on the basis of these comments, and responses to all comments were included in the preamble to the published final rules. Upon publication of the final rules, the GLO held informal workshops with local officials to assist them in understanding and meeting the state requirements.

Public participation in the development of the TCMP boundary proposal was also extensive. In early 1993, the EC established an interagency work group to research and delineate a scientifically and technically sound TCMP boundary. After reviewing available scientific data, the work group presented a recommended boundary to the State Agency Task Force (SATF). The SATF reviewed the recommendation and supporting documentation and forwarded the recommendation to the EC. After its review, the EC voted to present the boundary recommendation to the Council at its June 3, 1993, meeting. The Council approved publication of the recommended boundary in the *Texas Register* for public comment as the proposed TCMP boundary rule.

In June and July 1993, the Council held public hearings in McAllen, Corpus Christi, Victoria, Sugar Land, and Port Arthur to inform the public of the basis for delineation of the proposed boundary and to solicit public comment. A briefing and status report on the TCMP preceded each TCMP boundary hearing to give the public a greater understanding of the significance of the boundary within the program. The Federal Agency Task Force (FATF) was also asked to comment on the proposed boundary rule at its August 1993 meeting and was briefed on the public comments received.

During the public comment period, which ended on August 10, 1993, the Council received over 120 written comments on the proposed rule. Council staff responded, in writing or orally at the Council meeting in September 1993, to all comments submitted. The EC voted to present its recommendation to the Council for adoption of the proposed rule at its September 2, 1993, meeting.

The preliminary draft TCMP document and draft rules were distributed to the SATF, FATF, and focus group members on December 13, 1993. These groups were asked to comment

by January 29, 1994. The Council received more than 52 written comments and responded orally to comments presented at the January 28, 1994, Council meeting.

Based on the comments received on the December TCMP document, the March 1994 Texas Coastal Management Program Public Comment Document was produced. Over 1100 copies were distributed to local governments; to state and federal agency personnel; to environmental groups; to interests including the oil and gas industry, chemical manufacturers, agriculture, boating, fishing, ports and navigation, forestry, real estate, and utilities; and to the general public. Notice of availability of the document was published in the *Texas Register* and the TCMP newsletter. In addition, copies of the document were mailed to 16 libraries in the coastal counties for public examination.

The 45-day public comment period on the proposed TCMP rules ran from March 18, 1994, to May 2, 1994. During April, seven public hearings were held in Port Lavaca, Brownsville, Port Arthur, Galveston, Corpus Christi, Houston, and Bay City, and one in Austin to receive public comment. Notice of the hearings was published in the *Texas Register*, mailed to the TCMP newsletter distribution list, and published in local community newspapers. Press releases were distributed to local newspapers to further publicize the hearings and the comment period.

Seven of the hearings were chaired by Land Commissioner Garry Mauro. The Galveston hearing was chaired by Mayor Barbara Crews, the local government representative on the Council. More than 660 people attended the hearings. In addition to oral comments from 145 witnesses, more than 163 sets of written comments were received. Written responses to both oral and written comments were prepared. Notice of the availability of responses to comments was published in the July/August TCMP newsletter.

Proposed revisions to the draft rules based on comments received were presented to the Council on June 28, 1994. The Council voted to publish the proposed rule changes in the *Texas Register* and to extend the public comment period for another 60 days, from July 5 to September 6, 1994. Notice of the proposed rule changes and extension of the public comment period was published in the July 5, 1994, issue of the *Texas Register* and the July/August TCMP newsletter. A total of 1,459 copies of the proposed revisions was distributed, including copies to all who had received the March 1994 document.

In September 1994, the Council voted to adopt the TCMP rules with changes. The adopted rules were published in the *Texas Register* on September 27, 1994. During the program development process, over 1,000 comments were received and responded to. In addition, more than 200 meetings were held with groups and individuals to explain and receive feedback on the TCMP. Support for the program came from both industry and conservation groups.

In December 1994, the Council approved the TCMP document and submitted it to Governor Ann Richards. Governor Richards submitted the TCMP document to the Department of Commerce for approval on December 16, 1994.

In March 1995, Governor George W. Bush withdrew the TCMP from the federal approval process and requested that the legislature review the program. The legislature amended

the Coastal Coordination Act and related statutes (House Bill 3226) in several ways including broadening the Council membership, reducing the geographic scope of the program, eliminating the Special Area Management Planning Process (SAMP), shortening the time allowed for consistency review, revising and codifying the definitions of coastal natural resource areas, providing an exclusive listing of the agency and subdivision actions subject to the program, identifying the elements of the TCMP, and mandating the establishment of a permitting assistance group.

On June 8, 1995, Governor Bush signed amendments to the Coastal Coordination Act and related statutes into law in a ceremony in Corpus Christi, Texas.

On June 29, 1995, the Council proposed amendments to the TCMP rules to conform them to House Bill 3226. These proposed amendments were available for public comment for 45 days after publication in the *Texas Register* on July 18, 1995. In addition, the Council conducted two public hearings on the proposed amendments, in Corpus Christi and Galveston. A total of 210 comment letters and 38 oral testimonies were received during the comment period.

Before voting to amend the TCMP rules at its October 5, 1995, meeting, the Council took additional public comment.

C. Public Participation During Program Implementation

To ensure public participation in state and federal consistency determinations and other program decisions, such as rule certification, the Council will publish notice in the *Texas Register* for a minimum of 30 days and in the TCMP newsletter. The Council may hold special hearings in addition to its quarterly public meetings to solicit public comment on its deliberations. This is in addition to the public participation prescribed by the permitting procedures of individual agencies.

The Coastal Coordination Act establishes a Permitting Assistance Group (PAG) to coordinate preliminary reviews of agency and subdivision actions subject to the TCMP. Preliminary reviews are intended to provide direct Council input into the agency or local government permitting process to assist in the identification and resolution of any consistency issues. Public comment will be solicited on the request for preliminary consistency review via publication of a notice of request in the *Texas Register*.

The PAG will also facilitate preapplication assistance upon request to any individual or small business owner filing an application for an agency or subdivision permit or other action subject to the TCMP. Depending on applicants' individual needs, this assistance will include the provision of: (1) a list of the permits or other approvals necessary for the project; (2) a simple, understandable statement of all permit requirements; (3) a coordinated schedule for each agency's or subdivision's decision on the action; (4) a list of all the information the agencies or subdivisions need to declare the applications for the permits or other approvals administratively complete; (5) assistance in completing applications as needed; and (6) if enough information is available, a preliminary finding regarding the consistency of the proposed action. Regulations for provision of preapplication assistance by the PAG will be developed by the Council in the

future through the Individual and Small Business Permit Assistance Task Force. These regulations will be made available for public comment prior to their adoption.

The public will be informed of a request for application assistance through publication of a notice of request in the *Texas Register*. The public will have the opportunity to comment on determinations made by the PAG.

The Council will establish an advisory committee to assist in implementation of the TCMP and to provide a formal mechanism for ongoing public input into the program. Four or five regional subcommittees will be established to represent citizens, local governments, and other interested parties in each coastal region. The advisory committee will meet at least annually and will report regularly to the Council. By law, the advisory committee members must be persons with expertise in coastal matters and persons who live in the coastal zone.

To facilitate public participation in the TCMP, the regional subcommittees will be responsible for identifying coastal issues of concern in each region, hosting regular local meetings in each region, and disseminating program information to the public. They will conduct an ongoing evaluation of the TCMP and contribute to the annual TCMP report.

D. Public Information On The TCMP

General program information distributed to the public describes the benefits and requirements of the CZMA, TCMP development activities, and ongoing avenues for public participation in both development and implementation of the program. Specific information is provided on individual program elements, including:

- wetland protection
- erosion response and dune protection planning
- energy resources management
- marine debris
- water resource management
- nonpoint-source pollution.

1. Publications

Publications including the TCMP newsletter, fact sheets, brochures, and reports have been distributed to the public by mail and at meetings, workshops, conferences, and displays at special events in an ongoing effort to keep the public informed and involved throughout the TCMP development process. These publications will be updated, supplemented, and distributed to the public during program implementation.

The TCMP staff at the GLO maintains a mailing list comprising over 4,800 names. Included are TCMP committee and task force members; local and state officials; individuals who have inquired about the TCMP; state and regional environmental groups; other state agencies; realtors; developers; citizens' groups; neighborhood associations; representatives of the tourist industry, the petroleum and chemical industries, and the fishing industry; university programs;

and other affected parties. Membership lists are continually solicited from various interest groups and organizations, as well as at special event displays, meetings, presentations, and workshops for addition to the mailing list.

Everyone on the TCMP mailing list receives the Coastal Management Program newsletter, published bimonthly. The newsletter lists all Council and EC meetings, announces the publication of proposed rules and other documents in the *Texas Register*, lists available TCMP public education materials, and gives updates on the development of the program. The newsletter has often included proposed or draft documents in their entirety and will continue to include similar information after implementation of the program to ensure public access to the information.

When meetings, hearings, or other events cannot be effectively advertised in the TCMP newsletter, special mailouts to the mailing list are prepared. Special mailouts were necessary to inform the public of the June 1995 and October 1995 Council meetings.

2. Information Packets

A TCMP information packet is distributed to anyone inquiring about the program. It includes background information about the TCMP, coastal issues, and program development activities; a copy of the federal CZMA; and copies of state coastal management legislation. Issue-specific information on individual TCMP elements was added as the program developed. During the program development phase, more than 800 packets were distributed to state and federal agencies, local organizations, and individuals who requested current and historical information about the program.

3. Media

The TCMP maintains close communication with major local newspapers and television and radio stations through press releases and press conferences to promote events, to keep the public informed about program development, and to encourage public participation.

The principal newspapers serving the coastal zone are the *Houston Chronicle, Galveston Daily News, Corpus Christi Caller-Times, McAllen Monitor, Brownsville Herald, Brazosport Facts, Bay City Tribune, Port Arthur News, Victoria Advocate, Valley Morning Star*, and *Beaumont Enterprise*. The GLO publishes notices in coastal newspapers to announce workshops, public meetings, and hearings. The news media are invited to all TCMP events.

The press has been highly effective in generating interest in the TCMP. Articles appeared in several coastal newspapers following the public hearings on the proposed TCMP boundary. For example, the June 30, 1993, edition of *The Monitor*, a McAllen newspaper, contained an article titled "Welcome to the Coastline," which described the TCMP boundary proposal and outlined the program. Visits by program staff to coastal communities to speak about the TCMP have been well publicized.

On November 16, 1992, the GLO and the TNRCC held a press conference in Corpus Christi to jointly announce the development of the TCMP and the addition of Corpus Christi Bay

to the National Estuary Program. The press conference was held in conjunction with the wetland workshops, TCMP information sessions, and public hearings on the proposed GLO rules for management of the beach/dune system. Four Corpus Christi news stations, including a Spanish-language station, covered the press conference. The coverage ran in the 6:00 p.m. and 10:00 p.m. television news broadcasts and included footage of the area's beaches, bays, barrier islands, and wetlands.

The press attended and covered the TCMP boundary hearings in June and July 1993, as well as the eight public hearings held in April 1994 on the proposed Council rules and the March 18, 1994, draft program document.

4. Exhibits

Opportunities for the TCMP staff to publicize the TCMP and distribute information about the program arise frequently. Staff from the GLO and other participating state agencies present information about the program through speeches, slide shows, and display booths at schools, conferences, workshops, meetings, and special events.

TCMP displays have been exhibited at conferences and coastal festivals not only in coastal cities and towns, but also in inland cities such as Austin and Dallas. For example, a TCMP display was exhibited at Galveston's "Bay Day" festival, at the Texas State Fair in Dallas, and at the Galveston Bay Foundation's Lobby Day in Austin.

E. Federal Agency Consultation

The state initiated coordination with federal agencies on development of the TCMP through creation of the Federal Agency Task Force (FATF). The FATF held its first meeting in June of 1993. The FATF assisted in the development of the TCMP by providing information on the national interest, federal consistency review, and the resource data inventory. Members of the FATF were:

- Environmental Protection Agency, Region 6
- Federal Emergency Management Agency, Region IV
- Minerals Management Service
- National Marine Fisheries Service
- National Park Service - Padre Island National Seashore
- U.S. Army Corps of Engineers, Galveston District
- U.S. Coast Guard
- U.S. Department of Energy
- U.S. Department of the Air Force
- U.S. Department of the Navy
- U.S. Fish and Wildlife Service
- U.S. Geological Survey
- USDA Natural Resources Conservation Service

Consultation with federal agencies also occurred through direct correspondence with the agencies' Washington offices. Certified letters were mailed to federal agencies on July 9, 1993, to inform them of the status of the program and to solicit comments on the state's proposed coastal management boundary. Additional certified letters were mailed on August 12, 1993, requesting each agency to submit, by September 15, 1993, a written statement of its interpretation of the national interest in planning for and siting facilities on the Texas coast that are more than local in nature.

On August 16, 1993, the TCMP staff made a presentation to the FATF in Austin covering the schedule for development of the TCMP submission document, background information on the TCMP boundary and public comments received, the national interest in planning for and siting facilities which are more than local in nature, plan coordination, and the TCMP policy development process. Each agency was asked to list its activities and authorities relevant to coastal management for inclusion in the TCMP hearing document for federal consistency procedures.

The FATF met on October 12, 1993, to discuss the TCMP development timeline, uses to be managed, including the initial list of state and federal actions and authorizations subject to consistency review, and the revised CNRA definitions. FATF members provided GLO staff with a comprehensive list of federal actions that could be subject to consistency review.

The FATF met on January 11, 1994, to discuss the TCMP development timeline and the preliminary TCMP document, including the federal consistency review process, goals and policies, national interest, and plan coordination. Most federal agencies on the FATF submitted revised national interest statements.

At its April 12, 1994, meeting, the FATF discussed member agencies' comments on the March 1994 Public Comment Document. Comments centered on the federal consistency review provisions and on excluded federal lands. In addition, GLO staff traveled to Clear Lake before submission of the TCMP document to OCRM in 1994 and held a joint briefing and question-and-answer session with the two coastal U.S. Fish and Wildlife Service offices and the Galveston office of the National Marine Fisheries Service.

Consultation with federal agencies continued through July 1995, when amendments to the TCMP rules were proposed in the *Texas Register*. Comments letters were received from the USDA Natural Resources Conservation Service, OCRM, Corps, EPA Region 6, U.S. Fish and Wildlife Service, National Marine Fisheries Service, Minerals Management Service, and Naval Station Ingleside. The concerns of the federal agencies were addressed in the preamble to the rules when they were adopted by the Council.

On January 18, 1996, GLO staff sent letters to Region 6 of the Environmental Protection Agency, the Minerals Management Service, the National Marine Fisheries Service, the Galveston District of the U.S. Army Corps of Engineers, and the Clear Lake office of the U.S. Fish and Wildlife Service updating them on the status of federal approval of the TCMP and responding to earlier comments from these agencies. GLO staff followed the letters by conducting several meetings to discuss any remaining issues with the staffs of Region 6 of the Environmental

Protection Agency, the National Marine Fisheries Service, the Galveston District of the U.S. Army Corps of Engineers, and the Clear Lake office of the U.S. Fish and Wildlife Service.

Continuing consultation with federal agencies will be achieved primarily through the TCMP federal consistency review process. In addition, the FATF will continue to meet at least quarterly to ensure ongoing participation by federal agencies. The biweekly permit coordination meeting of the Corps of Engineers will also ensure advancement of state-federal coordination.

Part III

ENVIRONMENTAL IMPACT STATEMENT

PART III
REQUIREMENTS OF THE NATIONAL ENVIRONMENTAL POLICY ACT (NEPA)

A. Purpose and Need for Action

The purpose and need for Federal approval of the Texas Coastal Management Program arises out of the Coastal Zone Management Act (CZMA) of 1972 as amended (16 U.S.C. 1451 *et seq.*). The CZMA affirms the national interest in the effective protection and development of the coastal zone by providing assistance and encouragement to coastal states to develop and implement rational programs for managing their coastal zones to advance the national objectives included in the Act.

Broad guidelines and the basic requirements of the CZMA provide the necessary direction for developing these state programs. These guidelines and requirements for program development and approval are contained in 15 CFR Part 923. In summary, the requirements for program approval are that a state develop a program that:

(1) Identifies and evaluates those coastal resources recognized in the CZMA that require management or protection by the state.

(2) Reexamines existing policies or develops new policies to manage these resources. These policies must be specific, comprehensive and enforceable, and must provide an adequate degree of predictability as to how coastal resources will be managed.

(3) Determines specific uses and special geographic areas that are to be subject to the management program, based on the nature of identified coastal concerns. The management of uses, or their impacts, and areas, should be based on resource capability and suitability analyses, socio-economic considerations and public preferences.

(4) Identifies the inland and seaward areas subject to the management program.

(5) Provides for the consideration of the national interest in the planning for the siting of facilities that meet more than local requirements.

(6) Includes sufficient legal authorities and organizational structure to implement the program and to ensure conformance to it.

Increases in population and development activities in coastal Texas along with their attendant impacts such as habitat loss, the increased exposure of lives and property to natural hazards such as coastal flooding and erosion, the degradation of coastal bays and estuaries because of adverse effects to water quality and quantity, and the fragmented government approach to addressing these coastal issues reinvigorated both grassroots and state agency efforts in Texas to develop a comprehensive coastal management program for Federal approval. As a result, after four years of program development, Governor George Bush submitted a proposed Texas Coastal Management Program to the Office of Ocean and Coastal Resource Management (OCRM) on October 19, 1995, for approval pursuant to Section 306 of the CZMA.

OCRM has made a preliminary determination that the program meets the requirements of the CZMA, as amended. The proposed major Federal action necessitating this DEIS is, therefore, Federal approval of the Texas Coastal Management Program (TCMP). Pursuant to the National Environmental Policy Act (NEPA), 42 U.S.C. 4321 *et. seq.*, NOAA has prepared this Draft Environmental Impact Statement (DEIS) to assess the environmental impacts associated with the approval and implementation of the coastal management program submitted to NOAA by the State of Texas.

B. Alternatives Including the Proposed Action

Introduction

The proposed major Federal action is NOAA approval of the Texas Coastal Management Program. The alternatives available to the Assistant Administrator for Ocean Services and Coastal Zone Management (the Assistant Administrator) include delaying approval and denying approval (the no-action alternative). In approving a coastal management program (the preferred alternative), the Assistant Administrator must find that a state has met the Federal approval requirements of the CZMA at 15 CFR Part 923. Delay or denial of program approval could be based on a determination that the Texas Coastal Management Program does not meet any of the requirements of the CZMA, as amended, or a finding that Federal funding of the State program would not advance the objectives of the CZMA. The Texas Coastal Management Program, which is the subject of the proposed approval, is described in Part II of this document. A table cross-referencing CZMA requirements with sections from this document may be found in Part I. Texas could modify parts of the program or withdraw its application for Federal approval if the preferred alternative changes as a result of public comments or other CZMA considerations. A final program EIS will be prepared and will include responses to comments received on this draft EIS.

This section of the document presents the various alternatives available to the Assistant Administrator and the environmental effects of those alternatives for the purpose of comparison. In addition, in an effort to elicit public and agency comment and to assure that the Assistant Administrator's determination will be appropriate, this section also identifies possible programmatic reasons for delaying or denying approval of the TCMP identified through the public review process to date.

1. Alternative #1 Approve the TCMP (Preferred Alternative)

Approval of the TCMP should result in overall positive environmental effects. This analysis is based on a careful review of the management program as well as NOAA's twenty years of experience administering the National Coastal Zone Management Program.

There are four effects on the natural and human environment directly attributable to Federal approval of the TCMP. First, Texas would be eligible to receive Federal financial assistance for program implementation and enhancement. These funds would positively contribute to improve management of the natural and human environment. Second, approval places an obligation on Federal agencies to act in a manner consistent, to the maximum extent practicable, with the TCMP's enforceable policies when conducting or supporting activities within, or outside, the

State's coastal zone that could affect coastal resources or land and water uses within the coastal zone. This will significantly impact the Federal decision-making process related to land and water use decisions within and outside the Texas coastal zone. Third, Texas would be required to consider the national interest in energy and other facilities of national importance as well as nationally important coastal resources in its decision-making. Fourth, program approval would satisfy a critical eligibility criteria for ports in Texas to be able to obtain deepwater port licenses pursuant to the Deepwater Ports Act of 1974 (33 U.S.C.S. §1503).

Section 306, 306A, 309 Funding

Federal approval will enhance the State of Texas's financial ability to carry out its various coastal management efforts in accordance with TCMP policies. Texas will rely to a considerable degree on the program funding made available in annual Federal financial assistance awards under Sections 306, 306A, and 309 of the CZMA, both for program administration and for the Texas coastal management assistance program. Federal CZMA Section 306 funding will support additional staff, contracts, and other resources to enhance implementation of core TCMP laws. Local governments, as well as a broad range of other entities, will benefit from money available through the TCMP assistance fund. The State expects to use CZMA Section 306 funds to (1) enhance local government capacity to respond to coastal natural hazards by funding local planning and management efforts; (2) enhance state and local government management of critical areas (e.g., wetlands, submerged aquatic vegetation, and tidal flats) within their jurisdictions; (3) support development of an ecotourism industry in coastal Texas through the provision of assistance to local governments to develop plans for ecotourism; (4) streamline permitting processes and provide technological and technical assistance to make regulatory processes less costly and more efficient; (5) improve information for decision-making through efforts to develop baseline data and maps necessary for sound implementation of the TCMP goals and policies; and (6) enhance public education and outreach on coastal processes and management issues as well as TCMP requirements by developing and distributing materials such as user's manuals and by hosting public meetings, workshops, and conferences where technical information can be exchanged and training can be obtained.

Federal CZMA Section 306A low-cost construction funding will be used to achieve positive environmental impacts. Texas has one of the strongest sets of laws in the nation protecting public access to the beach. However, increased shoreline development makes meeting the shoreline access needs of the public a challenge. CZMA Section 306A funds can be used to acquire additional access corridors and enhance existing access (e.g., off-beach parking, dune walkovers, public bathrooms). CZMA Section 306A funds are also expected to be used to revitalize urban waterfronts. TCMP funds can be used to revitalize urban waterfronts to provide enhanced recreational opportunities and boost local economies.

Federal CZMA Section 309 funds will allow Texas to continue to enhance its approved program policies and procedures to address emerging priority needs in one or more of the following categories: (1) protecting, restoring or enhancing the existing coastal wetlands resource base or creating new coastal wetlands; (2) developing and adopting procedures to assess, consider, and control cumulative and secondary impacts of coastal growth and development; (3) reducing marine debris; (4) planning for the use of ocean resources; (5) preventing or significantly reducing threats to life and property by eliminating development and redevelopment

in high hazard areas and managing development in other hazard areas; (6) attaining increased opportunities for public access; and (7) facilitating the siting of energy facilities in an environmentally responsible manner.

Funding for such efforts is expected to have direct beneficial impacts on the natural and socio-economic environment of the coastal region, through protection of natural areas and other sensitive resources, waterfront revitalization, comprehensive planning, streamlining of permits and the monitoring of their effects, and conflict resolution. The integrated management approach of a coordinated cooperative TCMP is expected to result in direct benefits to the environment through a heightened proactive focus on coastal resource management. The TCMP provides the framework for a partnership among state and local agencies and other entities, public and private, to cooperate to preserve, protect, develop and restore the region's unique values.

Federal Consistency

Federal approval and implementation of the TCMP will have effects upon Federal agency actions. Approval will activate the Federal consistency provisions of Section 307 of the CZMA. The TCMP federal consistency process and relevant provisions of 15 CFR Part 930 are described in Chapter Seven. Because federal consistency entails early coordination and closer cooperation in planning as well as review of project proposals, it is presumed that federal consistency will provide another means to minimize the potential for adverse environmental impacts by expanding policies to comprehensively manage all private, state and Federal activities that adversely affect CNRAs. This is considered to be a desirable impact and one of the primary purposes of the CZMA.

The TCMP has been developed with the assistance and input of numerous Federal agencies having responsibility for activities in or affecting the coastal area. Therefore, conflicts between the TCMP's enforceable policies and federally permitted or conducted activities should be minimal. Federal activities will not be excluded, but will be required to be consistent with the TCMP's policies.

National Interest Considerations

Federal approval of Texas' program will also certify that Texas has an acceptable procedure to ensure the adequate consideration of the national interest involved in the siting of facilities so as to meet requirements which are other than local in nature. These facilities generally involve energy production or transmission, recreation, interstate transportation, production of food and fiber, national defense, etc.

Texas has identified the following facilities, activities and natural resources as being in the national interest, and therefore as factors that need to be considered in the siting of facilities: defense and aerospace facilities and activities; energy exploration, production, and transmission facilities and associated activities; transportation facilities and activities; water resources development facilities and activities; water, air, and land pollution control facilities and activities; natural and technological hazard control activities; recreational facilities and activities; coastal natural resources including wetlands, fish and wildlife species and habitats, threatened

and endangered species and habitats, cultural, historical, and archeological areas, natural hazard areas, and barrier islands.

This policy requirement of the CZMA is intended to assure that national concerns related to facility siting are expressed and dealt with in the development and implementation of a state's coastal management program. The requirement should not be construed as compelling states to propose a program that accommodates certain types of facilities. It works to assure that such national concerns are not arbitrarily excluded or unreasonably restricted in the management program.

This provision may have two impacts. First, it ensures that a state has a process and a program that does not prohibit or exclude a use or activity dependent on the coastal zone. In the absence of a comprehensive program such considerations might simply be ignored by oversight or default. This requirement will ensure that they are specifically considered. Second, the existence of consultative procedure should lead to more deliberate and less fragmented decision-making concerning the siting of facilities in the coastal zone.

Eligibility for Other Coastal Management Benefits and Assistance

The Corpus Christi and Houston Port Authorities have been interested in constructing a deepwater port, partly in response to the Mega Borg and other oil spills. However, in order to develop and operate a deepwater port, the port authority or other applicant must first receive a license from the Department of Transportation (Coast Guard). The Deepwater Port Act of 1974 , as amended (33 U.S.C.S. §1503) provides that, among other reasons, the Secretary of Transportation will not issue a license unless the coastal state to which the deepwater port is to be connected has developed or is making reasonable progress in developing a Federally approved coastal management program.

The development of one or more deepwater ports could have substantial positive impacts on a wide array of coastal resources such as wetlands, estuaries, and beaches. The construction of deepwater port facilities would reduce the risk of tanker accidents and thereby reduce the risk of major and chronic oil spills in the busy nearshore navigation channels. While construction of such a port may have some potential adverse impacts such as oil spills associated with unloading crude oil, these adverse impacts would be outweighed by the positive impacts associated with the reduced risk from tanker accidents and more frequent and chronic spills.

Indirect Effects of Federal Approval

Federal approval of the TCMP will have two broad indirect consequences for Texas. First, it will improve the institutional capacity of government at all levels to manage the coastal natural resources and the activities that impact them. Second, it will provide more clear and effective policies to address the principal issues of state concern.

The TCMP will improve the institutional capacity of government to address coastal issues and problems in several ways. First, through the application of uniform coastal policies and procedures, government entities will evaluate and manage activities in a more consistent manner. The TCMP will enhance coordination among government entities and increase predictability in

government decision-making. The uniform coastal policies in the TCMP will reduce the conflict and overlap of current government policies governing activities in the coastal zone.

Second, the TCMP will result in enhanced government accountability. The TCMP includes policies and procedures designed to help resolve conflicts between the objectives of various Federal, state, and local entities in the coastal zone. Through preliminary review of agency actions and rules, disputes can be identified and resolved early in the review process, thus resulting in coastal decision-making that is more accountable to the public. In cases of persistent disputes or conflict, the Council will act as a dispute resolution body through the exercise of State Consistency Review authority.

Third, the TCMP will promote greater public participation in coastal decision-making. As directed by the Legislature, the Council will create advisory committees to help identify and address the issues and concerns facing coastal communities and resource stakeholders. These committees will be made up of individuals with expertise in coastal matters and representing broad interests. The committees will provide regular input to the Council and assist in preparation of the annual report to the Legislature. The public will also have the opportunity to participate in government decisions affecting the coastal zone when the TCMP policies are applied to their decisions. Finally, the public will have direct and regular access to the Council, creating a forum for the discussion and resolution of coastal issues of concern to the public. Overall, the TCMP will enhance the institutional capacity of government entities in Texas to address coastal issues.

Enhanced Coastal Policies

The TCMP is a networked program based largely upon the exercise of existing state authorities. However, several policies are expected to add to and strengthen Texas's coastal management efforts to prevent adverse impacts on coastal resources.

First, the TCMP policies governing dredging and dredged material disposal will promote greater beneficial use of dredged material and promote avoidance and minimization of the adverse effects associated with these practices. The TCMP requires beneficial use of dredged material where the costs of such practices are reasonably comparable to the costs of non-beneficial use options. Where the costs of beneficial use exceed those of non-beneficial use options, beneficial use is required if the benefits exceed the additional costs. Although the TCMP dredge policy may have a short-term impact on navigation and maintenance of channels, implementation of the policy is expected to result in long-term benefits to Texas and to the State's coastal resources. Greater beneficial use of dredged material will help Texas more effectively respond to erosion problems, promote health and restoration of coastal natural resource areas, improve Texas's beaches, thus increasing tourism and enhancing the coastal economy, and improve commercial fishing by enhancing productive nearshore estuarine habitats.

Second, the TCMP will improve beach access and dune protection by ensuring more consistent and effective application of the Open Beaches Act and Dune Protection Act. These statutes, implemented through local beach access and dune protection plans, are networked into the TCMP. Local governments are expected to seek grants through the TCMP to enhance their capacity to implement these critical programs.

Third, the TCMP will enhance management of coastal wetlands and other critical habitats through the critical areas policy. The TCMP establishes for the first time a single state policy governing critical areas in the coastal zone. Implementation of this policy will improve management of wetlands, oyster reefs, sand and mud flats, and other critical coastal resources. The policy emphasizes avoidance and minimization of the impacts activities have on these resources. The state Section 401 certification procedures, as administered by the TNRCC and the RRC, have been improved as a result of the TCMP policy. Ensuring consistency among agency regulatory programs will in itself promote more effective management of critical areas.

Effective implementation of the TCMP will require more coordination among government entities taking actions and regulating activities in the coastal zone. The benefits to the public, to the regulated community, and to coastal resources will outweigh the increased cost of better government coordination.

For a more detailed discussion of the environmental impacts of Federal approval of the TCMP, see Part III Section D, Environmental Consequences (p. III-51).

2. Alternative #2: Deny Approval of the TCMP

The primary effects of denying approval to the TCMP would be the loss of Federal CZMA Section 306, 306A and 309 funds; the loss of Federal consistency authority; ineligibility for deepwater port licenses, and no assurances that national interests in coastal management would be considered.

The loss of Federal funds would result in adverse environmental impacts due to the diminished ability of Texas to (1) implement, coordinate or enhance its program at the state and local levels; (2) pass through to local governments funds necessary to ensure adequate implementation of relevant portions of the program; (3) provide technical assistance and training to local governments essential for the development of a more effective and efficient coastal program; (4) provide permitting and technical assistance to applicants to make the regulatory process more efficient and effective; (5) conduct assessments of, and develop recommendations for improving, program effectiveness; (6) complete low-cost construction projects per 306A; (7) develop the scientific basis for refining and improving coastal policies and decision-making; and (8) conduct public education and outreach efforts related to coastal management.

Adverse impacts could also result from the loss of Federal consistency authority. Federal agencies would likely continue to take actions that have potentially significant and adverse environmental effects on coastal resources and uses, without adequate review and input from Texas regarding its coastal management policies.

Without approval, Texas will not be required to ensure that national concerns related to facility siting are expressed and dealt with in the development and implementation of a state coastal management program. This could also result in less deliberate and more fragmented decision-making concerning the siting of facilities in the coastal zone.

Denial of program approval would render port authorities or other entities within Texas ineligible to receive deepwater port licenses from the Coast Guard, pursuant to the Deepwater

Port Act. The loss of the ability to develop deepwater ports could result in potentially significant environmental impacts from increased risks of oil spills and the potential impacts from dredging wider and deeper channels to accommodate tankers in a safer manner as an alternative to deepwater ports. In addition, the loss of opportunity to develop deepwater ports may have moderate socio-economic impacts to the State and communities that would benefit economically from these ports, such as Corpus Christi and the Houston/Galveston area.

3. Alternative #3: Delay Approval of the TCMP

The option of delaying approval would have the same general impacts noted above, albeit possibly for a shorter duration. The impact of delaying approval would nonetheless be felt due to the inability of Texas to receive additional CZMA Section 305 program development funds. This is due to provisions in the CZARA which allow states to receive 305 funds for only a maximum of two years. While the loss of Federal program development funds might not prohibit development of an approvable program, it would still result in a financial burden to the State and hinder present efforts to improve government coordination and make Texas' management of its coastal resources more effective.

4. Programmatic Reasons for Delaying or Denying Approval

The following section identifies possible programmatic reasons that the Assistant Administrator might delay or deny approval of the TCMP. These are primarily issues that were identified in the State's public review process used in developing its management program. The following are considered subsets of both the alternatives to deny or delay program approval. This section is included in order to elicit public comment and assure that the Assistant Administrator's final determination will be appropriate.

A. The Assistant Administrator could deny or delay approval of the TCMP if the adopted inland boundary of the TCMP is not adequate to meet CZMA requirements.

Section 306(d)(2) of the CZMA and 15 CFR §923.31 require that states establish an inland coastal zone boundary which is sufficient to include areas sufficient to capture all uses with direct and significant impacts to coastal waters, all CNRAs, waters under saline influence, salt marshes and wetlands, beaches, transitional and intertidal areas, and islands and must be presented in a manner that is clear enough for the public to determine whether they are in or outside of the boundary. OCRM has made a preliminary determination that the TCMP boundary meets these requirements.

Some commenters have raised the issue of whether the inland coastal boundary is sufficient to encompass all coastal wetlands. Texas received comments from the U.S. Fish and Wildlife Service that some freshwater wetlands (coastal prairies) were not included in the inland boundary. The primary CZMA requirement for establishing the inland boundary is the inclusion of marshes and other wetlands with salt-tolerant vegetation. While NOAA acknowledges that these freshwater wetlands can serve as important habitat, these wetlands are not salt-tolerant and provide habitat primarily for non-marine-related species. As such, the CZMA does not require Texas to include these wetlands in its CZMA boundary. It should be noted that the Texas coastal zone boundary encompasses nearly 5 million acres of land and 4 million acres of waters. Based

on these considerations, the Assistant Administrator has made a preliminary finding that the State's inland boundary, based on the State's Coastal Facilities Designation Line (CFDL), is sufficient to encompass all coastal wetlands as required in 15 CFR §923.31 (b)(1-8).

B. The Assistant Administrator could deny or delay approval of the TCMP if the program policies and authorities are not sufficient to meet CZMA requirements with regard to managing important coastal wetlands.

The CZMA approval and implementation regulations specifically require state coastal programs to include policies and authorities that will minimize the destruction, loss or degradation of wetlands and preserve and enhance their natural values (15 CFR §923.3).

The ability of Texas to manage activities on privately owned submerged lands and wetlands has been an issue since the State began developing a program in the 1970's. Until recently, the State relied on its submerged lands authorities to manage coastal wetlands on state-owned lands. In response, during program development Texas enhanced several of its existing authorities to provide the needed authority to address the management of all coastal wetlands. Texas will rely on the Texas Natural Resource Conservation Commission's and Railroad Commission's use of their Section 401 water quality certification authority to manage critical areas, including wetlands, on privately as well as publicly owned lands. The Texas Natural Resource Conservation Commission and the Railroad Commission spent considerable effort in revising their Section 401 water quality certification rules (31 TAC 279 and 16 TAC 3.8) in order to ensure that the State possesses adequate authority to comprehensively manage coastal wetlands. Both sets of rules provide for application of a sequencing of avoidance, minimization and compensation for adverse impacts to wetlands based on the Federal Clean Water Act Section 404(b)(1) guidelines.

Commentors have raised concerns during program development regarding the adequacy of the State's wetlands policies in general (31 TAC 501.14(h)) and specifically the adequacy of the State's sequencing provisions, the alternatives test (which should provide a rebuttable presumption that, in the case of nonwater-dependent uses, alternative upland sites with less environmental impacts are presumed to exist unless demonstrated otherwise), the definition of water dependency; and provisions for considering compensatory mitigation (which should not be considered as a practicable alternative to avoidance of impacts). In response, Texas has revised its definition of water-dependent uses (31 TAC 501.3 (13)) so that it provides an appropriate alternatives test in its sequencing requirements. Finally, Texas has provided additional clarification of the critical areas policies including considerations of compensatory mitigation in the sequencing provision in Part II Chapter Four (p. 4-38) and implementation of the policies in Chapter Six (page 6-24) of this document.

C. The Assistant Administrator could deny or delay approval of the TCMP if the State does not possess adequate organizational structure or mechanisms to implement and enforce the management program

Commentors have raised concerns regarding the ability of Texas to ensure compliance with the TCMP policies of networked state agencies, local governments, and individuals--especially in light of the legislative changes that were made to the Council's ability to administratively

require compliance of networked state agencies and local governments (see detailed discussion in Part II, Chapter Five, p. 5-4 to 5-10).

Texas will rely on several mechanisms to ensure enforcement of the TCMP policies: the networked state agencies and local governments, the Council in conjunction with the Attorney General, and the public. First, networked State agencies and local governments are required by the CCA to comply with and enforce the policies of the TCMP against private parties when undertaking actions subject to the program. State agencies and local governments will be assisted by the Permitting Assistance Group (PAG) through preapplication assistance and preliminary reviews to ensure that projects and state actions are in compliance with TCMP policies.

The state consistency review procedures provide an avenue for the Council in conjunction with the Attorney General to initiate legal action against an agency for failure to comply with the coastal policies. Under the state consistency review process, the Council will provide oversight of program implementation and dispute resolution functions through a review of contested actions referred to the Council for consistency with the TCMP policies, and ongoing monitoring of state agency and local government implementation of the coastal policies. When proposing an action, state agencies and local governments must prepare a formal consistency determination that concludes that the proposed action is consistent with the TCMP policies. This determination can be challenged by citizens, state agencies or Council members. If the determination is contested, and referred to the Council and the Council determines that the action is inconsistent, the Council will direct the agency to modify the action so that it is consistent with the TCMP policies. If the agency does not modify its action consistent with Council recommendations, and the Attorney General concurs that the agency action is inconsistent, then the Attorney General will initiate legal action against the state agency to compel compliance.

In addition, in order to enhance consistent implementation of policies, most state agencies and local governments have committed through formal agreements to submit their existing and new operating rules and regulations to the Council for consistency certification. Once their rules are certified as consistent, the agencies can establish thresholds for referral which would limits on the Council's ability to review individual agency actions. While these thresholds for referral would place limits the Council's ability to use the state consistency review process to ensure compliance, they are not a permanent bar. The TCMP also provides for both an ongoing and annual monitoring of agency and local government actions--through an annual report--to assess an agency's or local government's implementation of the program. If, after a review of the annual reports and ongoing monitoring information, the Council detects a pattern of noncompliance (either finding that an agency or local government has not implemented or enforced the TCMP policies or that they have amended or modified their rules in a manner inconsistent with TCMP policies) the Council may issue a notice of program deficiency and ultimately can revoke certification of agency rules, which would terminate the operation of any thresholds for referral.

The Council will be assisted in its monitoring responsibilities by the GLO, which will act as staff for the Council and assist with agency and local government monitoring. Finally, in a number of cases, Texas can also rely on the ability of citizens to act to ensure compliance with TCMP policies. Based on this information, the Assistant Administrator has made a preliminary

determination that the TCMP program organization and mechanisms are adequate for the purposes of the CZMA. For more details see Part II, Chapter Five.

D. The Assistant Administrator could deny or delay program approval if it is determined that the State has not adequately accommodated comments from the Corps of Engineers related to the State's policies on dredging and dredged material disposal.

Section 306(d)(1) of the CZMA and implementation regulations at 15 CFR 923.51 require that states must give adequate consideration to Federal agency comments on the development of the program. At the time of program submission, the only outstanding Federal agency issues were those raised by the U.S. Army Corps of Engineers (Corps) with regard to modifying the State's policies related to dredging and dredged material disposal for the following reasons or allowing more time for review and additional comment. Texas has since held additional discussions with the Corps and has provided additional clarification on this policy.

First, at the time of program submission, the Corps expressed concerns in written comments on the program that it could not meet the TCMP policy for beneficial uses of dredged material because the requirements could add additional costs to a project, resulting in costs greater than the "Federal standard." The "Federal standard" requires the Corps to undertake projects in the least costly environmentally acceptable manner. According to the Corps, costs for additional compliance above the "Federal standard" would have to be passed on to the local sponsor. The State responded by pointing out that the policy does not require the Corps to use material beneficially if the costs are significantly greater than traditional practices of disposal and if the benefits of using the material do not outweigh the additional costs of beneficial use. In addition, Texas and the Corps have signed a Memorandum of Agreement establishing a procedure that will phase in federal consistency reviews of Corps dredging projects over time. By phasing in reviews of projects, beneficial use requirements can be addressed early in the planning process for upcoming work and funds could be budgeted and/or obtained for the additional costs of using the material beneficially (see detailed discussions in Part II, Chapter Four, page 4-70, and Part II, Chapter Six, page 6-25). The State also notes that there are a number of sources of funds that could be used for beneficial use projects at the Federal (WRDA) and State (TxDOT) levels. Per subsequent discussions with the Corps, Texas has provided additional clarification that, if after what amounts to good faith but unsuccessful efforts by the Corp and local sponsor to secure funding for beneficial use of the material, the Corps may submit a new consistency determination for the project based on this new circumstance (see detailed discussion in Part II, Chapter Four, page 4-73). We would also note that it is NOAA's longstanding position that the Federal consistency provisions in CZMA Section 307 did not contemplate the use of economic efficiency (e.g., "Federal standard") as a valid justification for not complying with a state's Federally approved enforceable policies.

Second, the Corps expressed concerns that it could not meet the beneficial use policy because the Federal Government does not provide the Corps authority to evaluate some of project use benefits (such as recreational, flood and storm protection, erosion prevention, and economic development benefits) in a project analysis as required by the TCMP's policy (501.14(j)(4)(B)(I)). The state responded that the Corps will not be required to exceed its authority. The CZMA imposes an obligation on the Corps to comply with the State's enforceable coastal policies, unless the Corps is specifically prohibited by law from meeting the

policies. However, it is not clear whether there is a specific law that prohibits the Corps from complying with the CZMA when evaluating costs and benefits of dredged material disposal options. However, if there were such specific prohibitions, then, in these limited cases, the Corps will have met CZMA federal consistency standard of "consistent to the maximum extent practicable."

Third, the Corps expressed concern that the TCMP's dredging and dredged material disposal policies requiring mitigation for impacts could be interpreted to apply to Corps routine maintenance dredging of ongoing projects. The Corps claimed that it cannot meet this requirement because the Federal Government does not allow for mitigation during the course of routine maintenance. Texas responded by pointing out that the TCMP's mitigation requirements simply mirror the mitigation requirements in the Clean Water Act §404(B)(1) guidelines which currently apply to all Corps operation and maintenance activities per the Corps dredging regulations.

Fourth, the Corps also expressed concern that it was being held to a different standard than private individuals because the TCMP's beneficial use policy only applies to commercially navigable waterways and not to all dredging activities. Texas responded that the beneficial use policy, one of several elements making up the State's dredging policy, address those dredging activities (dredging in commercial waterways) that it felt would generate sufficient volumes of dredged material necessary for significant beneficial use projects. The State concluded that private dredging activities would not generate the requisite volumes of material needed for these beneficial projects.

E. <u>The Assistant Administrator could delay program approval if it is determined that the TCMP's policies related to dredging and dredged material disposal are not sufficient to meet CZMA requirements.</u>

The CZMA requires that a state develop policies that are appropriate to the degree of management needed and sufficiently specific to ensure a sufficient degree of predictability in decision-making (15 CFR §923.3(b)). However, concerns were raised in public comments that the policies related to dredging and dredged material disposal were not sufficiently specific. In particular, questions were raised regarding the intent and effect of the public and National Interest Exemption to the dredging policy in 31 TAC 501.14(j)(1)(D).

Texas maintains that this policy reflects the current provisions in the CWA Section 404(b)(1) and (2) related to dredging. In response to these comments the State provided additional explanation of the dredging policies including a discussion of the scope, applicability and effect of the national and public interest exemption in 501.14(j)(1)(D) in Part II Chapter Four of this document. The policy requires that dredging activities in coastal waters, submerged lands, critical areas, coastal shore areas and Gulf beaches avoid and minimize impacts to these resources to the greatest extent practicable. Furthermore, under normal circumstances, if the State determines that the dredging or placement of dredged material would result in significant impacts to these resources, the activity will be prohibited. However, if the socio-economic consequences would be detrimental to the public and national interest, then the State will consider the costs and benefits of not performing the dredging and, if the costs outweigh the benefits, the dredging may be authorized. Texas anticipates that this exception will rarely be

applied, and that the burden of demonstrating that the provision applies is on the applicant (see detailed discussion in Part II, Chapter Four, page 4-73).

A few additional issues were raised in public comments on the Texas Coastal Management Program/Draft Environmental Impact Statement (see Part VII). NOAA has evaluated the issues and finds that none of the issues raised warrant delaying or denying approval of the program for the reasons given in the response to public comments in Part VII. However, NOAA has revised the FEIS where appropriate to address the issues raised in these comments (see response to comments in Part VII).

C. Description of the Affected Environment

1. Physical Environment

Texas has about 367 miles of open Gulf shoreline and 1,100 miles of bay-estuary-lagoon shoreline. The total surface area of state-owned lands (mean high tide to 10.36 miles offshore) in the Gulf of Mexico is approximately 2,512,570 acres. The total open-water surface area of the bay-estuary-lagoon systems at mean high water is 1,532,430 acres (Diener, 1975).

Seven major and three minor bay-estuary-lagoon systems occur on the coast (figs. 3-10). The estuarine systems are characterized by diverse climatic and hydrologic features. The climate along the upper coast in the Beaumont-Port Arthur and Galveston-Houston areas is humid. The climate along the middle coast from the Bay City-Freeport area to the Corpus Christi area is subhumid to dry subhumid. Along the lower Texas coast in the Kingsville and Brownsville-Harlingen areas, the climate is semiarid.

Two principal wind regimes dominate the coast--persistent southeasterly winds from March through November, and short-lived but strong northerly winds from December through February (Fisher et al., 1972, 1973).

Northers occur in the coastal zone as often as 15 to 20 times per year (Hayes, 1965). Northers create wind tides that inundate the bay side of barriers and peninsulas, generate high-velocity ebb currents which transport sand through tidal passes to the Gulf of Mexico, and transport sand from dune and beach areas into the swash zone. Waves associated with northers erode parts of the central and lower coastal shoreline and create strong longshore currents that move sand southward along these shoreline segments (McGowen et al., 1977).

The Texas coast is struck by hurricanes or tropical storms about once every two years (McGowen et al., 1977). Simpson and Lawrence (1971) calculated that the probability of occurrence of a hurricane along a segment of the Texas coast in any one year varied from 7 percent in the Corpus Christi area to 14 percent in the Bay City-Freeport area. During hurricane passage, shorelines may be eroded from a few tens of feet to several hundred feet in a few hours (McGowen et al., 1977). Maximum hurricane storm surge heights on the Gulf shoreline can vary from 4.2 feet above mean sea level (MSL) in the High Island area to 12.7 feet above MSL in the Galveston area (Bodine, 1969).

Astronomical tidal variations in Texas estuaries are small compared with those of estuaries of the Atlantic and Pacific coasts; they range in the northwest Gulf of Mexico during maximum declination of the moon to about 2.6 feet and at minimum declination, about 0.7 feet (Ward et al., 1980). Meteorological events are more important than astronomical tides in affecting estuaries, as they alternately expose and flood the greatest area of tidal flat and marsh (Collier and Hedgpeth, 1950).

The most noticeable fluctuations in bay levels are caused by direction and force of the wind or wind tides (White and Calnan, 1990). The amount of open-bay fetch and the direction of wind tides control the effectiveness of wind-tidal activity (Brown et al., 1976). For example, broad fetch, as in Trinity Bay and the western arm of Matagorda Bay, and persistent southeast winds

aligned with the axis of the bay result in high wind tides that may build tide heights 2 to 3 feet above normal (Holliday, 1973).

2. Natural Resources

a. Waters of the Open Gulf of Mexico

Waters on the inner continental shelf of the western Gulf of Mexico are characterized by seasonably variable temperatures and salinities. Average surface temperatures range from 88°F to 57°F (Hedgpeth, 1953). Bottom water temperatures on the upper coast range from 54°F to 59°F in the winter to 84°F in the summer. Bottom water temperatures on the lower or south Texas coast range from 59°F in the winter to 82°F in the summer (Boesch and Rabalais, 1987).

Large freshwater discharges of the Mississippi and Atchafalaya rivers influence the hydrography of the northwestern Gulf shelf. The influence is especially prominent in reducing salinities of inner shelf waters as far west as Galveston (Boesch and Rabalais, 1987). Occasionally during the late spring this influence may extend down the Texas coast (Boesch and Rabalais, 1987). Hypoxia in bottom waters is a summer phenomenon off Louisiana and is known to occasionally extend at least to Freeport, Texas (Harper et al., 1981). Average salinity of the Gulf is 36 ppt (Hedgpeth, 1953).

Tidal ranges along the Gulf shoreline vary from 2.6 ft in the Sabine Pass area to 1.3 ft near Brazos Santiago Pass in the Brownsville-Harlingen area (U.S. Department of Commerce, 1978). Wave heights on both the upper and lower coasts range between 2.5 and 3.5 feet (U.S. Army Corps of Engineers, 1956a and 1956b). Net longshore sediment transport is southwesterly on the upper coast (Fisher et al., 1973) and northerly on the lower coast (Brown et al., 1980). In the Kingsville area, southwestward and northward longshore currents converge near latitude 27°N (Brown et al., 1977).

Shelf bathymetry near the Gulf shoreline is characterized by a relatively steep slope and ranges from approximately 30 feet/mile in the Brownsville area to 6 feet/mile in the Sabine Pass area (White et al., 1986 and 1987). At approximately 10 miles offshore, the slope decreases to about 9 to 12 feet/mile in the Brownsville area to 1 foot/mile in the Sabine Pass area. Maximum inner-shelf depths range from 96 feet in the Brownsville area to 40 feet in the Sabine Pass area.

The invertebrate fauna of the northwestern Gulf is generally considered an extension of the warm temperate Carolinian zoogeographic province that extends from Cape Hatteras, North Carolina, to Cape Kennedy, Florida (Pulley, 1953; Boesch and Rabalais, 1987). The South Texas invertebrate fauna has been described as Texas Transitional, with fauna typical of both tropical Caribbean areas and temperate western Atlantic areas (Pulley, 1953). The fauna of the outer shelf of the northwestern Gulf has more tropical affinities than the warm, temperate inner shelf.

The fish fauna of the northwestern Gulf of Mexico may be divided into temperate and tropical components, with a vague dividing line (Hoese and Moore, 1977). Some ecological factors affecting distribution include salinity, primary productivity, and substrate type. The inshore Gulf and estuarine habitats share a common fauna, but there are certain species which are

largely restricted to certain habitats. Natural rocky substrates are absent from the inshore area, except for some very small areas off Port Mansfield (7½-Fathom Reef). However, piers, jetties, and bulkheads provide a suitable habitat for such species as sheepshead, crested blennies, hairy blennies, frillfin gobies, and belted sand bass (Hoese and Moore, 1977). In the shallow Gulf, the surf zone, with its open, sandy bottom, characteristically contains the Gulf whiting and Atlantic threadfin (Hoese and Moore, 1977). Outside this zone, sediments become muddier, and characteristic fish are the Atlantic croaker, spot, drum, silver sea trout, southern kingfish, and Atlantic threadfin.

Many of the inshore fishes are estuarine-dependent and spend part or all of their lives in estuaries. Almost three-fourths of the fisheries harvest from the Gulf of Mexico consists of species dependent on estuaries or wetlands (NOAA, 1990). For example, on a Gulf-wide basis, inshore shrimp yields are related directly to availability of estuarine intertidal vegetation (Turner, 1977). A typical estuarine-dependent species spawns in the Gulf of Mexico, and the larvae are then carried towards shore by currents. The young fish enter the estuaries and remain there, reaching maturity in about one year. They may remain in the estuary, migrate to sea to spawn, or migrate from the shallow estuaries to spend the rest of their lives in the deeper Gulf of Mexico (Hoese and Moore, 1977). Estuary-related species of importance include menhaden, shrimps, oyster, crabs, and sciaenids.

b. Waters Under Tidal Influence

Seven major estuarine systems with a total water surface area of 1,541,301 acres (Armstrong, 1987) occur on the Texas coast: the Sabine-Neches, Galveston, Matagorda-Lavaca, San Antonio, Copano-Aransas, Corpus Christi-Nueces, and Laguna Madre-Baffin (figs. 2-9). Three minor riverine estuaries are also found on the coast: the Brazos, San Bernard, and Rio Grande. Sedimentation has mostly filled these estuaries, and the rivers that fed them now empty directly into the Gulf of Mexico.

There is very little temperature variation spatially within an estuary, either horizontally or vertically (Armstrong, 1987). For the most part, water temperatures follow air temperatures. Average annual salinities range from 2.3 ppt in Sabine Lake to 36.2 ppt in Laguna Madre (Armstrong, 1987). Seasonal salinity variations reflect freshwater inflows and vary considerably both within and between estuaries.

Water exchange in estuaries is due to astronomical tides, winds, barometric pressure, and density stratification (Armstrong, 1987). Of these influences, winds are the most important and can produce wind tides, which over long periods can account for substantial exchange of water between the Gulf and estuaries. The amount of open-bay fetch and the direction of wind tides control the effectiveness of wind-tidal activity (Brown et al., 1976).

Average depths in the estuaries at mean low water range from 0.7 feet in Cayo del Infernillo in the Baffin Bay system to 14.5 feet in Offatts Bayou in the Galveston Bay system (Diener, 1975). Average depths of the larger bay-estuary-lagoon systems range from 2.8 feet in upper Laguna Madre to 10.5 feet in Corpus Christi Bay. Many of the bays are shallow, with average depths of less than 4 feet. Maximum depths occur in the navigation channels and near the tidal passes.

Temperature, salinity, water depth, and sediment type are perhaps the most important environmental parameters affecting distributions of fish species. Low-salinity bay communities are dominated by fish species such as croaker, spot, sand trout, anchovies, and mullet. Low-salinity to almost freshwater areas of the upper coast are characterized by such species as gar, killifish, mullet, and blue catfish. In areas receiving adequate fresh water, menhaden are dominant (Hoese and Moore, 1977). The hypersaline bays and lagoons of south Texas, such as Baffin Bay and Laguna Madre, contain no distinctive species, and only a greatly reduced assemblage found in lower salinities, such as mullet, black drum, redfish, and speckled trout.

c. Submerged Lands

Coastal submerged lands are one of the most extensive habitats in any coastal system. In Texas, the total area of submerged land habitat is approximately 6,250 mi^2 or 4,000,000 acres. These areas are open systems that interact strongly with Gulf of Mexico and bay waters, with marshes and tidal flats on the periphery of the bay-estuary-lagoon system, and with riverine systems where they enter the estuary. Bay-estuary-lagoon sediment types are principally sand, mud (silt and clay), and gravel (composed primarily of shell material). The distribution of these different textural components follows a systematic trend for the larger bay systems, where muds characterize the deeper bay centers and sand the shallower bay margins (White and Calnan, 1990). The distribution is in part a reflection of wave and current energy, which is related to water depth. Inorganic bottom sediments are mostly composed of quartz, feldspar, and clay minerals. Oolites and coated grains are among the constituents of sediments in Baffin Bay along the south Texas coast (Frishman, 1969).

Sediments of the inner shelf span three textural ranges--gravel, sand, and mud. The gravel-sized fraction, which is minor, is composed predominantly of shell, but includes some rock fragments (Morton and Winker, 1979). Sand-sized sediments occupy the nearshore zone along the beach and shoreface and extend variable distances offshore. Muddy fine sands generally lie seaward of the nearshore sand zone in a narrow band that roughly parallels the sand trend. Sandy muds generally follow a similar pattern parallel to the coast and seaward of the muddy sand zone. Mud is deposited along much of the seaward perimeter of submerged lands.

The food web of the bottom habitat is based on detritus. Fungi and bacteria, which comprise the benthic decomposer organisms, are capable of breaking down the organic detritus. Protozoans and other organisms comprising the microfauna (2/1000 in. in size) consume the bacteria, and these are, in turn, consumed by the diverse meiofauna, such as nematodes, copepods, and juvenile stages of the larger macrofauna. Macrofauna are divided into two groups, the epifauna, or those species living on the surface of bottom sediments, and the infauna, which may live in tubes or burrow into the sediments to depths up to 8 inches. Typically, the highest concentrations of organisms are in the top one to two inches. Benthic macrofauna are polychaete annelid worms, clams, snails and other mollusks, and many species of crabs and other smaller crustaceans. Many ecologic parameters affect the distribution of benthic macrofauna, including salinity, temperature, dissolved oxygen, turbidity, organic content, seagrass distribution, interspecific competition, predation, vagility, sedimentation rates, and sediment characteristics. Biological interactions between macrofauna and predation by large, motile predators are also important processes controlling benthic community structure. Numerous fishes, such as

croakers, drum, spot, mullet, and shrimp forage on benthic organisms. Diving birds also can reach the benthos to consume small mollusks and other organisms.

d. Coastal Wetlands

Saltmarsh - Typical species in the saltmarsh community (a marsh is a frequently or continually inundated wetland characterized by emergent herbaceous vegetation) include smooth cordgrass (Spartina alterniflora), saltwort (Batis maritima), glasswort (Salicornia virginica and S. bigelovii), saltgrass (Distichlis spicata), seashore dropseed (Sporobolus virginica), sea ox-eye (Borrichia frutescens), and salt-marsh bulrush (Scirpus maritimus). Black mangroves (Avicennia germinans) are significant components of salt marsh systems in some areas along the central and south Texas coast. Salt marshes have their broadest distribution south of the Galveston Bay area, where they are common on the bayward side of barrier islands and peninsulas and along the mainland shores of narrow bays such as West Galveston Bay. Although salt marshes occur on bay-head deltas, the communities change rather rapidly to brackish, intermediate, and fresh marshes up the river valleys.

Brackish marsh - The brackish-marsh community is transitional between salt marshes and fresh marshes. Among the dominant species in topographically higher areas are marshhay cordgrass (Spartina patens), Gulf cordgrass (Spartina spartinae), saltgrass, salt-marsh bulrush (Scirpus maritimus) and sea ox-eye. Brackish marshes are the most extensive wetland communities in the Galveston Bay system (White and Paine, 1992). They are widely distributed along the lower reaches of the Trinity River delta, inland from West Galveston Bay, in the inland system south of the Brazos River, and along much of the lower reaches of the Lavaca and Guadalupe river valleys.

An intermediate marsh assemblage occurs on the upper coast above Galveston Bay where salinities are generally between those found in the fresh and brackish marsh assemblages. Species typical of this environment include seashore paspalum (Paspalum vaginatum), marshhay cordgrass, Olney bulrush, cattail (Typha sp.), and California bulrush.

Fresh marsh - Environments in which fresh marshes occur are generally beyond the limits of saltwater flooding, except perhaps locally during hurricanes. The freshwater influence from rivers, precipitation, runoff, and groundwater is sufficient to maintain a fresher-water vegetation assemblage consisting of such species as cattail, California bulrush, three-square bulrush (Scirpus americanus), water hyacinth (Eichornia crassipes), spiney aster (Aster spinosus), rattlebush (Sesbania drummondii), alligatorweed (Alternanthera philoxeroides), and pickerel weed (Pontederia cordata). Fresh marshes occur inland along river or fluvial systems and in upland basins, both on the mainland and on barrier islands. Inland from the chenier plain and upstream along the river valleys of the Neches, Trinity, San Jacinto, Colorado, Lavaca, Guadalupe, and San Antonio rivers, salinities decrease and fresh marshes intergrade with and replace brackish marshes.

Swamps and bottomland hardwoods - Swamps are most commonly defined as woodlands or forested areas that contain saturated soils or are inundated by water during much of the year. In Texas, these are areas in which bald cypress (Taxodium distichum) and water tupelo (Nyssa aquatica) occur in association with other species of trees such as sweetgum (Liquidambar

styraciflua) and willows (Salix spp.). Swamps occur principally in the entrenched valleys of the Sabine, Neches, and Trinity rivers. The swamps grade at slightly higher elevations into river bottomland hardwood forest or streamside woodland. Entrenched and nonentrenched river valleys to the south are dominated by drier woodlands or forested areas.

e. Submerged Aquatic Vegetation

Submerged aquatic vegetation (SAV) of the bay-estuary-lagoon system occurs in relatively shallow (less than 6 feet) subtidal areas. Five marine spermatophytes, including shoalgrass (Halodule wrightii), widgeongrass (Ruppia maritima), turtlegrass (Thalassia testudinum), clovergrass (Halophila engelmannii), and manatee grass (Syringodium filiformis) occur on the Texas Gulf Coast. However, only turtlegrass, widgeongrass, and shoalgrass have been reported on the central and northern coast. Species of SAV that occur in river deltas and do not tolerate long-term salinities above 6 ppt include Najas sp. and Vallisneria sp. (Zimmerman et al., 1990).

f. Tidal Sand or Mud Flats

Tidal sand flats and mud flats are ecologically important areas of the coast and a vital part of estuarine food chains. They are defined as silt and clay or sand substrates that usually occur in the intertidal zone and are regularly exposed and flooded by tides. In contrast to wetland habitats, mud flat and sand flat vegetation is minimal due to unstable sediments. Algal mats often occur on sand flats.

Mud flats and sand flats are the feeding grounds for coastal shorebirds, fish, and many invertebrates. Detritus and plankton collect on the flats and are eaten by primary consumers, which in turn are prey for higher levels of the food chain. Overall, sand flats are more abundant than mud flats. Extensive sandflats occur in the Laguna Madre area of South Texas, whereas mud flats are common on the upper coast in the Houston/Galveston and Beaumont/Port Arthur areas. Texas contains more tidal flats than any other state, and the Laguna Madre estuary contains 14 percent of the nation's tidal flats (Field et al., 1991).

g. Oyster Reefs

Extensive reefs of the Eastern oyster, Crassostrea virginica, are present in many bays and estuaries. Oysters and oyster reefs are not only ecologically important, possessing all the ecological characteristics of special aquatic sites as defined in Section 230.3 of the EPA 404(b)(1) Guidelines, but are also harvested commercially.

Reefs and unconsolidated shelly sediments comprise a total of 36.8 mi^2 of the Galveston Bay system surveyed in 1991 (Powell, 1993). The surveyed area includes the majority of West Bay, East Bay, Trinity Bay, and Galveston Bay. Of the surveyed area, about 60.3 percent is in Galveston, East, and Trinity bays. The remaining 39.7 percent is in West Bay and areas in Galveston Bay near Pelican Island. Powell (1993) found that the oyster reefs of the Galveston Bay system can be divided into naturally occurring reef that has existed over historic time and reef that has originated through man's influence.

h. Hard Substrate Reefs

The only known sedimentary bank in the nearshore areas of the Gulf of Mexico off Texas is Seven and One-Half Fathom Reef. The reef is located approximately two miles offshore Padre Island in 45 feet of water (Tunnell, 1970) and measures approximately 1,155 feet along its northwest to southeast length. The reef provides habitat for a diverse fauna composed of a mixture of temperate Atlantic and tropical Caribbean organisms. The reef fauna also resembles fouling communities on western Gulf of Mexico coastal jetties, especially the submerged ends of jetties on the lower Texas coast (Felder and Chaney, 1979).

Serpulid reefs composed of calcareous tubes of live and dead serpulid polychaetes are found in the Baffin-Alazan bay system, primarily along bay margins, and across the mouths of Baffin-Alazan bay and Baffin Bay and Laguna Madre. Serpulid reefs provide habitat for numerous species of crustaceans, mollusks, and polychaetes.

i. Coastal Shore Areas

Coastal shore areas are ecologically connected to their adjacent waterways, and any human modifications to these areas could have an impact on habitat and water quality. These areas function primarily as buffers protecting upland habitats from erosion and storm damage, and adjacent marshes and waterways from water-quality problems (Castelle et al., 1992). Unstabilized shorelines are the clay bluffs, sandy slopes, and sand and shell beaches whose morphology is controlled by regional geology and local coastal processes. The major bay systems have different proportions of shoreline types that contribute to differences in land loss rates between bays. Morton and Paine (1990) calculated that 27 percent of the shorelines of major Texas bays were bluffs and 13 percent sand and shell. Sixty percent of the shorelines were marsh. The Galveston, Matagorda, San Antonio, Copano, and Corpus Christi bay systems lost fringing land at gross rates of about 287 acres/year between 1930 and 1982, or a total of 14,924 acres (Morton and Paine, 1990). Altered sediment supply and current patterns result in changes to these natural shorelines.

A variety of birds occurs on bayshores, and few are restricted to one particular habitat (Britton and Morton, 1989). Cranes, rails, coots, gallinules, and other groups can be found on bay shorelines and in fringing marshes. Fiddler crabs (Uca spp.) are conspicuous crustaceans along bay-estuary-lagoon shorelines. These small crabs produce burrows that occur along almost every bayshore from the tide line to as much as 3 feet above sea level. The hermit crab (Clibanarius vittatus) also inhabits shore areas.

j. Gulf Beaches

Texas beaches not only serve as important recreational areas but also function as protection for landward structures during storms and periods of high wave and tidal activity. The beach is a dynamic habitat, subject to a variety of environmental influences such as wind and wave action, salt spray, high temperature, and moisture stress.

Overall, maintenance of the beach dune system is principally a function of the sediment supply to the system. Where this supply has been reduced or interfered with, erosion is likely to occur. Moreover, reduced sediment supply can generally result in loss of dunes and consequent loss of protection to upland areas provided by the dune system.

Relatively few animals and plants have adapted to these harsh conditions of the beach/dune system. The supralittoral zone or backshore begins at the base of the dunes and extends to the high tide line. The burrowing ghost crab (Ocypode quadrata) is one of the most conspicuous inhabitants of this area. Various species of tiger beetles (Cincidela spp.) may also occur in this area. Backshore flora is characterized by fleshy succulents, a few grasses, and prostrate creeping vines. The sea purslane (Sesuvium portulacastrum) can be found on the backshore and foredune slopes, along with bitter panicum (Panicum amarum) and the railroad vine (Ipomoea pes-caprae).

k. Critical Dune Areas

Sand dunes help prevent loss of life and property by absorbing the impact of storm surge and high waves and by stopping or delaying the intrusion of water inland. They store sand that slows shoreline erosion and replenishes eroded beaches after storms. They enhance the beauty of the coast and serve unique biological and ecological functions.

The most conspicuous dune crest plant is the sea oat (Uniola paniculata). Sea oats occur along the entire coast, ranging from the backshore to the central vegetated flat of the barrier islands (Britton and Morton, 1989). Other plants occurring on the exposed dune slopes and crests include bitter panicum, beach tea (Croton punctatus), camphor daisy (Machaeranthera phyllocephala), seacoast bluestem (Schizachyrium scoparium), and the railroad vine. Floral diversity is generally higher on the leeward dune slopes than on the windward side. Many insects occur in the dune vegetation, including beach tiger beetles, horseflies (Tabanus spp.), and deer flies (Chrysops spp.). Larger ghost crabs and the red land crab (Gecarcinus lateralis) burrow into the dunes.

l. Coastal Hazard Areas

Coastal hazard areas occur along and adjacent to the Texas Gulf and bay coastline. These areas are typically subjected to flooding from streams and storm-tidal surges, or are impacted by coastal erosion and subsidence. The results are substantial physical and monetary losses, and the potential for the loss of lives. The causes of the hazards to the Texas coast are the constant forces exerted by waves, winds, and currents upon the unstable coastal natural resources that make up the shores. During storms, these forces are intensified and can cause significant changes in the beaches, dunes, floodplains, washover areas, and inlets. Hazard area property is both publicly and privately owned and is used by a great number of visitors. In addition, shoreline erosion contributes to the direct physical destruction of ecologically important coastal natural resources and often impairs aquatic habitat by increasing turbidity.

A number of human activities may aggravate the destructive power of the storm-tidal surge and freshwater flooding. Human alteration of coastal hazard areas may result in the formation of new washover channels in adjacent low areas, increased shoreline erosion from the diversion of floodwaters, and increased exposure of new areas to tidal surge and flooding, and may impede the flow of floodwaters.

m. Special Hazard Areas

Special hazard areas are low-lying coastal areas prone to storm-surge tidal flooding or freshwater flooding. Specifically, they include the floodplains that are susceptible to a one percent or greater chance of flooding in any given year (inundated by a 100-year flood), and bay and Gulf shores that are exposed to high-velocity wave action from storms or prone to severe flood-related erosion. Special hazard areas are important to the coastal ecosystem because they generally receive the brunt of storms, act as natural surface-water detention systems, and are natural filters for runoff from upland areas.

Floodplains contain many different habitats and zones defined by a moisture gradient including the constantly inundated channels and lakes, overflow riverine wetlands, and dry uplands that are infrequently inundated. Floodplains support extensive fish populations of both sport and commercial fisheries. The makeup of fish populations and characteristics of the fisheries are dependent upon water regimes, size of the river system, proximity to estuarine waters, physical and chemical characteristics of the water, and geographic location of the river basin (Lambou, 1989). Floodplains and associated bottomland hardwoods also provide food, cover, and nesting sites for birds and other wildlife.

n. Critical Erosion Areas

Critical erosion areas are those Gulf and bay shorelines that are undergoing erosion and are determined to be critical by using a series of criteria developed by the General Land Office in coordination with state and Federal agencies and local governments. Critical erosion areas have been designated in the Coastwide Erosion Response Plan available from the General Land Office.

o. Coastal Barriers

Coastal barriers stretch 367 miles along the Texas shoreline, separating the Gulf of Mexico from the mainland (McGowen et al., 1977). Coastal barriers can include coastal natural resources that provide sediment utilized in coastal processes and provide food and/or habitat for numerous faunal species. In general, the landward boundaries of coastal barriers are distinct at the shoreline of bays and estuaries. However, for the deltaic headland and chenier plain features, the landward limit can be the Gulf Intracoastal Waterway. Coastal barriers are separated from each other by natural and man-made tidal passes.

Coastal barriers act as important buffers against coastal storms, protecting the extensive wetlands, other CNRAs, and the mainland lying behind the coastal barriers from erosion, flooding, and destruction.

Coastal barrier environments tend to be fairly severe. Fresh water is limited to ephemeral ponds. Salt spray is common with any onshore wind, and saltwater flooding occurs periodically (Shew et al., 1981). Species adapted to these relatively harsh conditions are limited in diversity and numbers. Floral and faunal components of coastal barriers have generally been described under other CNRAs, including coastal wetlands, tidal sand and mud flats, and critical dune areas.

p. Coastal Historic Areas

A wide range of both prehistoric and historic sites exists on the coastal plain and public submerged land of Texas. State Archaeological Landmarks are administered by the Texas Historical Commission. Historic sites include forts, shipwrecks, plantations, lighthouses, depots, battlefields, cemeteries, towns, ranches, and homesteads. The Texas Archaeological Research Laboratory at the University of Texas at Austin currently lists over 3,200 recorded archaeological sites within the 19 coastal counties.

q. Coastal Preserves

Parks are established for various recreational uses and frequently exhibit a combination of uses including scenic, historic, aesthetic, flood control, habitat preservation, and education, as well as typical outdoor recreational activities like hiking, camping, boating, fishing, and aesthetic benefits.

Coastal wildlife management areas (WMAs) were acquired and are being developed, maintained, operated and managed, along biological lines, for the wildlife and fish which utilize these areas. WMAs may be used for wildlife research under controlled conditions, demonstration of wildlife management practices, protection of wildlife species and habitats, outdoor classrooms, sources of broodstock, and multi-resource public use opportunities.

The Texas Parks and Wildlife Department (TPWD) currently maintains 13 parks and three fishing piers that total 16,593 acres in the 19 coastal counties. These range in size from the 149-acre Bryan Lake State Park to the 18,000-acre Sea Rim State Park. The three state fishing piers are from 1.8 to 7 acres in size. The TPWD currently manages 10 wildlife management areas in the 19 coastal counties that total 51,436 acres. These range in size from the 37-acre Redhead Pond to the 43,900-acre Matagorda Island WMA.

The diversity of habitat and contiguous undeveloped acreage is the greatest resource within the WMA system. Numerous habitat types can be found within the WMA system. Coastal wetlands on the lower coast are typified by salt marshes on the bay side of the barrier islands, large, open saline bays and lagoons, and a narrow belt of mainland salt marshes backed by relatively unspoiled coastal prairie which offers, during periods of rainfall, many food-rich freshwater ponds and swales. A portion of this area is the winter home of the endangered whooping crane, Grus americana, and thousands of sandhill cranes, Grus canadensis, which utilize tall grass coastal prairie and fallow agricultural fields.

Texas is one of the most significant waterfowl wintering regions in North America. In recent years, 3 to 5 million waterfowl annually have wintered in Texas. This represents about 50 percent of all waterfowl found in the Central Flyway in winter. Broad expanses of shallow flats, including sand and algal flats, as well as submerged aquatic vegetation, are important to ducks such as widgeon, pintail, redhead, gadwall, scaup, and canvasback. Approximately 650,000 (1983-85) redhead ducks, or about 70 percent of all redheads in North America winter in the Laguna Madre (Moulton, 1990). Just as important is the recent recognition of the use of these areas by migrant neotropical birds.

Many endangered vertebrate species make use of these varied natural resources. These include Kemps ridley sea turtle (Lepidochelys kempi), the Aplomado falcon (Falco femoralis), the Attwaters prairie chicken (Tympanuchus cupido attwateri), the bald eagle (Haliaeetus leucoephalus), and the jaguarundi (Felis yagouaroundi). Many more threatened and marginal species are offered protection by the WMA system. The TPWD is currently analyzing existing acreage and strategies for future acquisition.

The principal goal of the Texas Coastal Preserve Program is to ensure that desirable coastal natural resources are perpetuated through cooperative actions of the GLO, TPWD, and supporting private and public organizations. Recognizing the diversity of coastal natural resources and the breadth of public coastal concerns, the cooperating groups will develop a preserve program that: (1) protects fragile biological communities, including important colonial bird nesting sites; (2) protects unique coastal areas; (3) explores methods for recognizing preservation and enhancement opportunities; and (4) actively involves all concerned and knowledgeable persons and organizations. There are currently four coastal preserves: Armand Bayou and Christmas Bay in the Galveston Bay system; Welder Flats in the San Antonio Bay system; and South Bay, the southernmost extension of the lower Laguna Madre.

The boundaries of the Armand Bayou Coastal Preserve extend from the confluence of Armand Bayou with Clear Lake, upstream to the limit of tidal influence. Armand Bayou is an open system which receives substantial inputs of fresh water, sediment, and nutrients from the surrounding upland areas and tributaries (McFarlane, 1991a). The 60-square-mile watershed is surrounded by diverse environments ranging from bottomland hardwoods and coastal prairies to residential, commercial, and industrial areas. Subsidence in the watershed has virtually eliminated the coastal marshes, extended the zone of tidal influence, and changed the lower reach of the bayou from a fresh to a brackish water environment.

Christmas Bay, a small secondary bay at the southwestern extreme of the Galveston Bay system, is an important finfish and shellfish nursery area. Seagrasses are probably the most valuable and productive habitats in the bay. Four seagrass species occur in the bay; however, only widgeongrass is found elsewhere in the Galveston Bay system. The Brazoria National Wildlife Refuge is adjacent to Christmas Bay and has been a major, positive influence on the health and maintenance of the Christmas Bay ecosystem (McFarlane, 1991b).

Welder Flats is located on the eastern shore of middle San Antonio Bay. The characteristic mid-bay wetlands of Welder Flats consist of saltwater marshes, submerged aquatic vegetation, unvegetated sand and mud flats, and shallow saltwater ponds and lagoons (Pulich and Hinson, 1990). Because of its location near the Aransas National Wildlife Refuge, Welder Flats plays an integral role in bay waterfowl and wading bird ecology, including providing wintering habitat for the endangered whooping crane.

South Bay, a semi-enclosed estuarine system at the southernmost tip of Texas, supports a wide variety of habitat types, including seagrasses, oyster reefs, black mangroves and other salt marsh species, and tidal sand and mud flats. South Bay is a highly productive nursery area for shrimp and finfish and provides excellent feeding, resting and overwintering habitat for numerous species of indigenous and migratory bird species.

3. Human Environment/Environmental Quality

a. Mineral Exploration and Related Activities

Energy is the number-one industry in Texas. Despite setbacks in the late 1980s and early 1990s, energy accounted for 22 percent of the total net state revenue and 54 percent of state tax revenue in March 1993, according to the Texas Comptroller of Public Accounts (Sharp, 1993).

Texas contains 26 percent of the proven natural gas reserves in the lower 48 states, and the majority of those reserves lie offshore or along the coastal plain (Department of Energy, 1990). Texas is promoting the use of natural gas resource as an alternative fuel to revitalize the economy and diminish dependence on foreign oil. Even with diversification of the State's economy, the oil and gas industry, particularly exploration and production in the coastal zone, will continue to be of regional and national benefit in serving our nation's energy needs. In addition to producing one-third of the nation's natural gas, Texas produces one-fourth of the nation's oil, and a significant amount of the oil production occurs in the coastal zone.

Exploration, production, and service and support facilities include drilling and production platforms, tank farms, gas processing plants, dredged access channels, pipelines and pipeline landfalls, pipe coating and storage yards, platform-fabrication yards, separation facilities, service bases, and terminals. Texas currently houses two Strategic Petroleum Reserve sites and is being considered for a 100-million-barrel expansion of oil in storage in the current facilities. The expansion and operation of these storage facilities could impact the coastal zone.

Existing active facilities have sufficient capacity to support most of the projected level of future exploration and production in the coastal zone. Reactivation of inactive facilities can provide additional capacity; however, construction of new facilities will continue. Moreover, deeper and wider ports and channels may be proposed in response to the trend toward deeper water exploration and production of oil and gas.

Construction of oil and gas exploration and production facilities can disturb or destroy wetlands, seagrass communities, oyster reefs, and other surface resources. Filling, channel dredging, and other site preparation activities for construction of facilities in shallow bays and estuaries and on nearby shores may affect water quality, benthic communities, archaeological resources, and fishery resources. Resuspension of bottom sediments often results from facility construction and removal. Pipelines are often trenched for greater stability and protection from mechanical damage. According to the Minerals Management Service (MMS) Impact Statement for Gulf of Mexico Sales 139 and 141, 3,200 to 8,300 cubic meters of sediment are displaced per kilometer of pipeline.

Oil and gas exploration and production operations also may cause surface damage. Spills of crude oil and other contaminants, detonation of explosives for geophysical exploration, propwashing from support vessels, and tracks from land vehicles can have adverse effects on water quality, benthic communities, archaeological resources, and fishery resources. These operations also generate solid and liquid wastes. Common waste materials include debris, drill cuttings, drilling fluids, and wastewater, particularly produced water or brine. Produced waters make up 98 percent of all oil and gas exploration and production wastes, and 98 percent of these

produced waters are injected underground in wells permitted by the RRC. In the coastal zone, the discharge of brine to surface waters, either directly or by overland flow, is common.

The chronic exposure of estuarine habitats to brine pollution is potentially more damaging than accidental oil spills. Produced waters typically contain high levels of dissolved salts, with salinities ranging from 20 to 180 ppt, versus seawater at 35 ppt. Elevated concentrations of trace metals and dispersed and soluble petroleum hydrocarbons are also present. Concentrations of radium-226 in brines can exceed regulatory criteria established for other industries, yet little is known of its environmental effects (Roach and Spencer, 1992).

b. Federal Outer Continental Shelf Activities

Oil and gas exploration and production activities on Federal lands on the Outer Continental Shelf are managed by the MMS of the U.S. Department of the Interior (DOI). These activities have a major impact on the Texas coastal zone. The western and central portions of the Gulf of Mexico are characterized by the MMS, in its draft Comprehensive Program 1992-1997, as the mainstays of the OCS oil and gas operation and production efforts for the next five to ten years. The MMS predicts that 800 to 1000 new wells will be drilled in these parts of the Gulf each year because of the success rates in exploration and development and the potential in unexplored areas.

The central and western Gulf region has one of the highest concentrations of oil and gas activity in the world, and this is accompanied by extensive development of onshore service and support facilities. The MMS has summarized the existing OCS-related onshore facilities by coastal subarea (U.S. Department of the Interior, 1990). It concludes that the onshore service, support, and hydrocarbon-processing facilities already in existence will be sufficient for exploration, development, and production of the oil and gas projected to result from prior, proposed, and future sales of all Gulf of Mexico OCS lands.

Those new facilities projected for the Western Planning Area are widely distributed throughout the Texas Gulf Coast. Prior lease sales are predicted to account for 121 km of onshore pipe and several new pipeline landfalls. In addition, the MMS states that the Western Planning Area will be the potential location for one new pipe yard and three new terminals.

Of the 38 pipelines originating from either state or outer continental shelf waters along the Texas coast, 16 (42 percent) make landfall in the four-county area surrounding Galveston Bay. Gas pipelines in these areas range in diameter from 6 inches to 36 inches; oil pipelines are 4 inches to 14 inches in diameter.

The MMS projects that four new oil pipelines will make landfall along the Texas coast, in Jefferson County (High Island), Matagorda County (Matagorda Peninsula), Calhoun County (Matagorda Island), and Nueces County (Mustang Island). These pipelines will be installed to connect new production platforms to existing pipelines or central platform facilities.

c. Chemical and Petrochemical Manufacturing and Waste Management

The petroleum refining and petrochemical industries constitute a major part of the manufacturing sector of the Gulf Coast region. Of the region's top ten manufacturing companies in terms of employment, four are petroleum refineries, one is an oil and gas field supply company, and two are petrochemical companies. The first chemical plant established by a major U.S. company in the Gulf Coast area was the Dow plant in Freeport, built in 1938. The environment along the Gulf Coast proved ideal for petrochemical production, with a warm climate and availability of cheap electricity, seawater, and chemical feedstocks. The petrochemical companies grew as consumer demand for petrochemical products increased. The chemical and petrochemical manufacturing sector represents a major component of manufacturing in Texas. The chemical industry results in the employment of 450,000 Texans, with a total annual payroll of $15 billion. The chemical industry has invested more than $40 billion in Texas facilities and generates more than one-quarter of the State's manufacturing value added. In recent years, this manufacturing sector has demonstrated increasing concern for the environmental consequences of its operations, instituting programs to reduce waste generation and impacts on coastal resources.

Most of the existing chemical and petrochemical manufacturing infrastructure is located in the Galveston Bay area. It has been estimated that 45 percent of all U.S. petrochemical production is in the area around Houston. Of 31 oil refineries on the Texas coast, 12 (39 percent) are located in the four counties surrounding Galveston Bay. This is approximately 17 percent of the total oil refinery design capacity in the Gulf of Mexico. Of the 74 gas processing plants on the Texas coast, 22 (30 percent) are in the Galveston Bay area, and 32 percent of the gas processing plant design capacity is in that area.

In 1994, 1,200 Texas manufacturers reported the release or disposal of 223 million total pounds of toxic chemicals. Of this amount, 40 percent was managed in permitted underground injection wells, with the remaining 60 percent managed via water discharges, air emissions, and land disposal. Overall, the trend is toward reduction in the generation and release of toxic chemicals in the chemical and petrochemical industries. Results of the Toxic Release Inventory (TRI) found that from 1993 to 1994, Texas facilities had a 1.7 percent reduction in the release and disposal of on-site TRI-listed chemicals. The significant efforts of CLEAN INDUSTRIES 2000 members accounted for a 3 percent reduction in toxic chemicals. CLEAN INDUSTRIES 2000 is a TNRCC voluntary waste reduction program designed to reduce industrial pollution. Members voluntarily pledge to reduce the amount of toxic chemicals released and disposed of or the amount of hazardous waste generated by 50 percent by the year 2000. From 1993 to 1994, CLEAN INDUSTRIES 2000 members accounted for 14 of the top 20 TRI reduction facilities in Texas.

Government and industry use several methods to reduce or store hazardous waste. Management methods include land filling, land farming, incineration, chemical treatment, discharging, deep-well injection, and recycling. Many hazardous wastes can be treated to render them nonhazardous, as through neutralization, or can be recycled to recover usable constituents, as through solvent recovery or metal reclamation.

Proper management of toxic chemical wastes -- including reducing the total production of such wastes -- will lessen the potential for environmental degradation to bays, estuaries, wetlands, and other coastal natural resources. Current efforts to improve waste management are expected to continue. These efforts are particularly essential within the coastal zone where the chemical and petrochemical manufacturing capacity is concentrated.

d. Municipal and Industrial Wastewater

According to the TNRCC, there were 831 permitted municipal and industrial wastewater discharges in the coastal zone, as of January 1995. By far, the largest number of outfalls are found in Harris County, reflecting the concentration of industry and population in the county.

The Galveston Bay system is part of a 1,155 square-mile (2,992 sq. km.) watershed that encompasses parts of three counties, including Harris County. Along with the concentration of petrochemical industries, Galveston Bay receives the wastewater from communities with a total population exceeding seven million. Nearly 50 percent of wastewater discharges in the state are in the Galveston Bay watershed. The Houston Ship Channel receives approximately 550 permitted discharges, 13.4 percent of the state total (Texas Water Commission, 1992b).

e. Emission of Air Pollutants

The TNRCC is responsible for ensuring that air quality is improved and maintained in the state, based upon Federal standards established for specific criteria pollutants. Criteria pollutants include carbon monoxide, lead, nitrogen oxide, particulate matter, ozone, and sulfur oxides. Standards for these pollutants are established at levels to protect human health and the environment. For the industrialized coastal area, TNRCC's air quality control plans focus on reducing volatile organic compound (VOC) emissions and other emissions that result in the formation of ground-level ozone.

Data compiled for the national TRI shows Texas, with 60 percent of the nation's petrochemical refining production capacity and 25 percent of its oil refining capacity, in the forefront of industrial pollution reduction efforts. From 1987 to 1994, roughly 1,200 Texas manufacturers demonstrated a 43 percent reduction in air releases of toxic chemicals reported in the TRI.

f. Navigation

Navigation and navigation-related activities (e.g., dredging and dredged material disposal) can conflict with - or benefit - other human uses and resource management goals in the coastal region.

Prop scarring or the prop washing of sediments into adjacent sensitive areas by vessel traffic can damage or destroy submerged aquatic vegetation. Valuable upland and intertidal wildlife habitat can be lost to shoreline erosion caused or accelerated by vessel wakes. Water quality problems and fish kills can result from improperly planned access channels and canal lot developments that have inadequate circulation and flushing. Submerged aquatic vegetation and

shellfish beds can be degraded or destroyed by siltation resulting from dredging and disposal operations.

In contrast, however, many of these same activities can have positive impacts if properly planned and sited. New navigation channels and disposal sites can improve water circulation, enhancing fisheries and providing escape routes for aquatic species during unusual freeze or low-water events; dredged material can be used beneficially to restore, enhance, or create wildlife habitat and beaches can be nourished or eroding shorelines replenished using dredged materials of appropriate grain size and quality.

Navigation-related activities impact natural resources primarily through dredging and maintenance of ship channels and from oil spills and marine debris discharged into bay and estuary waters. On the upper coast, channels often allow saltwater intrusion many miles inland from the Gulf of Mexico, adversely affecting natural salinity regimes. This results in loss or change in vegetation and erosion of marsh soils. Erosion along navigation channels leads to similar wetland losses.

More than 95 percent of all goods imported and exported by the nation pass through America's ports and harbors (Coastal States Organization, 1993), and Texas is the largest maritime state in the United States (Texas Transportation Institute, 1989).

Due to the shallow nature of Texas bays, estuaries, and nearshore Gulf waters, navigation on the Texas Gulf Coast by large vessels is limited to dredged channels. The development of Texas' commercial waterway network began around 1855 with completion of the Port of Galveston, the first deepwater port in Texas. Another early development was the Houston Ship Channel, opened in 1914, to connect Buffalo Bayou (the Port of Houston) to the Gulf of Mexico. These were the first of many channel construction projects in Texas' shallow bays and estuaries that would eventually link Texas ports to national and international commerce (fig. 3).

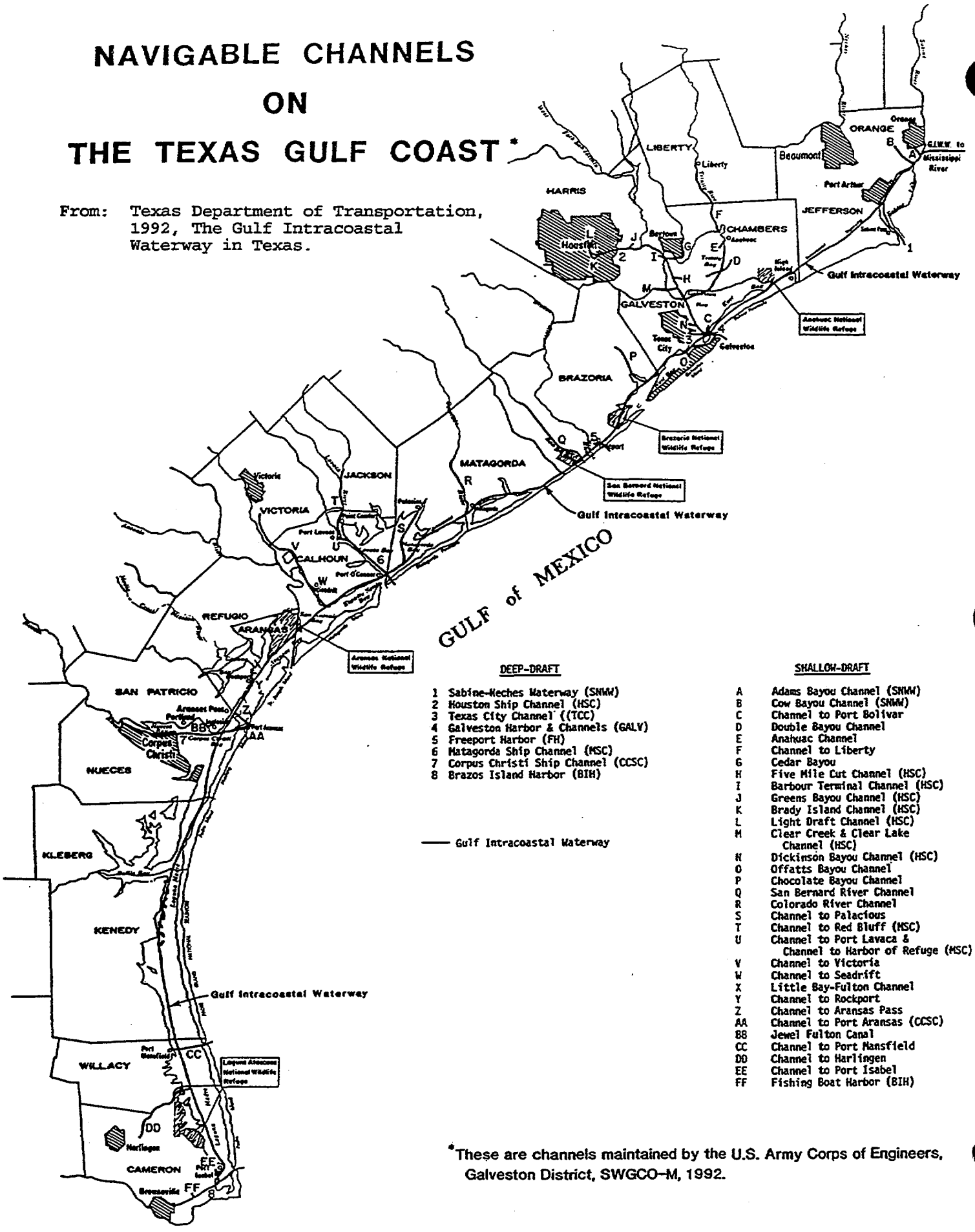
The primary navigation artery for waterborne commerce in Texas is the Gulf Intracoastal Waterway (GIWW) (fig. 4). Completed in *1947*, the Texas Section of the GIWW stretches more than 426 miles from the Louisiana border to the Port of Brownsville, providing protected inland travel between ports and a common link for an additional 419 miles of ancillary dredged channels. The GIWW, and the many side channels, link 12 deep-draft and numerous shallow-draft Texas port facilities to worldwide commerce (Texas Department of Transportation, 1992).

The social and economic importance of commercial navigation in Texas is significant and has been recognized in law. The Texas Coastal Waterway Act of 1975 states in part, "it is the policy of the State of Texas . . . to support the marine commerce and economy of this state by providing for the shallow draft navigation of the state's coastal waters in an environmentally sound fashion," and "the legislature finds and declares that . . . marine commerce is a vital element of the state's economy and the benefits derived therefrom are realized directly or indirectly by the entire state."

FIGURE 3

NAVIGABLE CHANNELS ON THE TEXAS GULF COAST*

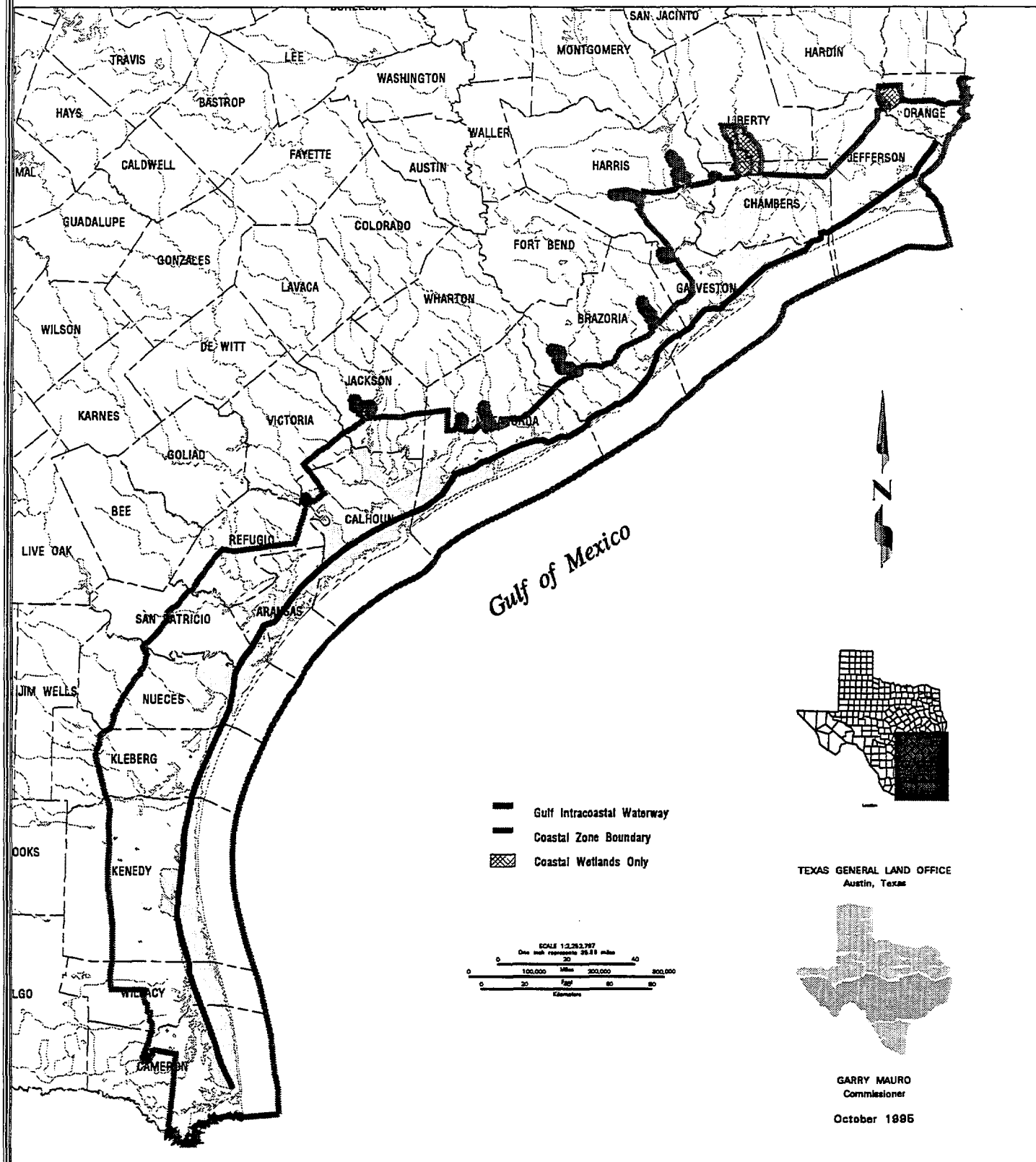
From: Texas Department of Transportation, 1992, The Gulf Intracoastal Waterway in Texas.



*These are channels maintained by the U.S. Army Corps of Engineers, Galveston District, SWGCO-M, 1992.

FIGURE 4

Texas Gulf Intracoastal Waterway



Approximately 50 percent of the total U.S. chemical production and 30 percent of its petroleum industry are located adjacent to dredged channels on the Texas Gulf Coast, contributing greatly to the 82 million short tons of goods, valued at $23.9 billion, that were transported on the Texas Section of the GIWW in 1990 (Texas Department of Transportation, 1992).

Texas ports and dredged channels are critical to the transportation infrastructure of both the state and the nation, diverting traffic which would otherwise have to go by land or air, minimizing impacts upon highway and railway systems, and minimizing shipping costs for bulk goods. Modern containerized facilities and connections to rail, truck, and industrial processing plants have made Texas ports preeminent in the nation and the world, especially in the shipping of petroleum and petrochemicals. Nationally, the Port of Houston ranked second in 1992 in total cargo transported (Tables 4 and 5).

Additional benefits for Texas ports are expected from the passage of the North American Free Trade Agreement (NAFTA). The Port of Houston is Mexico's leading U.S. port, handling more commodities for Mexico than all of the ports in Mexico combined, and a proposal has been made to construct a Texas offshore oil terminal where supertankers can unload their cargoes to decrease environmental hazards posed by oil spills (Culliton et al., 1992).

The impacts of this commercial navigation industry upon natural resources of the Texas coastal region are discussed under the Dredging, Shipping, and Transportation sections which follow.

g. Commercial and Recreational Fishing/Boating

Commercial fishing continues to be an important industry along the Texas coast and constitutes a significant component of navigational traffic in Texas waters. Texas generally ranks in the top 10 states nationally in terms of dollar value of commercial fish and shellfish landed. The 5-year (1990-1994) average dockside value of commercial fishery landings in Texas exceeded $188 million. In excess of 98 million pounds of shrimp, oysters, crabs, and finfish, exceeding $175.5 million in ex-vessel value, were harvested in Texas during 1990 (Osburn, 1990). In 1991, approximately 102 million pounds of seafood with an ex-vessel value of $199 million were harvested from Texas bays and the Gulf of Mexico. Shrimp accounted for 89 percent of the weight and 94 percent of the ex-vessel value in calendar year 1991. Using an appropriate expansion factor, the total economic impact of this industry at the wholesale level in Texas approximates one-half billion dollars annually (Campbell et al., 1992).

It has been estimated that approximately 98% of the commercial fish and shellfish landed in the Gulf of Mexico, including Texas, are estuarine-dependent; i.e., dependent on estuaries for reproduction, nursery areas, food production, or migration. Considering the important part wetlands play in the coastal estuaries of Texas, it is evident that Texas' wetlands are essential for supporting the state's fishing industry. The relationship between a fishery and wetlands has been very effectively demonstrated for the shrimp fishery, which is a major component of Texas' fishery landings. Research has shown that the productivity of shrimp fisheries is directly related to the amount of vegetated area in an estuary. In other words, the

Table 4

TOP 25 U.S. PORTS - 1992

(Thousands of Tons from 1991 figures)*

PORT	THOUSANDS OF TONS
1. South Louisiana, LA, Port of	199,662
2. Houston, TX	137,664
3. New York, NY & NJ	115,141
4. Valdez, AK	93,737
5. Baton Rouge, LA	84,569
6. New Orleans, LA	66,007
7. Corpus Christi, TX	60,866
8. Plaquemine, LA, Port of	58,497
9. Norfolk Harbor, VA	53,397
10. Long Beach, CA	52,032
11. Tampa, FL	46,408
12. Lake Charles, LA	44,014
13. Texas City, TX	43,104
14. Mobile, AL	40,482
15. Philadelphia, PA	39,713
16. Los Angeles, CA	39,537
17. Duluth-Superior, MN & WI	38,256
18. Baltimore, MD	37,656
19. Pittsburgh, PA	34,342
20. Port Arthur, TX	33,525
21. St. Louis, MO & IL	31,948
22. Pascagoula, MS	29,245
23. Portland, OR	28,227
24. Newport News, VA	24,450
25. Beaumont, TX	22,702

* Source: U.S. Army Corps of Engineers, Navigation Data Center Update, Waterborne Commerce Statistics Center Preliminary Report, November 24, 1993.

Table 5
Tonnage Handled by Texas Ports
for the Period 1989 - 1992

PORT	1989	1990	1991	1992
Houston, Texas	124,886,883	126,177,644	131,234,000	137,663,612
Corpus Christi, Texas**	57,931,945	62,023,736	56,974,000	60,866,092
Texas City, Texas	42,746,698	48,071,122	43,290,000	43,104,101
Beaumont, Texas	31,947,319	26,728,664	22,383,000	22,701,500
Port Arthur, Texas	23,801,409	30,679,583	29,835,000	33,524,964
Freeport, Texas	15,137,891	14,494,397	15,666,000	14,952,599
Galveston, Texas	12,354,709	9,629,434	10,858,000	12,317,599
Port Lavaca-Point Comfort, Texas	5,061,695	5,097,107	6,266,000	5,389,932
Channel to Victoria, Texas	3,562,336	3,740,374	3,408,000	4,265,228
Chocolate Bayou, Texas	3,526,758	3,300,000	3,469,000	*
Brownsville, Texas	1,237,027	1,371,606	1,620,000	1,594,222
Orange, Texas	657,627	709,490	849,000	552,504
Sabine Pass Harbor, Texas	1,248,308	630,432	503,000	419,832
Harlingen, Texas (Arroyo Colorado)	753,937	*	795,000	*
Colorado River, Texas	682,328	*	577,000	*
Johnson Bayou, Louisiana	839,594	*	596,000	*
Dickinson, Texas	722,645	*	532,000	*
Sweeny, Texas (San Bernard River)	480,519	*	*	*
Port Isabel, Texas	318,466	*	247,000	234,401
Cedar Bayou, Texas	275,458	*	218,000	*
Rockport, Texas	2,336	*	*	355
Channel to Aransas Pass, Texas	84,325	*	*	13,398
Port Mansfield, Texas	3,909	*	*	*
Anahuac, Texas	3,033	*	*	*
Channel to Liberty, Texas	4,443	*	*	*
Clear Creek, Texas	*	*	*	*
Double Bayou, Texas	2,850	*	*	*
Palacios, Texas	*	*	*	*

* Data unavailable at time of printing.
** Including Harbor Island.
NOTE: Data above is a compilation of information from 1991 MV-GC Freight Traffic Tables, Advanced Information, Navigation Data Center, Waterborne Commerce Statistics Center, Sept. 1993; and personal communication, Waterborne Commerce Statistics Center, March 1994.

more wetlands there are in an estuary, the more shrimp the estuary will produce. Unfortunately, the converse is also true, which is why it is critical to conserve and restore coastal wetlands in Texas. Another example of a fishery's dependence on wetlands is found in the menhaden fishery, whose total landings (Atlantic and Gulf) have decreased by 26% in the last decade. Menhaden are dependent on wetlands for nursery habitat, and the regional management plan for Gulf menhaden cites the loss of coastal wetlands as one of the principal threat to that fishery.

Recreational fisheries also play an extremely important role in the state's economy. In 1991 recreational boaters spent more than $1 billion fishing in Texas' waters, generating more than $72 million in state sales tax. About a third of the state's recreational fishing occurs in coastal waters. Annually, recreational boat owners in Texas originate more than 2.4 million boat trips in coastal waters. In 1991, saltwater recreational fishing resulted in $200 million in earnings and supported almost 11,000 jobs in coastal areas. Communities such as Port Isabel, Aransas Pass, Palacios, and Freeport all depend on fishing to support their local economies.

Recreational boat traffic can impact coastal natural resources. Intensive "prop-scarring" of submerged aquatic vegetation - primarily seagrass - in shallow-water bays throughout the mid and southern Texas coast regions is not uncommon. Although this impact to aquatic vegetation has not been fully quantified, aerial photographs provide a reliable indication of the extent of the impact.

h. Dredging

Texas bays and estuaries are crisscrossed by over 770 miles of federally maintained dredged channels and an as yet unquantified number of private and commercial channels. Texas is second only to Louisiana in the quantity of material dredged in Federal navigation projects each year.

In Texas coastal waters, material excavated from federally maintained channels is placed in more than 500 "designated" disposal sites. These disposal sites are typically upland confined, open-water confined, upland and open-water partially confined, open-water unconfined in bays and estuaries, and open-water unconfined in Federally approved Ocean Dredged Material Disposal Sites (ODMDS) located in the Gulf of Mexico. The disposal sites located in the bay and estuary environments encumber approximately 72,000 acres (about 112 square miles) of upland, intertidal, and submerged lands. The Gulf of Mexico ODMDS encumber approximately 25,875 acres or 40.43 square miles (General Land Office, 1993).

According to the Corps of Engineers, the Galveston District dredges about 30 to 40 million cubic yards of material annually. Approximately 50% of that material is placed within confined placement areas. The other half is placed in beach fill projects, bird island nourishment projects, partially confined or unconfined uplands, the open Gulf of Mexico, or the open bay. Open bay placement accounts for approximately 20% of the total material dredged in the district, or approximately 8 million cubic yards of material every year.

The most significant environmental impacts of dredged material disposal in Texas waters are related to the historic preference for use of partially confined or unconfined open-water disposal sites. Material placed in these sites typically disperses as mud flows or siltation during or immediately following the disposal operation, commonly beyond the authorized limits of the disposal site. A study conducted in Galveston Bay (Bassi and Basco, 1974) documented that up to 63 percent of the material placed in an unconfined site was redistributed outside the designated area over a period of five months, spreading out over the bay floor as a mud-density flow and eventually impacting an area three times larger than the original disposal site.

Dispersion of dredged material beyond the boundaries of a designated disposal site is dependent on many factors including the quantity and type of material, depth of placement, and technology used. Material typically dredged from channels in Texas bays and estuaries during maintenance operations is fine-grained and does not settle out of the water column rapidly. This type of material is easily dispersed into adjacent habitats. No comprehensive studies of the impacts of this dredged sediment dispersal upon aquatic resources in Texas bays and estuaries have been undertaken.

Additional impacts (important from the cumulative perspective) occur from private and commercial dredging activities permitted by Federal and state regulatory agencies. These projects range from small boat slips and private channels to large access channels for oil and gas exploration, channels and basins for commercial marinas, and berthing areas for shipping.

In addition to potential impacts on benthic communities and cultural resources from direct removal or siltation, dredging and disposal of dredged material may also alter water circulation patterns, sediment transport systems, and bathymetry, resulting in accelerated shoreline erosion, increased turbidity, resuspended contaminants, and potential adverse impacts on water quality. These alterations can, in turn, affect the health of aquatic organisms and human users of coastal resources.

i. Shipping and Operational Activities

More than 102,000 vessel trips transported more than 302 million tons of cargo to the six largest Texas ports during 1987 (Center for Marine Conservation). Shipping traffic is largely responsible for marine debris that is removed from Texas Gulf beaches each year. During the 1992 National Coastal Cleanup 13,000 volunteers cleaned 166 miles of Gulf beach in Texas, collecting 351,440 pounds of debris (Center for Marine Conservation, 1992) (fig. 5). This marine debris can be broadly broken down into two main categories: (1) ocean-based debris, which includes garbage disposed of by commercial and recreational fishing and boating vessels, merchant and cargo vessels, petroleum industry activities, and passenger cruise ships; and (2) land-based debris, which includes trash left by beach users, items that make their way to the beach through antiquated or inadequate sewage systems, and debris contributed by storm drains. (Center for Marine Conservation, 1992).

A variety of sources are responsible for the discharge of oil and chemicals into Texas coastal waters. Data for these discharges, compiled by the GLO's Oil Spill Prevention and Response Division, reveal the following breakdown of spill constituents discharged into Texas waters in calendar year 1992: 74.9 percent oil, 6.5 percent chemical, 8.6 percent other (including tallows, vegetable oils, drilling mud, etc.), and 10.0 percent classified as "mystery." The regional distribution of these spills is illustrated in figure 6 (General Land Office, 1993).

j. Shoreline Development

Rapid population growth and resulting development throughout the coastal zone over the last two decades have resulted in tremendous pressure to locate development close to the water. The value of residential, commercial, and industrial development is enhanced by proximity to the water. This has led to progressively complex issues that must be resolved by government entities, industry, developers, and coastal residents. These issues arise from the need to protect the sensitive coastal environment and to protect life and property from the forces of nature while preserving or enhancing multiple uses of valuable coastal resources, particularly those uses whose very existence and success depend on a waterfront location.

In hearings and workshops sponsored by the GLO in 1990, coastal citizens identified public beach access, dune protection, and shoreline erosion as three of the four most critical problems that a coastal management program should address (Texas Coastal Management Plan -1991). The beaches and dune complexes on the Gulf of Mexico shoreline are one of the state's most precious natural resources. One of the greatest coastal management challenges is to simultaneously provide for development of highly valuable beachfront property, improve public access to beaches and protect them from erosion exacerbated by development, and preserve dunes for their storm protection and erosion prevention functions.

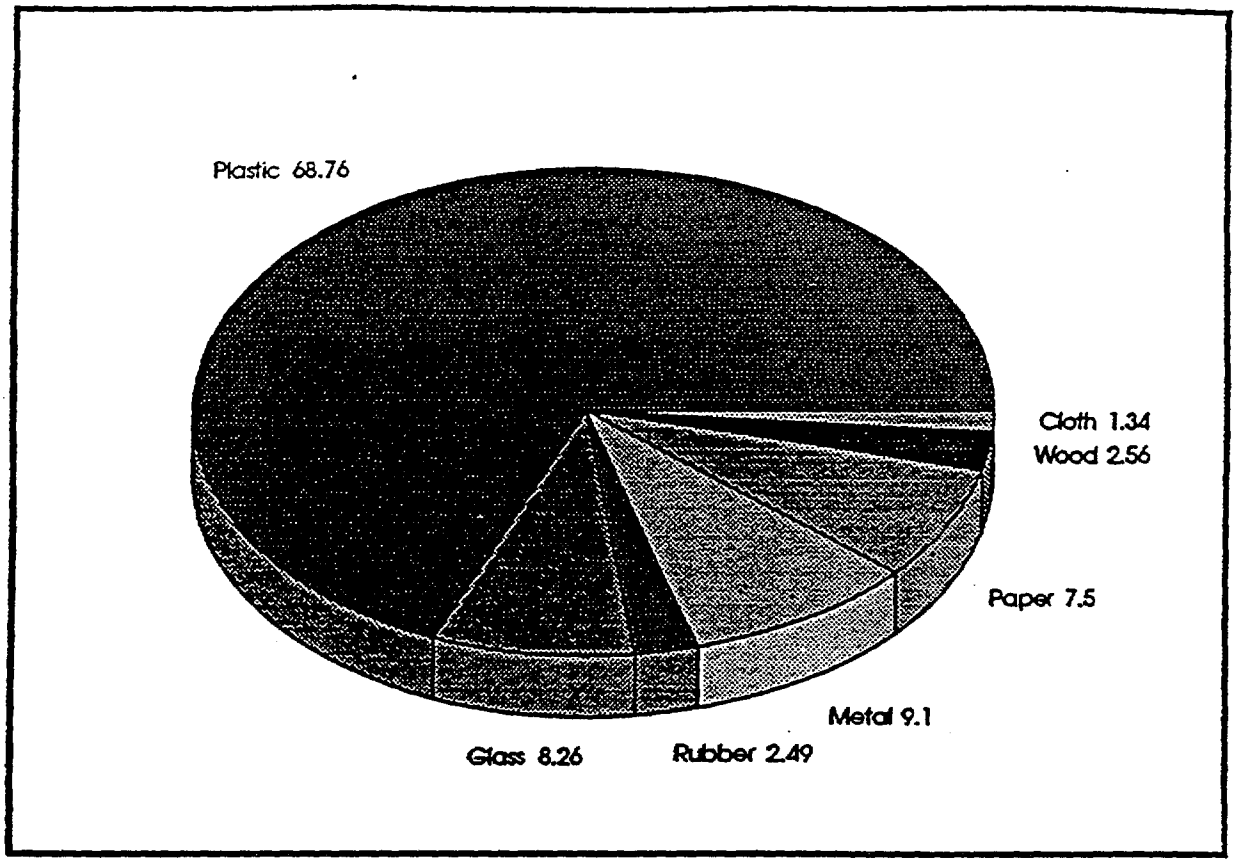
Erosion rates along the Texas coast vary. More than 27,000 acres of Gulf shoreline were lost between the mid-1800s and 1982, at an average long-term rate of about 225 acres/year. Bay shoreline loss between 1930 and 1982 averaged 287 acres/year (Paine and Morton, 1989).

k. Industrial/Commercial Construction

Commercial and industrial building along the nation's coastline accounted for approximately 40 percent of the total authorized construction between 1970 and 1989. Of that, 24 percent was in the Gulf of Mexico region. Texas had the highest level of coastal office development in the early 1980s as a result of the building boom in Houston. A decline in building permits in the coastal counties occurred after 1984; however, Texas still ranks third in the nation in retail building construction, second in office building construction, and sixth in industrial building construction.

FIGURE 5

PERCENT COMPOSITION OF TEXAS'S BEACH DEBRIS:



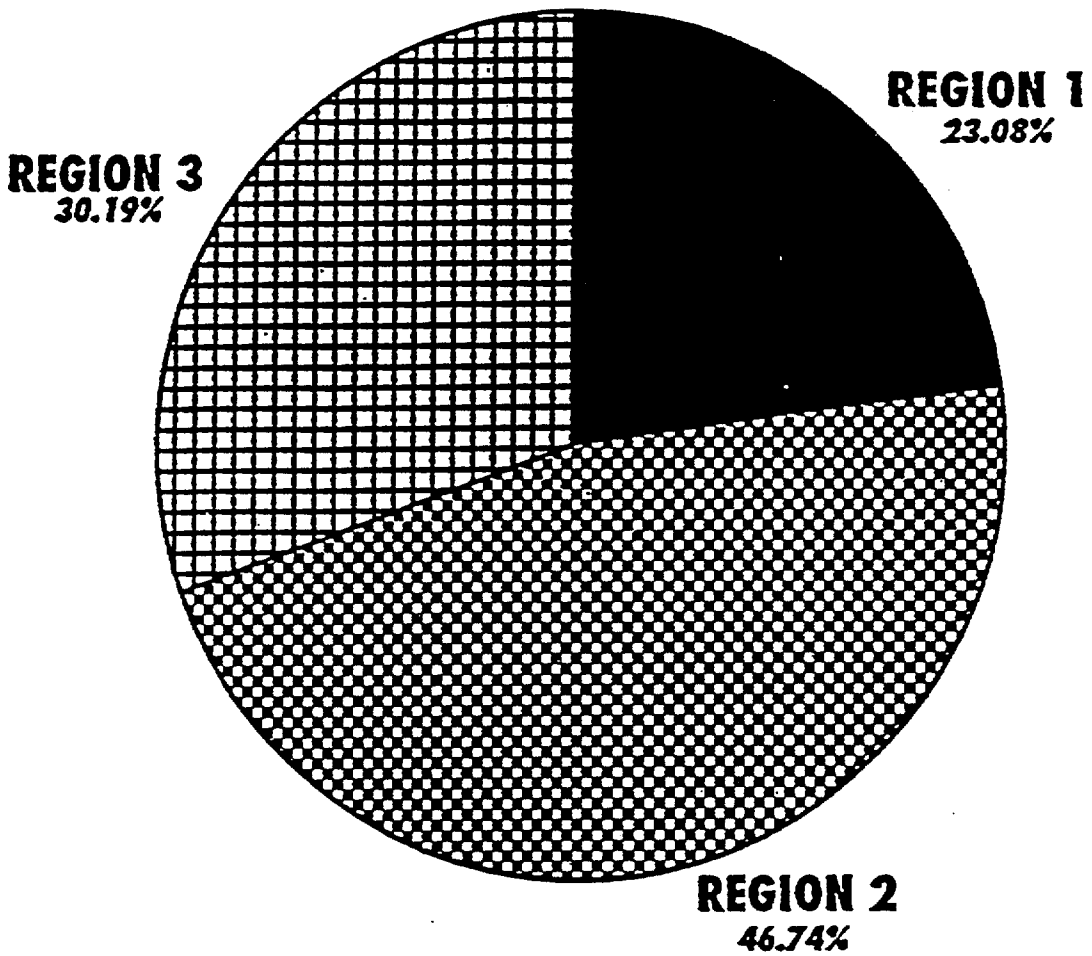
TEXAS'S 1992 DIRTY DOZEN:

	Total Number Reported	Percent of Total Debris Collected
1. Plastic pieces	47,392	10.01
2. Plastic caps/lids	28,593	6.04
3. Cigarette butts	25,161	5.31
4. Plastic food bags/wrappers	24,891	5.26
5. Plastic rope	22,813	4.82
6. Foamed plastic pieces	19,775	4.17
7. Metal beverage cans	17,466	3.69
8. Glass beverage bottles	16,185	3.42
9. Plastic beverage bottles	13,136	2.77
10. Miscellaneous plastic bags	13,030	2.75
11. Paper pieces	12,267	2.59
12. Glass pieces	12,052	2.54
Total	252,761	53.37

From: Center for Marine Conservation, 1992 National Coastal Cleanup Results.

FIGURE 6

Percentage of Spills Per Region
Calendar Year 1992



From: General Land Office, 1993 Oil Spill Prevention and Response Act Progress Report National Coastal Cleanup Results.

Region 1
consists of Jefferson, Orange, and parts of Chambers and Galveston Counties.

Region 2
consists of Harris, Brazoria, and parts of Galveston, Chambers, and Matagorda Counties.

Region 3
consists of Jackson, Victoria, Calhoun, Refugio, Aransas, San Patricio, Nueces, Kleberg, Kenedy, Willacy, Cameron and part of Matagorda Counties.

The hotel industry is a vital part of the coastal economy. Texas ranked fifth in the nation in coastal hotel and recreational building construction for the period of 1970 through 1989. Many of Texas' most popular vacation spots are located on or near the coast. Together with the growing coastal population, the demand for coastal recreational opportunities and the stress on natural systems as a result of increased tourist visits are expected to grow. Like commercial and industrial growth, the growth of the hotel industry reached its peak in the early 1980s and has declined since.

The Texas Department of Commerce has compiled figures on the economic impact of travel and tourism on Texas counties in 1990-1991, and the economic impact on coastal counties is substantial. For example, in the one-year time period, travel-related expenditures in Harris County amounted to about $3,380,800,000, payroll of $1,318,500,000, and employment of 73,340 people.

Texas coastal marinas provide direct access to bays, the Laguna Madre, and the Gulf of Mexico. Galveston Bay accounts for 30 percent of the total number of marinas on the Texas coast and 63 percent of the total wet slips in commercial marinas. The demand for recreational marinas is high in the coastal zone and will continue to increase. In addition to their value in providing protected moorage, fuel, repairs, and sanitation for boats, coastal marinas provide many social and economic benefits. These include access to coastal waters, focal points for community activities, focus for upland development, tax revenues for local communities, revenue for owners and the broader marine industry, and employment opportunities (Ditton et al., 1988).

1. Residential Construction

Choosing a location for a home along the Texas coast today is quite different from the choices made by the first Texas settlers. The first coastal inhabitants in Texas were the Karankawas, a nomadic tribe of Indians who hunted game on the barrier islands and fished in the adjacent bays and lagoons. The wisdom of the Karankawas is demonstrated by their choice of mainland campsites, where higher elevations provided safety and protection from the forces of nature (Morton et al., 1983). With the advent of "coastal engineering" (bulkheads, seawalls, etc.) and greater accessibility of the coast, development has increasingly been located along vulnerable shorelines.

With its abundant natural resources, temperate climate, and proximity to population centers, the coastal shoreline of Texas offers a variety of highly desirable residential sites. Many communities now sprawl across the coastal landscape. The Gulf shore has become a magnet for condominium development, while the bay shores have been drained and filled to accommodate the growing resident population. Between 1970 and 1989, Texas was one of the ten leading states in coastal residential construction (Culliton et al., 1992). By 1990, over two million single and multi-family housing units had been constructed within the Texas coastal area (Bureau of the Census, 1990). In addition, single-family houses have become larger. The average American single-family home is now approximately 2,000 square feet, 25 percent larger than in 1970

(Culliton et al., 1992). The construction of larger homes has resulted in the demand for larger shoreline lots.

In the past, wetlands and other sensitive areas along some shorelines were converted into dry land for residential, commercial, and industrial development. Dredging for waterfront development destroys shoreline habitats and resuspends sediments, causing increased turbidity which reduces light penetration to seagrass beds and suffocates oysters and other filter feeders. If the sediments are contaminated, their resuspension can release contaminants into the surrounding waters, degrading water quality. In addition, industrial and municipal groundwater pumping and, locally, extraction of oil and gas have accelerated subsidence around the Galveston Bay system. Subsidence destroys nearshore wetlands and other valuable surface resources and threatens and devalues shoreline properties.

In addition to contributing its share of point-source wastewater discharges, shoreline development is a major contributor of pollutants to coastal waters through stormwater runoff. This nonpoint-source pollution can contain garbage, pesticides, herbicides, dirt, oil, grease, and fecal coliform bacteria. Each year, tons of chemicals are applied by professional lawn care services, pest control services, and individual landowners. Texas Department of Agriculture (TDA) data indicate that residential runoff transports more pesticides into waterways than runoff from farmland. These chemicals are extremely toxic and are responsible for both the degradation and the mortality of marine resources. Runoff is a major contributor to seagrass decline. In Galveston Bay alone, 5,200 acres of seagrasses have been lost since the 1950s (McFarlane, 1988). Pathogens discharged from septic systems in some shoreline residential developments may cause disease and injury to aquatic resources and make coastal waters unsafe for human contact.

m. Public Beach Access

The Texas Open Beaches Act has guaranteed the public's right of access to and use of the state's public beaches since 1959. The Act authorizes the Texas attorney general to file suit against anyone who interferes with the public use of Gulf of Mexico beaches. Both Texas courts and the state legislature have recognized that the public has a vested common law property right to use the Gulf beaches, a right akin to an easement. Of the 367 miles of beach, 173 miles are considered easily accessible; that is, accessible by driving along the shore or by walking no more than one mile from a point that can be reached by a two-wheel-drive vehicle. Access to public beaches is provided by roads, off-beach parking, and dune walkovers.

The distance between and number of beach accessways (both vehicular and pedestrian) vary from community to community along the coast. For example, the City of Port Aransas maintains eight vehicular accessways for its nearly four and one-half miles of Gulf shoreline. The beach is open to vehicular traffic, although for public safety reasons, there are separate parking and bathing areas on the beach (Urban Engineering, 1993). The City of Galveston is considering the provision of off-beach parking areas along some portions of Galveston Island because local citizens are concerned about public safety and excessive vehicular traffic.

More beach accessways may allow increased use of the public beach. However, the increased public use could have adverse effects on adjacent dunes and/or coastal natural resources if public facilities are not available or if the accessways are not designed to avoid degrading or destroying those natural resources. Establishing new beach accessways through wetlands and dunes degrades the habitat and could conflict with use of the area for bird-watching or wildlife observation.

n. Erosion Response

Erosion response techniques include both structural and nonstructural methods. Erosion response structures include retaining walls, bulkheads, seawalls, rubble mounds, revetments, breakwaters, and groins. These structures are usually constructed where shoreline retreat has threatened coastal development. They are more commonly found in urban areas protecting residential and commercial structures and infrastructure. The longest segments of structurally modified shoreline occur in Galveston Bay, where 42 miles, or 18 percent of the total bay shoreline, is protected by structures (Morton and Paine, 1990).

While these structures may help protect coastal development and property, they can alter the coastal hydrologic and depositional system and adversely affect wetland productivity and downdrift shores. Wave energy reflected from a hard structure such as a seawall, bulkhead, retaining wall, rubble mound, or revetment may exacerbate erosion at the toe and endpoints of the structure. Breakwaters and groins are designed to slow the littoral current so that sediment can be deposited on the adjacent shore. However, this action decreases or depletes the amount of sediment available to downdrift shores and results in their erosion. The durability and effectiveness of structures in reducing land loss vary from site to site.

Nonstructural erosion response methods include beach nourishment, sediment bypassing, dune restoration, nearshore sediment berms, and wetland creation. Nonstructural erosion response methods are usually used where shoreline retreat has threatened coastal development or has caused deterioration of a recreational beach.

Nonstructural methods for erosion response all add sediment to the local sand budget. Beach nourishment extends the public beach and fills state-owned submerged lands and may have a temporary negative effect on submerged aquatic vegetation and infaunal species. Sediment bypassing helps keep the local sand budget in equilibrium and helps to maintain the adjacent shoreline. Nearshore berms attenuate wave energy while contributing sand to the littoral current. Dune restoration protects the public beach by supplying sediment to the eroded beach during storms. Beach nourishment and dune restoration may temporarily disrupt public beach access and use.

o. Storms, Hurricanes, and Flooding

Extreme natural events such as tropical storms and hurricanes are reminders of the vulnerability of the coastal zone. During hurricane conditions, low-pressure weather systems are accompanied by intensified winds and elevated tides. Storm tides are often extremely destructive and are the cause of the majority of property damage and loss during a storm.

The Texas coast is subjected to a hurricane or tropical storm about once every two years (McGowen et al., 1977). During Hurricane Carla in 1961, storm tides reached nearly 15 feet in Galveston and 21 feet in Port Lavaca. Erosion of the beach and foredune areas and breaching of barrier islands are associated with such storm tides. In 1983, Hurricane Alicia's 102 mph winds and storm tide of up to 11 feet (mean sea level) caused flooding and subsequent coastal erosion on the upper Texas coast (Morton and Paine, 1985). The western two-thirds of Galveston Island sustained the most beach erosion, although measurable erosion occurred at least 55 miles northeast of landfall (Savage et al., 1984).

Coastal flooding is an ever-present threat to public safety and coastal natural resources. Elevations of the Texas coastal zone are generally low (less than 10 feet) with the exception of dune areas along the coastal bend and lower coast, where they can reach 40 feet above mean sea level. Large, well vegetated dunes are able to protect landward properties from flooding, but most areas of the coast are considered floodprone.

Table 6 shows the number of floodprone communities located within the 19 coastal counties. Of the 163 communities, only eight do not participate in the National Flood Insurance Program (NFIP). The NFIP makes flood insurance available to those communities that follow the Federal regulations for reducing future flood losses.

p. Subsidence

Subsidence, the sinking of the land surface, is a primary contributor to shoreline loss. Subsidence may be due to both relative sea level rise and the withdrawal of groundwater, and, in some instances, to oil and gas extraction. As the water level rises, marsh along the shoreline is drowned. When residential development is located along the shoreline, the potential for marsh migration inland is eliminated. The result is a reduction in wetland habitats which provide the foundation for commercial and recreational fisheries. Subsidence also exposes shorelines to greater wave activity, which in turn accelerates coastal erosion. Subsidence was a particularly significant problem in the Galveston Bay area in the 1970s and early 1980s. The formation of the Harris-Galveston Subsidence District, which regulates groundwater withdrawal, has helped alleviate the problem.

Table 6

NATIONAL FLOOD INSURANCE PROGRAM

Status of Communities Within the 19 Coastal Counties

COUNTY	NUMBER OF COMMUNITIES DESIGNATED AS FLOODPRONE	COMMUNITIES NOT PARTICIPATING IN THE NFIP
Aransas	3	
Brazoria	25	
Calhoun	4	
Cameron	16	Town of Rangerville
Chambers	6	Town of Cove Old River-Winfree
Galveston	15	
Harris	27	
Jackson	4	
Jefferson	11	City of China
Kenedy	1	
Kleberg	2	
Liberty	11	City of Devers Town of Kenefick City of North Cleveland
Matagorda	3	
Nueces	7	
Orange	8	
Refugio	5	Town of San Patricio
San Patricio	9	
Victoria	2	
Willacy	4	
TOTAL	163	TOTAL NOT PARTICIPATING = 5

**** All CMP coastal county authorities participate in the NFIP and are included in the total number. ****

(Data compiled from Texas Natural Resource Conservation Commission, NFIP Master Status Report, 2/22/94)

q. Infrastructure

By the year 2000, it is estimated that more than 5.3 million persons will live in the coastal area (Texas General Land Office, 1992). The Galveston Bay complex ranks first among urbanized areas in the state and is the eighth largest in the United States. Twenty percent of the total state population lives within the four counties (Chambers, Brazoria, Galveston, and Harris) surrounding Galveston Bay (Ditton et al., 1988). The population living directly on the state's shoreline will have more than doubled between 1960 and 2010, according to projections by the U.S. Department of Commerce (Texas General Land Office, 1992). As the population and the accompanying development increase, the demand for support facilities and public works increases accordingly. Public water supplies, transportation systems, schools, public buildings, electric and gas utilities, sewage, and solid-waste facilities must all meet the needs of expanding coastal communities.

r. Water Development

Public water supplies come from both surface and groundwater sources. One of the state's nine major aquifers is located along the coast. The Gulf Coast aquifer provides over 1.5 million acre-feet of water per year (Texas Water Development Board, 1991). The lower coast contains large quantities of brackish groundwater which can be made useful for water supplies through desalination. The largest industrial desalination plant in the state, located in Texas City, produces 4 million gallons of fresh water each day (Texas Water Development Board, 1990). Surface water comes from the Gulf Coast's primary river systems, which include the Sabine, Neches, Trinity, San Jacinto, Brazos, Colorado, Lavaca, Guadalupe, Nueces, and Rio Grande.

Major impoundments or diversions within the coastal zone are Lake Texana on the Navidad River in Jackson County (10,995 surface acres) (Texas Water Commission, 1992), Wallisville Lake on the Trinity River in Chambers County (3,800 surface acres) (U.S. Army Corps of Engineers, 1991), Lake Houston in Harris County (12,230 surface acres) (Texas Water Commission, 1992), and the Colorado River diversion project (diversion of the river into Matagorda Bay). Other major impoundments, such as the Falcon Reservoir, occur within 200 miles of the coast. In addition, several salinity barriers occur in the coastal zone, including barriers on Chocolate Bayou, Taylors Bayou, and the Neches River (U.S. Army Corps of Engineers, 1991).

The inflow of fresh water is widely recognized as an essential factor influencing the biological productivity of the coastal ecosystem. Some of the functional roles of fresh water include dilution of seawater, creation and maintenance of low-salinity nursery habitats for juvenile fish and other biota, moderation of water temperatures, a medium for the transport of beneficial sediments and nutrients, and transportation of external organic detritus from decaying plant and animal tissues into the bay-estuary-lagoon system.

Freshwater inflow needs of bay-estuary-lagoon systems are dynamic, and both quantity and seasonal timing are important to maintaining a productive coastal ecosystem. Extended inflow conditions that fall below maintenance levels can degrade the ecosystem and result in the loss of important nursery areas for the young of economically valuable fish and shellfish, and a reduction in the potential for natural assimilation of organic and nutritive wastes produced by municipal, industrial, and agricultural activities. Large-scale reductions in fresh water can be produced by both meteorological events and human activities. Dramatic reductions in freshwater inflow can result from droughts and from dams and associated impoundments on streams and rivers, water diversion and control projects, and surface and groundwater withdrawals.

Major effects on the coastal ecosystem from loss of freshwater inflow due to droughts, dams, diversions, or withdrawals include increased salinity of bay-estuary-lagoon waters; reduced mixing due to salinity differences and stratification of the water column; penetration of the salt-wedge farther upstream, allowing greater intrusion of marine predators, parasites, and diseases; saltwater intrusion into coastal groundwater and surface water; diminished supply of nutrients from inland sources; diminished supply of sediments to subsiding delta wetlands resulting in the conversion of vegetated marshes to open-water areas; loss of economically important seafood harvests from coastal fisheries for reasons related to high salinity; reduced food supply; loss of nursery habitats; deterioration of salt marshes and seagrass beds under constantly elevated salinities; and alteration of littoral drift and nearshore circulation patterns.

s. Transportation

Public roadways serve over 3.3 million registered vehicles in the Texas coastal area. Over 68,000 people use public transportation such as buses, streetcars, or trolleys as a means of transportation to and from work (Bureau of the Census, 1990). The state highway system within the coastal area is highly developed. Interstate 45 traverses portions of Harris County and terminates in Galveston. Interstate 10, linking the Pacific and Atlantic coasts, crosses portions of Orange, Jefferson, Chambers, and Harris counties, linking with Interstate 45 in Houston.

Other major traffic arteries include U.S. Highway 90, which runs parallel to or congruent with I-10 on an east-west route; U.S. 59, which runs west from Houston terminating on the Mexican border at Laredo, Texas; and U.S. 77, which originates at the Canadian border, enters the state near Dallas/Ft. Worth, and runs parallel to the central and lower Texas coast, linking the cities of Victoria, Corpus Christi, Kingsville, and Raymondville before terminating at the Mexican border in Brownsville.

Numerous minor state highways and farm-to-market roads lead from these major highways to remote areas. The state maintains approximately 6,492 miles (centerline measurement) of highways in the coastal area and expended more than $672 million on highway maintenance and construction during fiscal year 1992, excluding costs of administrative support for the activities. This figure represents approximately 30 percent of statewide expenditures in only eight percent of

Texas counties (Texas Department of Transportation, 1992). There is one legal international port of entry from Mexico within the coastal zone, at Brownsville in Cameron County.

There are six railroads within the coastal area with a combined length of approximately 780 miles. Railroads operating within the area include: (1) Missouri-Pacific, (2) Missouri - Kansas - Texas, (3) Atchison, Topeka and Santa Fe, (4) Southern Pacific, (5) Burlington Northern, and (6) Texas Mexican. The only passenger route (AMTRAK) is from Beaumont to Houston and is operated by the National Railroad Passenger Corporation. A Texas High Speed Rail Project has been proposed by the Texas TGV Corporation to connect the cities of Houston, Dallas/Ft.Worth, and San Antonio. The only portion of the coastal area that would be impacted by this project would be northern Harris County. There is one international port of entry by rail from Mexico at the Brownsville B&M bridge.

Five major airports are located in the coastal area. Regularly scheduled commercial or commuter flights from these facilities accounted for approximately 12 million enplaned passengers. Twenty-five minor commercial airports and three military airfields are also located in the coastal area (Corps of Engineers, 1993) as well as the National Aeronautics and Space Administration's Johnson Space Center, which was recently designated as operations and planning center for the United States Space Station Program.

The construction, maintenance, and operation activities related to highways, railroads, and airports contribute to nonpoint-source pollution as oils and grease are washed into drainage systems and directly or indirectly transported into coastal bays, estuaries, or the Gulf of Mexico, altering water quality. Ditches and drains associated with transportation routes can result in rapid draining of rainwater. The impact of this rapid runoff, combined with increased impervious cover, can greatly reduce water percolation and groundwater recharge. Potential water quality enhancements that can be obtained as surface water runoff passes through shoreline marsh habitats is also lost.

The construction of new highways and ancillary facilities can result in filling and/or modification of wetlands, disruption of surface water flow patterns, and alteration of ecosystem dynamics. Elevated roadways, berms, retaining walls, etc., can channel water into barrow ditches or drains which speed nonpoint-source pollution to streams, rivers, and estuaries. Transportation accidents (rail, highway, and navigation) have the potential to discharge liquid cargo directly into the aquatic environment, into wetlands, or into ditches/drains which eventually lead to sensitive habitats. Roadside and trackside fires spread into adjacent areas and impact environments outside of the authorized right-of-way.

The perceived economic and sociologic importance of transportation often outweighs environmental considerations in planning for construction techniques, siting, and maintenance operations. A lack of master planning results in individually small, but cumulatively important, environmental impacts from transportation, construction, and maintenance activities.

t. Public Utilities/Public Facilities

Public sewer systems serve over 1.8 million housing units along the coast; 229,000 housing units use septic tanks or cesspools for sewage disposal (Bureau of the Census, 1990). Municipal treatment plants account for 62 percent of the waste discharged to Galveston Bay. In 1990, there were 617 plants with municipal wastewater discharge permits in the Houston-Galveston area (Hadden and Riggin, 1992). Houston's 69th Street Wastewater Treatment Plant is the largest such plant in Texas, capable of treating 200 million gallons of sewage every day (Texas Water Development Board, 1991).

Electric generating facilities provide 776,396 housing units in the coastal area with electricity as their primary source of heat, while gas utilities fuel 893,383 housing units. An additional 5,032 housing units are reported to use wood as their primary source of heating fuel (Bureau of the Census, 1990).

The public medical research centers in the Gulf Coast region are of both national and international scope. The University of Texas Medical Branch at Galveston has served as the state's largest university hospital complex and includes nine hospitals (Texas Comptroller of Public Accounts, 1992). Correctional institutions provide housing for 24,181 persons. Juvenile institutions house 1,041 children.

Government employment makes up a smaller portion of the employment base on the Gulf Coast than in the state as a whole. Still, the region has significant government employment. In 1990, government office space housed 302,848 local, state, and Federal workers (Bureau of the Census, 1990).

Although public facilities and public works provide many services and benefits to coastal communities, their construction, operation, and maintenance are placing increased pressure on the coastal environment. The construction of public buildings for schools, office space, and institutions can contribute to the filling of valuable wetland habitats and to increased pollution from stormwater and sediment runoff, septic systems, and sewage.

u. Agriculture

Agricultural production, processing, transportation, and marketing together make up the state's second largest economic sector, accounting for 20 percent of the state's employment and $75 billion in annual economic impact (Hightower, 1990). The economic multiplier for agriculture is the state's second largest, meaning that agriculture adds proportionately more value to the state's economy than all other industries except construction. Because agricultural production and processing are so widespread in Texas, the benefits of agriculture to the economy reach most of the state's households directly or indirectly.

Every dollar earned by a Texas farmer or rancher adds another $2.16 to the state's economy as it passes from one economic transaction to another. The 20 counties in the coastal area comprise a total of 11 million acres, 60 percent of which is currently in agricultural production (i.e., cropland, rangeland, or timber). Annual income from agricultural production in these counties exceeds $1 billion (Texas Agricultural Statistics Service, 1985).

Agriculture and related activities conflict with other uses and activities. Nonpoint-source pollution, point-source pollution, and soil erosion can affect the water quality of rivers, bays, estuaries, and aquifers.

v. Aquaculture

The development of aquaculture in Texas augments natural aquatic food supplies and provides alternatives to more traditional agricultural products. Aquaculture is simply defined as underwater agriculture or technically defined as the rearing of aquatic organisms under controlled conditions. Texas cultures a wide variety of aquaculture species. In terms of value, the top five aquaculture industries are: catfish at $2.9 million; aquatic plants at $2.0 million; penaeid shrimp at $1.9 million; crawfish at $1.8 million; and sportfish at $600,000.

According to recent studies, the total value of Texas aquaculture production today is approximately $20 million per year. Based on an annual increase of ten percent, by the year 2000 the value should be close to $35 million. In 1991, Texas accounted for approximately two percent of catfish acreage nationwide and produced approximately two percent of total sales. However, Texas produced more than 3.8 million pounds of marine and freshwater shrimp worth nearly $11 million, more shrimp than any other state.

While Texas may have the potential to become a leader in aquaculture, that promise has not yet been realized. However, a number of signals suggest that the demand for aquaculture products will continue to increase steadily and that Texas has the natural resources to become a major supplier of aquaculture products and services. In time, as more aquaculture facilities are permitted, care must be taken to ensure that they do not adversely impact natural ecosystems and that exotic species are not introduced into the aquatic system. Aquacultural producers must use water carefully and make every effort to clean up the wastewater that their operations produce.

w. Coastal Tourism and Recreation

Recreational water resources in Texas consist of freshwater lakes, rivers, and streams, and saltwater bays, estuaries, and the Gulf. It is estimated that there are over 3 million surface acres of both fresh and salt water in Texas. Of this total, there are approximately 1.2 million surface acres of fresh water suitable for boating, fishing, and waterskiing (Texas Outdoor Recreation Plan, 1990). For saltwater recreation, approximately 3.9 million square yards are designated for swimming. Water is important not only for water-based activities, but as a focus for parks and a variety of other activities, such as camping, picnicking, hiking, and nature study.

The Texas Gulf Coast is a major state and national recreational and tourism attraction. Beaches, bays, and estuaries sustain saltwater fishing, boating, swimming, beachcombing, and a host of associated activities. Among the more important recreational attractions and resources are Sea Rim, Goose Island, Galveston Island, and Mustang Island state parks; Padre Island National Seashore; and state and Federal wildlife refuges.

Community leaders, government officials, and parks and recreation professionals are beginning to appreciate the economic value of tourism. During the economic downturn of the mid-1980s, community leaders and economic development planners began to capitalize on the potential of recreational resources in their areas. Recreation and tourism can create jobs, encourage a more diversified economy, and thus help moderate recessions.

The U.S. Travel Data Center estimated that the travel industry in Texas, which includes all trips away from home of 100 miles or more, generated $17.2 billion in gross business receipts in 1986. In the same year, the industry generated $3.8 billion in payrolls, $606 million in state taxes, and $392 million in local taxes. A study titled "1983 Outdoor Recreation Trip Expenditures in Texas," conducted by the TPWD, indicated that Texans spent nearly $9.3 billion on recreation trips (in-town and out-of-town) in Texas for twenty outdoor recreation activities. Sightseeing and driving for pleasure topped the list in travel expenditures with over $2 billion. Another TPWD study, "1987 Texas State Park Economic Impact Assessment," indicated that the economic impact to the state of Texas of expenditures by visitors to 92 state park sites was close to half a billion dollars per year.

Towns near or adjacent to high-quality natural resource areas such as national and state parks, forests, reservoirs, waterways, and the Gulf Coast receive significant economic impacts from expenditures by outdoor recreationists. Resource attractions combined with mild winters allow communities in the Rio Grande Valley to benefit from the spending of "winter Texans."

While some communities have been very effective in developing recreational resources and attracting tourists, others have not taken advantage of these opportunities. Communities that develop industrial parks to attract industry often neglect outdoor recreational resources that could increase their attractiveness to industry, bring in tourist dollars, and improve the quality of life for residents and visitors. Recreational resources are sometimes sacrificed to economic development rather than used to complement such development.

The Texas coast attracts both in- and out-of-state visitors who enjoy beach activities, saltwater fishing and boating, and bird-watching. The economies of many coastal communities rely heavily on recreation and tourism, yet other valuable coastal economic activities, such as shipping, oil development, and land development, can have detrimental impacts on the resources that support recreation-based tourism.

Marinas provide important recreational opportunities but can have significant adverse environmental impacts, depending on their location, design, services offered, and number and

type of boats served. Environmental impacts from coastal marina construction and operation may be temporary or long-term. Adverse impacts result from dredging and dredged material disposal, poor design and placement of shoreline and protective structures, wastewater discharge and stormwater runoff, and boat operation and maintenance.

Hotels, condominiums, and beach homes provide places for coastal visitors to stay, but placing those structures in dune areas can contribute to beach erosion where dune sand is unavailable for replenishment. Developments built side by side can limit beach access for local recreationists and day users. Dunes may be damaged by off-road vehicles and even by foot traffic.

Marine debris creates serious problems for both recreationists and beach managers. It is aesthetically unpleasant, and coastal communities spend thousands of dollars cleaning their beaches every year. Irresponsible coastal residents and visitors contribute to the litter problem and create safety hazards when they leave glass containers and other debris behind. In the water, marine debris can be attributed to wastes from merchant vessels, commercial fishing vessels, cruise ships, military vessels, offshore drilling operations, and recreational boaters. Currents make Gulf beaches the victims of an international waste problem.

The Gulf, bays, marshes, and wetlands are coastal resources with many recreational values. The direct use of the waters by fishermen, boaters, waterfowl hunters, and birders is obvious. These environments also serve as habitats, breeding grounds, and nurseries for the species which are critical to the success of fishing, marsh hunting, and wildlife observation.

D. Environmental Consequences

1. Introduction

The Federal action is the approval of the TCMP as having met the requirements of the CZMA. This action would have several direct and indirect positive consequences for the environment and resource users. The direct effects of approval include: (1) provision of Federal financial assistance under the CZMA to assist with program implementation (§306 funds), low-cost construction projects (§306A funds), and program enhancement (§309 funds); (2) Federal consistency provisions pursuant to the CZMA becoming operational (CZMA §307); (3) requirements for state consideration of the national interest in energy and other major facilities and resources of national importance; and (4) meeting one of the eligibility requirements in order for entities within Texas to receive a deepwater port license from the U.S. Coast Guard to construct and operate a deepwater port off the Texas coast. The indirect effects of Federal approval include the implementation of specific policies, procedures and programs that make up the TCMP.

Both the direct and indirect effects of program approval should have significant positive environmental impacts within the Texas coastal zone, particularly on coastal natural resources and uses.

The TCMP is consistent with the CZMA requirements, which are in turn consistent with the environmental considerations underlying NEPA decision-making. This should ensure that state and national environmental concerns and considerations will become part of state and Federal decision-making processes with a particular focus on land and water uses and coastal resources within the Texas coastal zone.

2. Direct Effects

The direct effects of Federal approval should yield positive impacts to coastal natural resources. The TCMP contains policies designed to mitigate adverse impacts on coastal natural resources and §306 funds should enhance Texas' financial ability to implement those policies. Specifically, the §306 funds should help achieve the program goals of preserving, enhancing, or restoring the diversity, quality, quantity, functions, and values of coastal natural resources while ensuring economic development and multiple human uses of the Texas coastal zone. In terms of the program policies, §306 funds can help Texas to: (1) administer, monitor, and enforce the coastal policies; (2) educate the public on the coastal policies and why they are necessary (e.g., the impacts from coastal processes and coastal activities and measures to mitigate impacts); (3) provide assistance to create, enhance, or restore coastal resources, or to help permit applicants plan early in the development process to avoid, minimize, and compensate for impacts to coastal resources; and (4) provide training to state and local government decision-makers to better administer policies.

These funds will also enhance the State's ability to respond to emerging coastal issues and enhance and improve the application of program policies by providing personnel or resources to develop better information on coastal processes and impacts from activities, and to evaluate program effectiveness. Section 306A funds will allow Texas to undertake low-cost construction projects and to preserve, enhance, or restore important coastal resources. It has been NOAA's experience that states can successfully use §306A funds as seed monies to leverage other Federal, state, and local funds for projects. Section 309 funds will allow Texas to continue to enhance its approved resource protection policies and procedures to address emerging priority needs related to: (1) protecting, restoring, or enhancing the existing coastal wetlands resource base or creating new coastal wetlands; (2) developing and adopting procedures to assess, consider, and control cumulative and secondary impacts of coastal growth and development; (3) reducing marine debris; and (4) planning for the use of ocean resources.

The exercise of Federal consistency authority and the use of Federal funding to assist with Federal consistency reviews should result in significant positive impacts to coastal natural resources. Management of those resources and the human activities that impact them will become both more efficient and more effective because Federal agency programs will be better coordinated with state and local programs through the TCMP. After Federal approval of the TCMP, direct Federal activities and development projects, activities requiring Federal licenses and permits, OCS plans of exploration and production, and activities supported by Federal funding must comply with the State's enforceable coastal policies, as provided for in section 307 of the CZMA. This will give Texas the ability to ensure that Federal navigation and flood control projects, dredge and fill permits, transportation projects, military installations, etc. do not result in unnecessary impacts to coastal resources and that limited public resources are not expended resolving needless conflicts or duplication of effort because of poor coordination with state or local programs. This should provide substantial positive institutional impacts as Federal agency decision-making will be better coordinated and aligned with state and local priorities. It will also ensure continued consideration of NEPA/CZMA/TCMP concerns by the Federal government.

The development of one or more deepwater ports would have substantial positive impacts on a wide array of coastal natural resources such as wetlands, estuaries, and beaches. The construction of deepwater port facilities would reduce both tanker traffic in Texas' bays and estuaries and the frequency of lightering operations in the Gulf of Mexico, thereby reducing the risk of major and chronic oil spills. However, pursuant to the Deepwater Port Act of 1974 as amended (33 U.S.C.S. §1503), interested parties such as the Corpus Christi and the Houston port authorities cannot receive a deepwater port license from the U.S. Coast Guard until Texas has a Federally approved coastal management program. Therefore, program approval is critical to these communities.

The provision of Federal coastal zone management funds should also have positive socio-economic and institutional impacts. Section 306 and Section 309 funds can be used to enhance administration and improve compliance with or improve coastal natural resource policies, which in turn should enhance the sustainability of economies dependent on maintaining renewable

coastal resources and improve the environmental quality of the coastal zone. Section 306 funds can also be used to benefit the tourism industry by funding feasibility studies and other state and local planning to develop an ecotourism industry. Texas has already stated an intent to use these funds to refine and improve the regulatory processes by providing resources or personnel for developing joint permit applications, enhancing preliminary consistency reviews, and providing information or technical assistance to applicants to expedite the permitting process in order to provide for more efficient and predictable government decision-making.

Section 306 and Section 306A funds will also benefit coastal economies by enhancing state efforts to revitalize deteriorating and under-utilized urban waterfronts and ports by providing personnel or resources to undertake planning and feasibility studies for these areas as well as providing low-cost construction funds to undertake actual repairs or reconstruction. Often, §306A funds are used to leverage additional Federal, state or local funding to complete these redevelopment projects. Section 306A funds can also be used to improve Texas' efforts to enhance access to public beaches and other public coastal areas. Possible projects include provision of dune walkovers, boat ramps, and off-beach parking. Adverse environmental impacts from these construction projects are avoided or minimized through NOAA requirements for completion of environmental assessments prior to approving these projects.

Section 309 funds can be used to enhance policies and procedures for improving the sustainability of coastal economies including : (1) preventing or significantly reducing threats to life and property by eliminating development and redevelopment in high hazard areas and managing development in other hazard areas; (2) attaining increased opportunities for public access; and (3) facilitating the siting of energy facilities in an environmentally responsible manner.

With the approval of the TCMP, Texas will maintain procedures to ensure that the siting of energy and other facilities of national interest are given adequate consideration by state and local governments. The requirement does not compel states to propose a program that accommodates certain types of facilities. Rather it works to assure that energy and other facilities of national interest are not arbitrarily excluded or unreasonably restricted under the program. It also requires states to take into consideration coastal natural resources of national interest in their decision-making so that these important coastal natural resources are not unnecessarily destroyed or degraded.

2. Indirect Effects

The TCMP seeks to conserve, protect, develop, and where feasible, restore the coastal natural resource areas within the State's coastal zone and to encourage multiple uses of those resources that are consistent with the goals of the TCMP and the CZMA. Since the TCMP will be implemented in conjunction with many other Federal, state, and local government programs in social and economic systems that are constantly changing, the description of the potential socio-economic impacts of the program are necessarily general. The TCMP anticipates using future

information on socio-economic needs and coastal natural resources developed from the program to provide state and local governments with improved decision-making processes for managing coastal land and water uses, siting of major facilities, and generally providing increased predictability about how uses may occur in the coastal zone.

The underlying premise of the TCMP is that local, state, and Federal government decision-makers need to understand the dynamics of both the environmental and socio-economic systems of the coastal zone and balance the needs of the two through consistent policy decisions. The TCMP anticipates cooperatively planning for and managing the uses and natural resources of the state so that the its citizens can best determine how both to conserve valuable natural resources and accommodate the needs of an expanding population. The program seeks to conserve key ecological areas, both for their intrinsic and aesthetic value and because they are a significant part of the Texas coast's economic infrastructure. This is achieved by ensuring that industry and development meet consistent, predictable performance standards that do not prohibit development of ports, navigation channels, oil and gas, and residential or commercial real estate, but avoid, minimize, and remedy their adverse impacts on coastal natural resources.

Achievement of this balance involves trade-offs that include both positive and negative effects. Most of the TCMP's performance standards are already in place in the form of policies or rules applied through existing regulatory or natural resource management programs. Continued application of these existing standards will have a neutral effect. However, the TCMP will coordinate these existing programs so that limited public resources are used more efficiently and more effectively. This will result in net positive environmental impacts.

Since the TCMP is based largely on existing standards, the potential for increased cost to the industries and developments subject to these policies is low. To the extent any increased costs are realized because of more effective application of these standards, they should generally be one-time, minimal costs. Moreover, the increased costs should be offset by and be commensurate with broader, longer term socio-economic benefits to be realized either by taxpayers or other coastal industries, users, or properties. These broader, longer-term benefits would include the reduction of public expenditures for pollution cleanup or storm damage, the continued economic productivity of fisheries, wildlife, beaches, forests, other renewable resources, and the conservation of the natural heritage of the coastal zone.

Some lost expectations may occur. For example, some coastal property may be limited to a use that generates a reasonable rate of economic return, rather than the use that would generate the highest rate of return, if the latter would significantly degrade coastal natural resources or put public or private property in jeopardy from erosion, hurricanes, or other coastal hazards. Because the policies effectively balance different interests, these cases should be limited. Moreover, socio-economic gains elsewhere should offset any reduction in rate of return from use of the property.

Lost expectations or one-time, minimal cost to industries or developments are also offset by other broader, longer-term benefits that these same industries and developments should realize

from better planning and management through the TCMP. These broader, longer-term benefits would include the reduced in the cost of planning and permitting new development through the streamlining of government decision-making, protection of property and infrastructure from erosion and other coastal hazards through the preservation of beaches and shorelines, preservation of environmental amenities, less pollution, higher quality development, better utilization of "sunk" costs and investments, better fit of supply and demand, greater awareness of local needs and opportunities, and less uncertainty regarding future development patterns.

In a study conducted by the National Coastal Resources Research and Development Institute in conjunction with the University of North Carolina's Center for Urban and Regional Studies entitled, "Valuing Coastal Zone Management" (1990), the authors found that in 22 of 24 states in the survey with coastal management programs, coastal Gross National Product (GNP) increased relative to CZMA expenditures, and that each $1 of coastal zone management spending was associated with an increase of as much as $37 in coastal GNP due to coastal dependent activities, $1.50 in coastal GNP due to coastal-linked activities, and up to $650 in coastal GNP due to coastal service activities. While not concluding that coastal zone program expenditures caused a specific increase in coastal GNP, the study did conclude that at the least, "the statistical results suggest a positive relationship between dynamic coastal zone programs and dynamic coastal economies."

Potential economic benefits can include higher sales, greater demand for facilities and services, increased property values, and heightened satisfaction with the physical environment. Prudent coastal management, therefore, results in a balance between conservation of irreplaceable or difficult to replace natural resources and economic needs like jobs, housing, recreation, and commerce. The TCMP policies that enhance protection of coastal resources and improve bay and estuarine water quality will provide both short- and long-term enhancement of commercial and recreational fishing economies dependent on these renewable resources, as well as provide the foundation for long-term profitability for coastal tourism, ecotourism, recreation, and other industries dependent on the continuance and enhancement of environmental amenities such as clean water, clean beaches, and healthy wetlands. As a result, the implementation of the TCMP should foster a more diverse and stable economic base.

Some of the TCMP's socio-economic impacts are institutional in nature. Overall, these impacts are positive. Developers and conservationists are both calling for more predictability and consistency in land and water use decisions. Without the coordination provided by the TCMP, duplication and conflict among numerous Federal, state, and local authorities increase the uncertainty about the nature and timing of development that will be permitted in the future. Cooperation among all levels of government is an objective and requirement of both the TCMP and CZMA. The TCMP's uniform coastal policies, permit assistance program, and consistency review of Federal agency decisions and state agency rulemaking and permitting provide an enhanced degree of predictability and consistency, while allowing adequate flexibility to address unique circumstances or emerging issues. The establishment of the Coastal Coordination Council, the Executive Committee, and other TCMP entities to apply the uniform coastal policies will

considerably improve fragmented and overlapping management of coastal resources, enhance efficiency, and provide added predictability and consistency to decision-making.

Implementation of the TCMP should result in a net reduction in government costs. There may be some added cost to government to implement the program. However, these should be minimal because the TCMP essentially coordinates existing programs and policies rather than creating new ones. Additional costs could be incurred by providing increased permit assistance to applicants or assistance to local governments for implementing beach and dune policies. These costs can be offset by §306 funds if the state chooses to do so.

On the other hand, local, state, and Federal expenditures of tax dollars for disaster relief or replacement of infrastructure resulting from damages from coastal flooding, erosion and wind damage should be reduced. Reductions in expenditures should accrue from enhanced protection of natural protective features as a result of the implementation of policies related to dune protection and construction on or adjacent to beaches. The TCMP should also reduce the number of structures exposed to coastal hazards through implementation of policies related to the elevation and flood proofing of structures in critical dune areas, restrictions on development of some infrastructure on barrier islands, restrictions on private shore-hardening structures and consideration of impacts on down drift beaches and shorelines from the construction of other navigation and shore-hardening structures.

Implementation of the TCMP should also result in positive impacts regarding public input into government decision-making. The public involvement in the development of the TCMP has been extensive. In addition, the program provides for substantial ongoing public involvement in program implementation through the state and Federal consistency review procedures, existing state procedures, and the expected establishment of an advisory council. Public participation in major program decisions and in general program implementation, through public notice and comment provisions, public hearings, as well as the establishment of a public advisory committee is provided.

Implementation of the TCMP should result in net positive impacts on certain coastal natural resources also. In addition to improved government coordination, significant positive short- and long-term benefits to coastal resources should result from implementation of enhanced state policies applicable to wetlands and other aquatic resources and beaches and dunes. Implementation of the program will also result in moderate to significant positive impacts to submerged lands and benthic organisms, water quality and circulation patterns in coastal bays and estuaries, and coastal hazard areas.

The impacts are expected to be positive because, like NEPA, these policies generally call for the avoidance of adverse impacts where possible, the minimization of adverse impacts in all cases, and remediation of or compensation for any unavoidable damage to important coastal natural resources. These TCMP policies that deal with protection of wetlands and other aquatic

resources include the critical areas policy, the dredging and dredged material placement policy, and the policy on development in the beach/dune system.

The critical areas and dredging policies will result in net positive impacts on critical areas, which are coastal wetlands, submerged aquatic vegetation, tidal sand and mud flats, oyster reefs, and hard substrate reefs. These policies include an overall policy of "no net loss" of critical areas through requirements to restrict impacts from non-water dependent uses, prohibit "significant" adverse impacts, require compensatory mitigation for unavoidable impacts, and allowing the development of mitigation banks.

The TCMP dredging and dredged material placement policy goes on to establish a sequential priority system for the disposal of dredged material. The preferred sequence is: (1) the beneficial use of dredged material, (2) contained upland disposal, (3) other contained disposal, and (4) open-water disposal in non-productive water bottoms. This policy should reduce the amount of dredged material that traditionally has been disposed of in unconfined, open-water sites and moreover should increase the extent of some coastal habitats.

While the implementation of the TCMP will not halt all adverse impacts to wetlands and other critical areas, it establishes a policy framework for more effectively ensuring that any adverse impacts are minimal, limited in scope, short-term in duration, and offset by other positive environmental impacts. Additionally, the policies could result in an increase in wetlands from the beneficial use of dredged materials. Application of these policies may result in an incremental increase in development costs. However, the TCMP includes provisions and processes to avoid disruptions from those costs. For example, application of the dredging policy to dredging of federally maintained waterways is governed by the October 1994 Memorandum of Agreement between the Council and the Corps. This agreement provides that changes in dredging practices are not implemented until there has been an opportunity to secure any additional funding needed to implement them.

The TCMP policies will also enhance the protection of the beach dune system. The TCMP policies require activities in critical dune areas to avoid and minimize adverse impacts to critical dune systems and require creation or restoration of dunes for any unavoidable adverse impacts. In these areas, the policies prohibit activities that would result in material damage to dunes or dune vegetation. In addition the policies will mitigate activities that result in coastal erosion and loss of beaches by prohibiting private parties from constructing seawalls and groins on the beach or within 200 feet of the line of vegetation in critical dune areas.

As stated above, the dredging and dredged material placement policy includes provision on beneficial use of dredged material. A high priority for beneficial use is restoration or protection of coastal shores and beaches. This will protect coastal property from erosion and storms. This, in turn, maintains the value of coastal property, enhances coastal tourism, and preserves the integrity of significant elements of the coastal economy.

E. Unavoidable Adverse Environmental Effects

The probable effects of TCMP implementation will, on the whole, be environmentally beneficial. With or without the program, coastal development will occur, some of which could lead to adverse environmental impacts on coastal habitats and ecosystems. However, with the program in place, Texas can seek to balance the conservation of coastal resources with the recognized need for rational economic growth.

With or without the program, adverse impacts associated with the siting of major facilities for purposes of defense, transportation, and energy needs in which both the state and Federal governments have an interest, will continue. It is important to note, however, that under the TCMP and related Federal laws (e.g., National Environmental Policy Act), the State and Federal agencies responsible for such projects will evaluate the projects for their impacts on the natural coastal environment. Required in that evaluation is the balanced consideration of the national interest, local economy, and coastal natural resources.

F. Relationship between Short-Term Uses of the Environment and the Maintenance and Enhancement of Long-Term Productivity

Approval of the TCMP will likely restrict some local, short-term uses of the environment. However, it will also provide long-term assurance that the natural resources and benefits provided by the Texas coast will be available for future use and enjoyment by more effectively administering existing resource protection laws.

The TCMP recognizes that, in the short term, some coastal-dependent developments have adverse consequences on coastal resources, but that they may still have to be located in the coastal zone to protect the inland environment as well as help provide for orderly economic development and meet the national interest. However, the program policies will, in most cases, allow Texas to make development decisions that avoid where possible, minimize, and in some cases compensate for these adverse impacts.

Regarding the long-term use of the environment, the TCMP recognizes the coastal zone as a delicately balanced ecosystem; establishes a process of balanced management of coastal resources; allows growth to continue while protecting key resources; and provides a framework which can protect regional, state and national interests by assuring the maintenance of the long-term productivity and economic vitality of coastal resources necessary for the well-being of the public. Beneficial changes will likely promote avoidance of long-term costs to the public and a diminished quality of life resulting from the misuse of coastal resources.

G. Irreversible and Irretrievable Commitments of Resources

The only irretrievable or irreversible commitment of resources that will result directly from the approval of the Texas program is the commitment of state and Federal funds and personnel for the purpose of achieving the goals and objectives of the program. It is presumed that irretrievable and irreversible commitments of economic and environmental resources will occur during the implementation of the Texas program. This program is designed to balance the need for development with the need for the protection and enhancement of coastal environmental resources by avoiding, minimizing and mitigating the consequences of coastal development on resources such as wetlands and shallow water marine habitats.

The program ensures that any such proposed activities which commit coastal resources are subjected to as comprehensive a review as individual actions and as actions contributing to the cumulative impacts taking place on coastal resources. Such review will ensure that those irretrievable and irreversible commitments of resources which are undertaken under the TCMP are made with full awareness of the consequences of those commitments.

Part IV

LIST OF PREPARERS

Part IV. LIST OF PREPARERS

The following persons were responsible for the drafting of the final environmental impact statement:

Ms. Sally Davenport: Associate Deputy Commissioner for Resource Management, Texas General Land Office

Degrees: B.A., History, Texas Tech University, Lubbock, Texas, 1969
M.S., Community and Regional Planning, University of Texas, Austin, 1976

Experience: Ms. Davenport has extensive experience in coastal and resource management. She currently oversees management of the State's interest in more than 4 million acres of state-owned submerged lands. Prior to joining the General Land Office in 1980, she served for three years as Administrator of Programs for the Texas Coastal and Marine Council, specializing in natural hazards, floodplain management, and disaster response. She served as Director of Land Office's Coastal Division from 1985 to 1994, with lead responsibility for development of the TCMP. Ms. Davenport has served on numerous interagency committees on natural resource management. She was active in development of the Galveston bay Plan, after having been appointed to the Management Committee for the Galveston Bay National Estuary Program by Governor Bill Clements. She has served as state chair of the Coastal and Shoreline Erosion Committee of the Gulf of Mexico Program, and is a director of the American Shore and Beach Association.

Mr. Tom Nuckols: Co-Director, Coastal Division, Resource Management Program, Texas General Land Office

Degrees: B.A., Political Science, Austin College, Sherman, Texas, 1982
J.D., Baylor University Law School, Waco, Texas, 1985

Experience: Mr. Nuckols has worked on coastal management issues, including drafting legislation and regulations dealing with coastal zone management, oil spill prevention and response, alternative fuels, beachfront development, wetlands protection, endangered species habitat conservation, and natural resource damage assessment for the Texas General Land Office for the past six years. He has served as Co-director of the Coastal Division, Resource Management Program, since September 1994. Prior to that he served as: Director of Coastal Management, Resource and Asset Management

Program; Director of the Environmental Law Section, Legal Division; Director of Real Estate Section, Legal Division, and as Staff Attorney in the Legal Division, Texas General Land Office beginning in 1985.

Mr. Peter A. Ravella: Co-Director, Coastal Division, Resource Management Program, Texas General Land Office

Degrees: B.S., Marine Biology, with honors, Texas A&M University, 1982.
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Experience: Mr. Ravella has been involved with coastal management issues in Texas for more than three years. He has served as the Co-director of the Coastal Division, Resource Management Program of the Texas General Land Office since September 1994. Prior to that, he served as Special Advisor for Coastal Program Development and Director of the Environmental Law Section, Legal Division, Texas General Land Office. Mr. Ravella also worked as Legislative Aide for Energy and Environment for U.S. Rep. Ron Wyden, Washington, D.C., from 1991 to 1993.

Mr. Bill Milhouser: Pacific Regional Manager, Coastal Programs Division, Office of Ocean and Coastal Resource Management

Degrees: B.S., Psychology, University of Illinois
M.A., Urban and Regional Planning, George Washington University

Experience: Mr. Milhouser has worked at OCRM since 1976 on state coastal management programs in the Gulf, South Atlantic, and Pacific regions. He has been involved in a wide-range of CZM program development issues and has considerable experience in NEPA issues, particularly as they relate to the impacts of local coastal programs in Alaska on various types of development. Mr. Milhouser has served as the Coastal Programs Division's Section 305 program development coordinator since 1993.

Mr. Ole Varmer: NOAA, Counselor at Law, General Counsel for Ocean Services

Degrees: J.D., Benjamin N. Cardozo School of Law (NY, NY) 1987
Legal Assistant Certificate, George Washington University, 1981
B.S., Business & Science, Columbia University Union College, 1980

Experience: Mr. Varmer has been working in the Environmental Law field since he started work at the Department of Commerce in 1987. He has been working on Coastal and Marine Environmental Law since moving to the Assistant General Counsel's

Office for the National Ocean Service in 1990. He has worked on Management Plans and Environmental Impact Statements for the National Estuarine Research Reserves in Maryland, Virginia, Delaware, North Carolina and Georgia. He has also worked on the management plans, regulations and Environmental Impact Statements for National Marine Sanctuaries in Florida, Massachusetts, and California.

Mr. Bill O'Beirne: Acting Gulf/Caribbean Regional Manager, Coastal Programs Division, Office of Ocean and Coastal Resource Management

Degrees: B.A., History, University of Virginia, Charlottesville, VA, 1981
M.S., Urban and Environmental Planning, University of Virginia, 1988

Experience: Mr. O'Beirne has worked at OCRM on various coastal management issues for the past seven years. He has been acting Gulf/Caribbean Regional Manager since August 1992 and has worked with coastal management programs in Louisiana, Mississippi, Florida, Alabama, and Puerto Rico. He has worked on the development of the Texas Coastal Management Program since 1990.

NOAA would like to gratefully acknowledge Ms. Caryn Cosper, Deputy Commissioner for Resource Management, Texas General Land Office, for her contribution to the overall quality of the final environmental impact statement and her leadership in the process for federal approval of the TCMP.

NOAA would also like to gratefully acknowledge the following individuals who made substantial contributions to portions of the EIS:

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Mark Jordon, Texas Natural Resource Conservation Commission
James Moore, Texas State Soil and Water Conservation Board
Joe Uravitch, NOAA, Office of Ocean and Coastal Resource Management
Sonia Taylor, NOAA, Office of Ocean and Coastal Resource Management
David Kaiser, NOAA, Office of Ocean and Coastal Resource Management
Margo Jackson, NOAA, General Counsel for Ocean Services
Brett Joseph, NOAA, General Counsel for Ocean Services
Pamela Lawrence, NOAA, General Counsel for Ocean Services

Part V

LIST OF AGENCIES, ORGANIZATIONS AND INDIVIDUALS RECEIVING COPIES OF FEIS

Part V. LIST OF AGENCIES, ORGANIZATIONS AND INDIVIDUALS RECEIVING COPIES OF THE FEIS

Federal Agencies

Council on Environmental Quality
Department of Agriculture
- Farm Service
- Forest Service
- Natural Resources Conservation Service

Department of Commerce
- National Marine Fisheries Service
- National Geodetic Service

Department of Defense
- Air Force
- Army Corps of Engineers
- Marine Corps
- Navy

Department of Energy
Department of Health and Human Services
Department of Housing and Urban Development
Department of the Interior
- Fish and Wildlife Service
- Geological Survey
- Minerals Management Service
- National Biological Service
- National Park Service

Department of Justice
Department of Transportation
- Federal Aviation Administration
- Federal Highway Administration
- Maritime Administration
- U.S. Coast Guard

Environmental Protection Agency
- Office of Federal Activities,
- Office of Wetlands, Oceans and Watersheds
- Gulf Of Mexico Program

Federal Emergency Management Agency
Federal Energy Regulatory Commission
Federal Maritime Commission
General Services Administration
Interstate Commerce Commission
National Aeronautics and Space Administration
Nuclear Regulatory Commission

State and Regional Agencies and Local Governments

Governor's Office
Coastal Coordination Council
Gulf States Marine Fisheries Commission
Gulf Waste Disposal Authority
Legislative Reference Library
Office of the Attorney General
Office of State-Federal Relations
Public Utility Commission of Texas
Railroad Commission of Texas
State Emergency Management Division
Texas Department of Agriculture
Texas Department of Commerce
Texas Department of Health
Texas Department of Housing and Community Affairs
Texas Department of Public Safety
Texas Department of Transportation
Texas Forest Service
Texas General Land Office
Texas Historical Commission
Texas Low-Level Radioactive Waste Disposal Authority
Texas Natural Resource Conservation Commission
Texas Parks & Wildlife Department
Texas State Auditor's Office
Texas State Comptroller's Office
Texas State Library
Texas State Soil & Water Conservation Board
Texas Water Development Board

Lamar University
Texas A&M University System
Texas Southern University
Texas State University System
University of Houston System
University of Texas System

Corpus Christi Bay National Estuary Program
Galveston Bay Estuary Program

Coastal Area Legislators
Congressional Delegation
County Judges in the Coastal Zone

County Commissioners in the Coastal Zone
City Mayors in the Coastal Zone
Navigation Districts
Port Authorities
River Authorities
Soil and Water Conservation Districts

Local Public Libraries in the Coastal Zone

National Interest Groups

American Association of Port Authorities
American Bureau of Shipping
American Farm Bureau Federation
American Institute of Planners
American Petroleum Institute
American Planning Association
American Sport Fishing Association
Association of State Floodplain Managers
Boat U.S.
Boating Industry Association
Center for Marine Conservation
Chambers of Commerce of the U.S.
Clean Water Network
Coast Alliance
Coastal States Organization
Conservation Fund
Environmental Defense Fund, Inc.
Environmental Law Institute
Environmental Policy Center
Friends of the Coast
Friends of the Earth
Isaak Walton League of America
Lake Carriers Association
League of Women Voters of the U.S.
National Association of Conservation Districts
National Association of Counties
National Association of Home Builders of the U.S.
National Association of Realtors
National Audubon Society
National Fisheries Institute
National League of Cities

National Parks and Conservation Association
National Recreation and Parks Association
Natural Resources Defense Council
National Wildlife Federation
Nature Conservancy
Shore and Beach Protection Association
Sierra Club National Coastal Committee
Society of Real Estate Appraisers
Soil Conservation Society of America
Sport Fishing Institute
U.S. Sailing Association
World Wildlife Fund

Individuals and other Interested Parties

Upon request, copies were sent to all individuals and other interested parties not listed as receiving copies of the FEIS.

PART VI

REFERENCES--FEIS

Part VI. REFERENCES--FEIS

American Sportfishing Association. The 1991 Economic Impact of Sport Fishing in Texas. ASA: 8pp.

Armstrong, N. E. 1987. The ecology of open-bay bottoms of Texas: a community profile. Washington, D.C., U.S. Department of the Interior, Fish and Wildlife Service, 104 pp.

Bassi, D. E., and D. R. Basco. 1974. Field study of an unconfined spoil disposal area of the Gulf Intracoastal Waterway in Galveston Bay, Texas. Civil Engineering Department, Texas A&M University, C.O.E. Report No. 174, p. 63.

Bodine, B. R. 1969. Hurricane surge frequency estimated for the Gulf Coast of Texas. U.S. Army Corps of Engineers, Coastal Engineering Research Center Technical Memorandum 26, 32 pp.

Boesch, D. F., and N. N. Rabalais. 1987. Long-term environmental effects of offshore oil and gas development. New York, Elsevier Applied Science, 708 pp.

Brady, S.J. and Flather, C.H., 1994. Changes in wetlands on nonfederal rural land of the conterminous United States from 1982 to 1987. Env. Manag. 18(5):693-705.

Britton, J. C., and Brian Morton. 1989. Shore ecology of the Gulf of Mexico. Austin, Texas, University of Texas Press, 387 pp.

Brown, L. F., Jr., J. L. Brewton, T. J. Evans, J. H. McGowen, W. A. White, C. G. Groat, and W. L. Fisher. 1980. Environmental geologic atlas of the Texas Coastal Zone: Brownsville-Harlingen area. The University of Texas at Austin, Bureau of Economic Geology, 140 pp.

Brown, L. F., Jr., J. L. Brewton, J. H. McGowen, T. J. Evans, W. L. Fisher, and C. G. Groat. 1976. Environmental geologic atlas of the Texas Coastal Zone: Corpus Christi area. The University of Texas at Austin, Bureau of Economic Geology, 123 pp.

Brown, L. F., Jr., J. H. McGowen, T. J. Evans, C. G. Groat, and W. L. Fisher. 1977. Environmental geologic atlas of the Texas Coastal Zone: Kingsville area. The University of Texas at Austin, Bureau of Economic Geology, 131 pp.

Bureau of the Census. 1990. Census of Population and Housing. U.S. Department of Commerce.

Campbell, Page, T. Storck, V. Price, and L. Robinson. 1992. Trends in Texas commercial fishery landings, 1972-1991. Management Data Series No. 86.

Castelle, A. J., Catherine Conolly, Michael Emers, E. D. Metz, Susan Meyer, Michael Witte, Susan Mauermann, Terrell Erickson, and S. S. Cooke. 1992. Wetland buffers: use and effectiveness. Washington State Department of Ecology, Shorelands and Coastal Zone Management Program, Olympia, Washington, Publication 92-10, 171 pp.

Center for Marine Conservation. 1992. National Coastal Cleanup Results, pp. 22 and 280.

Center for Marine Conservation. No date. Shipping Safety and America's Coasts, pp. 8 and 30-37.

Chambers, J.R., 1992. Coastal degradation and fish population losses. *In* Stroud, ed. Stemming the Tide of Coastal Fish Habitat Loss. National Coalition for Marine Conservation, Inc.:45-51.

Coastal States Organization. 1993. Congressional Briefing Book, America's Coast, America's Pride, p. 2.

Cole, R. M. 1981. The serpulid reefs of Baffin Bay, Texas, in Modern depositional environments of sands in South Texas, C. E. Sterling and J. L. Russell, eds. Gulf Coast Association of Geological Societies, field trip guide, pp. 53-57.

Collier, W. J., and J. W. Hedgpeth. 1950. An introduction to the hydrography of tidal waters of Texas. The University of Texas, Publications of the Institute of Marine Science, 1(2):125-194.

Cowardin, L. M., V. Carter, R. C. Golet, and E. T. LaRoe. 1979. Classification of wetlands and deep-water habitats of the United States. U.S. Department of the Interior, Fish and Wildlife Service, Office of Biological Services, Washington, D.C. FWS/OBS-79/31, 103 pp.

Culliton, Thomas J., John J. McDonough III, Davida G. Remer, and David M. Lott. 1992. Building along America's coasts: 20 years of building permits, 1970-1989. U.S. Department of Commerce, NOAA Coastal Trends Series, 49 pp.

Dahl. T.E., 1990. Wetlands Losses in the United States 1780's to 1980's. U.S. Dept. Interior: 13 pp.

Diener, R. A. 1975. Cooperative Gulf of Mexico estuarine inventory and study - Texas: area description. National Oceanic and Atmospheric Administration, Technical Report, National Marine Fisheries Service Circular 393, 129 pp.

Department of Energy. 1990. Environmental impact assessment 0216.

Ditton, R. B., D. K. Loomis, D.R. Fesenmaier, M.O. Osborn, D. Hollin, and J. W. Kolb. 1988. Galveston Bay and the surrounding area: human uses, production and economic values, in Galveston Bay Seminar Executive Summary. National Oceanic and Atmospheric Administration, Estuary of the Month, p. 3.

Energy Information Administration. 1993. U. S. crude, natural gas, and natural gas liquids resources, 1992 Annual Report. DOE/EIA-0216(92), 153 pp.

Felder, D. L., and A. H. Chaney. 1979. Decapod crustacean fauna of Seven and One-Half Fathom Reef, Texas: species composition, abundance, and species diversity. Contributions in Marine Science, 22:1-29.

Field, D. W., A. J. Reyer, P. V. Genovese, and B. D. Shearer. 1991. Coastal wetlands of the United States: an accounting of a valuable national resource. Strategic Assessment Branch, National Oceanic and Atmospheric Administration, 59 pp.

Fisher, W. L., L. F. Brown, Jr., J. H. McGowen, and C. G. Groat. 1973. Environmental geologic atlas of the Texas Coastal Zone: Beaumont-Port Arthur area. The University of Texas at Austin, Bureau of Economic Geology, 93 pp.

Fisher, W. L., J. H. McGowen, L. F. Brown, Jr., and C. G. Groat. 1972. Environmental geologic atlas of the Texas Coastal Zone: Galveston-Houston area. The University of Texas at Austin, Bureau of Economic Geology, 91 pp.

Frishman, S. A. 1969. Geochemistry of oolites, Baffin Bay, Texas. The University of Texas at Austin, Master's thesis, 82 pp.

Gabrysch, R. K., and L. S. Coplin. 1990. Land-surface subsidence resulting from ground-water withdrawals in the Houston Galveston region, Texas, through 1987. U.S.G.S. Report of Investigations No. 90-01. 53 pp.

Galveston Bay National Estuary Program. 1993. The Galveston Bay plan: the comprehensive conservation and management plan for the Galveston Bay estuary. Draft for Management Conference Review, September 10, 1993, 236 pp.

Game, Fish and Oyster Commission. 1937. Annual Report, Fiscal Year 1936-37. Austin, Texas.

Gulf States Marine Fisheries Commission, 1988. The Menhaden fishery of the Gulf of Mexico United States: a regional management plan. GSMFC, Mississippi.

Hadden, Susan G. and Lauren Riggin. 1992. Baywide management evaluation of Galveston Bay. Galveston Bay National Estuary Program, 307 pp.

Harper, D. E., Jr., L. D. McKinney, R. R. Salzer, and R. J. Case. 1981. The occurrence of hypoxic bottom water off the upper Texas coast and its effects on the benthic biota. Contributions in Marine Science, 24:53-79.

Hayes, M. O. 1965. Sedimentation on a semiarid, wave-dominated coast (South Texas) with emphasis on hurricane effects. The University of Texas at Austin, Ph.D. dissertation, 350 pp.

Hedgpeth, J. W. 1953. An introduction to the zoogeography of the northwestern Gulf of Mexico with reference to the invertebrate fauna. The University of Texas at Port Aransas, Publications of the Institute of Marine Science, 4(1):169-232.

Hightower, J. 1990. Agricultural development in a sustainable economy, Texas Department of Agriculture.

Hightower, M., Charles Branton, and Granvil Treece. 1990. Governmental permitting and regulatory requirements affecting Texas coastal aquaculture operations. TAMU Sea Grant College Program, TAMU-SG-90-601.

Hoese, H. D., and R. H. Moore. 1977. Fishes of the Gulf of Mexico: Texas, Louisiana, and adjacent waters. College Station, Texas, Texas A&M University Press, 327 pp.

Holliday, Barry. 1973. Bay circulation, in Resource evaluation studies on the Matagorda Bay area, Texas, W. M. Ahr, project coordinator. Texas A&M University Sea Grant publication, TAMU-SG-74-204, p. 5-20.

King, B. D., III. 1990. Planning aid report, Matagorda County shore erosion study. U.S. Fish and Wildlife Service. Clear Lake Field Office, Houston, Texas. 51 pp.

Kusler, J. A., W. J. Mitsch, and J. S. Larson. 1994. Wetlands. Scientific American. January 1994. p. 64-70.

Lambou, V. W. 1989. Management needs for fishes and fisheries dependent on overflow riverine wetlands, in Wetlands and River Corridor Management, J. A. Kusler and Sally Daly, eds. Proceedings of an International Symposium on Wetlands and River Corridor Management, Charleston, South Carolina, p. 123-131.

McFarlane, R. W. 1991a. An environmental inventory of the Armand Bayou Coastal Preserve. The Galveston Bay National Estuary Program, GBNEP Publication 8, 66 pp.

____ 1991b. An environmental inventory of the Christmas Bay Coastal Preserve. The Galveston Bay National Estuary Program, GBNEP Publication 7, 95 pp.

McFarlane, R. W., T. J. Bright, B. W. Cain, M. Hightower, J. J. Kendall, J. W. Kolb, A. J. Mueller, P. F. Sheridan, C. B. Smith, E. G. Wermund, and T. E. Whitledge. 1988. "Issues and information needs" in Galveston Bay: issues, resources, status, and management. U.S. Department of Commerce, NOAA Estuary-of-the-Month Seminar Series No. 13, pp. 67-77.

McGowen, J. H., L. F. Brown, Jr., T. J. Evans, W. L. Fisher, and C. G. Groat. 1976a. Environmental geologic atlas of the Texas Coastal Zone: Bay City-Freeport area. The University of Texas at Austin, Bureau of Economic Geology, 98 pp.

McGowen, J. H., C. V. Proctor, Jr., L. F. Brown, Jr., T. J. Evans, W. L. Fisher, and C. G. Groat. 1976b. Environmental geologic atlas of the Texas Coastal Zone: Port Lavaca area. The University of Texas at Austin, Bureau of Economic Geology, 107 pp.

McGowen, J. H., L. E. Garner, and B. H. Wilkinson. 1977. The Gulf shoreline of Texas: processes, characteristics, and factors in use. The University of Texas at Austin, Bureau of Economic Geology. Geological Circular 77-3, 27 pp.

Morton, R. A. 1974. Shoreline changes on Galveston Island (Bolivar Roads to San Luis Pass): an analysis of historical changes of the Texas Gulf shoreline. The University of Texas at Austin, Bureau of Economic Geology. Geological Circular 74-2, 34 pp.

Morton, R. A. 1975. Shoreline changes between Sabine Pass and Bolivar Roads: an analysis of historical changes of the Texas Gulf shoreline. The University of Texas at Austin, Bureau of Economic Geology. Geological Circular 75-6, 43 pp.

Morton, R. A. 1993. Shoreline movement along developed beaches of the Texas Gulf coast: a user's guide to analyzing and predicting shoreline changes. The University of Texas at Austin, Bureau of Economic Geology. Open-File Report 93-1, 79 pp.

Morton, R. A., and J. G. Paine. 1990. Coastal land loss in Texas--an overview. Gulf Coast Association of Geological Societies Transactions, 40:625-634.

Morton, R.A., and M. J. Pieper. 1975a. Shoreline changes on Brazos Island and South Padre Island (Mansfield Channel to Mouth of the Rio Grande): an analysis of historical changes of the Texas Gulf shoreline. The University of Texas at Austin, Bureau of Economic Geology. Geological Circular 75-2, 39 pp.

Morton, R.A., and M. J. Pieper. 1975b. Shoreline changes in the vicinity of the Brazos River Delta (San Luis Pass to Brown Cedar Cut): an analysis of historical changes of the Texas Gulf shoreline. The University of Texas at Austin, Bureau of Economic Geology. Geological Circular 75-4, 47 pp.

Morton, R.A., and M. J. Pieper. 1977. Shoreline changes on Mustang Island and North Padre Island (Aransas Pass to Yarborough Pass): an analysis of historical changes of the Texas Gulf shoreline. The University of Texas at Austin, Bureau of Economic Geology. Geological Circular 77-1, 45 pp.

Morton, R. A., Pieper, M. J., and McGowen, J.H. 1976. Shoreline changes on Matagorda Peninsula (Brown Cedar Cut to Pass Cavallo): an analysis of historical changes of the Texas Gulf shoreline. The University of Texas at Austin, Bureau of Economic Geology. Geological Circular 76-6, 37 pp.

Morton, R. A., and C. D. Winker. 1979. Distribution and significance of coarse biogenic and clastic deposits on the Texas inner shelf. Gulf Coast Association of Geological Societies Transactions, 29:136-146.

Morton, Robert A., O. H. Pilkey, Jr., O. H. Pilkey, Sr., and W. J. Neal. 1983. Living with the Texas shore. Duke University Press, 190 pp.

Moulton, D. F. 1990. Texas waterfowl habitat: status and needs. Special staff report. Wildlife Division, Texas Parks and Wildlife Department, 20 pp.

National Oceanic and Atmospheric Administration. 1990. Estuaries of the United States, vital statistics of a national resource base. Strategic Assessment Branch, Ocean Assessments Division, Rockville, Maryland. 79 pp.

Osburn, Hal R., G. E. Saul and C. L. Hamilton. 1987. Trends in Texas Commercial Fishery Landings, 1977-1985. Management Data Series Number 107. Austin, Texas: Texas Parks and Wildlife Department, Coastal Fisheries Branch, 93 pp.

Powell, E. N., J. Song, and M. Ellis. 1993. The status of oyster reefs in Galveston Bay, Texas. Draft report submitted to the Galveston Bay National Estuary Program.

Pulich, W. M., Jr., and J. M. Hinson. 1990. Habitat inventory of Welder Flats Coastal Preserve, in Welder Flats Coastal Preserve, baseline studies report, J. R. MacRae, project coordinator. Texas Parks and Wildlife Department, Resource Protection Division. Report submitted to EPA, Cooperative Agreement Number X-006299-01-0, variable pagination.

Pulley, T. E. 1953. A zoogeographic study based on the bivalves of the Gulf of Mexico. Harvard University. Ph.D. dissertation, 215 pp.

Railroad Commission of Texas. February 1994. Texas Petrofacts. 5 pp.

Riggio, R. F., G. W. Bomar, and T. J. Larkin. 1987. Texas drought: its recent history (1931-1985). Texas Water Commission, LP 87-04, 74 pp.

Roach, R. W., and Steve Spencer. 1992. Produced water - what is it and who cares? Bayline. Newsletter of the Galveston Bay National Estuary Program, pp. 4-5.

Sharp, John. 1993. Fiscal Notes. Publication of the Texas Comptroller of Public Accounts. 16 pp.

Shew, D. M., R. H. Baumann, T. H. Fritts, and L. S. Dunn. 1981. Texas barrier islands region ecological characterization: environmental synthesis papers. National Coastal Ecosystems Team, Biological Services Program, U.S. Fish and Wildlife Service, Washington. D.C. FWS/OBS-81/32, 413 pp.

Simpson, R. H., and M. B. Lawrence. 1971. Atlantic hurricane frequencies along the U.S. coastline. U.S. Department of Commerce, National Oceanic and Atmospheric Administration Technical Memorandum NWSSR-58, 14 pp.

Stickney, R. R. and J. T. Davis. 1981. Aquaculture in Texas. A status report and development plan. TAMU-SG-81-119.

Texas Agricultural Statistics Service. 1985 agricultural statistics.

Texas Comptroller of Public Accounts. 1992. Texas regional outlook: Gulf Coast. Forces of Change Project.

Texas Comptroller of Public Accounts. 1993. Swampthing: complex issues lurk in Texas wetlands. Fiscal Notes. 3(5): 1-10.

Texas Department of Transportation. 1992. District and county statistics, DISCOS.

Texas Department of Transportation. 1992. The Gulf Intracoastal Waterway in Texas, pp. 2, 4, 6, and 7.

Texas Energy and Natural Resources Advisory Council. 1982. Coastal natural resources in Texas. Report to the governor and the 68th legislature, 51 pp.

Texas General Land Office. 1992. EnviroNomics, 1(2):4.

Texas General Land Office. 1993. Acreage of federally maintained dredged channels and disposal sites calculated from information provided by the U.S. Army Corps of Engineers and compiled in GIS format by the Texas General Land Office.

Texas General Land Office. 1993. Oil Spill Prevention and Response Act progress report, p. 6.

Texas Natural Resource Conservation Commission. 1990. Toxic Release Inventory.

Texas Natural Resource Conservation Commission. 1992. Pollution Prevention Subcommittee report to Task Force 21, 37 pp.

Texas Natural Resource Conservation Commission. 1994. National Flood Insurance Program Master Status Report, February 22, 1994, 111pp.

Texas Parks and Wildlife Department. 1988. The Texas Wetlands Plan, addendum to the 1985 Texas Outdoor Recreation Plan. Texas Parks and Wildlife Department, 35 pp.

Texas Parks and Wildlife Department. 1993. Trends in Texas commercial fishery landings, 1972-1992, Management Data Series No. 106. Texas Parks and Wildlife Department, 11 pp.

Texas Water Development Board. 1991. Texas Water Facts. TWDB 91- 0166, 28 pp.

Texas Transportation Institute, Texas A&M University. 1989. Optimum disposal methods for use on the Gulf Intracoastal Waterway, Research Report 1194-1F, p. 1.

Texas Water Commission. 1992a. Segment identification maps for Texas river and coastal basins. LP 85-02, 56 pp.

Texas Water Commission. 1992b. Summary report: regional assessments of water quality pursuant to the Texas Clean Rivers Act (Senate Bill 818). Texas Water Commission, GP 92-01, 315 pp.

Thomas, J. R., and R. L. Ferguson. 1990. National Oceanic and Atmospheric Administration's habitat mapping under the Coastal Ocean Program, in Federal Coastal Mapping Programs, S. J. Kiraly, R. A. Cross, and J. D. Buffington, eds. U.S. Fish and Wildlife Service Biological Report 90(18):27-37.

Thornthwaite, C. W. 1948. An approach toward a rational classification of climate. Geographical Review, 38(1):55-94.

Treece, Granvil. 1993. Texas aquaculture history and growth potential for the 1990s. TAMU Sea Grant College Program.

Tunnell, J. W., Jr. 1970. A checklist of the mollusks of Seven and One-Half Fathom Reef, Northwestern Gulf Mexico. Contributions in Marine Science 15:194-203.

Turner, R. E. 1977. Intertidal vegetation and commercial yields of penaeid shrimp. Baton Rouge, Louisiana, Louisiana State University, pp. 411-416.

Turner, R.E., 1992. Coastal wetlands and Penaeid shrimp habitat. *In* Stroud, ed. Stemming the Tide of Coastal Fish Habitat Loss. National Coalition for Marine Conservation, Inc.:97-104.

U.S. Army Corps of Engineers. 1956a. Wave statistics for the Gulf of Mexico off Caplan, Texas. Beach Erosion Control Board, Technical Memorandum no. 86, 51 pp.

____ 1956b. Wave statistics for the Gulf of Mexico off Brownsville, Texas. Beach Erosion Control Board, Technical Memorandum no. 85, 12 pp.

____ 1991. Water resources development in Texas. 1991. U.S. Army Corps of Engineers, Southwestern Division, Dallas, Texas, 143 pp.

____ 1993. Drug interdiction project. Draft EIS for the Texas Gulf Coast. Tables 35, 36, and 37.

U.S. Department of Commerce. 1978. Tide current tables 1979, Atlantic coast of North America. National Oceanic and Atmospheric Administration, National Ocean Survey, 231 pp.

U.S. Dept. Commerce, 1994. Fisheries of the United States, 1993. U.S. Govt. Printing Office.

U.S. Dept. Of Commerce, 1995. Unpublished statistics.

U.S. Dept. Interior and U.S. Dept. Commerce, 1993. 1991 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation in Texas. U.S. Govt. Printing Office

U.S. Department of the Interior. 1990. Gulf of Mexico OCS Region environmental impact statement/environmental assessment. MMS 93-0012.

Vig, Norman J. and M. E. Kraft, 1990. Environmental policy in the 1990's. Houghton Mifflin Company, Boston and New York, p. 68.

Ward, G. H., Jr., N. E. Armstrong, and the Matagorda Bay Project Team. 1980. Matagorda Bay Texas: its hydrography, ecology, and fishery resources. Washington, D.C., U.S. Fish and Wildlife Service, Biological Services Program, FWS/OBS-81/52, 230 pp.

Webb, J. W., G. T. Tanner, and B. H. Koerth. 1981. Oil spill effects on smooth cordgrass, Spartina alterniflora in Galveston Bay, TX. Contributions in Marine Science. 24:107-114.

White, W. A., and T. R. Calnan. 1990. Sedimentation in fluvial-deltaic wetlands and estuarine areas, Texas Gulf Coast: literature synthesis. Prepared for Texas Parks and Wildlife Department Resource Protection Division in accordance with interagency contracts (88-89) 0820 and 1423, 261 pp.

White, W. A., and J. G. Paine. 1992. Wetland plant communities, Galveston Bay system. The Galveston Bay National Estuary Program. Publication GBNEP-16, 124 pp.

White, W. A., T. R. Calnan, R. A. Morton, R. S. Kimble, T. G. Littleton, J. H. McGowen, and H. S. Nance. 1987. Submerged lands of Texas, Beaumont-Port Arthur area: sediments, geochemistry, benthic macroinvertebrates, and associated wetlands. The University of Texas at Austin, Bureau of Economic Geology Special Publication, 110 pp.

White, W. A., T. R. Calnan, R. A. Morton, R. S. Kimble, T. G. Littleton, J. H. McGowen, H. S. Nance, and K. S. Schmedes. 1986. Submerged lands of Texas, Brownsville-Harlingen area: sediments, geochemistry, benthic macroinvertebrates, and associated wetlands. The University of Texas at Austin, Bureau of Economic Geology Special Publication, 138 pp.

White, W. A., T. R. Calnan, R. A. Morton, R. S. Kimble, T. B. Littleton, J. H. McGowen, and H. S. Nance. 1989. Submerged lands of Texas, Kingsville area: sediments, geochemistry, benthic macroinvertebrates, and associated wetlands. The University of Texas at Austin, Bureau of Economic Geology Special Publication, 138 pp.

White, W. A., T. A. Tremblay, E. G. Wermund, Jr., and L. R. Handley. 1993. Trends and status of wetland and aquatic habitats in the Galveston Bay system, Texas. The Galveston Bay National Estuary Program, Publication GBNEP-31, 225 pp.

William M. Kier Associates, 1994. Fisheries, Wetlands, and Jobs. Campaign to Save California Wetlands: 24 pp.

World Resources Institute. 1993. Environmental Almanac. Congressional Quarterly Press, p. 274.

Zimmerman, R. J., T. J. Minello, M. C. Castiglione, and D. L. Smith. 1990. Utilization of marsh and associated habitats along a salinity gradient in Galveston Bay. U.S. Department of Commerce, National Marine Fisheries Service. NOAA Technical Memorandum, NMFS-SEFC-250, 68 pp.

Zimmerman, R. J., T. J. Minello, E. F. Klima, and J. M. Nance, 1991. Effects of accelerated sea-level rise on coastal secondary production. Coastal Zone '91 Conference, Long Beach, California. pp. 110-194.

Part VII

COMMENTS ON DEIS AND RESPONSE TO COMMENTS

INDEX TO WRITTEN COMMENTS

No.	Commenter	Date
1.	U.S. Nuclear Regulatory Commission	July 15, 1996
2.	Brazos River Authority	July 15, 1996
3.	NOAA, National Marine Fisheries Service, Southeast Regional Office	July 23, 1996
4.	Texas Historical Commission	July 8, 1996
5.	Texas Chemical Council	August 2. 1996
6.	Port of Houston Authority	August 2, 1996
7.	U.S. Army Corps of Engineers, Galveston District	August 2, 1996
8.	U.S. Coast Guard	August 5, 1996
9.	NOAA, National Marine Fisheries Service, Office of Habitat Conservation	August 5, 1996
10.	Port of Corpus Christi Authority, Department of Engineering Services	August 5, 1996
11.	*Withdrawn*	
12.	NOAA, National Geodetic Survey	July 23, 1996
13.	U.S. Environmental Protection Agency, Region 6	July 30, 1996
14.	DOI, U.S. Fish and Wildlife Service, Division of Habitat Conservation	July 29, 1996
15.	Texas Review and Comment System, Review Notification	July 26, 1996

INDEX TO WRITTEN COMMENTS (continued)

No.	Commenter	Date
16.	Galveston Bay Foundation	August 5, 1996
17.	John Arrington	August 1, 1996 & August 5, 1996

INDEX TO ORAL COMMENTS

No.	Commenter	Date
1.	Tom Nuckols, on behalf of Garry Mauro, Texas Land Commissioner, DEIS Public Hearing Corpus Christi, Texas	July 31, 1996
2.	Glenda Callaway, Galveston Bay Foundation DEIS Public Hearing, Galveston, Texas	August 1, 1996
3.	Linda Shead, Galveston Bay Foundation DEIS Public Hearing, Galveston, Texas	August 1, 1996
4.	John Arrington, Citizen DEIS Public Hearing, Galveston, Texas	August 1, 1996
5.	Tom Kornegay, Port of Houston Authority DEIS Public Hearing, Galveston, Texas	August 1, 1996
6.	B.J. Storseth, Citizen DEIS Public Hearing, Galveston, Texas	August 1, 1996
7.	Garry Mauro, Texas Land Commissioner DEIS Public Hearing, Galveston, Texas	August 1, 1996
8	Drew Puffer on behalf of Jim Giattina, Gulf of Mexico Program (telephone comments)	August 5, 1996

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

July 15, 1996

Mr. Joe Uravitch
Coastal Programs Division
SSMC-4, Room 11109
1305 East-West Highway
Silver Spring, MD 20910

Dear Mr. Uravitch,

The Nuclear Regulatory Commission (NRC) received a copy of the draft Environmental Impact Statement for the Texas Coastal Management Program (TCMP). The NRC reviewed the document and determined the TCMP boundary may include one nuclear power plant. We contacted the South Texas Project nuclear power plant and the licensee confirmed that the plant is located within the coastal management boundary and the responsible personnel are aware of the TCMP. The licensee understands actions inside or outside the coastal boundary that will affect any land or water use or natural resource of the coastal zone will be coordinated with the NRC (if the action requires NRC approval), the state and NOAA in accordance with the TCMP federal consistency requirements. Thank you for the opportunity to comment on your document.

Sincerely,

David B. Matthews, Chief
Generic Issues and and Environmental
Projects Branch
Division of Reactor Program Management
Office of Nuclear Reactor Regulation

cc: Ms. Donna Wieting, Acting Director
Ecology and Conservation Office
U.S. Department of Commerce
Room 5805
Washington, D.C. 20230

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RESPONSES TO COMMENTS

WRITTEN COMMENT NO. 1: U.S. NUCLEAR REGULATORY COMMISSION
July 15, 1996

Response to Comments:

Comment noted. No change needed. NOAA appreciates the NRC bringing the TCMP to the attention of the management of the South Texas Project nuclear power plant.

Brazos River Authority

QUALITY • CONSERVATION • SERVICE

July 15, 1996

Mr. Joe Uravitch
Coastal Programs Division
SSMC-4, Room 11109
1305 East-West Highway
Silver Spring, Maryland 20910

Dear Mr. Uravitch:

The Brazos River Authority was requested to review the *Texas Coastal Management Program Draft Environmental Impact Statement*, prepared by the National Oceanic and Atmospheric Administration Office of Ocean and Coastal Resource Management and the State of Texas Coastal Coordination Council. The document provides a good overview of the Coastal Zone Management Program as it impacts Texas.

The Authority has the following concerns about the Coastal Zone Management Program description provided in the draft report:

- The appropriation of and administration of water within 200 miles of the coast by the Texas Natural Resource Conservation Commission is referenced in the draft and further defined in 31 Texas Administrative Code Section 501.14 (r). There are no provisions for public notification of actions, specific recourse to a TNRCC ruling by an affected party, or specific criteria or procedures which TNRCC should follow in evaluating and then ruling on these water rights, uses, impoundments, and diversions.

- During drought conditions, what are the recourses or specific applications of the "beneficial inflows" and the Texas Parks and Wildlife Department's five percent allocation from any reservoir and associated works within 200 miles from the coast? The current wording in 31 TAC Section 501 (r)(B) and (r)(J) does not provide guidance or reference current State law (Waggoner Act) defining water use priorities.

Thank you for the opportunity to review this draft report on the Texas Coastal Management Program. If you have any questions or need additional comment, please contact me at (817) 772-6010.

Sincerely,

Tom Conry

THOMAS M. CONRY
Water Quality Planner

0000002

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JUL 22 1996

TMC:kld
cc: Ms. Donna Wieting, U.S. Department of Commerce
Mr. Bill O'Beirne, NOAA/OCRM
Ms. Janet Fatheree, Texas General Land Office
w/bra-8/tcmp1

4400 Cobbs Drive • P.O. Box 7555 • Waco, Texas 76714-7555
817-776-1441 • FAX 817-772-5780

WRITTEN COMMENT NO. 2: BRAZOS RIVER AUTHORITY
July 15, 1996

Response to Comments:

1. Comment noted. No change needed. The policies found in 31 TAC §501.14(r) are taken verbatim from state statute. Provisions for public notification of actions, specific recourse to a TNRCC ruling by an affected party, or specific criteria or procedures which TNRCC should follow in evaluating and then ruling on water rights, uses, impoundments, and diversions are governed by existing provisions of the Texas Water Code and TNRCC administrative rules.

2. Comment noted. No change needed. It is NOAA's understanding that the policies found in 31 TAC §501.14(r) (B) and (j) are taken verbatim from state statute. Specific applications of "beneficial inflows," Texas Parks and Wildlife Department's five percent allocation, and water use priorities are governed by existing provisions of the Texas Water Code and TNRCC administrative rules.

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Southeast Regional Office
9721 Executive Center Drive N.
St. Petersburg, Florida 33702

July 23, 1996

MEMORANDUM FOR: N/ORM - Joe Uravitch

FROM: F/SE02 - Andreas Mager, Jr.

SUBJECT: Review of the Texas Coastal Management Program Document and Draft Environmental Impact Statement

As requested by Donna Wieting in her memo dated June 13, 1996, the National Marine Fisheries Service, Southeast Region Habitat Conservation Division (HCD) has reviewed the June 1996 subject document. All of our previous comments have been adequately addressed in this DEIS and we have no further comments to offer.

If we can be of further assistance, please call Rusty Swafford, Branch Chief of our Galveston HCD Office at (409) 766-3699.

cc:
CS/EC - Wieting
F/SE022

26 1996

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WRITTEN COMMENT NO. 3: NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION, NATIONAL MARINE FISHERIES SERVICE, SOUTHEAST REGIONAL OFFICE
July 23, 1996

Response to Comments:

Comment noted. No change needed.

TEXAS
HISTORICAL
COMMISSION

George W. Bush • *Governor*
John L. Nau, III • *Chairman*
Curtis Tunnell • *Executive Director*

The State Agency for Historic Preservation

July 8, 1996

Donna Wieting, Acting Director
Ecology and Conservation Office
U.S. Department of Commerce
Office of the Under Secretary for Oceans and Atmosphere
Washington, DC 20230

Re: TCMP Draft EIS (DOC, F2, F52)

Dear Ms. Wieting:

We have received and reviewed the draft EIS for the Texas Coastal Management Plan and in general we believe the document fairly comprehensively presents the cultural resource issues, regulations, and concerns of our agency. We were somewhat surprised that the document more thoroughly presented and discussed the Antiquities Code of Texas than it did Section 106 regulations.

We also believe that cultural resources referred to in the document as "Coastal Historic Areas" should also be classified with other endangered resources as part of the "Critical Areas Enhancement" section in Part I of the report. Historic areas, such as prehistoric Indian sites, are non-renewable resources that are quickly being depleted along the entire coastal zone of Texas due to increased residential and commercial development of this part of Texas. Please also see additional comments that are attached.

Thank you for your assistance in the protection of Texas' cultural resources, and if you have any questions please contact Mark Denton, project reviewer, of our staff at (512) 463-5711.

Sincerely,

Tim Perttula
for James E. Bruseth, Ph.D.
Deputy State Historic Preservation Officer

Tim Perttula
Timothy K. Perttula, Ph.D.
Associate Director for Antiquities Review

MHD/JEB/TKP

JUL 22 1996

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DEPARTMENT OF ANTIQUITIES PROTECTION
P. O. Box 12276 • Austin, TX 78711-2276 • 512/463-6096 • Fax 512/463-8927 • TDD 1-800-735-2989

p. 4-89, 33.2053 (E) (2): The appropriate citation is 36 CFR Part 800 and 36 CFR Part 60. 36 CFR 65 refers to National Historic Landmarks, while properties on or eligible for inclusion in the National Register are significant at National, State, regional, or local levels.

p. 4-89, Management: Section 106 consultation also includes licenses, and approvals or federal assistance on project undertakings.

p. 4-90 - regulations enacted pursuant to the National Historic Preservation Act are 36 CFR Part 800.

WRITTEN COMMENT NO. 4: TEXAS HISTORICAL COMMISSION
July 8, 1996

Response to Comments:

1. Comment noted. No change needed. "Coastal Historic Areas" are designated as a coastal natural resource area in the TCMP and includes policies which address the protection and preservation of these areas. The "Critical Areas Enhancement" provision (DEIS, Part I, page 12) identifies the funding priorities established by the Coastal Coordination Council for use of CZMA funds available under sections 306 and 306A. Whether coastal historic areas should be included as a specific funding priority or included under Funding Priority #2, Critical Areas Enhancement, is the prerogative of the Coastal Coordination Council, not NOAA.

2. Comment accepted. As requested, the citation for "federal undertakings affecting a coastal historic area" has been changed from 36 CFR § 65.1 to 36 CFR Part 800 and 36 CFR Part 60 (DEIS, Part II, page 4-89).

3. Comment noted. No change needed. NOAA recognizes that section 106 consultation also includes licenses, and approvals or federal assistance on project undertakings. The discussion entitled "Management Authority and Administration" (Part II, page 4-89) is general and adequately reflects the scope of section 106 consultation.

4. Comment accepted. As requested, the citation for regulations enacted pursuant to the National Historic Preservation Act has been changed to 36 CFR Part 800 (DEIS, Part II, page 4-90).

TEXAS CHEMICAL COUNCIL

1402 Nueces Street • Austin, Texas 78701-1586 • (512) 477-4465 • Fax (512) 477-5387

August 2, 1996

RECEIVED 5 1995

Mr. Joe Uravitch
Coastal Programs Division
SSMC-4, Room 11109
1305 East-West Highway
Silver Spring, MD 20910

TEXAS CHEMICAL COUNCIL COMMENTS
Texas Coastal Management Program
Draft Environmental Impact Statement
June 1996

Dear Mr. Uravitch:

Texas Chemical Council (TCC) appreciates the opportunity to comment on the Texas Coastal Management Program - Draft Environmental Impact Statement.

TCC members represent a major component of the manufacturing sector in Texas. The chemical industry results in the employment of more than 450,000 Texans, with a total annual payroll of more than $15 billion. The chemical industry has invested more than $40 billion in Texas production facilities. The Texas chemical industry generates one-quarter of the state's manufacturing value added, and accounts for a similar percentage of manufacturing shipments.

Should you have any questions concerning the enclosed comments, please do not hesitate to contact me at (512) 477-4465 or Malcom Payne of Du Pont at (713) 470-3276.

Sincerely,

Mark A. Shilling
Texas Chemical Council

h0000005

cc. Donna Wieting -- USDOC
Malcom Payne -- Du Pont

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Texas Chemical Council Comments
Texas Coastal Management Program -- Draft Environmental Impact Statement

General Comment

In general, TCC supports the conclusions of the draft EIS. TCC has worked with the State of Texas and all interested parties concerning the protection of coastal areas to develop a coastal management plan which is balanced and fair. While the program goals and policies will protect, preserve, restore and enhance the diversity of coastal natural resource areas, it also ensures sound management of all coastal resources by allowing for compatible economic development and multiple human uses of the zone.

There are, however some areas where we believe the Draft EIS can be improved, and we submit the following specific comments:

Part II Description of the Texas Coastal Management Program

Chapter 1.C. Principle Issues of State Concern

Water Supply and Water Quality

"Point source discharges from industrial and municipal sources..." Industrial sources have been regulated and ratcheted down to very low levels of pollutant discharges. These discharges have been implicated in shell fish bed closing in only a few cases. Recent data obtained by the Gulf of Mexico Program Public Health Committee shows non-point sources, animal run-off and marine activities all to be greater sources than industrial point sources. **The EIS should either recognize this data or leave this editorial language out of the document.**

Part III Environmental Impact Statement

B. Alternatives Including the Proposed Action

B.1. Alternative #1

National Interest Considerations

TCC believes the list of identified National interests in the second paragraph should be expanded to include our industry - Chemical and petrochemical manufacturing. Based on a definition earlier in the document, we might be included in the category called "energy exploration, production and transmission facilities and associated activities", but we believe a **more specific category for Chemical and petrochemical manufacturing should be included**.

C. Description of the Affected Environment

C.3. Human Environment/Environmental Quality

No manufacturing industry of any type is included in the list activities shown under this heading. TCC requests that both "Chemical and Petrochemical Manufacturing" and "Metals Refining" be specifically listed under this heading, and that economic data, tax revenue generated and number of jobs created by these industries be provided similar to that shown for "(f) Navigation, (g) Commercial and Recreational Fishing/Boating, (k) Industrial/Commercial Construction and (w) Coastal Tourism and Recreation." **We believe our economic impact in the coastal area is as great as,or greater than the other listed activities and should be acknowledged.**

C.3.c. Municipal, Industrial, and Toxic and Hazardous Waste Management

In the 3rd paragraph, figures are given for 1990 industrial production of hazardous waste and "toxic substances". 1994 TRI data is available and should be used. Industry is making substantial reductions every year in the generation of all wastes. Acknowledgment should be made of the Clean Texas 2000 Program and of EPA's 33/50 Program. A statement should be included which indicates industrial waste production will be significantly reduced in the coming years. Also the term "toxic substances" is not correctly used in this context. **TCC asks that it be deleted.**

In the 5th paragraph, there is a very misleading statement that "Texas industries have generated approximately 64 million metric tons of hazardous waste annually since the mid-1980's." The implication is that waste generation has been constant from the 1980's to present. As mentioned above, waste generation has been drastically reduced since the mid-1980's. Later in the same paragraph, figures are given for the number of permitted hazardous waste disposal sites as of November 1989. **Current data should be used, or this material should be deleted.** In addition, we see no value in knowing the number of permitted waste disposal sites.

The first statement in the 7th paragraph is: "The improper management of large amounts of hazardous waste on the Texas coast increases the potential for ..." There is very little potential for improper management of even small amounts of hazardous waste on the Texas coast. To imply that there is such an increased potential says that TNRCC and county and local environmental agencies are not doing their jobs. This is not the case. In this same paragraph, there is a statement that accidental releases of toxic substance(s) into the environment are expected. **It is our industry's goal and expectation that there not be any accidental releases, therefore, we suggest that this statement be deleted. We further suggest that the 7th paragraph be deleted or significantly revised.**

C.3.d. Municipal and Industrial Wastewater

The number of permitted outfalls and the quantity of effluent discharged in the first tier of coastal counties is not germane to the EIS. The figures that should be used are those within the coastal zone, as defined in the TCMP. Also, current (1996) information on the numbers of outfalls should be readily available from TNRCC. **TCC suggests that this section either be deleted or brought up to date.**

C.3.e. Emission of Air Pollutants

Contrary to the statement at the end of the first paragraph, the TNRCC's plans and programs for reducing ozone formation in the coastal zone are focused on reducing VOC emissions, not nitrogen oxide emissions. **Therefore this statement should be revised.**

C.3.r. Water Development

The data shown in the second paragraph indicate that the Wallisville Reservoir will be about 50% larger than Lake Houston. **TCC believes this data is in error, and should be re-confirmed.**

D. Environmental Consequences

D.2. Socio Economic and Institutional Impacts

In the middle of the 5th paragraph (near the bottom of page Part III-54) a sentence reads: "However the program policies are generally performance standards and do not, except in very rare cases prohibit classes of activities." **TCC would like to see further information provided and some discussion as to what classes of activities might be prohibited by the CZMA.**

E. Unavoidable Adverse Environmental Effects

If TCC's preceding requests that:

1) our industry be specifically listed as a national interest industry, and
2) separate listings be created for us under Part III. C. 3,

then this section is not an issue for us. However, if these requests are not agreed to, and we are considered to be "energy exploration, production and transmission facilities and associated activities", then we disagree with the 3rd paragraph of this Section. For our industry, we do not agree that no new facilities are planned in Texas' coastal area nor do we anticipate that our (existing) facilities will remain largely unchanged.

WRITTEN COMMENT NO.5: TEXAS CHEMICAL COUNCIL
August 2, 1996

Response to Comments:

1. Comment accepted. Part II, Chapter 1, C., Principal Issues of State Concern, (DEIS Part II, page I-3) has been revised to reflect a more balanced description of point source and nonpoint source discharges.

2. Comment noted. No change needed. Part III, B. 1., National Interest Consideration, (DEIS, page III-5) summarizes the National Interest statements submitted by various federal agencies which are more completely described in DEIS Appendix H. NOAA recognizes the significance and importance of the chemical and petrochemical industries to the national, state and local economies. The Texas chemical industry has invested more than $40 billion in Texas facilities, accounting for the employment of more than 450,000 Texans and producing a total annual payroll of $15 billion.

In accordance with NOAA regulations, 15 C.F.R. § 923.51(d)(3), the State of Texas undertook the process to identify the National Interest considerations to be included in the TCMP by soliciting National Interest statements from all relevant federal entities. NOAA has reviewed the National Interest statements received by the State, and chemical and petrochemical manufacturing is not specifically included in any statement. Therefore, unilaterally expanding the National Interest consideration would be inconsistent with NOAA's regulations and procedure for identifying the national interest.

3. Comment accepted. Part III, C.3.c., Municipal, Industrial, and Toxic and Hazardous Waste Management, (DEIS, page III-26 to 27) has been retitled "Chemical and Petrochemical Manufacturing and Waste Management." In addition, the text has been revised to more accurately reflect the economic contributions of this manufacturing sector and to update the data related to waste generation.

4. Comment accepted. Part III, C.3.d., Municipal and Industrial Wastewater, (DEIS, page III-27), has been revised. The information regarding the number of permitted wastewater outfalls has been updated and limited to those within the coastal zone.

5. Comment accepted. Part III, C.3.e., Emissions of Air Pollutants, (DEIS, page III-27) has been revised to substitute VOC emissions for nitrogen oxide and to update data.

6. Comment accepted. Part III, C.3.r., Water Development, (DEIS, page III-44), has been revised to reflect the size of the Wallisville project, as finally approved. The project size was reduced from 19,700 surface acres to 3,800 surface acres. The Wallisville project is a non-impounding saltwater barrier with no storage capacity.

WRITTEN COMMENT NO.5: TEXAS CHEMICAL COUNCIL
August 2, 1996

7. Comment accepted. Part III, D., Environmental Consequences, (DEIS, page III-54) has been revised to emphasize that the TCMP policies are generally performance-based.

8. Comment accepted. Part III, E, Unavoidable Adverse Environmental Effects, (DEIS, page III-56), has been revised to delete the last sentence.

BAKER & BOTTS
L.L.P.
1600 SAN JACINTO CENTER
98 SAN JACINTO BLVD.
AUSTIN, TEXAS 78701-4039

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August 2, 1996

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VIA FEDERAL EXPRESS

Joe Uravitch
Coastal Programs Division
SSMC-4, Room 11109
1305 East-West Highway
Silver Spring, MD 20910

Re: Comments on the Texas Coastal Management Program Document/Draft Environmental Impact Statement and the Approval of the Texas Coastal Management Program by NOAA

Dear Mr. Uravitch:

The Port of Houston Authority (the Port) appreciates the opportunity to provide comments on the June 1996 Texas Coastal Management Program Document/Draft Environmental Impact Statement (DEIS) and on whether the National Oceanic and Atmospheric Administration (NOAA) should approve the Texas Coastal Management Program (CMP) pursuant to the Federal Coastal Zone Management Act of 1972 (CZMA).

Since late 1993, the Port has been an active participant in the negotiations and development of the Texas CMP. The Port was involved in extensive negotiations with the Texas General Land Office (GLO), other shipping and navigation interests, environmental representatives, and agency personnel in the dredging section of the CMP. The Port's interest in this element of the Texas CMP is obvious: dredging is essential in the maritime industry. This section of the Texas CMP can be said to be the core of our livelihood.

The negotiations on the dredging section were complex and arduous. Nevertheless, the Port was able to arrive at a compromise and supported the Texas CMP as adopted by the Texas Coordination Council last fall. The Port has reviewed the June 1996 DEIS, however, and has some concerns about the interpretation of the dredging sections of the Texas CMP. As long as those concerns are addressed, as set forth in the comments and suggestions below, the Port supports NOAA's approval of the Texas CMP pursuant to the CZMA.

No 0000008

1. **Reference to Maintenance Dredging Memorandum of Agreement (Part II, p. 3-4)**

This page of the DEIS incorrectly describes the Maintenance Dredging Memorandum of Agreement as "proposed," because it was entered in October 1994. The Port brought this mistake to the attention of GLO staff, who agreed that it should be corrected. Therefore, we suggest that the first paragraph on page 3-4 of Part II of the DEIS be replaced with the following paragraph to correct the mistake:

> Because of the extensive federal maintenance dredging activities within the coastal boundary, the Council negotiated and entered a memorandum of agreement (MOA) with the U.S. Army Corps of Engineers (COE) in October 1994. The October 1994 Maintenance Dredging MOA establishes a multi-year period for consistency review of ongoing federal maintenance dredging projects within the CMP boundary. The MOA establishes a schedule for review of particular projects. Without the MOA, the COE would have to prepare and submit consistency determinations on all its projects within 120 days of federal approval of the CMP, and the state would have to review and respond to the consistency determination within 60 days (15 CFR Part 930). The time lines stipulated in the MOA allow the state and COE to conduct more complete and thorough reviews of federal maintenance dredging projects.

2. **Houston Ship Channel Project and DEIS Interpretation of Texas CMP Section 506.28(c) (Part II, p. 5-20 - 5-21)**

Part of the negotiations on the Texas CMP involved how the CMP would be applied to the Houston Ship Channel deepening and widening project and to the maintenance dredging of the existing Houston Ship Channel. Through the development of beneficial use of the dredged spoil, that project is nearing approval. The Senate and House recently approved the appropriations bill.

Section 506.28(c) of the Texas CMP recognizes that the Houston Ship Channel project has previously undergone extensive planning to be consistent with the goals and policies of the CMP. Our review of the DEIS language interpreting that section, however, caused the Port some concern. Specifically, the Port objects to the following passage from pages 5-20 - 5-21 of the June 1996 DEIS:

> The Houston-Galveston Navigation Channels Project already provides such a plan that is consistent with the goals and policies of the CMP. Therefore, the CMP calls for a much less comprehensive review of maintenance dredging of the channel in the interim between federal approval of the CMP and implementation of the plan. Under 506.28(c), interim maintenance dredging associated with the Houston-Galveston Navigation Channels Project is presumed to be consistent with *§501.14(j)(1) and the associated provisions* of the CMP's dredging and dredged material placement policy. This provision creates a substantive presumption, not a procedural exception. Therefore, like all other maintenance dredging in the coastal zone, interim maintenance dredging of the Houston-Galveston Navigation Channels will undergo consistency review under the MOA, which is referred [to] in §506.24(c).
>
> If the interim maintenance dredging takes place in a manner other than that described in the current environmental assessment or environmental impact statement for the project, the presumption does not apply. These projects would be reviewed with all provisions of the dredging and dredged material disposal policy.
>
> Similarly, the presumption is limited to § 501.14(j)(1) and its associated provisions. *Interim maintenance dredging is not presumed consistent, and is therefore subject to review, with regard to the other parts of the dredging and dredged material placement policy, such as the beneficial use provisions.* Reviewing interim maintenance dredging for its beneficial use potential is justified because dredged material is a valuable resource. (Emphasis added.)

Although the language of Section 506.28(c) has been approved for a couple of years, this interpretation of its provisions is new. The Chairman of the Port and Port staff helped develop Section 506.28(c) in 1994 through discussions with GLO and other agency staff. The recent interpretation of Section 506.28(c) in the June 1996 DEIS simply does not embody the understanding the Port had during negotiations or the language of Section 506.28(c). Section 506.28(c) provides:

> Disposal or placement of dredged material in existing dredge disposal sites identified and actively used as described in an environmental assessment or environmental impact statement issued prior to the effective date of this chapter shall be presumed consistent with § 501.14(j)(1) of this title (relating to Policies for Specific Activities and Coastal Natural Resource Areas), unless such existing disposal or placement is modified in design, size, use, or function, provided that the material is generated by maintenance dredging of commercially navigable waterways for which a federal development project undergoes evaluation pursuant to the interagency coordination

> group process under subsection (b) of this section and such process was initiated prior to the adoption of this chapter and provided further, if the interagency coordination group approves the project that requires disposal or placement in confined sites and/or beneficial use of the dredged material from those waterways and results in cessation of open water disposal of dredged material and such project is authorized in a final supplemental environmental impact statement.

It has been the Port's intent and understanding with GLO and other agency staff from the beginning that activities related to the Houston Ship Channel project and associated interim maintenance dredging be completely grandfathered under this section. Specifically, since the 1994 negotiations, the Port's interpretation of Section 506.28(c) has been that the operative section of the dredging policy that needs consistency review is embodied in Section 506.28(c)'s reference to Section 501.14(j)(1). The Port has always understood that the beneficial use and other subsections of Section 501.14(j) only clarify and elaborate on the Section 501.14(j)(1) requirements and do not contain additional substantive requirements that require consistency review of maintenance dredging.

Until the arrival of the DEIS in the Port's offices in late June 1996, nothing in Texas CMP documents contradicted the Port's interpretation and understanding of Section 506.28(c). Indeed, even part of the DEIS language supports the Port's position, because it specifically recognizes that interim maintenance dredging is "presumed consistent with §501.14(j)(1) and the associated provisions of the CMP's dredging and dredged material placement policy." The rest of the DEIS interpretation, however, is internally inconsistent with that acknowledgment. It is the first time the Port has seen the interpretation that Section 506.28(c)'s presumption of consistency does not apply to the beneficial use provisions of Section 501.14(j)(4), which are no less "associated provisions of the CMP's dredged and dredged material placement policy" than the other unidentified "associated provisions" of that policy that the DEIS recognizes are presumed consistent.

As noted previously, the DEIS interpretation is new. At least three other documents interpreted Section 506.28 since its adoption in September 1994, and none of them contained the language and interpretation the Port found in the DEIS. For instance, the preambles to both the September 27, 1994 and October 20, 1995 publication of Texas CMP rules discussed Section 506.28, but neither of them contained the DEIS language. Moreover, the October 1995 CMP Document, which we understood would make up most of the DEIS, did not contain the interpretation the Port now sees in the DEIS. That document, like the DEIS, introduces Section 506.28(c) by describing the Houston Ship Channel interagency coordination group (ICG) process. However, unlike the DEIS, the October 1995 CMP Document correctly explains that "[d]isposal or placement of dredged material" in the manner described in Section 506.28(c) and meeting the three requirements of that rule "will be presumed consistent by the Council." As that document indicates, Section 506.28(c) requires nothing more for interim dredging to be presumed consistent with the CMP.

The Port's agreement and Section 506.28(c) provide that interim maintenance dredging projects will be considered consistent with the CMP. Therefore, the Port requests that NOAA remove the objectionable language from the DEIS and replace it with a statement that interim maintenance dredging of the Houston Ship Channel is consistent with CMP for all aspects of dredging, including beneficial use, pursuant to Section 506.28(c). Specifically the Port suggests that you remove the language of the DEIS quoted above and replace it with the following:

> The Houston-Galveston Navigation Channels Project already provides such a plan that is consistent with the goals and policies of the CMP. Therefore, the CMP calls for a much less comprehensive review of maintenance dredging of the channel in the interim between federal approval of the CMP and implementation of the plan. Under 506.28(c), interim maintenance dredging associated with the Houston-Galveston Navigation Channels Project is presumed to be consistent with §501.14(j)(1) and the associated provisions of the CMP's dredging and dredged material placement policy, including the beneficial use provisions. This provision creates a substantive presumption of consistency, not a procedural exception. Therefore, it requires the interim maintenance dredging of the Houston-Galveston Navigation Channels Project to undergo the consistency review process under the MOA referred to in §506.24(c) with a substantive presumption of consistency.
>
> If the interim maintenance dredging takes place in a manner other than that described in the current environmental assessment or environmental impact statement for the project, the presumption does not apply. These projects would be reviewed with all provisions of the dredging and dredged material disposal policy.

The Port has discussed these issues with GLO staff and they have agreed to the Port's proposal set forth above. The interpretation and application of Section 506.28(c) is critical to the Port, and we are pleased that the differences of interpretation have been satisfactorily resolved.

* * *

The Port of Houston Authority appreciates the opportunity to comment on the DEIS and NOAA's approval of the Texas CMP. If, after reviewing these comments, you have any questions, please do not hesitate to call Larry Feldcamp at (713) 229-1573 or Katy Wells at (512) 322-2578.

Very truly yours,

Larry B. Feldcamp
P. Kathleen Wells
On Behalf of the
Port of Houston Authority

cc: Donna Wieting (*by Federal Express*)
Acting Director
Ecology and Conservation Office
Room 5805, PSP
U.S. Department of Commerce
Washington, D.C. 220230

Tom Nuckols, General Land Office (*by facsimile*)
Ned Holmes, Chairman, Port of Houston Authority
Tom Kornegay, Executive Director, Port of Houston Authority
Rosie Barrera, Director of Public Affairs, Port of Houston Authority

WRITTEN COMMENT NO. 6: PORT OF HOUSTON AUTHORITY
August 2, 1996

Response to Comments:

1. Comment accepted. The document has been changed to reflect the comment (DEIS, Part II, page 3-4).

2. Comment partially accepted. Ongoing federal activities activities, such as maintenance dredging, cannot be "grandfathered" from the federal consistency review requirements of §307 of the CZMA. While there can be no exemption from review, it may be appropriate for a state program to allow certain activities to undergo a special review process when they meet special or unique standards reflecting particularly high state priorities. In exchange for meeting high state priorities, the federal agency undertaking the activity may pursue a streamlined, expedited, or otherwise modified process for obtaining a consistency agreement from the state.

It is NOAA's understanding that the TCMP takes this approach to the Houston-Galveston Navigation Channels Project (HGNCP). As noted in Part II.5.E.4.f, the Port of Houston established a model for the nation in its approach to the planning and design of the HGNCP expansion, both in terms of the process it followed and the result it achieved. The project was planned and designed using the interagency coordination team (ICT) approach. Through the ICT, the Port obtained a consensus plan for ending open water disposal of dredged material in Galveston Bay and, instead, using it beneficially or placing it in upland confined placement sites. This plan is reflected in the final supplemental environmental impact statement that has been issued for the project.

The HGNCP expansion set high standards regarding interagency coordination, beneficial use, upland disposal, and cessation of open water disposal. NOAA understands that these served as the basis for the conditions in 31 TAC §506.28(c), which will give interim maintenance dredging associated with the HGNCP, and any other maintenance dredging that meets those conditions, a special process for obtaining a consistency agreement from the state. To obtain the consistency agreement, the Corps of Engineers must submit a consistency determination indicating that 31 TAC §506.28(c) applies. If so, the maintenance dredging is deemed consistent by virtue of a substantive presumption of consistency.

The language suggested in the comment is imprecise in its use of the term "presumption" and therefore unacceptable. The suggested language states that a "substantive presumption" already applies to the maintenance dredging before any review begins. Since the 31 TAC §506.28(c) presumption amounts to a final consistency agreement, such an interpretation would amount to an improper exemption by making the review procedure moot. The only interpretation of 31 TAC §506.28(c) that comports with the CZMA is that the maintenance dredging is entitled to the substantive presumption only after it has gone through the review procedure and the state has factually determined it to satisfy the conditions of 31 TAC

WRITTEN COMMENT NO. 6: PORT OF HOUSTON AUTHORITY
August 2, 1996

§506.28(c). The imprecise use of terminology would prevent federal approval of the TCMP and is, therefore, obviously inadvertent. Therefore, the language has been incorporated with slight modifications that will allow the TCMP to be approved.

DEPARTMENT OF THE ARMY
GALVESTON DISTRICT, CORPS OF ENGINEERS
P.O. BOX 1229
GALVESTON, TEXAS 77553-1229

REPLY TO
ATTENTION OF:

August 1, 1996

Technical Support Branch

RECEIVED
-5 1995

Mr. Joe Uravitch
Coastal Programs Division
SSMC-4, Room 11109
1305 East-West Highway
Silver Spring, MD 20910

Dear Mr. Uravitch:

In response to your June 13, 1996, letter requesting comments on the June 1996 Texas Coastal Management Program (CMP)/Draft Environmental Impact Statement, the comments of the Galveston District are enclosed. The Galveston District Corps of Engineers has made several comments to the General Land Office (GLO) staff concerning the lack of public comment on major modifications to the program and the redundancy of the program with other existing programs. To date these concerns have not been addressed. These and other issues are detailed within the enclosed comments.

The regulations implementing the Coastal Zone Management Act do not allow a State's plan to apply more stringent requirements to federal activities (15 C.F.R. 930.30), than are applied to federally licensed activities (15 C.F.R. 930.50), such as dredging to accommodate oil and gas production. The current plan makes no mention of requiring mandatory beneficial use of dredged material for federally regulated activities, but seeks to apply that requirement for only the federally maintained channels.

Another concern relates to how the CMP will mesh with our Department of the Army Permit Program responsibilities. As written, several aspects of the state CMP will mirror existing regulatory responsibilities which have been delegated to the Corps of Engineers. This mirroring will in effect create a redundant regulatory authority which permit applicants will be required to work through. Our permitting program and the CMP must work together in such a way that it provides the public with an expeditious permitting process while, at the same time, safeguarding the environment. We believe these concerns can be addressed by a local operating agreement that clearly defines procedures and areas of responsibility. We provided a draft local operating agreement on permitting to the state for review more than 2 years ago for review. To avoid a cumbersome and redundant program it is very important that our draft proposal, or some revised version, be signed before the CMP goes into effect.

We request that the Office of Coastal Resource Management (OCRM) address the concerns raised by the Galveston District Corps of Engineers. We look forward to working with OCRM and the State of Texas to resolve these concerns and establishing a mutually agreeable CMP for Texas.

If you have any questions, please contact Mr. Neil McLellan at (409) 766-3963 directly.

Sincerely,

Eric R. Potts
Colonel, Corps of Engineers
District Engineer

Enclosure

Copy Furnished (w/Encl):

Ms. Donna Wieting
Acting Director
Ecological and Conservation Office
Room 588005, PSP
U.S. Department of Commerce
Washington, D.C. 20230

COMMENTS OF THE U.S. ARMY CORPS OF ENGINEERS, GALVESTON DISTRICT ON THE TEXAS COASTAL MANAGEMENT PLAN/ DRAFT ENVIRONMENTAL IMPACT STATEMENT (JUNE 1996)

GENERAL

1. The Federal Office of Ocean and Coastal Resource Management (OCRM) has made a preliminary determination that; 1) the proposed Texas Program is consistent with the objectives and policies of the national legislation; 2) the award of Federal funds under Section 306 of the Federal Act will help Texas to meet those objectives; 3) Texas' management policies, authorities, and organizational structure are adequate to implement the program; and 4) there will be a net environmental gain as a result of program approval and implementation. Although OCRM has made this preliminary assessment, it is of concern to the Galveston District that the Texas Coastal Management Plan will develop some redundant regulatory review of existing programs, override the discretion of Congress by mandating beneficial uses of dredged material, made for a more stringent standard for federal projects when compared to state, local or private projects, and has not fulfilled its obligation to fully coordinate the program.

2. The June 1995 version of the CMP was significantly modified in relation to the dredging policy, details discussed below. The modifications were presented and ratified on 5 October 1995. Public comment was allowed prior to the vote. The modifications were significant due to the increased burden placed on the federal government and project local sponsors. Issuance, request for comments and acceptance by the council of significant policy changes all within a 2 hr period, is not full participation by federal agencies, local governments, regional organization, port authorities, and other interested parties and individuals, public and private as required in CZMA.

3. The Galveston District Regulatory Branch currently regulates activities along the Texas coast that fall under the jurisdiction of Section 10 of the Rivers and Harbors Act (structures and work in navigable waters) and Section 404 of the Clean Water Act (discharge of dredge and fill material into waters of the U.S.). There are several federal regulations (National Environmental Policy Act, 404(b)(1) etc.) which give the Corps guidance on how to evaluate proposals under these authorities. Many aspects of the proposed state plan will mirror the existing Corps of Engineers program requirements, particularly the 404(b)(1) guidelines which are used to evaluate the impact of discharges of dredged or fill material. This mirroring will in effect create a redundant regulatory authority which applicants will be required to deal with. Some of these concerns can be addressed through working agreements between the Corps and state agencies, but it is apparent that the 401 Certification procedures are becoming redundant with the Corps' existing program.

4. It is of continuing concern that the CMP's major goal is to acquire federal funds and to use them to regulate Federal government actions while having fewer impacts on the State and local coastal resources. The dredging and dredged material placement issues are a prime example of how the federal actions are being held to a different standard compared with other regulatory, state or private actions.

SPECIFIC

1. Part I pg 4, Program Goals and Policy:

It is unclear why dredging and dredged material disposal is designated a "critical area". All other examples given are for specific definable areas, ie wetlands, tidal sand and mud flats. Dredging and dredged material placement are processes, not locations.

2. Part I, pg 11, Dredging in Bays and Estuaries,

In general context this discussion is incorrect. Numbers and examples for amount of material dredged and deposited encompasses all dredging conducted by the Galveston District Corps of Engineers. The numbers presented included dredging done in the open Gulf of Mexico, rivers and landlocked channels.

This section makes no mention of the extensive dredging conducted by state, local and private concerns done within the coastal zone. Records from the Galveston District regulatory program indicate that 90 navigation related permits were issued in 1995, several dealing with dredging channels in support of oil exploration, or oil related industries on land owned and leased by the General Land Office.

Section presupposes that all open bay placement of dredged materials is harmful to the environment. The most comprehensive review of dredging practices for any bay in Texas was conducted by the Galveston Bay National Estuary Program (1993). Their report indicated that 2500 new acres of oyster reefs were created on the side of material deposition and identified several hundred acres of wetlands created by dredged material deposition in open water. In that particular case open bay placement benefited the overall health of Galveston Bay.

The Memorandum of Agreement between the Coastal Coordination Council and the Galveston District Corps of Engineers was signed in October 1994. Several changes to the TCMP were subsequently made. The Galveston District entered into the agreement to allow the CCC the opportunity of greater participation in the dredging process. Baseline participation by the federal government has been established in the current dredging program, however, various programs do exist for federal cost sharing in incremental expense of beneficial uses of dredged material. All incremental costs will require a cost share sponsor. If additional requirements are made by the state that increases costs over the existing base plan, the federal government will be required to identify a 100% cost share sponsor for the additional costs.

3. Part II pg 4-1: Chapter Four, Program Goals and Policies, Policy Category 8: Development in Critical Areas.

A. Policies.

There are already contradictions with some of the policies explained in this section. Section 1(F) states that "while no net loss of critical area function and values is the goal, it is not

required in individual cases where mitigation is not practicable or would result in only inconsequential environmental benefits." State agencies operating under the CMP guidelines have already begun requiring mitigation in cases where wetland impacts are minimal and the areas involved are low quality. If this trend continues, permit applicants will have another layer of permitting requirements to work through.

B. Least Damaging Alternatives

The first paragraph of this section states that "an applicant seeking authorization for a non-water-dependent project must make a convincing case that it is not feasible to locate the project in a critical area." This is not the intent of an alternatives analysis and is an apparent misstatement. The applicant is required to demonstrate that his proposed project is the least environmentally damaging practicable alternative. As written, the applicant is required to demonstrate that his proposed project is not feasible.

C. Management Authority and Administration

Section 401 Water Quality Administration

This section states that "Section 401 certification authority covers all COE permits under Section 404 CWA, Sections 9 and 10 of the Rivers and Harbors Act,...". This is incorrect. Activities regulated under Section 9 and 10 of the Rivers and Harbors Act may not have an associated discharge and, if this is the case, does not require a state water quality certification. The state has been informed of this reference numerous times and have not removed if from the CMP to date.

4. Part II pg 4-57 Dredging and Dredged Material Disposal and Placement

Part II, Pgs 4-60 through 4-64 Sections 1 through 3

As stated in Part III, pg 12 of the DEIS, most of the dredging regulations stated here mirror requirements set forth by Clean Water Act Section 404(b)(1) guidelines. By having a redundant policy the Coastal Coordination Council is increasing and complicating the regulatory requirements associated with dredging, inverse of the stated goal to consolidate and reduce regulatory requirements. The authority for regulating the discharges of dredged material has been designated to the Corps of Engineers, with oversight by the Environmental Protection Agency. These responsibilities cannot be arbitrarily delegated to the State of Texas.

In discussion with the GLO staff it is understood that this section will be applied to ongoing maintenance dredging operations. These projects have been authorized and funded by the Congressional legislation have existing environmental documentation and state water quality certifications. Modifications to the existing plan will require additional Congressional legislation. The Corps of Engineers has no authority to budget or account for additional costs associated with state requirements that exceed the base plan. To implement such projects the Corps will require 100% local cost sharing or additional Congressional Legislation.

Part II, pg 4-65 Section 4

This section was radically changed at the 5 October 1995 Coastal Coordination Council Meeting. The language was presented, discussed and passed within a 2 hour period. We do not believe this represents full participation among all the stake holders, Ports authorities, state agencies, federal agencies etc. Below is a description of the language changes as presented at the 5 October meeting:

How it read prior to changes

All suitable dredged material from commercially navigable waterways is a potentially reusable resource and must be used beneficially to the greatest extent practicable. Other dredged material should be considered a potentially reusable resource to be used beneficially.

1. Factors that shall be considered in determining whether a beneficial use project is appropriate include:

a. the environmental gains and losses that will result;

b. the proximity of the beneficial use site to the dredge site; and

c. the quality of the dredged material and its suitability for beneficial use.

How it read after changes presented at 5 October CCC meeting

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

(A) If the costs of the beneficial use of dredged material are reasonably comparable to the costs of disposal in a non-beneficial manner, the material shall be used beneficially.

(B) If the costs of the beneficial use of dredged material are significantly greater than the costs of disposal in a non-beneficial manner, the material shall be used beneficially unless it is demonstrated that the costs of using the material beneficially are not reasonably proportionate to the cost of the project and the benefits that will result. Factors that shall be considered in determining whether the costs of the beneficial use are not reasonably proportionate to the benefits include, but are not limited to:

(I) environmental benefits, recreational benefits, flood or storm protection benefits, erosion prevention benefits, and economic development benefits:

(ii) the proximity of the beneficial use site to the dredge site; and

(iii) the quantity and quality of the dredged material and its suitability for beneficial use.

By requiring beneficial uses on projects, or proof that all beneficial use options are not economical, the Coastal Coordination Council is placing an enormous budgetary and evaluation burden on the Corps of Engineers and local project sponsors. Corps of Engineers projects are not authorized nor funded to use all material dredged from navigation channels beneficially. Project baselines have been established and project cost which exceed baseline estimates will be passed on to local sponsors. In addition, the Corps can only evaluate National Economic Development (NED) benefits, many of the required benefit factors fall outside current authorities.

The Coastal Coordination Council applies the beneficial use section only to federally maintained channels. We believe this is an arbitrary application of the CMP. As an example, Galveston District regulatory records indicate 90 navigation related permitted dredging operations in 1995. Many of these permits are for oil and gas exploration on state owned land which the GLO controls. Many of these projects generate significant amounts of dredged material. Historically some of these projects have been used for beneficial purposes, such as the 30 plus acres of wetlands created in the Aransas National Wildlife Refuge. In Part III, pg 12 of the DEIS states the State of Texas "..address those dredging activities (dredged in commercial waterways) that it felt would generate sufficient volumes of dredged material necessary for significant beneficial use projects". Analyses of data and dredged volume thresholds should determine how consistency determinations are made, not feelings.

Part II pg 4-66 Section 6

This is inappropriate in that the State is attempting to protect itself from losing title to a riparian owner by virtue of accretions from the dredged material. A recent case, Natland Corp. v Baker's Port Inc., 865 S.W. 2nd 52 (Tex. Civ app. 1993) altered the accretions law in Texas by holding that if dredged disposal material migrates by the alluvial process and attaches to riparian land, the upland riparian owner gains title to the emergent accretions and the State loses title. The CMP should be used to protect environmental concerns, not to shield the State from losing title to submerged lands and the minerals underlying said lands. The United States or its local project sponsors should not have to obtain agreements from owners to protect the State's ownership of submerged lands. The State legislature, by constitutional amendment if necessary, would be the proper vehicle for effectively overruling the Natland case and protecting the State's title to its submerged lands.

Part II pg 4-67 Explanation

This section describes the redundancy of the existing program with the Texas CMP. The agreement entered into by the Corps of Engineers and the Council in October 1994 was completed a full year and several drafts before since the final draft of the TCMP was completed. The Galveston District entered into the MOA to allow the Coastal Coordination Council the opportunity to more fully participate in the dredging process and establish on operating schedule. The Corps of Engineers has established a base plan for maintenance of federal projects, additional funds above the base plan will require a 100% local cost share sponsor. The Council

is encouraged to become the local sponsor for the beneficial uses they are requiring.

5. Part III pg 7-6 U.S. Department of Defense

National Interest of Army Corps of Engineers should read

(4) **Army Corps of Engineers.** The Army Corps of Engineers has national interest in facilities and programs administered by the Galveston District which identify areas of federal involvement in the coastal zone. National interest includes maintenance of federally authorized navigation channels, implementation of the regulatory actions including Section 10 of the River and Harbors Act and Section 404 of the Clean Water Act, responding to national emergencies and support of military functions within the State of Texas.

6. Part III pg 11

Navigation maintenance projects within the Galveston District Corps of Engineers have established a baseline depending on how the project was authorized by the Congress of the United States. The district is not authorized to fund or budget for modifications of those projects subject to local or state requirements. Baseline funding may be augmented by federal funds if strict guidelines and requirements are met. In any case local cost sharing sponsor will be responsible for all or some of the additional funds to implement local requirements. It is misleading to infer that the Galveston District can budget for a unauthorized project and receive funding.

7. Part III pg 28 Navigation

Both the Houston Ship Channel and Galveston Ship Channel were originally constructed by private interest, not the Corps of Engineers. The Gulf Intracoastal Waterway was completed in 1947, not early 1900s.

8. <u>References</u>

Galveston Bay National Estuary Program, 1993, "Draft: Galveston Bay Environmental Characterization Report"

WRITTEN COMMENT NO. 7: DEPARTMENT OF DEFENSE, U.S. ARMY CORPS OF ENGINEERS, GALVESTON DISTRICT
August 2, 1996

Response to Comments:

1. Redundancy issue (page 1, paragraphs 1 and 3; page 2, paragraph 6; page 3, paragraphs 3 and 4). Comment noted. No change needed. The TCMP is not redundant, does not create another layer of permitting requirements, and does not regulate federal agency actions. The CZMA does not "arbitrarily delegate" federal responsibilities to the states. The CZMA encourages states to address issues of state and national concern through the development and implementation of ***state*** coastal management programs. These programs ensure protection of state coastal uses and resources, as identified by states and mandated by Congress. When states accept Congress' invitation to manage its coastal uses and resources, Congress has granted the state significant input into direct federal activities and federal license or permit activities that are reasonably likely to affect coastal uses or resources.

State coastal management program review is not the same as federal agency review. State coastal management review is more comprehensive than federal review and addresses a wide range of coastal management concerns. The TCMP includes policies that affect coastal wetlands in addition to the policies in 31 TAC §501.14(h) which mimic, but do not mirror, the §404(b)(1) Guidelines (e.g. temporal effects, levees, etc.). The state's review is also concurrent with existing state and federal reviews, therefore, there is no additional delay. Also, the TCMP is made up of existing state permit programs and will not create another layer of permit reviews.

State agencies also have jurisdiction over the discharge of dredged or fill material in wetlands and other waters of the United States. For example, the GLO is responsible under state statute for permitting such activities on state land. The TNRCC and RRC are responsible under the Clean Water Act and state statutes for certifying that federal permits for such discharges comply with state water quality standards. This is appropriate because the federal government does not have exclusive control over management of wetlands and states' other coastal resources. Rather than adding a new layer, the TCMP is employing federal consistency review under section 307 of the CZMA to coordinate these existing layers.

2. Page 1, paragraph 2. Comment noted. No change needed. The record developed by the Coastal Coordination Council during program development indicates that federal agencies, local governments, regional organizations, port authorities, and other private and public parties and individuals had adequate opportunities for input and fully participated in all aspects of development of the TCMP.

The resultant dredge policy was the product of many iterations over a period of more than two years. Throughout the process, input was sought and received from many sources. The Council first adopted its rules establishing the TCMP in September 1994. The June 1995 version

of the TCMP contained proposed revisions to those rules. These revisions were open to public comment for 45 days and were the subject of public hearings in Corpus Christi and Galveston, Texas. The record indicates that the Corps did not comment at either hearing. However, the Council received written comments from the Corps of Engineers on August 30, 1995. In addition, the Council received hearing testimony and written comments on the dredge policy from project local sponsors (including ports and the Texas Department of Transportation), waterway users, state agencies, local governments, and citizens.

The commenters offered the Council several different options with respect to the language of the dredging policy. Those options ranged from keeping the September 1994 language to adopting the proposed June 1995 language to adopting different language entirely. The adopted revisions were published on October 18, 1995. The preamble to the revisions contained responses to the Corps' and all other comments and an explanation of why the Council chose to make each of these revisions. It appears from the record that the Council fully considered the Corps' and all other comments and ultimately chose a combination of the different options offered by the commenters so that all interests would be fairly balanced.

Finally, it should be noted that the Council solicited final public comments at the October 5, 1995, meeting at which the revisions were adopted. The Council's record of that meeting indicates that a Corps spokesman testified, described the Corps' discussions with the Council on dredge policy as "in depth," and expressed no objection to either the content of the dredge policy language or the process by which it was drafted.

3. Federal regulation issue (page 1, paragraph 4). Comment noted. No change needed. The major goal of the TCMP is to comprehensively manage private and public uses of the coastal zone. It is not to acquire federal funds and to use them to regulate federal agency actions. The CZMA does not allow states to regulate federal agencies. The CZMA does require that direct federal activities that are reasonably likely to affect any coastal use or resource be consistent to the maximum extent practicable with state coastal management programs. See response 4 for further detail on "consistent to the maximum extent practicable."

4. Beneficial use rule issues (page 1, paragraph 1; page 2, paragraph 5; page 3, paragraph 4; page 5, paragraphs 1 and 4; page 6, paragraph 2). Comment noted. No change needed. The state's beneficial use of dredge material rule does not override the discretion of Congress, will not place an enormous budgetary burden on the Corps, and will not otherwise require the Corps' to conduct its activities contrary to federal law. The beneficial use policy, as applied to the Corps for its dredging activities through the CZMA federal consistency requirement, is completely compatible with other federal law. The CZMA requires federal agencies to be *consistent to the maximum extent practicable* with state coastal management programs. This

means that federal activities must be fully consistent unless compliance is prohibited based upon the requirements of existing law applicable to the federal agency's operations. 15 C.F.R. § 930.32(a). Thus, if a federal agency's discretion is limited by federal law, then the federal agency may proceed with its activity even though the activity may not be fully consistent with a state's coastal management program. This would also apply to cost-share limitations imposed on the Corps by federal appropriations law and ongoing maintenance dredging operations. This determination of consistency must be made on a case-by case basis. Texas and the Corps have developed a process in the October 1994 Memorandum of Agreement (MOA) to address lack of available funds. The October 1994 MOA between the Coastal Coordination Council and the Galveston District provides an innovative and flexible process whereby different funding sources can be pursued for any incremental costs associated with compliance with the dredge policy. These funding sources could include federal authorities, such as section 1135 of the Water Resources Development Act of 1986, as amended, as well as other federal funding authorities.

In addition, in determining what factors to consider when evaluating benefits, the Corps must not only evaluate National Economic Development benefits, but the CZMA requires the Corps to consider state coastal management programs as well, subject to the consistent to the maximum extent practicable standard. The CZMA requires federal agencies, whenever legally permissible, to consider state coastal management programs as supplemental requirements to be adhered to in addition to existing agency mandates. 15 C.F.R. § 930.32(a).

5. Page 2, paragraph 1. Comment noted. No change needed. This paragraph does not designate dredging and dredged material placement as a "critical area." It discusses both areas to be managed and uses to be managed under the program. Dredging and dredged material placement is a use to be managed under the program.

6. Page 2, paragraph 2. Comment accepted. It appears from Figure 3, which is located in Part III, page 29, that all or almost all of the dredging done by the Galveston District is within the Texas coastal zone, which includes the open Gulf of Mexico and all tidally influenced rivers. For clarification, the term "bays and estuaries" has been changed to "coastal waters."

7. Page 2, paragraph 3. Comment accepted. The document has been changed to reflect that significant dredging activities are undertaken by state, local, and private concerns under permits issued by the Corps of Engineers.

8. Page 2, paragraph 4. Comment noted. No change needed. The dredge policy establishes

preferred dredged material placement techniques. Among the preferred techniques is disposal of dredged material in "open water areas of relatively low productivity or low biological value." By making open water disposal a preferred technique, the policy clearly does not presuppose that all open water disposal is harmful to the environment.

9. Page 3, paragraph 1. Comment accepted. This error has been corrected.

10. Page 3, paragraph 2. Commented accepted. Clarifying language has been added to the document.

11. Page 5, paragraph 2. Comment noted. No change needed. The beneficial use policy at 31 TAC §504.14(j)(4) applies to "commercially navigable waterways." The preamble to the October 20, 1995, Texas Register publication of the adopted revisions to the TCMP rules indicates that the Council intends that term to include, but not be limited to, "waterways and associated facilities, developed, constructed or maintained pursuant to congressional authorization." This does not limit the term "commercially navigable waterways" to those maintained by the Corps. Rather, it simply sets out an example of one type of waterway that is considered commercially navigable. Therefore, the beneficial use policy would apply to any commercially navigable channel not maintained by the Corps of Engineers. Nevertheless, as a practical matter, most of these channels will be maintained by the Corps. As stated in Part III.B.4.D, Texas drafted the beneficial use policy to focus on those channels that would generate sufficient volumes of material to achieve economies of scale with respect to conveyance of the material. Therefore, there appears to be no intent to discriminate against the Corps. Focusing the policy only on larger volume channels appears to be a reasonable decision. Moreover, beneficial use can be required as a permit condition as a technique to mitigate adverse effects on wetlands and other coastal resources for dredging activities that generate less volume. As the TCMP is implemented, NOAA expects the Corps and the Council, in the context of applying the mitigation provisions of the §404(b)(1) Guidelines and the TCMP critical areas and dredging policies, to examine whether beneficial use of material from non-commercially navigable channels is feasible. NOAA, through its periodic evaluations pursuant to §312 of the CZMA, will be able to assess whether the implementation of the beneficial use policy has a discriminatory effect.

12. Riparian land issue (page 5, paragraph 3). Comment noted. No change needed. The state's policy is a legitimate exercise of state law and states' rights under the Public Trust Doctrine and the CZMA. The CZMA does not limit state coastal management programs to protecting environmental concerns. State coastal management programs, developed under the CZMA, must comprehensively manage private and public uses of the coastal zone. An important component of state coastal management programs is impacts to a state's submerged lands. An

important mechanism to address a range of coastal management concerns, including submerged lands, is the Public Trust Doctrine. See Coastal States Organization, Putting the Public Trust Doctrine to Work (1990). Texas' policy is consistent with these concerns and public trust law. Also, the Texas policy is distinguished from the Natland case. The Natland case addressed title to property *after* dredge material disposal. The Texas policy seeks to protect state owned land *before* dredge material is disposed at a new site.

13. Page 6, paragraph 1. Comment accepted. The document has been revised to incorporate the comment.

14. Page 6, paragraph 3. Comment accepted. This has been corrected.

U.S. Department of Transportation
United States Coast Guard

Commandant
U. S. Coast Guard

2100 Second St. S.W.
Washington, DC 20593-0001
Staff Symbol: G-LEL
Phone: (202) 267-6003

AUG 5 1996
5890

National Oceanic and Atmospheric Administration
National Ocean Service
Office of Ocean and Coastal Resource Management
Coastal Programs Division; Gulf/Caribbean Region
1305 East-West Highway (N/ORM3)
Silver Spring, MD 20910

RECEIVED
AUG 5 1996

ATTN: Mr. Joe Uravitch

Dear Mr. Uravitch:

This letter provides the comments of the U.S. Coast Guard, pursuant to 15 C.F.R. § 923.51, on the proposed Texas Coastal Management Program. Approval of the Program should be delayed until these comments are addressed.

It appears that the proposed Program does not clearly provide a workable means for accomodating the needs of: (1) Federal oil or hazardous substance response activities under the National Contingency Plan (NCP), or (2) Federal participation in regional or local contingency planning. Although we have not had time to coordinate our comments with the Environmental Protection Agency, we expect that they would share our view that these matters should be addressed.

With respect to response activities, the Program should state that Federal response activities undertaken in accordance with the NCP do not require consistency determinations. This is so because the regulatory time frames for submittal and review of consistency determinations cannot be satisfied in emergency response situations. Additionally, those activities will be taken in conformance with contingency plans created with the full participation of the State. Finally, the Coastal Zone Management Act itself precludes interfering with the directives of the Federal On Scene Coordinator when undertaking a spill response pursuant to the Clean Water Act. *See* 16 U.S.C. § 1456(f).

With respect to regional and local contingency planning, Federal agencies participate in various ways. *See* 40 C.F.R. Subpart C. Although these planning activities are not listed in 31 TAC § 506.12 as "Federal agency actions" requiring consistency determinations, the State has reserved the right to add to that list. It is conceivable that the State could at some point contend that these planning activities are Federal actions or activities requiring consistency determinations.

It is our understanding that the General Land Office is the lead state agency for both contingency planning and administration of

the proposed Coastal Management Program. We therefore hope and expect that, to the extent the State may feel a need to conduct consistency review of contingency plans, the General Land Office will incorporate its review into the contingency planning process conducted under section 311(j) of the Clean Water Act. In our view, the appropriate time for this consideration is when a contingency plan is initially prepared or subsequently renewed. This approach streamlines the process of assuring State concurrence with local and area contingency plans and their consistency with the Program. Although the provision in 16 U.S.C. § 1456(f) arguably makes consistency review unnecessary, we think it would be helpful if the Program included a clear commitment to coordinate its review in this manner.

Since we only recently learned of the proposed Texas Coastal Management Program, this is our Office's first opportunity to provide comment. Your consideration of the above concerns is appreciated. If you have any questions, our point of contact is Commander Ronald Kilroy at 202-267-6003.

Sincerely,

R. R. WESTON
Captain, U. S. Coast Guard
Acting Chief, Office of Environmental Law
By direction of the Commandant

WRITTEN COMMENT NO. 8: DEPARTMENT OF TRANSPORTATION, U. S. COAST GUARD
August 5, 1996

Response to Comments:

1. Second and fifth paragraphs. Comment noted. No change needed. Texas has developed a coastal management program that coordinates state permit and federal consistency review procedures into existing procedures. The state, through the GLO, already uses the state-federal coordination procedures of the Oil Pollution Act of 1990.

2. Third and fifth paragraphs. Comment noted. No change needed. CZMA §307(f) does not provide a federal consistency exemption to the Coast Guard, for emergency responses or other activities. In enacting §307(f), Congress requires consistency in the application of Clean Water Act and CZMA "water pollution control requirements." (Section 307(f) applies to "water pollution control requirements," i.e., discharge limitations, and not to other Clean Water Act requirements.) Including the water pollution control requirements and the application of the federal consistency requirement furthers coordination of federal and state water quality policies. Moreover, the two provisions can be read together. Also, even water pollution control requirements are subject to the consistency requirement and must be consistent to the maximum extent practicable with state coastal management programs.

No federal activity is exempt from the federal consistency requirement if the federal activity is reasonably likely to affect any coastal use or resource. If the Coast Guard must make an emergency response that is reasonably likely to affect any coastal use or resource, the Coast Guard should conduct that response consistent with and coordinate, to the maximum extent practicable, with state coastal management programs. If time does not allow the Coast Guard to coordinate with the state or to meet consistency requirements, the Coast Guard may deviate from full consistency pursuant to 15 C.F.R. § 930.32(b). Furthermore, if a state coastal management program has agreed that relevant Coast Guard regulations, the National Contingency Plan (NCP), and Area Contingency Plans (ACP) are consistent with the state's coastal management program, then emergency response actions taken pursuant to those regulations and plans should not require state consistency review.

The House of Representatives' Merchant Marine and Fisheries Committee provided guidance on the interpretation of §307(f). See 136 Cong. Rec. 8077 (Sep. 26, 1990). The Committee stated that: "a federal agency shall not be shielded from compliance with the more stringent environmental requirements of other federal or state laws by a finding that it is consistent to the 'maximum extent practicable' with the CZMA. Subsection 307(f) clarifies that the other statutory requirements applicable to federal agencies are unaltered. Therefore, if another statute holds a federal agency to a higher standard, the agency is not relieved of that duty by virtue of compliance with this law." Id. In summary, incorporation of Clean Water Act

requirements into state programs will ensure uniform application of these requirements, and does not preclude application of the federal consistency requirement.

3. Fourth paragraph. Comment noted. No change needed. See discussion in the second paragraph for state coordination and involvement in oil spill response planning. Local contingency planning (not part of the NCP or ACPs) is not subject to federal consistency if there is no required federal approval and federal involvement is limited to an advisory role. The state, however, closely coordinates local contingency planning with federal efforts.

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Silver Spring, Maryland 20910

AUG 5 1996

CC: BENOIT/LAWLESS
URAVITCH/O'BEIRNE

MEMORANDUM FOR: Jeffrey Benoit
Director, Office of Ocean
and Coastal Resource Management, NOS

FROM: James P. Burgess
Acting Director
Office of Habitat Protection, NMFS

SUBJECT: Texas Coastal Zone Management Plan

NMFS' Office of Habitat Protection (F/HP) and Southeast Regional Office would like to thank you for the opportunity to review the Texas Coastal Zone Management Plan Draft Environmental Impact Statement (EIS). We have reviewed the draft EIS and agree it should proceed through the authorization process in its current form. F/HP strongly supports the provisions in the EIS for beneficial use of dredge material and opposes any changes to the existing language. If there are discussions or meetings pertaining to changes in the current EIS policy for beneficial uses of dredge material, F/HP would like to be represented.

Your office should complete Endangered Species Act Section 7 Consultation with NMFS' Office of Protected Resources (713-2322/1401) before issuing the final EIS.

RECEIVED
AUG - 6 1996

WRITTEN COMMENT NO. 9: NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION, NATIONAL MARINE FISHERIES SERVICE, OFFICE OF HABITAT CONSERVATION
August 5, 1996

Response to Comments:

Comment noted. No change needed. NOAA is currently undertaking appropriate Endangered Species Act §7 consultation as requested.

THE PORT
OF CORPUS CHRISTI

Department of Engineering Services

August 5, 1996

RECEIVED
AUG 6 '6

Mr. Joe Uravitch
Coastal Programs Division
SSMC-4, Room 11109
1305 East-West Highway
Silver Spring, MD 20910

Subject: National Oceanic and Atmospheric Administration Office of Ocean and Coastal Zone Management Draft Environmental Impact Statement for Proposed Federal Approval of the Texas Coastal Management Program

Dear Mr. Uravitch:

The following comments on the subject document are made on behalf of the staff of the Port of Corpus Christi Authority (PCCA), Corpus Christi, Texas.

1. Certain port interests remain concerned that the proposed coastal management program is based more on a concept that environmental benefits will occur rather than being based on any facts to support that contention. We request that National Oceanic and Atmospheric Administration (NOAA) Office of Ocean and Coastal Zone Management (OCRM) include, as part of its Texas Coastal Management Program (TCMP) environmental analysis, a detailed state-by-state summary of the measurable environmental improvements that have occurred within states as a result of their participation in the federal Coastal Zone Management Program. The requested summary should include a breakdown of the federal cost to provide the benefits as well as the total cost to participating state and local governments to achieve them as well.

2. It is not clear how the Coastal Coordination Council (CCC) will be accountable to a person, party, or corporation who has sought authorization to conduct work that requires an agency action under the proposed TCMP rules, but who has had the permit denied by the networked agencies on the basis that the proposed action is inconsistent with the goals and policies of the TCMP. The PCCA believes the current CCC membership is open and fair minded, however, they request that the Draft Environmental Impact Statement (DEIS) identify the CCC rule(s) that describes the procedure by which an applicant can petition the CCC to review a permit denied by an agency. There are thresholds established for certain individual agency action approvals that become subject to review by the CCC. However, the instance regarding petitioning the CCC with regard to permit denial is not clear. It is requested the DEIS address this issue in a concise, easily understandable manner.

0000010

222 Power Street Corpus Christi, TX 78401 • P.O. Box 1541 Corpus Christi, TX 78403 • TEL: 512-882-5633 • FAX: 512-882-3079

3. Part II, 3-7 (B) (1) (A) second paragraph states, "The Coastal Coordination Act requires the GLO, in coordination with the networked agencies and subdivisions, to prepare an annual report on the effectiveness of the TCMP. The Council approves the report." This matter primarily concerns CCC oversight of agency compliance with the goals and policies of the TCMP. However, another important means to determine regulatory effectiveness is conducting an audit of the measurable environmental improvements and economic benefits or, conversely, measurable economic costs, associated with the TCMP and federal program. We request that the NOAA-OCRM include in the DEIS a statement that the GLO will also audit these factors and include, as part of its annual report, a detailed analysis of the economic impact associated with the program including, but not limited to, costs associated with delays in permitting, and lost business opportunity costs.

4. The PCCA agrees, overall, with the substantive interpretative elements of the Explanation to the Dredging Policy of 501.14(j) as provided in the NOAA TCMP DEIS Part II pages 4-67 and 68. However, the PCCA is very concerned that the language in the Explanation cannot be directly reconciled with a direct reading of the language of 501.14(j), related 501.14(h), or with the Memorandum of Agreement (MOA) between the U.S. Army Corps and the CCC (Appendix E). The PCCA believes that before NOAA-OCRM approval of the TCMP, that the TCMP rules and MOA should be corrected to incorporate, in plain language, the substantive interpretive elements of the rules provided in the Explanation. The PCCA requests that NOAA-OCRM withhold approval of the TCMP conditional to rule correction.

5. The PCCA is concerned with the assumptions tendered in Part II, Page 4-70, paragraph three, concerning guidelines for dredged material. The PCCA requests NOAA-OCRM cite the specific TCMP rule or agency regulation that unequivocally states what this paragraph is describing in the DEIS. The interpretation of the TCMP rules provided appears to be new, and it is inaccurate. The PCCA requests the paragraph be struck from the text as it appears misleading and is not clearly substantiated by the existing TCMP rules. Its absence will not impair the quality or content of the DEIS.

6. Another concern by the PCCA involves the adequacy of the DEIS regarding the National Environmental Policy Act (NEPA). It is our understanding that NEPA requires agencies, such as NOAA-OCRM, to balance the environmental costs of a proposed action against the action's economic and technological benefits. It is the PCCA staff's opinion that the DEIS does not provide sufficient information to either the public or decision makers of the likely economic and environmental costs or benefits that are likely and are expected to result due to federal approval of the TCMP. The PCCA requests a formal cost-

benefit analysis be prepared and that it be incorporated into the DEIS for public review and comment.

The PCCA appreciates the opportunity to comment on the DEIS concerning the proposed federal approval of the Texas Coastal Management Program (TCMP). Should you have any questions, please contact me at (512) 882-5633 (fax: 512-882-3079), or through the letterhead address.

Sincerely,

Paul D. Carangelo

Paul D. Carangelo, R.E.M.

slb
cc: John LaRue
Frank Brogan
Greg Brubeck
Rick Maldonado

WRITTEN COMMENT NO. 10: PORT OF CORPUS CHRISTI AUTHORITY, DEPARTMENT OF ENGINEERING SERVICES
August 5, 1996

Response to Comments:

1. Comment noted. No change needed. Neither the National Environmental Policy Act or the Council on Environmental Quality's implementing regulations require this type of analysis as a prerequisite to approving the TCMP. NOAA is currently conducting a study of the effectiveness of the national coastal zone management program. Upon completion, NOAA will send the Port of Corpus Christi a copy. However, delaying approval of the TCMP and the benefits it affords the people of Texas until the study is complete is not warranted. Each coastal state is different in terms of its geology, climate, flora and fauna, economy, and government structure. The CZMA reflects this in that it allows a state tremendous flexibility to tailor its program to local needs. Consequently, an analysis of the measurable environmental improvements and federal, state, and local costs associated with coastal management programs in states other than Texas would be of extremely limited use in evaluating the approvability of the Texas program.

2. Comment accepted. It is NOAA's understanding that Section 33.2053 of the Coastal Coordination Act allows for Council review only when a permit is issued or approved, not when a permit is denied. Language has been added to the document clarifying this.

3. Comment noted. No change needed. The content of the annual report is described in Part II, Chapter 3.B.1.a. It appears that the type of information requested in the comment could be included in the annual report. Beyond the elements of the report described there, the Council will be responsible for specifying the precise content of the report.

4. Comment noted. No change needed. No conflict is apparent from a straightforward reading of the explanatory text in Part II, Policy Category 10, the plain language of 31 TAC §501.14(j), and the October 1994 Memorandum of Agreement between the Council and the Galveston District Corps of Engineers. The Council approved this explanatory text at its April 19, 1996, meeting and the record indicates it was the subject of intense work by the Texas Department of Transportation and other members of the Council, the Corps of Engineers, and the Port of Corpus Christi and other ports. The Council submitted the explanatory text to NOAA for inclusion in the description of the TCMP specifically to explain how it will interpret and apply that section in the context of the MOA. Therefore, this comment has already been addressed and withholding approval pending further action on this issue is unwarranted.

5. Comment noted. No change needed. This paragraph describes 31 TAC §§ 155.3(g)(3)(A) through (E), which is a School Land Board rule applicable to state owned submerged lands underlying bays and estuaries.

WRITTEN COMMENT NO. 10: PORT OF CORPUS CHRISTI AUTHORITY, DEPARTMENT OF ENGINEERING SERVICES
August 5, 1996

6. Comment noted. No change needed. The federal action at issue here is the approval of the state program; which is not a federal regulation. The federal requirements for economic costs assessments, including cost benefit analyses pertain to federal regulations; they do not apply to every federal decision. See Regulatory Flexibility Act and E.O. 12866. NEPA regulations provide guidance for doing cost-benefit analyses when an agency undertakes to do so, but NEPA does not require that a cost benefit analysis be conducted. In this case, there are no federal regulations, and the environmental consequences of the federal action of approval of a state program is sufficiently removed from the economic impacts of the subject state program, such that assessment of the economic impacts of the state program is not required. NOAA will not do a formal cost benefit analysis, although its environmental analysis includes some economic impacts.

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL OCEAN SERVICE
National Geodetic Survey
Silver Spring, Maryland 20910-3282

JUL 23 1996

MEMORANDUM FOR: Donna Wieting
Acting Director, Ecology and Conservation Office

FROM: Captain Lewis A. Lapine, NOAA
Director, National Geodetic Survey

SUBJECT: DEIS-Texas Coastal Management Program

The subject statement has been reviewed within the areas of the National Geodetic Survey's (NGS) responsibility and expertise and in terms of the impact of the proposed actions on NGS activities and projects.

All available geodetic control information about horizontal and vertical geodetic control monuments in the subject area is contained on the NGS home page at the following Internet World Wide Web address: http://www.ngs.noaa.gov. After entering the NGS home page, please access the topic "NGS Products and Services" and then access the menu item "NGS Products." This menu item will allow you to directly access geodetic control monument information from the NGS data base for the subject area project. This information should be reviewed for identifying the location and designation of any geodetic control monuments that may be affected by the proposed project.

If there are any planned activities which will disturb or destroy these monuments, NGS requires not less than 90 days' notification in advance of such activities in order to plan for their relocation. NGS recommends that funding for this project include the cost of any relocation(s) required.

For further information about these monuments, please contact John Spencer; SSMC3, NOAA, N/NGS; 1315 East West Highway; Silver Spring, Maryland 20910; telephone: 301-713-3169; fax: 301-713-3169.

Federal approval is required in order for the State to receive Federal funds to implement the Texas Coastal Management Program. The Office of Coast Survey, NOS, NOAA, has determined that the shoreline replenishment and the construction of beach erosion control groins will not significantly affect the safety of navigation. NOAA would like U.S. Army Corps of Engineers as built plans upon completion of individual projects so that changes can be accurately portrayed on future editions of

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affected nautical charts and reflected in the text of U.S. Coast Pilots.

For further information about these charting activities, please contact Howard Danley, NOAA, Office of Coast Survey, N/CS28, 1315 East West Highway, Silver Spring, Maryland 20910.

WRITTEN COMMENT NO.12: NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION, NATIONAL GEODETIC SURVEY
July 23, 1996

Response to Comments:

Comment noted. No change needed.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 6
1445 ROSS AVENUE, SUITE 1200
DALLAS, TX 75202-2733

July 30, 1996

Mr. Joe Uravitch
Coastal Programs Division
National Oceanic Atmospheric
Administration
SSMC.4, Room 11109
1305 East-West Highway
Silver Spring, MD 20910

Dear Mr. Uravitch:

In accordance with our responsibilities under Section 309 of the Clean Air Act, the National Environmental Policy Act (NEPA), and the Council on Environmental Quality Regulations for Implementing NEPA, the U.S. Environmental Protection Agency (EPA) Region 6 office in Dallas, Texas, has completed its review of the National Oceanic and Atmospheric Administration (NOAA) Draft Environmental Impact Statement (DEIS) for the proposed Texas Coastal Management Program (CMP).

We appreciate the State's commitment to submit a complete coastal nonpoint source program to EPA and NOAA within thirty months of CMP approval. We look forward to working with the State of Texas and NOAA in establishing a coastal nonpoint source program that restores and protects Texas coastal waters.

The EPA rates your DEIS as "LO," i.e., EPA has "Lack of Objections" to the lead agency's preferred alternative. Our classification will be published in the Federal Register according to our responsibility under Section 309 of the Clean Air Act, to inform the public of our views on proposed Federal actions.

We appreciate the opportunity to review the DEIS. We request that you send our office one copy of the Final EIS at the same time that it is sent to the Office of Federal Activities, (2251A), EPA, 1200 Pennsylvania Avenue, N.W., Washington, D.C. 20460.

Sincerely yours,

Michael P. Jansky, P.E.

Michael P. Jansky, P.E.
Regional Environmental Review
Coordinator

10000013

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AUG 1 1996

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WRITTEN COMMENT NO. 13: U.S. ENVIRONMENTAL PROTECTION AGENCY, REGION 6
July 30, 1996

Response to Comments:

Comment noted. No change needed.

U.S. Fish and Wildlife Service
Division of Habitat Conservation
4401 N. Fairfax Drive, Room 400
Arlington, VA 22203
Phone: (703) 358-2201
Fax: (703) 358-2232

RECEIVED
JUL 29
CAD/OK

COASTAL PROGRAM TRANSMITTAL

July 29, 1996

To: Bill O'Beirne
NOAA/OCRM

From: Keith Taniguchi
Branch of Habitat Restoration

Subject: Department of the Interior Schedule of Review of the Draft EIS for the Texas Coastal Zone Management Plan

Bill, attached for your information is a copy of the Fish and Wildlife Service transmittal that requested our Ecological Services' Corpus Christi and Clear Lake Field Offices to review the DEIS for the Texas CZMP. It shows that the comments from all of the DOI Bureaus will be prepared by July 31, 1996, by the DOI Office of Environmental Policy and Compliance.

I hope this will help you anticipate when the comments will be sent to NOAA/OCRM. Ken Havran is your contact (202 208-7116) if you should not receive a response.

You are always welcome, of course, to contact me should you require assistance.

A. Keith Taniguchi

Attachment

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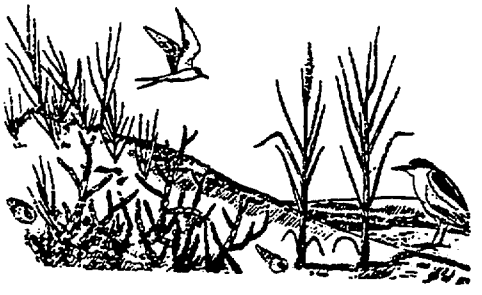

Partners for Wildlife

WRITTEN COMMENT NO. 14: DEPARTMENT OF THE INTERIOR, U.S. FISH AND WILDLIFE SERVICE, DIVISION OF HABITAT CONSERVATION
July 29, 1996

No response needed.

O'Penn

TEXAS REVIEW AND COMMENT SYSTEM
REVIEW NOTIFICATION

Applicant/Originating Agency: U.S. Department of Commerce/ NOAA
Contact Name and Phone: Mr. Joe Uravitch / (301) 713-3155

Project Title: DRAFT (P/DEIS) TEXAS COASTAL MANAGEMENT PROGRAM

Funding Agency: USDOC SAI/EIS#: TX-R-96-06-26-0001-50-00

Date Received: June 24, 1996 Date Comments Due BPO: 08/03/96

REVIEW PARTICIPANTS

Bureau of Economic Geology
Texas Historical Commission
Texas Department of Transportation
Texas Parks and Wildlife Department
Public Utility Commission
Railroad Commission of Texas
State Soil and Water Conservation Board
Texas Natural Resource Conservation Commission
Texas Water Development Board
Brazos Valley Development Council
Coastal Bend Council of Governments
Deep East Texas Council of Governments
Golden Crescent Regional Planning Commission
Lower Rio Grande Valley Development Council
South East Texas Regional Planning Commission

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№ 0000015

Special Notes/Comments: Subject Cover Letter/Abstract provided to reviewers listed above per receipt of this notification by SPOC. Please contact Mr. Uravitch at USDOC directly if you wish to review entire application.

[] No Comment.

Review Agency Signature

Return Comments to: for

J. C. Adams, State Single Point of Contact
Governor's Office of Budget & Planning
P.O. Box 12428
Austin, TX 78711
(512) 463-1771

WRITTEN COMMENT NO. 15: TEXAS REVIEW AND COMMENT SYSTEM, REVIEW NOTIFICATION
July 26, 1996

No response needed.

Bell

GALVESTON
BAY
FOUNDATION

5 August 1996

Ms. Donna Wieting
Acting Director
Ecology and Conservation Office
U.S. Department of Commerce
Room 5805, PSP
Washington, D.C. 20230

Dear Ms. Wieting:

Enclosed are the comments of the Galveston Bay Foundation on the draft Environmental Impact Statement for the Texas Coastal Management Program. Thank you for your consideration.

Very truly yours,

Linda Shead

Linda R. Shead, P.E.
Executive Director

Enclosure

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AUG - 9 1996

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17324-A HIGHWAY 3 • WEBSTER, TX 77598 • (713) 332-3381

GALVESTON
BAY
FOUNDATION

COMMENTS OF THE GALVESTON BAY FOUNDATION
ON THE DRAFT ENVIRONMENTAL IMPACT STATEMENT
FOR THE TEXAS COASTAL MANAGEMENT PROGRAM

August 5, 1996

The Texas Coastal Management Program could be said to be in the making since the 1970's. The current version has had over seven years of development. It has involved the greatest amount of public participation from all interests of any program ever instituted in the State of Texas. As a consequence, the Texas Coastal Management Program (Program), and by extension the draft Environmental Impact Statement, reflects the tremendous amount of consideration given to most every conceivable impact of the Program.

The Galveston Bay Foundation could, like most other participants, find points in the Program that could benefit from improvement to strengthen the protection of the Galveston Bay ecosystem, and economy. However, the Program is a consensus plan that can be worked with, and that can bring to the coastal environment of the State of Texas the benefits of coordination, focus, and funding that derive from the plan.

The Galveston Bay Foundation encourages the speedy approval of the Texas Coastal Management Program under the federal Coastal Zone Management Act.

17324-A HIGHWAY 3 • WEBSTER, TX 77598 • (713) 332-3381

WRITTEN COMMENT NO. 16: GALVESTON BAY FOUNDATION
August 5, 1996

Response to Comments:

Comment noted. No response needed.

OFFICE OF OCEAN AND COASTAL RESOURCE MANAGEMENT

August 1, 1996

Statements of John M. Arrington on Draft Environmental Impact of June 1996.

John M. Arrington
Texas Beach Advocate
7025 Kopman Drive
Houston, Tx. 77061-2709
1-713-6494795

COASTAL COORDIN. COUNCIL 8-1-96

RECEIVED AUG 9

Office of Ocean and Coastal Resource Management
National Oceanic and Atmospheric Administration
U.S. Department of Commerce
1305 East-West Highway, N/ORM3
Silver Spring, Maryland 20910

RE: Comments on Draft EIS as presented at Galveston Hearing 8-1-96.

I am John M. Arrington who has been volunteer advocate on Texas Coastal Zone Management issues for many years. My comments are directed toward NOAA as same comments have been aired to Texas General Land Office repeatedly in last few years.

I support US Coastal Zone Management being sponsor of our Texas Management Program. My comments are based on inadequacies to protect private property rights, do not allow local City and County Governments to gain total benefits and enforce its own rules, do not apply beach access rights, do not apply health and welfare of persons living or visiting coastal beaches, and general omissions of local rules, State Constitution, and State Statutes applicable to coastal management.

My Comments are as follows:

Item 1; Documents not addressed within EIS. Note that House Bill No. 3226 new applied TNRC Section 33.053 (8) Elements of Coastal Management Program, mandated that EIS would include "(8) a compilation of state constitutional provisions, laws, rules, and judicial decisions under which the state proposes to exercise control over the uses of land and water described by Subdivision (4)". Following not within EIS;

A. Constitution of the State of Texas; Article II, Sec. 1, 5, 7, 8, and Article 16., Sec. 59, Article 3., Sec. 56 (local and special laws), 57, and Article 4., sec 10., and Article 9., sec 1A.

B. New House Bill 3226 is included but does not demonstrate all of Bill signed by Governor in 1995. Your "Appendix D" makes no reference to this bill.

C. New Senate Bill 14, 1995 amended the Section 1. Subtitle A. Title 10, Government Code, was amended by adding Chapter 2007. Your "Appendix D" has no reference to this bill. Your "Appendix B", Page 75, 33.210 Private Property does address "Taking Issue" of private property. Senate Bill 14 identifies who would pay for 25 percent or more devaluation of private property by a government entity.

D. City of Galveston Coastal Development Ordinance 94-26, adopted May 12, 1994 for purposes of required US CZM rules.

E. County of Galveston Coastal Development Rules of Court adopted for purposes of requirement of US CZM rules.

F. Texas Administrative Code, Chapter, requirements of the Texas Water Commission for sewerage disposal as septic tanks installations. Texas Administrative Code, Chapter 317. This authority for enforcement is now under "TNRCC". West Galveston Island has lots of septic systems that are non functional and threat to public health. Rules spelled out in Texas Statues on how to comply with safe public health requirements regarding septic systems. You do not list such laws under your "Appendix D". EIS does address in "Coastal Coordination Act Impementation Rules" precautionary statements with no mention of how to achieve a safe environment.

EIS Part 1-5, Protection of Estuaries and Coastal Water Quality addresses what TNRCC will manage, but references State Statutes other than those listed above.

Existing rules can be interpreted to allow installation of a septic system at sea level or below sea level. Texas has such situations.

G. Your "Appendix D" does mention Texas Natural Resources Code Chapter 61. However, body of EIS redefines the definition of "Gulf Beach", "Public Beach", "State Owned Beaches", and "Beach Area". EIS improperly refers to what is the "Texas Open Beaches Act". EIS offers confusion to future interpretation and application of laws.

In 1958 a law suit concerning property rights on Laguna Madre scared Texans. In 1959 the Texas Legislature originated the "Texas Open Beaches Act" (Acts 1959, 56th Legislature). Law was taken from Spanish Law "Las Siete Partidas" as its foundation. No other US State has such a beach law preserving beaches for public use. In 1977 the original "Texas Open Beaches Act"s one paragraph was splintered into what NOAA reads as TNRC Chapter 61. Beaches and

Dunes Section 61.001 thru 61.024. EIS interprets only parts (splinters) of original OBA.

Original OBA defined conditions under which "Beach Beach", "Public Beach", "State Owned Beaches", and "Beach Area" defined all of these terms. **EIS solution would be to define Open Beaches Act as Chapter 61. Beaches and Dunes Section 61.001 thru 61.024.**

H. EIS does not have list of decisions by Texas Courts that are precedential rules. Such list can be obtained by looking in present Vernon's Texas Codes Annotated, Natural Resources Vol 1. Example — Seaway Co. Vs. Attorney General Texas 1964 (Galveston Island), Gulf Holding Corp. Vs. Brazoria County, and many more. Each property on West Galveston Island seashore has been sued by Attorney General of Texas and a judgement exist at our local courthouse. These number over 1,200 cases.

J. EIS does not include copies of local dune ordinances or County Rules of Court. Their existence is acknowledged but obvious NOAA did not review for consistency with the program. General Land Office did advise that NOAA did sign off on. Because the City of Galveston Ordinance is only 90 pages and the County of Galveston Rules of Court are 500 pages there exists a difference of interpretation as to where consistency applies in Galveston County. This could be detrimental to Galveston County as a whole obtaining local control of their future and not receive entire benefits of Coastal Management.

K. Title 31 TAC. Natural Resources and Conservation Code, Part 1, Chapter 15 Sub chapter A, Section 15.1-15.10. Commonly called GLO Dune Rules. This is stand alone law created for purposes of Texas Coastal Management, as well as being consistent with US CZM requirements. It has been in force several years and local governments pattern their own dune rules from these rules. This is not listed in EIS "Appendix D".

Item No. 2; Present enforcement of Texas Coastal Management;

A. Title 31 TAC. Natural Resources and Conservation Code, Part 1, Chapter 15 Sub chapter A, Section 15.1-15.10. Commonly called GLO Dune Rules. This law exists and is applicable to local governments with assistance from Texas General Land Office to carry our provision of. NOAA in developing EIS has not observed the Texas Coastal areas as to enforcement as violations are taking place. . Example - a obvious violation requires locality enforcement authority to notify Texas General Land Office within 24 hours of knowing violation exists. In Galveston this is not taking place and notification to Texas General Land Office of a violation is not being moved on as provide by rules.

Point being if NOAA in its EIS cannot recognize seashore violations and there exists violations then why are we approving a program that is being ignored before inception.

Education of everyone involved is lacking and few local governments are even aware they are not enforcing what, and how they should be enforcing. EIS has not discovered this and does not address.

This is causing detrimental impacts to our coast that management plan should be stopping. Examples where City of Galveston, Texas Natural Resource Conservation Commission, Texas Attorney General, and Texas General Land Office. Example are;

a. Naturally formed dunes near San Luis Pass have been cut to allow vehicle beach access. Rules do not allow such cutting to elevation where tides will cause erosion. These cuts evidently bad idea as no one uses them except illegal vehicles.

b. Many permits for beachfront construction have been approved with no provision for natural drainage to bay. This is prohibited in present rules.

c. Beach parking lots authorized by City Galveston allow vehicles and overnight camping in vegetated dune areas. There are no instructional signs or monitoring of this.

d. Sail boats are allowed to be stored in vegetated dune areas up to weeks at a time. Rules frown on destroying vegetation and dunes this causes.

e. High pressure pipe line comes ashore on beach from wells. Line uncovered and large valve box on public beach area. There are no signs or concern for this high pressure line.

f. Recently a sub divider of beach front lots made dune cut at 10 mile road through naturally formed dunes. Material was bulldozed to provide fill on private lots. Rules don't allow dune cuts or use of sand for private property.

g. Access roads to beach required to someday have road elevated over dunes to preserve dune elevation integrity. City supposed to cause this to happen. At 10 ½ mile (Pabst) Road a drainage plan originated to cause road to drain to bay as required by rules. City did generate over 200 truck loads of sand from other drainage projects, but none of this sand used for 10 ½ Mile Road beach entrance. Most of sand hauled to City of Galveston Storage lot near Airport and used on other non beach projects. Rules cover such activities and requires beneficial use of sand for beach uses.

h. New permits for beach home construction provide requirements for a dune and a walkway to the beach to prevent foot traffic through dunes. Other homes owners are allowed to not have dune and a walkway and allowed to walk through dunes on foot. This practice is detrimental to dune and vegetation enhancement. EIS does not address.

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August 1, 1996
Statements of John M. Arrington on Draft Environmental Impact of June 1996.

i. Septic tank installation and maintenance rules are furnished to local County Health Department by Texas Natural Resource Conservation Commission routinely. New maintenance rules to maintain septic system so as to not be public health hazard. West Galveston has such non functioning, over used septic systems. However, TNRCC has never passed along new rules to follow. Texas Beaches may be experiencing a health hazard that causes illness in visitors to our beaches. This unconfirmed in Texas because we do no health monitoring for such conditions. Present EIS does not address, however, NOAA knows about the hundreds of US beaches being closed for these very problems.

My review of EIS revealed NOAA has not thoroughly observed conditions in Texas. When reading other states plans it prompts me to wonder why Florida or California have certain benefits of Coastal Zone Management that appears to be denied us Texans. My recommendations should be addressed and a final plan be approved.

Respectfully,
John M. Arrington

CC

Texas Coastal Coordination Council
Stephen F. Austin Building
1700 N. Congress Avenue
Austin, Tx. 78701-1495

Garry Mauro
Honorable Land Comm.
1700 N. Congress Ave
Austin, Tx. 78701-1495

Henry Freudenberg
Honorable Mayor Galv

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Statements of John M. Arrington on Draft Environmental Impact of June 1996

John M. Arrington
Texas Beach Advocate
Houston, Tx. 77061-2709
1-713-6494795

8-5-96

Bill O'Beirne
Office of Ocean and Coastal Resource Management
National Oceanic and Atmospheric Administration
U.S. Department of Commerce
1305 East - West Highway, N/ORM3
Silver Spring, Maryland 20910

RE: Second statement and supplement August 5, 1996 on Draft EIS

Dear Bill O'Beirne:

Further review of Draft EIS indicate you copied contents of December 16, 1994 letter from Governor Ann W. Richards to Jeffrey R. Benoit in your office. This was Environmental Assessment (EA) created by Texas General Land Office per NOAA requirements. EA contained errors and miss representations that you repeated in your Draft EIS.

My expectation was that NOAA would do thorough check on us Texans to confirm accuracies in what we furnished to you. Additionally, when I identified matters now presented to you I sent letters to Texas General Land Office and included (CC) copy to NOAA in your office.

These matters presented to you should be addressed by you. I also highly recommend that you take off your tie and put on your beach shoes to visit and see for yourself what you are now overlooking in your Draft EIS. Texas does not need US Coastal Zone Management that does not represent US Statute requirements. Get acceptance done while looking other way on requirements should not be sought. This would only put flawed program into actions, but would not achieve goals set for Texas.

My additional matters are:

Item 1; Texas General Land Office worked with City Galveston to create a dune line plan. Aerial photo of seashore used to draw boundary of dune line. This triggered rules preventing certain structures from being built seaward of this line.

On West Galveston at Pabst Road dead end at beach designated dune boundary takes 90 degree turn inland 250 feet with another 90 degree turn to continue parallel to seashore. This area contains two rows existing homes, one street row, and vacant lots. Line continues to then turn seaward again 90 degrees. This map takes in about $8,000,000.00 worth of real estate causing lots to become un usable for residential purposes. This map approved by City of Galveston, Texas General Land Office and NOAA. Referencing NOAA Draft EIS APPENDIX B - quoting Texas Law Tx Natural Resources Code 33.210 Private Property. "The requirements of this subchapter may not be applied in a manner that would result in the taking, damage, or destruction of property without adequate compensation." (Reference Item 1; C, first comments — Texas Senate Bill No. 14 prohibits "Taking of private property without compensation.)

These property owners have not been notified of this maps existence and when NOAA became party to originate making this property unusable for its intended purpose, who is going to compensate these owners.

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NOAA is on record to see that any Texas Plan be "Taking" proof. NOAA obviously has not viewed this map.

Item 2: Same Map above at 25th Street and Seawall has Flagship Hotel, owned by City of Galveston extending into Gulf several hundred feet. Map encircles this motel. There are no dunes to consider and interpretation of present plan would dictate dune rules applicable to this Hotel.

This Hotel's existence is not unlawful, but your NOAA rules address how to create special area concerns and rules to apply to this. Besides a dune line map not applicable here. Draft EIS should address correct approach to meet requirements of US Federal Program.

Item 3. Same Map above at 10th Street and Seawall has businesses structures that extend into the Gulf of Mexico. Map boundary encircles these properties. There are no dunes to consider and interpretation of present plan would dictate dune rules applicable to these properties.

These properties are not un lawful, but your NOAA rules address how to create special area concerns and rules to apply to this. Besides a dune line map not applicable here. Draft EIS should address US Federal Program guidelines.

.Item 4. Same Map above at West Beach 9 mile raod area. New development called "SANDS OF KAHALA BEACH." This new development replaced public parking lot used by public for beach access. Plan approved by City Galveston, Texas Attorney General, and Texas General Land Office. Developer scrapped area to form a dune with a small base about 12 foot NGVD. Behind this new dune the remains of original dune system was removed to a depth of about two feet. This sand was moved inland as fill for other lots that were previously low area that was marginal wet lands. This could result in next storm reaching Texas Highway FM 3005 because of this net loss of elevation.

The scarf is very evident where elevation altered. Rules do no allow this but with NOAA dependance on 1994 "EA" such is not addressed in Draft EIS.

Item 5. Republic of Texas in 1837 made law to plat West Galveston Island so as to have 50 foot road easements each 660 feet. Platted easements exist from bay to Gulf Of Mexico Beach. Easements were dedicated fee simple to public for a roadway and access to beaches. These maps have been honored in previous development, but have in last 15 years with annexation by City of Galveston been interpreted as being property of City of Galveston. City of Galveston has systematically sold or traded these easements to facilitate development of condos or homes. This is resulting in privatization of large beach areas that are public.

This results in crowding public beach users into areas where they directly impact traffic patterns, and become nuisance to home owners living nearby.

This has been told to City of Galveston, Texas Attorney General, Texas General Land Office, and NOAA. Deprivation of future generations for beach access is being denied by present Government. This should be addressed in NOAA's Draft EIS.

Item 6; Galveston Island has instances of 500,000 visitors coming to beaches. EIS does not address how these visitors are supposed to relieve themselves with absence of toilets. This is a health hazard with this sewerage added to our environment. Other states that monitor sewerage according to "NRDC" one of four visitors to beaches become sick from sewereage transmitted disease carrying organisms. This is a serious problem not addressed by your Draft EIS.

You will find in Texas Law the Texas Department Of Transportation builds and maintains rest stops with toilet facilities for visitors. This is being done on inland Texas Highways, but has not been suggested for Texas Massive Beach Crowds. Your rules address the health and welfare of people, so this appropriate for mentioning

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in your Draft EIS.

Item 7; West Galveston Island from west end of seawall to 8 mile road has 50-100 horses for rental by public. Horses with their riders access beach through dune area. Horses nervousness causes them to relieve themselves on public beach area. Horse manure become so dominant public beach users vacate area. At moon phases of tides where no high tides occur the build up becomes very concentrated. There are no efforts to pop scoop this manure from the beach.

County of Galveston Health Department, TNRCC, City of Galveston, Texas General Land Office, and Texas Attorney General know of this problem, but only response has been to hold their nose. No monitoring of disease carrying organisms has been attempted.

These horses access vegetated dune area to impact vegetation and dunes.

The Draft EIS does not address this potential health impact, but should.

I offer any data you may want to back up what I have presented here. Also, you really need a personal tour of Galveston to see what I attempt to explain.

Respectfully,

John M. Arrington

CC

Texas Coastal Coordination Council Stephen F. Austin Building 1700 N. Congress Avenue Austin, Tx. 78701-1495	Garry Mauro Honorable Land Commissioner 1700 N. Congress Avenue Austin, Tx. 78701-1495	Henry Freudenberg Honorable Mayor Galv.
Phil Gramm Honorable US Senator 712 Main Suite 2400 Houston, Tx. 77002	Mario V. Gallegos Jr. Honorable Tx Senator P.O.Box 12068 Austin, Tx., 78711	Jerry Patterson Honorable Tx Senator P.O Box 12068 Austin, Texas, 78711
Craig Eiland Honorable Tx Representative 4236 Spoonbill Ln. Galveston, Tx., 77551		

WRITTEN COMMENT NO. 17: JOHN ARRINGTON, CITIZEN
August 1, 1996

Response to Comments:

1. Comment noted. No change needed. The comment requests that NOAA evaluate whether the TCMP includes sufficient legal authorities to implement the program and ensure conformance to it. Specifically, the comment requests that certain other state legal authorities be networked into the TCMP.

NOAA has carefully reviewed the legal structure of the TCMP and has concluded that the program does include legal authorities adequate to address the principal issues of state concern. NOAA recognizes that other state statutes, regulations, policies, and judicial decisions may be generally relevant to management of coastal uses and activities. However, it is the state's prerogative to determine the precise nature and scope of the program submitted for review under the CZMA. So long as the TCMP includes sufficient legal authorities adequate to ensure conformance with the TCMP policies, NOAA can approve the program. The scope and description of the authorities networked into the TCMP is adequate.

With respect to the Coastal Coordination Act included in Appendix B of the DEIS, NOAA concurs that a complete copy of the statute, as amended, be included in Appendix B.

2. Comment noted. No change needed. The second comment raises the concern that Texas state and local governments are not adequately enforcing existing laws and regulations for management of the beach/dune system (31 TAC §15.1-15.10). Several alleged violations are noted in the comment and NOAA is encouraged to investigate and become familiar with these possible violations.

NOAA must review the TCMP to determine if the program includes sufficient legal authorities and organizational structure to implement and ensure conformance with the TCMP Policies. See 15 C.F.R. Part 923. NOAA has concluded that the TCMP does include policies adequate to manage uses that impact on coastal natural resource areas and the program's organizations structure is coherent and legally sufficient. NOAA recognizes that at any point in time, violations of existing state and local authorities networked into the TCMP may be occurring. In this case, the violations cited, if true, do not undermine the overall sufficiency of the TCMP polices or implementation structure. It is particularly important to note that these alleged violations precede NOAA's approval of the TCMP.

Future violations of the TCMP policies or a pattern of failure to adequately implement legal requirements networked into the TCMP would be of concern to NOAA. The adequacy of the state's implementation efforts is a matter appropriately addressed in NOAA's periodic evaluations of the TCMP, under CZMA §312. These reviews are conducted every three years.

WRITTEN COMMENT NO. 17: JOHN ARRINGTON, CITIZEN
August 5, 1996

1. Comment noted. No change needed. The first comment raises the question of whether the TCMP fails to adequately protect private property. NOAA recognizes the importance of private property rights and, as noted in the comment, the TCMP rules include a specific provision for the protection of private property rights. NOAA also takes notice of Texas Senate Bill 14, which prohibits the taking of private property without just compensation. However, whether existing state practices unlawfully interfere with property rights is not at issue before NOAA.

2-7. Comments noted. No change needed. NOAA recognizes the concerns raised regarding regarding the application, interpretation and enforcement of the City of Galveston dune protection program, public beach access, adequacy of facilities for beach goers, establishment of the local dune protection line, and the potential impact of horses on the dune system. In general, these matters are left to the prerogative of the local government, within the minimum standards adopted by the Texas General Land Office and other relevant state and local laws.

NOAA notes that beach and dunes are "coastal natural resource areas" under the TCMP. The adequacy of the state's efforts to respond to these and other uses and activities will be addressed in the §312 review.

TESTIMONY
of
Texas Land Commissioner Garry Mauro
before
The Office of Ocean and Coastal Resource Management
July 31, 1996
Corpus Christi, Texas

I'd like to thank the Office of Ocean and Coastal Resource Management for giving me the opportunity to speak in support of the proposed federal decision to approve the Texas Coastal Management Program.

The development of the Texas CMP was a long, exhaustive process that included extensive input, comment and day-to-day participation from across the full spectrum of public interests.

After seven years of intensive effort, we now have a program that streamlines and clarifies the relationships between state agencies regarding coastal issues, a program that also simplifies and expedites the way those agencies interact with local governments and respond to requests -- like permitting -- from the private sector.

As it now stands, the Texas Coastal Management Program will have major positive impact on all aspects of the Texas Gulf Coast -- from recreation and the economy to the conservation of natural resources and the environment.

With federal approval, the benefits to the both the Texas coastal economy and the Texas coastal environment will be even greater.

An obvious tangible and immediate benefit is the annual funding for coastal programs that comes with federal approval.

It's our belief that the best use of those funds is to pass the maximum possible amount of money through to coastal communities.

To that end, should we gain federal approval we are in the process of allocating the pro-rated annual allotment for fiscal year 1996 among fourteen projects that address such problems as beach nourishment, dune restoration and shorefront revitalization.

I don't have to tell this audience that fourteen projects barely make a dent in the much needed environmental, recreational and economic enhancements for the Texas Coast, and coastal staff are already preparing to solicit and evaluate proposals for the first full year of funding.

Another benefit of federal approval is that it removes a major obstacle for the development of deep water ports.

Sixty per cent of all the oil shipped to the U.S. from foreign producers sails through Texas waters and it's no secret that our oil imports are increasing every year.

Oil plays a vital role in the economy of the Texas Coast.

At the same time, oil spills pose some of the biggest threats to both the coastal economy and the coastal environment.

Offshore terminals, offshore moorings and deep water ports can do much to allievate the threat of catastrophic oil spills.

The biggest benefit from federal approval, however, will be the influence it will afford Texas in the federal decision making process regarding coastal issues.

Let me return to oil spills to illustrate my point.

We have had a several major spills since the GLO's Oil Spill Division began operations under the auspices of the Texas Oil Spill Prevention and Response Act of 1991 -- called OSPRA for short.

The difference between the way those spills have been dealt with as compared to the two catastrophic spills during the summer of 1990 is night and day.

The reason for the dramatic improvement is that OSPRA clarifies responsibilities and facilitates cooperation between private, local, state and federal authorities under a unified command.

In other words, everybody talks to each other and all work together toward a common goal.

With federal approval of the Texas CMP, a paradigm analgous to that of oil spill response will apply to all the issues facing the coast in which federal agencies have an interest -- issues like wetlands and dune protection, erosion mitigation, and dredging and beneficial use of dredged materials.

While I'm on the subject of dredging, let me make it clear that we regard dredged materials as assets, not waste.

Our policy is to require beneficial use of dredged materials whenever it can be done in an economic way.

I know that tackling this issue will be a challenge -- at first.

We will need communication and cooperation between waterway users, the

Corps of Engineers, the ports and the State of Texas.

But I am confident that we can do it.

Communication.

Streamlining.

Efficiency.

Everybody on the same page and everybody working for the same goals.

These are the most important benefits we will realize with federal approval.

Let me make one other thing clear at this point and that it is how Texas will address the nonpoint pollution control provisions of section 6217.

As I wrote to OCRM Director Jeffery Benoit in a letter dated June 6 of this year, we believe our existing nonpoint authorities and programs are sufficient for approval under 6217.

However, we recognize that neither the type nor the amount of information submitted constitute a sufficiently complete description of the Texas coastal nonpoint program to enable NOAA and the EPA to make a finding.

Texas is committed to submitting a complete description of our existing coastal nonpoint program within 30 months of federal approval -- the same timeline provided for states already in the program.

If, however, NOAA and EPA find, at that time, that we have failed to submit an approvable coastal nonpoint program, the governor will withdraw Texas from the National Coastal Zone Management Program as directed by state law.

I'l close my remarks by making a request and expressing an expectation.

The request is this: Please act quickly.

We have been working on the Texas CMP since 1989 and it's high time we have it in place.

I have directed my staff to do everything possible to help you in that process -- including making themselves available to you in Washington D.C.

Let me say that one of the reasons I've worked so long and hard for a federally approved Texas CMP is because it is only federal program of which I am aware that truly respects the primacy of the states.

Further, I have continually been impressed with OCRM's staunch advocacy on behalf of the states when disputes have arisen with other federal agencies.

My fond expectation, then, is that should we have the misfortune to bump heads with a federal agency -- or agencies -- Texas will have you as energetic and effective allies.

Thank you.

ORAL TESTIMONY NO. 1: TOM NUCKOLS ON BEHALF OF GARRY MAURO, LAND COMMISSIONER, DEIS PUBLIC HEARING TESTIMONY, CORPUS CHRISTI, TEXAS
July 31, 1996

Summary of Testimony:

Commissioner Mauro submitted written testimony identical to the oral testimony offered at the Corpus Christi public hearing. This written testimony in included in its entirety.

Response to Testimony:

NOAA appreciates Commissioner Mauro's support for expeditious federal approval of the TCMP.

ORAL COMMENT NO. 2: GLENDA CALLAWAY, GALVESTON BAY FOUNDATION
DEIS PUBLIC HEARING TESTIMONY, GALVESTON, TEXAS
August 1, 1996

Summary of Testimony:

The TCMP meets the CZMA requirements and I strongly urge you to approve the program so that we can move forward. There has been a tremendous amount of participation already on this program, in fact, about 20 years of public participation; and I think it's time to start it.

Response to Comments:

Comment noted. No change needed. NOAA appreciates the support for moving forward expeditiously with Federal approval, as proposed in the DEIS.

ORAL COMMENT NO. 3: LINDA SHEAD, GALVESTON BAY FOUNDATION
DEIS PUBLIC HEARING TESTIMONY, GALVESTON, TEXAS
August 1, 1996

Summary of Testimony:

The Galveston Bay Foundation has been involved in the process of developing this plan for several years now, as have hundreds of other coastal citizens; and we certainly support the approval by OCRM so that we can move forward. I know that there's been a lot of struggle, and we have stated a number of times that this is not a perfect plan. There are things that we might like to have improved, as I'm sure there are things that other entities would like to see improved but it is a plan that we can work with and we can move forward with and we can continue to improve over time. So, we encourage you to please go ahead and approve it.

Response to Comments:

Comment noted. No change needed. NOAA appreciates the support for moving forward expeditiously with Federal approval, as proposed in the DEIS.

ORAL COMMENT NO. 4: JOHN ARRINGTON, CITIZEN
DEIS PUBLIC HEARING TESTIMONY, GALVESTON, TEXAS
August 1, 1996

Summary of Testimony:

Note: Mr. Arrington submitted written testimony, in addition to offering oral testimony at the Galveston public hearing. The entire written testimony has been included earlier in this Part of the FEIS. Therefore, no summary of Mr. Arrington's testimony is included here.

Response to Comments:

NOAA's response to Mr. Arrington's testimony follows his written testimony.

ORAL COMMENT NO. 5: TOM KORNEGAY, EXECUTIVE DIRECTOR, PORT OF HOUSTON AUTHORITY, DEIS PUBLIC HEARING TESTIMONY, GALVESTON, TEXAS
August 1, 1996

Summary of Testimony:

Since 1993, the Port has been an active participant in the negotiations and development of the Coastal Management Plan. The Port was involved in extensive negotiations with the General Land Office, other shipping and navigation interests environmental representatives and agency personnel in the dredging section of the TCMP. The Port's interest in this area is quite obvious. Dredging is essential in the maritime industry. This section can be said to be the core of our livelihood. The negotiations on the dredging section were very complex and sometimes arduous. Nevertheless, The Port Authority was able to arrive at a compromise in support of the CPM as adopted. Part of the negotiations involved how the Coastal Management Plan would be applied to the Houston Ship Channel widening and deepening project and to maintenance dredging during the interim of the existing Houston Ship Channel project.

The innovative development of beneficial uses of dredged material through that development -- the widening and deepening project -- is nearing approval. The Senate and the House just within the last few weeks have the Water Resources Development Act which would authorize the project. Our review of the Draft Environmental Impact Statement has revealed that we have a slight misunderstanding about the section on interim dredging in the Houston Ship Channel until our widening and deepening project is accomplished. We are specifically concerned with the language of the Draft EIS and the lack of a consistency presumption with the beneficial use plan in the rules. Our view is that the presumption in 31 TAC §506.28(c) covers all aspects of the dredging policy, including beneficial uses.

We have had and will continue to have discussions with the General Land Office staff about the differing interpretations of this section. We are optimistic that our differences can be satisfactorily resolved. However, as this provision is important to us -- and I should say extremely important to us -- we believe that we should note that this situation exists.

Response to Comments:

NOAA acknowledges the Port's concern regarding implementation of the TCMP Dredge Policy, particularly as it relates to beneficial use. These concerns also appear in written comments by the Port and which are included in their entirety earlier in this Part of the FEIS. NOAA's response to these comments and concerns appears immediately after the Port's written comments.

ORAL COMMENT NO. 6: B. J. STORSETH, CITIZEN
DEIS PUBLIC HEARING TESTIMONY, GALVESTON, TEXAS
August 1, 1996

Summary of Testimony:

My comment has to do with just one question, and they may be answered in the DEIS. Does the plan, rule, or law define state property, dune protection, bulkhead erection and/or maintenance, permission requirements to build on beach-front lots, and who responsible for the enforcement of these rules, law or plan?

It seems like that if an individual has a question regarding these issues -- or some action that is being taken -- he cannot get it consistently answered. Who do we go to get consistent answers and answers that are valid and legal?

Response to Comments:

Comment noted. No change needed. The testimony offered raises an important question. The DEIS discusses the roles and responsibilities of the state and local governments at DEIS, Part II, page 4-77. For more information, the commenter may wish to contact the Texas General Land Office, Coastal Division or local government officials with responsibility for management of the beach/dune system.

ORAL COMMENT NO. 7: GARRY MAURO, TEXAS LAND COMMISSIONER
DEIS PUBLIC HEARING TESTIMONY, GALVESTON, TEXAS
August 1, 1996

Summary of Testimony:

Note: Commissioner Mauro submitted written testimony identical to the oral testimony offered at the Galveston public hearing. This written testimony is included, in its entirety, earlier in this Part of the FEIS. Therefore, no summary of Commissioner Mauro's testimony is included here.

Response:

NOAA's response to Commissioner Mauro's testimony follows his written testimony.

ORAL COMMENT NO. 8: DREW PUFFER ON BEHALF OF JIM GIATTINA, GULF OF MEXICO PROGRAM, TELEPHONE COMMENT
August 5, 1996

Summary of Testimony:

The Gulf of Mexico Program has no comments on the TCMP/DEIS or NOAA's proposed Federal approval decision.

Response to Comments:

Comment noted. No change needed. NOAA appreciates the support for moving forward with Federal approval, as proposed in the DEIS.

APPENDIX A

Acronyms

Appendix A

ACRONYMS

APA	-	Administrative Procedure Act
APR	-	Area for Preservation or Restoration
BEG	-	Bureau of Economic Geology, University of Texas
BLM	-	Bureau of Land Management
CATPOOL	-	Texas Catastrophe Property Insurance Pool
CBRA	-	Coastal Barrier Resources Act
CCA	-	Coastal Coordination Act
CCC	-	Coastal Coordination Council
CCMP	-	Comprehensive Conservation and Management Plan
CDC	-	Center for Disease Control and Prevention
CFR	-	Code of Federal Regulations
CNRA	-	coastal natural resource area
COE	-	U.S. Army Corps of Engineers
CWA	-	Clean Water Act
CWCP	-	Coastal Wetlands Conservation Plan
CZARA	-	Coastal Zone Act Reauthorization Amendments
CZMA	-	Coastal Zone Management Act of 1972
DOC	-	U.S. Department of Commerce
DOD	-	U.S. Department of Defense
DOE	-	U.S. Department of Energy
DOI	-	U.S. Department of the Interior
DOT	-	U.S. Department of Transportation
EA	-	environmental assessment
EC	-	Executive Committee of the Coastal Coordination Council
EIS	-	environmental impact statement
EPA	-	U.S. Environmental Protection Agency
FAA	-	Federal Aviation Administration
FATF	-	Federal Agency Task Force
FEMA	-	Federal Emergency Management Agency
FERC	-	Federal Energy Regulatory Commission
FHA	-	Federal Housing Administration
FIRM	-	flood insurance rate map
FWPCA	-	Federal Water Pollution Control Act (Clean Water Act)
GAPC	-	geographic area of particular concern
GBP	-	Galveston Bay Program
GLO	-	Texas General Land Office
GSA	-	General Services Administration
HHS	-	U.S. Department of Health and Human Services
LNG	-	liquefied natural gas

MARPOL	-	Marine Pollution Act (International Convention for the Prevention of Pollution from Ships)
MMS	-	Minerals Management Service
MOA	-	Memorandum of Agreement
MSL	-	mean sea level
NAFTA	-	North American Free Trade Agreement
NEP	-	National Estuary Program
NEPA	-	National Environmental Policy Act
NFIP	-	National Flood Insurance Program
NMFS	-	National Marine Fisheries Service
NOAA	-	National Oceanic and Atmospheric Administration
NPDES	-	National Pollutant Discharge Elimination System
NPS	-	National Park Service
NRC	-	Nuclear Regulatory Commission
NRCS	-	Natural Resources Conservation Service
NWI	-	National Wetland Inventory
OAG	-	Office of the Attorney General
OCRM	-	Office of Ocean and Coastal Resource Management
OCS	-	outer continental shelf
OSPRA	-	Oil Spill Prevention and Response Act of 1991
PAG	-	Permitting Assistance Group
PUC	-	Public Utility Commission
PSF	-	Permanent School Fund
QMB	-	Quality Management Board
RMC	-	Resource Management Code
RRC	-	Railroad Commission of Texas
SATF	-	State Agency Task Force
SAV	-	submerged aquatic vegetation
SIP	-	Clean Air Act state implementation plan
SLB	-	School Land Board
SSPOC	-	State Single Point of Contact
SWQS	-	Surface Water Quality Standards
TAC	-	Texas Administrative Code
TACB	-	Texas Air Control Board
TAMU	-	Texas A&M University
TCMP	-	Texas Coastal Management Program
TDA	-	Texas Department of Agriculture
TDH	-	Texas Department of Health
THC	-	Texas Historical Commission
TMOGA	-	Texas Midcontinent Oil and Gas Association
TNRCC	-	Texas Natural Resource Conservation Commission
TORP	-	Texas Outdoor Recreation Plan
TPWD	-	Texas Parks and Wildlife Department
TRACS	-	Texas Review and Comment System
TSCC	-	Toxic Substances Coordinating Commission

TSSWCB	-	Texas State Soil and Water Conservation Board
TWC	-	Texas Water Commission
TWDB	-	Texas Water Development Board
TxDOT	-	Texas Department of Transportation
USCA	-	United States Code Annotated
USCG	-	U.S. Coast Guard
USDA	-	U.S. Department of Agriculture
USDOI	-	U.S. Department of the Interior
USDOT	-	U.S. Department of Transportation
USFWS	-	U.S. Fish and Wildlife Service
USGS	-	U.S. Geological Survey
WRP	-	Wetlands Reserve Program
WQMP	-	Texas State Water Quality Management Plan

APPENDIX B

Coastal Coordination Act

Vernon's

TEXAS CODES ANNOTATED

Volume 1

NATURAL RESOURCES CODE

Sections 1.001 to 80

1996

Cumulative Annual Pocket Part

Replacing 1995 pocket part supplementing 1978 main volume

For Use In 1995–1996

Includes
Laws through the 1995 Regular Session
of the 74th Legislature
Court Constructions through 903 S.W.2d 153

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Historical and Statutory Notes

1995 Legislation

The 1995 amendment rewrote subd. (8); and added subds. (13) and (14).

§ 33.005. Effect of Chapter

(a) This subchapter does not repeal Subchapter B, Chapter 436, Health and Safety Code,[1] or the following provisions of the Parks and Wildlife Code: Chapters 83 and 86, Subchapter A of Chapter 46, Subchapter A of Chapter 76, Subchapter B of Chapter 81,[2] Subchapter G of Chapter 82,[3] Subchapter C of Chapter 216,[4] or Sections 66.101, 66.107, 66.112 through 66.118, 66.205, 76.031 through 76.036, 78.001 through 78.003, 81.002, 136.047, 184.024, 201.015, or 335.025.

[See main volume for (b)]

Amended by Acts 1991, 72nd Leg., ch. 14, § 284(100), eff. Sept. 1, 1991.

1 V.T.C.A., Health & Safety Code § 436.011 et seq.
2 V.T.C.A., Parks & Wildlife Code § 81.101 et seq.
3 V.T.C.A., Parks & Wildlife Code § 82.601 et seq.
4 V.T.C.A., Parks & Wildlife Code § 216.021

Historical and Statutory Notes

1991 Legislation

The 1991 amendment rewrote subsec. (a).

SUBCHAPTER B. ADMINISTRATIVE PROVISIONS

§ 33.011. Board to Administer, Implement, and Enforce Chapter

Law Review Commentaries

Oil and gas leasing upon Texas state lands.
J.W. Adams, Jr., 47 Texas Bar J. 18 (1984).

§ 33.015. Special Account

(a) A dedicated account is created, and money received by the board for the grant of permits under this chapter shall be deposited in the State Treasury to the credit of this dedicated account.

(b) Sections 403.094(h) and 403.095(b), Government Code, do not apply to the dedicated account created under this section.

Amended by Acts 1993, 73rd Leg., ch. 991, § 9, eff. Sept. 1, 1993.

Historical and Statutory Notes

1993 Legislation

The 1993 amendment, in the section heading, substituted "account" for "fund"; designated subsec. (a) and therein substituted "dedicated account" for "special fund" in two places; and added subsec. (b).

SUBCHAPTER C. POWERS AND DUTIES

§ 33.051. General Duty

The board, the council, and the land office shall perform the duties provided in this subchapter.

Amended by Acts 1991, 72nd Leg., ch. 295, § 33, eff. June 7, 1991; Acts 1995, 74th Leg., ch. 416, § 2, eff. June 8, 1995.

Historical and Statutory Notes

1991 Legislation

The 1991 amendment rewrote this section.

1995 Legislation

The 1995 amendment inserted ", the council,".

§ 33.052. Development of Coastal Management Program

(a) The commissioner shall develop a continuing comprehensive coastal management program pursuant to the policies stated in Section 33.202 of this code. The program is not effective until approved by a majority of the council under Section 33.204 of this code.

Text of subsec. (b) as amended by Acts 1995, 74th Leg., ch. 165, § 22(52)

(b) In developing the program, the land office shall act as the lead agency to coordinate and develop a long-term plan for the management of uses affecting coastal conservation areas, in cooperation with other state agencies that have duties relating to coastal matters, including the Parks and Wildlife Department, the attorney general's office, the Texas Natural Resource Conservation Commission, the Texas Water Development Board, the Texas Department of Transportation, and the Railroad Commission of Texas. The plan shall implement the policies stated in Section 33.001 of this code and shall include the elements listed in Section 33.053 of this code.

Text of subsec. (b) as amended by Acts 1995, 74th Leg., ch. 416, § 2

(b) In developing the program, the land office shall act as the lead agency to coordinate and develop a long-term plan for the management of uses affecting coastal natural resource areas, in cooperation with other state agencies that have duties relating to coastal matters, including those agencies represented on the council. The program shall implement the policies stated in Section 33.202 of this code and shall include the elements listed in Section 33.053 of this code.

(c) The council may appoint and establish procedures for an advisory committee to advise the council and the land office on coastal management issues. The advisory committee may only include persons with expertise in coastal matters and persons who live in the Texas coastal area. A member of the advisory committee serves at the pleasure of the council. A member is not entitled to compensation for services performed as a member of the committee but may receive reimbursement from land office funds for actual and necessary expenses incurred in attending meetings of the advisory committee.

(d) For purposes of Subsections (a) and (b) of this section, "coastal natural resource areas" has the meaning assigned by Section 33.203 of this code.

(e) This section does not add to or subtract from the duties and responsibilities of a state agency other than the land office, the council, and the board.

Amended by Acts 1989, 71st Leg., ch. 1145, § 1, eff. Sept. 1, 1989; Acts 1991, 72nd Leg., ch. 295, § 34, eff. June 7, 1991; Acts 1995, 74th Leg., ch. 76, § 11.263, eff. Sept. 1, 1995; Acts 1995, 74th Leg., ch. 165, § 22(52), eff. Sept. 1, 1995; Acts 1995, 74th Leg., ch. 416, § 2, eff. June 8, 1995.

Historical and Statutory Notes

1989 Legislation

The 1989 amendment designated subsec. (a); and added subsecs. (b) to (f).

1991 Legislation

The 1991 amendment, in subsec. (a), substituted "commissioner" for "board"; in subsec. (b), inserted "In developing the program," and substituted "uses affecting coastal conservation areas" for "Texas coastal public land"; in subsec. (c), in the first sentence, deleted "or the board" following "office", and in the last sentence substituted "may receive" for "is entitled to"; and rewrote subsec. (d) which formerly read:

"For purposes of Subsections (b) and (c) of this section 'coastal public land' includes beaches bordering on, the water of the open Gulf of Mexico, and the land lying beneath that water to the extent that the beaches, water, and land are within the jurisdiction of the state."

1993 Legislation

Section 1 of Acts 1993, 73rd Leg., ch. 616 provides:

"The Texas Coastal Observation Network is established as a cooperative project of Texas A&M University—Corpus Christi, Lamar University, the Texas Water Development Board, and the General Land Office. The network shall collect data on natural processes affecting the coast for the purpose of studying, planning for, and managing human uses of the coast as they are affected by those

natural processes. The participating state entities shall coordinate the project with the National Oceanic and Atmospheric Administration, other appropriate federal entities, and private entities."

1995 Legislation

Acts 1995, 74th Leg., ch. 76, § 11.263 amended § 33.052(b). However, § 1.02(b) of Acts 1995, 74th Leg., ch. 76 provides:

"If any provision of this Act conflicts with a statute enacted by the 74th Legislature, Regular Session, 1995, the statute controls."

Acts 1995, 74th Leg., ch. 165, in subsec. (b), in the first sentence, substituted "Natural Resource Conservation" for "Water", and substituted "Texas Department of" for "State Department of Highways and Public".

Section 25 of Acts 1995, 74th Leg., ch. 165 provides in part that no substantive change is intended by that chapter.

Acts 1995, 74th Leg., ch. 416, in the section heading, inserted "Coastal"; in subsec. (a), in the first sentence, inserted "coastal" and substituted "33.202" for "33.001", and added the second sentence; in subsec. (b), in the first sentence, substituted "natural resources" for "conservation", substituted "those agencies represented on the council" for "the Parks and Wildlife Department, the attorney general's office, the Texas Water Commission, the Texas Water Development Board, the State Department of Highways and Public Transportation, and the Railroad Commission of Texas", and in the second sentence, substituted "program" for "plan", and substituted "33.202" for "33.001"; in subsec. (c), twice substituted "council" for "land office", and in the first sentence, inserted "council and the"; rewrote subsec. (d); deleted subsec. (e); redesignated former subsec. (f) as (e) and therein inserted ", the council,"; and deleted subsec. (g). Prior to amendment, subsecs. (d), (e) and (g) read:

"(d) For purposes of Subsections (a) and (b) of this section, 'coastal conservation areas' includes beaches and critical dune areas bordering on the seaward shore of the Gulf of Mexico; coastal public submerged lands; washover channels on barrier islands; historic areas, parks, wildlife refuges, preserves, and other such designated natural resource management areas within the coastal area; the water of the open Gulf of Mexico, and the land lying beneath that water within the jurisdiction of the state.

"(e) The land office may adopt rules to implement this section."

"(g) The land office shall, on September 1 of even-numbered years, present a biennial report to the legislature outlining the status of coastal problems, issues, and programs."

Cross References

Coastal management plan, for purpose of Coastal Coordination Act, as the plan developed under this section, see V.T.C.A., Natural Resources Code § 33.203.

§ 33.053. Elements of Coastal Management Program

(a) The coastal management program, in compliance with the Coastal Zone Management Act of 1972 (16 U.S.C. Section 1451 et seq.), shall include the following elements:

(1) an identification of the boundaries of the coastal zone subject to the coastal management program as provided by Section 33.2053(k);

(2) a continuous analysis of the potential uses for the land and water within the coastal zone, including recommendations as to which configurations of uses consonant with the policies of this chapter maximize the benefits conferred on the present and future citizens of Texas;

(3) guidelines on the priority of uses within the coastal zone, including specifically those uses of lowest priority;

(4) a list of the uses of the land and water within the coastal zone that are permissible under state law and under agency or subdivision actions described by Sections 33.2051 and 33.2053 and that would have a direct and significant impact on the coastal waters;

(5) recommendations as to increments of jurisdiction or authority necessary to protect land and water within the coastal zone from direct and significant detrimental consequences flowing from the uses of adjacent land;

(6) an inventory of designated coastal natural resource areas, as defined by Section 33.203, in the coastal zone;

(7) a description of the organizational structure by which the coastal management program is implemented and administered;

(8) a compilation of state constitutional provisions, laws, rules, and judicial decisions under which the state proposes to exercise control over the uses of land and water described by Subdivision (4);

(9) a list of each agency or subdivision action, as described by Sections 33.2051 and 33.2053, that may have a direct and significant detrimental impact on coastal natural resource areas;

(10) a list of each federal agency action or activity and each outer continental shelf plan that may have a direct and significant detrimental impact on coastal natural resource areas;

(11) a procedure, as described under Sections 33.205, 33.2051, 33.2052, 33.2053, 33.206, 33.208, and 33.209, for determining the consistency of an agency or subdivision action or a federal agency action or activity or outer continental shelf plan with the goals and policies of the coastal management program;

(12) a definition of "gulf beach," as defined by Section 33.203, and a description of the statutory planning process or program for protection of and access to public beaches and other public coastal areas of environmental, recreational, historical, aesthetic, ecological, or cultural value;

(13) a description of the statutory planning process or program for energy facilities likely to be located in, or that may directly and significantly affect, the coastal zone;

(14) a description of the statutory planning process or program for:

(A) assessing the effects of shoreline erosion;

(B) studying and evaluating ways to control or reduce the impact of shoreline erosion; and

(C) restoring areas detrimentally affected by shoreline erosion;

(15) a description of the state's statutory program regulating nonpoint source water pollution, as it relates to the coastal zone; and

(16) an explanation of the relationship of specific policies of the coastal management program to:

(A) protection of resources;

(B) management of coastal development; and

(C) simplification of governmental procedures.

(b) For purposes of Subsections (a)(9) and (a)(11), "agency or subdivision action" has the meaning assigned by Section 33.203.

(c) For purposes of Subsections (a)(10) and (a)(11), "federal agency action," "federal agency activity," and "outer continental shelf plan" have the meanings assigned by Section 33.203.

Amended by Acts 1995, 74th Leg., ch. 416, § 2, eff. June 8, 1995.

Historical and Statutory Notes

1995 Legislation

The 1995 amendment rewrote the section.

Section 6 and 7 of the 1995 amendatory act provide:

"Sec. 6. The legislature intends that, subject to Chapter 33, Natural Resources Code, as amended by this Act, the coastal management program submitted by the governor under 16 U.S.C. Section 1455 on or after the effective date of this Act be as similar to the coastal management program submitted before the effective date of this Act as is practicable.

"Sec. 7. If the secretary of the United States Department of Commerce and the administrator of the United States Environmental Protection Agency find Texas has failed to submit an approvable coastal nonpoint pollution control program as required by 16 U.S.C. Section 1455b, which would result in the withholding of money under 16 U.S.C. Sections 1455b(c)(3) and (4), the governor shall withdraw any coastal management program developed under Chapter 33, Natural Resources Code, that has been:

"(1) approved by the secretary of the United States Department of Commerce; or

"(2) submitted to the secretary of the United States Department of Commerce for approval under 16 U.S.C. Section 1455."

Cross References

State owned coastal wetlands, acquisition plan to follow guidelines provided for in this subchapter, see V.T.C.A., Parks & Wildlife Code § 14.002.

SUBCHAPTER E. ENFORCEMENT AND APPEAL

Administrative Code References

General Land Office, planning division, procedure for hearings, management plan for Texas coast, see 31 TAC § 15.1 et seq.

SUBCHAPTER F. COASTAL COORDINATION

Acts 1977, 65th Leg., p. 1900, ch. 757, effective August 29, 1977, classified as Vernon's Ann.Civ.St. art. 5415e-1.5, was repealed by § 9 of Acts 1979, 66th Leg., p. 2007, ch. 785, which by § 1 thereof incorporated the provisions of the 1977 Act into the Natural Resources Code by adding this Subchapter F, consisting of §§ 33.201 to 33.204.

Acts 1991, 72nd Leg., ch. 295, § 37, amended this subchapter.

§ 33.201. Short Title

This subchapter may be cited as the Coastal Coordination Act.

Added by Acts 1979, 66th Leg., p. 1991, ch. 785, § 1, eff. June 13, 1979. Amended by Acts 1991, 72nd Leg., ch. 295, § 37, eff. June 7, 1991.

Historical and Statutory Notes

1991 Legislation

The 1991 amendment deleted "of 1977" at the end of the section.

Prior Laws:

Acts 1977, 65th Leg., p. 1900, ch. 757, § 1.

Acts 1979, 66th Leg., p. 2007, ch. 785, § 9.

Vernon's Ann.Civ.St. art. 5415e-1.5, § 1.

§ 33.202. Policy

(a) It is declared to be the policy of this state to make more effective and efficient use of public funds and provide for more effective and efficient management of coastal natural resource areas, and to better serve the people of Texas by:

(1) continually reviewing the principal coastal problems of state concern, coordinating the performance of government programs affecting coastal natural resource areas, and coordinating the measures required to resolve identified coastal problems; and

(2) making all coastal management processes more visible, accessible, coherent, consistent, and accountable to the people of Texas.

(b) It is declared to be the policy of this state that the chief executive officer of the state should represent the State of Texas in discussions and negotiations with the federal government with regard to the effect of federal actions on the coastal programs and policies of the State of Texas.

Added by Acts 1979, 66th Leg., p. 1991, ch. 785, § 1, eff. June 13, 1979. Amended by Acts 1991, 72nd Leg., ch. 295, § 37, eff. June 7, 1991; Acts 1995, 74th Leg., ch. 416, § 3, eff. June 8, 1995.

Historical and Statutory Notes

1991 Legislation

The 1991 amendment rewrote subsec. (a), which formerly read:

"It is declared to be the policy of this state to make more effective and efficient use of public funds and public facilities in coastal natural resource areas, and to better serve the people of Texas by:

"(1) continually reviewing the principal coastal problems of state concern, the performance of state coastal programs, and the measures required to resolve identified coastal problems; and

"(2) making the state's many existing coastal management processes more visible, accessible, and accountable to the people of Texas."

1995 Legislation

The 1995 amendment, in subsec. (a)(1), substituted "government" for "agencies, subdivisions, and", and "coordinating the" for "the coordinating".

Prior Laws:

Acts 1977, 65th Leg., p. 1900, ch. 757, § 2.
Acts 1979, 66th Leg., p. 2007, ch. 785, § 9.
Vernon's Ann.Civ.St. art. 5415e-1.5, § 2.

Library References

Health and Environment ⟹25.5(3).
C.J.S. Health and Environment §§ 91 et seq., 106 et seq., 129 et seq.

§ 33.203. Definitions

In this subchapter:

(1) "Coastal natural resource areas" means:

(A) coastal barriers;

(B) coastal historic areas;

(C) coastal preserves;

(D) coastal shore areas;

(E) coastal wetlands;

(F) critical dune areas;

(G) critical erosion areas;

(H) gulf beaches;

(I) hard substrate reefs;

(J) oyster reefs;

(K) submerged land;

(L) special hazard areas;

(M) submerged aquatic vegetation;

(N) tidal sand or mud flats;

(O) water of the open Gulf of Mexico; and

(P) water under tidal influence.

(2) "Coastal barrier" means an undeveloped area on a barrier island, peninsula, or other protected area, as designated by United States Fish and Wildlife Service maps.

(3) "Coastal historic area" means a site that is specially identified in rules adopted by the Texas Historical Commission or the Antiquities Committee as being coastal in character and that is:

(A) a site on the National Register of Historic Places, designated under 16 U.S.C. Section 470a and 36 CFR Part 63, Chapter 1; or

(B) a state archaeological landmark, as defined by Subchapter D, Chapter 191.

(4) "Coastal preserve" means any land, including a park or wildlife management area, that is owned by the state and that is:

(A) subject to Chapter 26, Parks and Wildlife Code, because it is a park, recreation area, scientific area, wildlife refuge, or historic site; and

(B) designated by the Parks and Wildlife Commission as being coastal in character.

(5) "Coastal shore area" means an area within 100 feet landward of the highwater mark on submerged land.

(6) "Coastal waters" means waters under tidal influence and waters of the open Gulf of Mexico.

(7) "Coastal wetlands" means wetlands, as the term is defined by Section 11.502, Water Code, located:

(A) seaward of the coastal facility designation line established by rules adopted under Chapter 40;

(B) within rivers and streams, to the extent of tidal influence, as shown on the Texas Natural Resource Conservation Commission's stream segment maps;

(C) within one mile of the mean high tide of the portion of river and stream described by Paragraph (B), except as provided by Paragraphs (D) and (E);

(D) in the case of wetlands bordering the portion of the Trinity River described by Paragraph (B):

(i) within the area located between the mean high tide line on the western shoreline of that portion of the river and Farm-to-Market Road 565 and Farm-to-Market Road 1409; or

(ii) within the area located between the mean high tide line on the eastern shoreline of that portion of the river and Farm-to-Market Road 563; or

(E) in the case of wetlands bordering the portion of the Neches River described by Paragraph (B):

(i) within one mile from the mean high tide line of the western shoreline of that portion of the river described by Paragraph (B); or

(ii) within the area located between the mean high tide line on the eastern shoreline of that portion of the river and Farm-to-Market Road 105.

(8) "Critical area" means a coastal wetland, an oyster reef, a hard substrate reef, submerged aquatic vegetation, or a tidal sand or mud flat.

(9) "Critical dune area" means a protected sand dune complex on the Gulf shoreline within 1,000 feet of mean high tide designated by the land commissioner under Section 63.121.

(10) "Critical erosion area" means an area designated by the land commissioner under Section 33.601(b).

(11) "Gulf beach" means a beach bordering the Gulf of Mexico that is:

(A) located inland from the mean low tide line to the natural line of vegetation bordering the seaward shore of the Gulf of Mexico; or

(B) part of a contiguous beach area to which the public has a right of use or easement:

(i) continuously held by the public; or

(ii) acquired by the public by prescription, dedication, or estoppel.

(12) "Hard substrate reef" means a naturally occurring hard substrate formation, including a rock outcrop or serpulid worm reef, living or dead, in an intertidal or subtidal area.

(13) "Oyster reef" means a natural or artificial formation that is:

(A) composed of oyster shell, live oysters, and other living or dead organisms;

(B) discrete, contiguous, and clearly distinguishable from scattered oyster shell or oysters; and

(C) located in an intertidal or subtidal area.

(14) "Special hazard area" means an area designated under 42 U.S.C. Section 4001 et seq. as having special flood, mudslide or mudflow, or flood-related erosion hazards and shown on a flood hazard boundary map or flood insurance rate map as Zone A, AO, A1–30, AE, A99, AH, VO, V1–30, VE, V, M, or E.

(15) "Submerged land" means land located under waters under tidal influence or under waters of the open Gulf of Mexico, without regard to whether the land is owned by the state or a person other than the state.

(16) "Submerged aquatic vegetation" means rooted aquatic vegetation growing in permanently inundated areas in estuarine and marine systems.

(17) "Tidal sand or mud flat" means a silt, clay, or sand substrate, without regard to whether it is vegetated by algal mats, that occur in intertidal areas and that are regularly or intermittently exposed and flooded by tides, including tides induced by weather.

(18) "Water of the open Gulf of Mexico" means water in this state, as defined by Section 26.001(5), Water Code, that is part of the open water of the Gulf of Mexico and that is within the territorial limits of the state.

(19) "Water under tidal influence" means water in this state, as defined by Section 26.001(5), Water Code, that is subject to tidal influence according to the Texas Natural

Resource Conservation Commission's stream segment map. The term includes coastal wetlands.

(20) "Council" means the Coastal Coordination Council, which shall consist of the commissioner, the chair of the Parks and Wildlife Commission or a member of the commission designated by the chair, the chair of the Texas Natural Resource Conservation Commission or a member of the commission designated by the chair, a member of the Railroad Commission of Texas appointed by that commission, the chair of the Texas Water Development Board or a member of the board designated by the chair, the chair of the Texas Transportation Commission or a member of the commission designated by the chair, a member of the State Soil and Water Conservation Board appointed by that board, and one city or county elected official who resides in the coastal area, one owner of a business located in the coastal area who resides in the coastal area, one resident from the coastal area, and a representative of agriculture, each appointed by the governor with the advice and consent of the senate for two-year terms. The terms of the positions on the council held by the city or county elected official who resides in the coastal area and the resident from the coastal area expire May 31 of each even-numbered year. The terms of the positions on the council held by the owner of a business located in the coastal area who resides in the coastal area and the representative of agriculture expire May 31 of each odd-numbered year.

(21) "Agency or subdivision" means any state agency, department, board, or commission or political subdivision of the state.

(22) "Coastal management program " means an ongoing, comprehensive program containing the elements required for approval of a program under the Coastal Zone Management Act of 1972 (16 U.S.C. Section 1451 et seq.) that is designed to coordinate agencies' management of activities that may adversely affect coastal natural resource areas for the purpose of continually making management of those activities more efficient and effective.

(23) "Agency or subdivision action" means an action described by Section 33.2051 or 33.2053.

(24) "Federal agency activity" means a function performed by or for a federal agency in the exercise of its statutory responsibility, including financial assistance, the planning, construction, modification, or removal of a public work, facility, or any other structure, and the acquisition, use, or disposal of land or water resources. The term does not include the issuance of a federal license or permit.

(25) "Federal agency action" means a license or permit that a federal agency may issue that represents the proposed federal authorization, approval, or certification needed by the applicant to begin an activity.

(26) "Proposed action" means an agency or subdivision action under consideration by the agency or subdivision, but with respect to which the agency or subdivision has not made a final decision.

(27) "Outer continental shelf plan" means a plan for the exploration or development of, or production from, an area leased under the Outer Continental Shelf Lands Act (43 U.S.C. Section 1331 et seq.) and the rules adopted under that Act that is submitted to the secretary of the United States Department of the Interior after federal approval of the coastal management program.

Added by Acts 1979, 66th Leg., p. 1991, ch. 785, § 1, eff. June 13, 1979. Amended by Acts 1991, 72nd Leg., ch. 295, § 37, eff. June 7, 1991; Acts 1995, 74th Leg., ch. 76, § 11.264, eff. Sept. 1, 1995; Acts 1995, 74th Leg., ch. 416, § 4, eff. June 8, 1995.

Historical and Statutory Notes

1991 Legislation

The 1991 amendment rewrote this section which formerly read:

"(a) In this subchapter:

"(1) 'Coastal natural resource areas' means areas in the Gulf of Mexico within the boundaries of this state, tidal inlets and tidal deltas, bays, lagoons which contain seawater and which have unimpaired connection with the Gulf of Mexico, oyster reefs, grassflats, channels which contain seawater, coastal lakes containing seawater, beaches adjacent to seawater, barrier islands, wind tidal flats, marsh which contains seawater, washover areas, sand dune complexes on the Gulf shoreline, river mouths and tidal streams up to the farthest point of intrusion by

seawater, and spoil deposits in direct contact with seawater or located within, upon, or in direct contact with any of these coastal natural resource areas, but does not include any mainland area where seawater is present only during storms or hurricanes as defined by the Beaufort Wind Scale.

"(2) 'Council,' means the Natural Resources Council created by the Natural Resources Council Act of 1977 (Article 4413(48), Vernon's Texas Civil Statutes).

"(3) 'Seawater' means any water containing a concentration of one-twentieth of one percent or more by weight of total dissolved inorganic salts derived from the marine water of the Gulf of Mexico.

"(b) The definition in Subsection (a)(1) of this section is not admissible in evidence in any court of law for any purpose other than the implementation and construction of this subchapter unless otherwise agreed by all parties to the case or controversy before the court."

1995 Legislation

Acts 1995, 74th Leg., ch. 76, in the definition of "council", substituted "Natural Resource Conservation" for "Water".

Acts 1995, 74th Leg., ch. 416, rewrote the section, which formerly read:

"In this subchapter:

"(1) 'Coastal natural resource areas' means areas designated in the coastal management plan as requiring special management, including coastal public submerged lands, public beaches, washover areas on peninsulas, mainland shorelines, and barrier islands, protected sand dune complexes on the Gulf shoreline, and parks, historic areas, wildlife refuges, preserves, and other such natural resource management areas located within the coastal area and designated in the coastal management plan.

"(2) 'Council' means the Coastal Coordination Council, which shall consist of the commissioner, the attorney general, the chair of the Parks and Wildlife Commission, the chair of the Texas Water Commission, a member of the Railroad Commission of Texas, and one city or county elected official and one resident from the coastal area appointed by the governor for two-year terms.

"(3) 'Agency or subdivision' means any agency, department, board, commission, subdivision, body politic, or other government entity or unit.

"(4) 'Coastal management plan' means the plan as developed by the commissioner under Section 33.052 of this code."

Section 5 of Acts 1995, 74th Leg., ch. 416 provides:

"As soon as possible on or after the effective date of this Act, the governor shall appoint to the Coastal Coordination Council:

"(1) a city or county elected official who resides in the coastal area, if a vacancy occurs in that position on the council;

"(2) a resident from the coastal area, if a vacancy occurs in that position on the council;

"(3) an owner of a business located in the coastal area who resides in the coastal area; and

"(4) a representative of agriculture."

Prior Laws:

Acts 1977, 65th Leg., p. 1900, ch. 757, § 3.
Acts 1979, 66th Leg., p. 2007, ch. 785, § 9.
Vernon's Ann.Civ.St. art. 5415e-1.5, § 3.

§ 33.204. Administration of Coastal Management Program

(a) The council by rule shall adopt goals and policies of the coastal management program. A goal or policy may not require an agency or subdivision to perform an action that would exceed the constitutional or statutory authority of the agency or subdivision to which the goal or policy applies.

(b) The council shall meet once in each calendar quarter. The commissioner is chair of the council. The chair or any three members of the council may convene special meetings at other times.

(c) Except as provided by Sections 33.205(c)(3) and 33.206(a), the council may act on the agreement of a majority of a quorum of the council.

(d) For each matter to be reviewed by the council under Section 33.205(c) or (d) of this code, the governor shall designate a local elected official from a county or municipality directly affected by the matter under review. The local official shall serve as a nonvoting participant on the council for purposes of reviewing and acting on that matter only.

(e) In conducting reviews under Section 33.205 of this code, the council shall receive and consider the oral or written testimony of any person regarding the coastal management program as the testimony relates to the agency or subdivision action or federal agency action or activity or outer continental shelf plan under review. The council may reasonably limit the length and format of the testimony and the time at which it will be received. Notice of the period during which the testimony will be received shall be published in the Texas Register and in a newspaper of general circulation in each county directly affected by the matter under review before the commencement of that period. The council shall consider only the record

before the agency or subdivision involved in the matter under review, the agency's or subdivision's findings, applicable laws and rules, any additional information provided by that agency or subdivision, and public testimony under this subsection, provided that if the agency or subdivision did not hold a hearing, make a record, or make findings, the council may hold a hearing and make findings necessary to a complete and thorough review.

(f) The land office shall assist the council in carrying out its duties. The council members may not receive compensation for services but may receive reimbursement for actual and necessary expenses. The land office, in coordination with other agencies and subdivisions, shall prepare an annual report on the effectiveness of the coastal management program. The land office shall submit the report to the council for approval. On or before January 15 of each odd-numbered year, the land office shall send to the legislature each of the previous two annual reports.

Added by Acts 1979, 66th Leg., p. 1991, ch. 785, § 1, eff. June 13, 1979. Amended by Acts 1991, 72nd Leg., ch. 295, § 37, eff. June 7, 1991; Acts 1995, 74th Leg., ch. 416, § 4, eff. June 8, 1995.

Historical and Statutory Notes

1991 Legislation

The 1991 amendment rewrote this section which formerly read:

"(a) The council shall make studies of problems and issues affecting the coastal natural resource areas of the state that are in the public interest.

"(b) The council shall prepare and submit to the governor and legislature before March 1 of each even-numbered year a comprehensive report with recommendations for action on problems and issues affecting the coastal natural resource areas of the state. The comprehensive report may include a minority report and recommendations and shall include:

"(1) a short description of the environmental, social, and economic changes in or affecting the coastal natural resource areas of the state during the preceding two years, this description to include changes in boundaries and state or federal coastal policies;

"(2) a statement of the principal problems of state concern in or affecting coastal natural resource areas;

"(3) a statement of the steps recommended by the council to resolve identified problems, including additions to or changes in state policies, programs, or statutes affecting coastal natural resource areas, transfers of programs among agencies, and the creation of new programs or elimination of old ones;

"(4) a review of the effectiveness of current programs for implementing state policy affecting coastal natural resource areas;

"(5) a report on the success of actions taken by the council during the preceding two years, including public hearings, administration of federal grant funds, and specific studies; and

"(6) recommended state coastal natural resource research and data acquisition priorities.

"(c) The state agencies, university systems, other bodies, and elected officials represented on the council shall perform or have performed all research and analyses requested by the council for the preparation of the report and transmit the research and analyses to the council by such time as is necessary to ensure the timely submission of the council's finished report to the governor and legislature.

"(d) In the course of preparing the report, the council shall receive and consider the oral or written testimony of any person regarding the coastal policies, programs, and procedures of the state. The council may reasonably limit the length and format of the testimony and the time at which it will be received. Notice of the period during which the testimony will be received shall be published in the Texas Register not less than 30 days before the commencement of that period."

1995 Legislation

The 1995 amendment rewrote the section, which formerly read:

"(a) The council shall promulgate rules adopting the goals and policies of the coastal management plan and make studies of problems and issues affecting the management of coastal natural resource areas as provided in the plan.

"(b) The council shall meet once in each calendar quarter. The commissioner is chair of the council and may convene special meetings at other times. For each matter to be reviewed by the council under Section 33.205 of this code, the governor shall designate a local elected official from a county directly affected by the matter under review. The local official shall serve as a nonvoting participant on the council for purposes of reviewing and acting on that matter only.

"(c) In conducting reviews under Section 33.205 of this code, the council shall receive and consider the oral or written testimony of any person regarding the goals and policies of the coastal management plan. The council may reasonably limit the length and format of the testimony and the time at which it will be received. Notice of the period during which the testimony will be received shall be published in the Texas Register and in a newspaper of general circulation in each county directly affected by the matter under review before the commencement of that period. The council shall consider only the record before the agency or subdivision involved in the matter under review, the agency's or subdivision's findings, applicable laws and rules, any additional information provided

by that agency or subdivision, and public testimony under this subsection, provided that if the agency or subdivision did not hold a hearing, make a record, or make findings, the council may hold a hearing and make findings necessary to a complete and thorough review.

"(d) The land office shall assist the council in carrying out its duties. The council shall not receive compensation for services but may receive reimbursement for actual and necessary expenses."

Section 5 of the 1995 amendatory act provides:

"As soon as possible on or after the effective date of this Act, the governor shall appoint to the Coastal Coordination Council:

"(1) a city or county elected official who resides in the coastal area, if a vacancy occurs in that position on the council;

"(2) a resident from the coastal area, if a vacancy occurs in that position on the council;

"(3) an owner of a business located in the coastal area who resides in the coastal area; and

"(4) a representative of agriculture."

Prior Laws:

Acts 1977, 65th Leg., p. 1900, ch. 757, § 4.
Acts 1979, 66th Leg., p. 2007, ch. 785, § 9.
Vernon's Ann.Civ.St. art. 5415e-1.5, § 4.

Library References

Health and Environment ⇐25.5(9).
C.J.S. Health and Environment §§ 65, 66, 103, 107, 140 et seq., 150 et seq.

§ 33.205. Consistency With Coastal Management Program; Council Review

(a) An agency or subdivision that takes an agency or subdivision action described by Section 33.2051 or 33.2053 that may adversely affect a coastal natural resource area shall comply with the goals and policies of the coastal management program.

(b) An agency or subdivision subject to the requirements of Subsection (a) shall affirm that it has taken into account the goals and policies of the coastal management program by issuing a written determination that a proposed action described by Section 33.2051 or 33.2053 is consistent with the program goals and policies.

(c) The council may not review a proposed action subject to the requirements of Subsections (a) and (b) of this section for consistency with the goals and policies of the coastal management program unless:

(1) the consistency determination for the proposed action was contested by:

(A) a council member or an agency that was a party in a formal hearing under Chapter 2001, Government Code, or in an alternative dispute resolution process; or

(B) a council member or other person by the filing of written comments with the agency before the action was proposed if the proposed action is one for which a formal hearing under Chapter 2001, Government Code, is not available;

(2) a person described by Subdivision (1) of this subsection files a request for referral alleging a significant unresolved dispute regarding the proposed action's consistency with the goals and policies of the coastal management program; and

(3) any three regular members of the council agree that there is a significant unresolved dispute regarding the proposed action's consistency with the goals and policies of the coastal management program and the matter is placed on the agenda for a council meeting.

(d) If consistency review thresholds are in effect under Section 33.2052, the council may not review a proposed action subject to the requirements of Subsections (a) and (b) for consistency with the goals and policies of the coastal management program unless the requirements of Subsection (c) are satisfied and:

(1) if the proposed action is one for which a formal hearing under Chapter 2001, Government Code, is available:

(A) the action exceeds the applicable thresholds and the agency's consistency determination was contested in a formal hearing or in an alternative dispute resolution process; or

(B) the action does not exceed the applicable thresholds but may directly and adversely affect a critical area, critical dune area, coastal park, wildlife management area or preserve, or gulf beach and a state agency contested the agency's consistency determination in a formal hearing; or

(2) if the proposed action is one for which a formal hearing under Chapter 2001, Government Code, is not available to contest the agency's determination, the action exceeds the applicable thresholds.

(e) The council must consider and act on a matter referred under Subsection (c) or (d) before the 26th day after the date the agency or subdivision proposed the action. For purposes of this section, an action subject to the contested case provisions of Chapter 2001, Government Code, is proposed when notice of a decision or order is issued under Section 2001.142, Government Code.

(f) The council by rule shall establish a process by which an applicant for a permit or other proposed action described in Section 33.2053, or an agency or subdivision proposing an action, may request and receive a preliminary consistency review. The rules shall:

(1) create a permitting assistance group composed of representatives of council member agencies and other interested council members to coordinate the preliminary reviews; and

(2) require that the following written information be produced not later than the 45th day after the date of the request for preliminary review:

(A) a statement from each agency or subdivision required to permit or approve the project as to whether the agency or subdivision anticipates approving or denying the application;

(B) if an agency or subdivision intends to deny an application, the agency's or subdivision's explanation of the grounds for denial and recommendations for resolving the grounds in a way that would allow the application to be approved;

(C) if enough information is already available, a preliminary finding as to whether the project is likely to be found consistent with the goals and policies of the coastal management program; and

(D) if the project is likely to be found inconsistent with the goals and policies of the coastal management program, an explanation and recommendation for resolving the inconsistency in a way that would allow the project to be found consistent.

(g) The council by rule shall establish a process by which an individual or small business may request and receive assistance with filing applications for permits or other proposed actions described by Section 33.2053. The rules shall provide for:

(1) the coordination of preapplication assistance through the permitting assistance group; and

(2) the provision of the following, by the permitting assistance group, to an individual or a small business, on request:

(A) a list of the permits or other approvals necessary for the project;

(B) a simple, understandable statement of all permit requirements;

(C) a coordinated schedule for each agency's or subdivision's decision on the action;

(D) a list of all the information the agencies or subdivisions need to declare the applications for the permits or other approvals administratively complete;

(E) assistance in completing the applications as needed; and

(F) if enough information is already available, a preliminary finding as to whether the project is likely to be found consistent with the goals and policies of the coastal management program.

(h) If an agency, subdivision, or applicant has received a preliminary finding of consistency under Subsection (f)(2)(C) or (g)(2)(F) and a request for referral was filed on that action under Subsection (c)(2), the council may accept the request for referral only if the agency or subdivision has substantially changed the permit or proposed action since the preliminary finding was issued.

Added by Acts 1991, 72nd Leg., ch. 295, § 37, eff. June 7, 1991. Amended by Acts 1995, 74th Leg., ch. 416, § 4, eff. June 8, 1995.

Historical and Statutory Notes

1995 Legislation

The 1995 amendment rewrote the section, which formerly read:

"(a) All actions taken or authorized by state agencies and subdivisions that may adversely affect coastal natural resource areas, including discharges and withdrawals that may significantly affect water quality in state waters subject to tidal influence, must comply with the goals and policies of the coastal management plan. In developing rules and policies applicable in coastal areas and performing actions subject to the requirements of this subsection, state agencies and subdivisions shall take into account the goals and policies of the coastal management plan.

"(b) The council shall review any action subject to the requirements of Subsection (a) of this section that the commissioner submits to the council for review. The council shall review any action subject to the requirements of Subsection (a) of this section that is submitted to the council by any three regular members of the council.

"(c) An action must be referred to the council within 30 days of the date it becomes final. The council must consider and act on the matter within 90 days of referral."

§ 33.2051. Agency Rulemaking Actions

(a) The land office shall comply with Sections 33.205(a) and (b) when adopting or amending a rule governing the prevention of, response to, or remediation of a coastal oil spill.

(b) The Texas Natural Resource Conservation Commission shall comply with Sections 33.205(a) and (b) when adopting or amending a rule governing:

(1) air pollutant emissions;

(2) on-site sewage disposal systems; or

(3) underground storage tanks.

(c) The State Soil and Water Conservation Board shall comply with Sections 33.205(a) and (b) when adopting or amending a rule governing agricultural or silvicultural nonpoint source pollution.

(d) An agency shall comply with Sections 33.205(a) and (b) when adopting or amending a rule governing an individual action described by Section 33.2053.

(e) The council may not review a proposed rule of the Texas Department of Agriculture.

Added by Acts 1995, 74th Leg., ch. 416, § 4, eff. June 8, 1995.

§ 33.2052. Certification of Agency Rules; Agency Actions Considered Consistent

(a) The council by rule shall establish a process by which an agency may submit rules and rule amendments described by Section 33.2051 to the council for review and certification for consistency with the goals and policies of the coastal management program.

(b) The process must provide that an agency may submit to the council consistency review thresholds for the agency's actions described in Section 33.2053. After the council certifies that an agency's rules are consistent and approves the agency's thresholds, the agency's consistency determination under Section 33.205(b) for an action is final and is not subject to referral and review, except as provided by Section 33.205(d).

(c) The council by rule shall provide that the council may revoke its certification under Subsection (b) if the council finds that an agency has:

(1) implemented certified rules in a manner that conflicts with the goals and policies of the coastal management program; or

(2) amended certified rules in a manner inconsistent with the goals and policies of the coastal management program.

Added by Acts 1995, 74th Leg., ch. 416, § 4, eff. June 8, 1995.

§ 33.2053. Individual Agency or Subdivision Actions

(a) The land office, the School Land Board, or a board for lease of state-owned lands shall comply with Sections 33.205(a) and (b) when issuing or approving:

(1) a mineral lease plan of operations;

(2) a geophysical or geochemical permit;

(3) a coastal easement;

(4) a miscellaneous easement;

(5) a coastal lease;

(6) a surface lease;

(7) a structure registration;

(8) a cabin permit;

(9) a navigation district lease;

(10) certification of a local government beach access or dune protection plan; or

(11) an agency or subdivision wetlands mitigation bank.

(b) The Public Utility Commission of Texas shall comply with Sections 33.205(a) and (b) when issuing a certificate of convenience and necessity.

(c) The Railroad Commission of Texas shall comply with Sections 33.205(a) and (b) when issuing:

(1) a wastewater discharge permit;

(2) a waste disposal or storage pit permit; or

(3) a certification of a federal permit for the discharge of dredge or fill material.

(d) The Texas Transportation Commission shall comply with Sections 33.205(a) and (b) when approving:

(1) an acquisition of a site for the placement or disposal of dredge material from, or the expansion, relocation, or alteration of, the Gulf Intracoastal Waterway; or

(2) a transportation construction project or maintenance program.

(e) The Texas Historical Commission and the Antiquities Committee shall comply with Sections 33.205(a) and (b) when issuing:

(1) a permit for destruction, alteration, or taking of a coastal historic area; or

(2) a review of a federal undertaking affecting a coastal historic area.

(f) The Texas Natural Resource Conservation Commission shall comply with Sections 33.205(a) and (b) when issuing or approving:

(1) a wastewater discharge permit;

(2) a permit for a new concentrated animal feeding operation located one mile or less from a critical area or coastal waters;

(3) a permit for solid or hazardous waste treatment, storage, or disposal;

(4) creation of a special purpose district or approval of bonds for the purpose of construction of infrastructure on coastal barriers;

(5) levee improvement or flood control projects;

(6) a certification of a federal permit for the discharge of dredge or fill material;

(7) a declaration of an emergency and request for an emergency release of water;

(8) a new permit for an annual appropriation of:

(A) 5,000 or more acre-feet of water within the program boundary; or

(B) 10,000 or more acre-feet of water outside the program boundary but within 200 stream miles of the coast;

(9) an amendment to a water permit for an increase in an annual appropriation of:

(A) 5,000 or more acre-feet of water within the program boundary; or

(B) 10,000 or more acre-feet of water outside the program boundary but within 200 stream miles of the coast; or

(10) a change in the purpose of use of an annual appropriation of water to a more consumptive use of:

(A) 5,000 or more acre-feet of water within the program boundary; or

(B) 10,000 or more acre-feet of water outside the program boundary but within 200 stream miles of the coast.

(g) The council may not review an action of the Texas Natural Resource Conservation Commission described by Subsections (f)(8)–(10) taken to implement a part of the Trans-Texas Water Program that the Trans-Texas Water Program Policy Management Committee has found to be consistent with the goals and policies of the coastal management program.

To find that the program is consistent with the goals and policies, the Trans-Texas Water Program Policy Management Committee must:

(1) include at least three members of the council, or representatives of those members, as voting members of the committee; and

(2) make the finding by a majority vote of those members or their representatives.

(h) The Parks and Wildlife Department shall comply with Sections 33.205(a) and (b) when issuing or approving:

(1) an oyster lease;

(2) a permit for taking, transporting, or possessing threatened or endangered species;

(3) a permit for disturbing marl, sand, shell, or gravel on state-owned land; or

(4) development by a person other than the Parks and Wildlife Department that requires the use or taking of any public land in a state park, wildlife management area, or preserve.

(i) A subdivision shall comply with Sections 33.205(a) and (b) when issuing a dune protection permit or beachfront construction certificate that authorizes:

(1) construction activity that is located 200 feet or less landward of the line of vegetation and that results in the disturbance of more than 7,000 square feet of dunes or dune vegetation;

(2) construction activity that results in the disturbance of more than 7,500 cubic yards of dunes;

(3) a coastal shore protection project undertaken on a gulf beach or 200 feet or less landward of the line of vegetation and that affects more than 500 linear feet of gulf beach; or

(4) a closure, relocation, or reduction in existing public beach access or public beach access designated in an approved local government beach access plan, other than for a short term.

(j) An action to renew, amend, or modify an existing permit, certificate, lease, easement, approval, or other action is not an action under this section if the action is taken under a rule that the council has certified under Section 33.2052 and:

(1) for a wastewater discharge permit, if the action is not a major permit modification that would:

(A) increase pollutant loads to coastal waters; or

(B) result in relocation of an outfall to a critical area;

(2) for solid, hazardous, or nonhazardous waste permits, if the action is not a Class III modification under rules of the Texas Natural Resource Conservation Commission; or

(3) for any other action, if the action:

(A) only extends the period of the existing authorization and does not authorize new or additional work or activity; or

(B) is not directly relevant to Sections 33.205(a) and (b).

(k) The council shall establish a program boundary to limit the geographic area in which the requirements of Sections 33.205(a) and (b) apply. The boundary is the coastal facility designation line as defined by Appendix 1 to 31 TAC Section 19.2 as that appendix existed on the effective date of this section, as modified by Section 33.203(7). Except as provided by Subsections (f)(8)–(10), this subchapter does not apply to an agency action authorizing an activity outside the program boundary.

Added by Acts 1995, 74th Leg., ch. 416, § 4, eff. June 8, 1995.

§ 33.206. Council Action

(a) A proposed action is consistent with the goals and policies of the coastal management program and approved by the council unless, on the affirmative vote of at least two-thirds of the members of the council, the council determines the action to be inconsistent with the coastal management program and protests the action.

(b) If the council protests the proposed action, the council shall report its findings on the matter to the agency or subdivision. The report shall specify how the proposed action is inconsistent with the goals and policies of the coastal management program and include

specific recommendations of the council regarding how the proposed action may be modified or amended to make it consistent with the program. Before the 21st day after the date the agency or subdivision receives the report, the agency or subdivision shall review the findings and recommendations and determine whether to modify or amend the proposed action to make it consistent with the goals and policies of the coastal management program and shall notify the council of its decision.

(c) If an agency or subdivision does not modify or amend a proposed action to be consistent with the goals and policies of the coastal management program, the council shall request the attorney general to issue an opinion on the consistency of the proposed action with the coastal management program. The agency or subdivision is stayed from taking the proposed action until the attorney general issues the opinion. The attorney general shall issue an opinion before the 26th day after the date the council requests the opinion.

(d) The council shall adopt procedural rules for the review of federal actions, activities, and outer continental shelf plans that incorporate the provisions of federal regulations governing those reviews. The rules shall provide that the chair or any three members may request additional information from a federal agency or additional time for review as provided by the federal regulations.

(e) The council shall review any federal action, activity, or outer continental shelf plan that any three members of the council agree presents a significant unresolved issue regarding consistency with the goals and policies of the coastal management program and place the matter on the agenda of a meeting of the council for review.

(f) If an activity requiring an agency or subdivision action described by Section 33.2053 that falls below thresholds in effect under Section 33.2052 also requires an equivalent federal permit or license, the council may only determine the agency or subdivision action's consistency. If an activity requiring an agency or subdivision action above thresholds requires an equivalent federal permit or license, the council may determine the consistency of the agency or subdivision action or the federal license or permit, but not both. The determination regarding the consistency of an action made by the council under this subsection constitutes the state's determination regarding consistency of the equivalent agency or subdivision action or federal action.

(g) If, after review, the council finds a proposed federal agency action or activity or outer continental shelf plan is inconsistent with the coastal management program, and the federal agency does not modify the action, activity, or outer continental shelf plan to achieve consistency with the program, the governor, with the assistance of the chair of the council, may seek mediation of the matter in accordance with federal law.

(h) The council may not protest a proposed action by an agency or subdivision pertaining to an application filed with that agency or subdivision before the date the coastal management program is adopted.

Added by Acts 1991, 72nd Leg., ch. 295, § 37, eff. June 7, 1991. Amended by Acts 1995, 74th Leg., ch. 416, § 4, eff. June 8, 1995.

Historical and Statutory Notes

1995 Legislation

The 1995 amendment rewrote the section, which formerly read:

"(a) After reviewing an action of a state agency or subdivision, the council may affirm or protest the action of the state agency or subdivision.

"(b) If the council protests the action, the council shall remand the matter to the state agency or subdivision. The remand shall include findings on inconsistencies with the goals and policies of the coastal management plan and may include recommendations of the council. On remand, the state agency or subdivision shall modify or amend the action to make it consistent with the goals and policies of the coastal management plan. Should the agency or subdivision decide not to amend its action as recommended by the council, it shall notify the council of that decision.

"(c) The state agency's or subdivision's action on remand is subject to review by the council as provided in Section 33.205 of this code. The only basis on which the council may reverse a decision of an agency or subdivision is that the action is inconsistent with the goals and policies of the coastal management plan.

"(d) The council shall review any federal action the commissioner submits to the council for review. If, after review, the council finds a federal action does not comply with goals and policies of the coastal management plan, the council may refer the matter to any federal official authorized to review or act on the matter and may pursue resolution of the matter with the federal official."

§ 33.207. Council Recommendations

In addition to the report required by Section 33.206, the council:

(1) may periodically submit recommendations to an agency or subdivision designed to encourage the agency or subdivision to carry out its functions in a manner consistent with the coastal management program, including recommendations for methods to simplify governmental procedures and changes in applicable rules or statutes; and

(2) shall report to the legislature on:

(A) recommended statutory changes needed to make more effective and efficient use of public funds and provide for more effective and efficient management of coastal natural resource areas, including recommendations on methods to simplify governmental procedures; and

(B) agency or subdivision actions that are not consistent with the coastal management program.

Added by Acts 1991, 72nd Leg., ch. 295, § 37, eff. June 7, 1991. Amended by Acts 1995, 74th Leg., ch. 76, § 5.95(49), eff. Sept. 1, 1995; Acts 1995, 74th Leg., ch. 416, § 4, eff. June 8, 1995.

Historical and Statutory Notes

1995 Legislation

Acts 1995, 74th Leg., ch. 416 rewrote the section, which formerly read:

"A person aggrieved by a final action of the council may appeal to a district court under the Administrative Procedure and Texas Register Act (Article 6252-13a, Vernon's Texas Civil Statutes)."

Acts 1995, 74th Leg., ch. 76, § 5.95(49) amended § 33.207. However, § 1.02(b) of Acts 1995, 74th Leg., ch. 76 provides:

"If any provision of this Act conflicts with a statute enacted by the 74th Legislature, Regular Session, 1995, the statute controls."

§ 33.208. Enforcement

(a) The agency or subdivision with jurisdiction over a proposed action shall enforce the provisions of the coastal management program.

(b) If the attorney general issues an opinion under Section 33.206(c) that a proposed agency or subdivision action is inconsistent with the coastal management program and the agency or subdivision fails to implement the council's recommendation regarding the action, the attorney general shall file suit in a district court of Travis County to enforce this subchapter. The court shall consider the attorney general's opinion in determining whether the proposed action is consistent with the coastal management program.

(c) Notwithstanding the request of an opinion from, or the filing of suit by, the attorney general, the council and the agency or subdivision may enter into a settlement agreement with regard to the proposed action. If the council and the agency or subdivision enter into a settlement agreement, the council may rescind its request for an opinion from the attorney general.

Added by Acts 1991, 72nd Leg., ch. 295, § 37, eff. June 7, 1991. Amended by Acts 1995, 74th Leg., ch. 416, § 4, eff. June 8, 1995.

Historical and Statutory Notes

1995 Legislation

The 1995 amendment rewrote the section, which formerly read:

"The attorney general, at the request of the council, shall file in a district court of Travis County or in the county in which the violation occurs a suit to enforce this subchapter."

§ 33.209. Prohibition on Special Area Management Plans

The council may not develop or approve a special area management plan, including a plan for an area designated under the national estuary program.

Added by Acts 1995, 74th Leg., ch. 416, § 4, eff. June 8, 1995.

§ 33.210. Private Property

The requirements of this subchapter may not be applied in a manner that would result in the taking, damage, or destruction of property without adequate compensation.

Added by Acts 1995, 74th Leg., ch. 416, § 4, eff. June 8, 1995.

§ 33.211. Sunset Provision

The Coastal Coordination Council is subject to Chapter 325, Government Code (Texas Sunset Act). Unless continued in existence as provided by that chapter, the council is abolished and this subchapter expires September 1, 1999.

Added by Acts 1995, 74th Leg., ch. 416, § 4, eff. June 8, 1995.

SUBCHAPTER G. COASTAL WETLAND ACQUISITION

Acts 1977, 65th Leg., p. 1902, ch. 758, effective August 29, 1977, classified as Vernon's Ann.Civ.St. art. 5415e-3, was repealed by § 9 of Acts 1979, 66th Leg., p. 2007, ch. 785, which by § 2 thereof incorporated the provisions of the 1977 Act into the Natural Resources Code by adding this Subchapter G, consisting of §§ 33.231 to 33.238.

Administrative Code References

General Land Office, certification of coastal wetlands, criteria, see 31 TAC § 15.52.

§ 33.231. Short Title

This subchapter may be cited as the Coastal Wetland Acquisition Act.

Added by Acts 1979, 66th Leg., p. 1993, ch. 785, § 2, eff. June 13, 1979.

Historical and Statutory Notes

Prior Laws:

Acts 1977, 65th Leg., p. 1902, ch. 758, § 1.

Acts 1979, 66th Leg., p. 2007, ch. 785, § 9.

Vernon's Ann.Civ.St. art. 5415e-3, § 1.

§ 33.232. Policy

It is the declared policy of the state:

(1) to protect the property rights of those who sell interests in land to the state by fairly compensating the sellers;

(2) to protect that coastal wetland which is most essential to the public interest by acquiring fee and lesser interests in the coastal wetland and managing it in a manner that will preserve and protect the productivity and integrity of the land as coastal wetland; and

(3) to assure that the state does not expend funds to acquire any coastal wetland to which it already holds a valid title at the time of the expenditure.

Added by Acts 1979, 66th Leg., p. 1993, ch. 785, § 2, eff. June 13, 1979.

Historical and Statutory Notes

Prior Laws:

Acts 1977, 65th Leg., p. 1902, ch. 758, § 2.

Acts 1979, 66th Leg., p. 2007, ch. 785, § 9.

Vernon's Ann.Civ.St. art. 5415e-3, § 2.

Administrative Code References

General Land Office, certification of coastal wetlands, policy, see 31 TAC § 15.51.

Library References

Navigable Waters ⇐36(1).
C.J.S. Navigable Waters § 92 et seq.

§ 33.233. Definitions

In this subchapter:

(1) "Acquiring agency" means the Parks and Wildlife Department.

APPENDIX C

Coastal Coordination Act
Implementation Rules
31 TAC §501, §503, §505 and §506

The complete set of Coastal Coordination Council rules in this appendix were compiled from Texas Administrative Code, Title 31, Natural Resources and Conservation, 1996, Chapters 501, 503, 505, and 506, as reflected by the official text on file with the Texas Secretary of State's Office, and the *Texas Register*, March 26, 1996, 2456-2457, 2472, and April 5, 1996, 3007.

Coastal Coordination Act
Implementation Rules
31 TAC §501

Chapter 501. COASTAL MANAGEMENT PROGRAM

Subchapter A. GENERAL PROVISIONS

§501.1 Program for Special Management of Coastal Natural Resource Areas

(a) The purpose of the Texas Coastal Management Program (CMP) is to make more effective and efficient use of public funds and to more effectively and efficiently manage coastal natural resource areas (CNRAs) and the activities that may affect them. The program is based on goals and policies that guide the use and development of CNRAs, preserve and protect CNRAs, and improve government processes. The Coastal Coordination Council (council) will adopt rules promulgating the goals and policies. The Coastal Coordination Act requires agency or subdivision actions to comply with these goals and policies.

(b) The council will exercise authority pursuant to the Coastal Coordination Act in the following ways.

(1) The council will study and review the principal coastal problems of state concern. This review will include examination of the current status and future trends of CNRAs; examination of conflicts between competing uses of CNRAs; and examination of policy issues with respect to local, state, or national interests and concerns related to CNRAs. The council will examine alternative regulatory and other management approaches to these problems, identify data collection and research needs, and foster public education and participation.

(2) The council will coordinate the performance of agencies, subdivisions, and programs by promulgating goals and policies to guide and serve as the basis for consistency review of agency and subdivision actions. The council will examine the goals and policies in this chapter annually to review the effectiveness of the program and will propose revisions to the goals and policies, as necessary.

(3) The council will coordinate the measures required to resolve identified coastal problems and make coastal management processes more visible, accessible, coherent, consistent, and accountable by reviewing agency and subdivision actions for consistency with the goals and policies in this chapter. Actions subject to review are those set forth in Natural Resources Code, §33.2051 and §33.2053. The council shall employ consistency review of agency and subdivision rules and policies as the primary technique for ensuring that agency and subdivision actions are consistent with the goals and policies in this chapter.

(c) As directed in the Coastal Coordination Act, the General

Land Office (GLO) will assist the council in implementing a program for coastal management, which shall be entitled the Texas CMP. The council may on occasion request or receive assistance from additional agencies or subdivisions that have authority over or expertise relevant to a particular coastal problem that is before the council. The GLO, in coordination with other agencies and subdivisions, shall prepare an annual report reviewing the effectiveness of the program as required by Texas Natural Resources Code, §33.204(f). The GLO shall submit the report to the council for approval. On or before January 15 of each odd-numbered year, the GLO shall send to the legislature each of the previous two annual reports.

(d) The Texas CMP will help local governments improve their ability to manage CNRAs and human activities affecting those resources.

§501.2 Findings

(a) The council finds that the coast is subject to the following uses:

(1) residential development, which includes siting, construction, and maintenance of single- and multiple-unit dwellings;

(2) commercial development, which includes siting, construction, and maintenance of warehouses, offices, retail stores, hotels, restaurants, marinas, and recreational facilities;

(3) industrial development, which includes siting, construction, operation, and maintenance of oil and gas exploration and development facilities, manufacturing and petrochemical plants, refineries, processing facilities, and ports;

(4) agricultural development, which includes farming, ranching, silviculture, and aquaculture;

(5) other development, which includes public buildings, parks, and other public purpose development;

(6) development of infrastructure, which includes the siting, construction, operation, and maintenance of roads, causeways and bridges, railroads, transmission and communication lines, water and sewer lines and pump stations, oil and gas transportation pipelines, and other linear facilities; airports; electric generating facilities; flood control structures, dams, and other water control structures; water, sewage, and wastewater treatment facilities; and solid waste facilities;

(7) waterfront construction, which includes erosion

response projects and shoreline access structures. Erosion response projects include retaining walls, bulkheads, seawalls, rubble mounds, revetments, breakwaters, and groins. Shoreline access structures include piers, docks, wharves, boat ramps, and other structures. Other structures on state submerged land and private submerged land include artificial reefs and fishing cabins;

(8) dredging, which includes excavation and disposal or placement of material from navigation channels and basins for commercial shipping, recreational boating, and oil and gas exploration and production; excavation for water intake structures, wastewater outfalls, or other structures incidental to shoreline development; and sediment mining on submerged lands; and

(9) hunting, fishing, and other taking of terrestrial and aquatic wildlife.

(b) Because they may adversely affect CNRAs, the council finds that special management of these uses of the coast is necessary for continued balanced development of the coast.

§501.3 Definitions and Abbreviations

(a) The following words, terms, and phrases, when used in this chapter, shall have the following meanings, unless the context clearly indicates otherwise.

(1) Adverse effects or adversely affect--Effects that result in the physical destruction or detrimental alteration of a CNRA. Such detrimental alterations are:

(A) construction in critical dune areas and coastal hazard areas that increase risks to human safety or the potential for damage to property or CNRAs from floods, hurricanes, or other storms;

(B) alterations that interfere with public use and enjoyment of, or access to and from, those CNRAs to which the public has a right of use, enjoyment, or access;

(C) alterations that damage or destroy coastal historic areas;

(D) alterations that harm the functions and values of CNRAs as habitat for terrestrial and aquatic wildlife;

(E) alterations that disrupt wildlife corridors or fish or bird migratory routes;

(F) discharges of pathogens, radioactive materials, dissolved minerals or solids, toxic substances, or suspended solids

at levels harmful to humans or terrestrial or aquatic life or that significantly impair the aesthetic qualities of CNRAs;

(G) alterations of salinity regimes, nutrient supply, oxygen concentration, or temperature regimes in coastal waters that are harmful to terrestrial or aquatic life;

(H) alterations of hydrology, water flow, circulation patterns, water level, or surface drainage that are harmful to humans or terrestrial or aquatic life, impair the aesthetic qualities of CNRAs, or exacerbate erosion of shorelines or river deltas;

(I) alterations of littoral and sediment transport processes that reduce the supply of sediments available to those processes or would otherwise exacerbate erosion of shorelines or river deltas;

(J) alterations that increase losses of shore areas or other CNRAs from a rise in sea level with respect to the surface of the land, whether caused by actual sea-level rise or land surface subsidence; and

(K) emission of air pollutants at levels that are harmful to humans or terrestrial or aquatic life or that significantly impair the aesthetic qualities of CNRAs.

(2) Avoid and otherwise minimize--To avoid adverse effects to the greatest extent practicable. Adverse effects that cannot be avoided must then be minimized to the greatest extent practicable.

(3) Coastal zone--The area within the boundary established in §503.1 of this title (relating to Coastal Management Program Boundary).

(4) Coastal hazard areas--Special hazard areas and critical erosion areas.

(5) Coastal natural resource area (CNRA)--Any area defined in Texas Natural Resources Code, §33.203(1) that is located within the coastal zone.

(6) Coastal waters--Waters under tidal influence and waters in the open Gulf of Mexico.

(7) Council--The Coastal Coordination Council.

(8) Critical areas--A coastal wetland, an oyster reef, a hard substrate reef, submerged aquatic vegetation, or a tidal sand or mud flat.

(9) Cumulative adverse effects--Adverse effects increasing in significance due to the collective effects of a number of actions.

(10) Pollutant--Any constituent that contaminates or alters the physical, thermal, chemical, or biological quality of any CNRA so as to be harmful, detrimental, or injurious to humans, animal life, vegetation, or property or to the public health, safety, or welfare or that impairs the usefulness or the public enjoyment of CNRAs for any lawful purpose.

(11) Practicable--Available and capable of being done after taking into consideration existing technology, cost, and logistics in light of the overall purpose of the activity.

(12) Public beach--Any public beach as defined in the Texas Natural Resources Code, §61.013(c).

(13) Secondary adverse effects--Adverse effects which would result from a proposed action and cause significant modifications or alterations to the physical or chemical characteristics of coastal natural resource areas beyond the limit of the immediate project area.

(14) Water-dependent use or facility--An activity or facility that must be located in coastal waters or on submerged lands or that must have direct access to coastal waters in order to serve its basic purpose and function. Facilities that are water-dependent include, but are not limited to, public beach use and access facilities, boat slips, docks, breakwaters, marinas, wharves and other vessel loading or off-loading facilities, utility easements, boat ramps, navigation channels and basins, bridges and bridge approaches, revetments, shoreline protection structures, culverts, groins, saltwater barriers, navigational aids, mooring pilings, simple access channels, fish processing plants, boat construction and repair facilities, offshore pipelines and constructed wetlands below mean high water. Activities that are water-dependent include, but are not limited to, marine recreation (fishing, swimming, boating, wildlife viewing), industrial uses dependent on marine transportation or requiring large volumes of water that cannot be obtained at inland sites, mariculture, exploration for and production of oil and gas under coastal waters or submerged lands, and certain meteorological and oceanographic activities.

(b) The following words, terms, and phrases, when used in this chapter, shall have the following meanings, with respect to CNRAs.

(1) Coastal barrier--An undeveloped area on a barrier island, peninsula, or other protected area, as designated by United States Fish and Wildlife Service maps.

(2) Coastal historic area--A site that is specially identified in rules adopted by the Texas Historical Commission as being coastal in character and that is:

(A) a site on the National Register of Historic Places, designated under 16 United States Code, §470a and 36 Code of Federal Regulations, Part 63, Chapter 1; or

(B) a state archaeological landmark, as defined by Texas Natural Resources Code, Subchapter D, Chapter 191.

(3) Coastal preserve--Any land, including a park or wildlife management area, that is owned by the state and that is subject to Chapter 26, Parks and Wildlife Code, because it is a park, recreation area, scientific area, wildlife refuge, or historic site; and designated by the Texas Parks and Wildlife Commission as being coastal in character.

(4) Coastal shore area--An area within 100 feet landward of the high water mark on submerged land.

(5) Coastal wetlands--Wetlands, as the term is defined by Texas Water Code, §11.052, located:

(A) seaward of the Coastal Facility Designation Line, established by rules adopted under Texas Natural Resources Code, Chapter 40;

(B) within rivers and streams to the extent of tidal influence, as shown on the Texas Natural Resource Conservation Commission's stream segment maps and described as follows:

(i) Arroyo Colorado from FM Road 1847 to a point 100 meters (110 yards) downstream of Cemetery Road south of the Port of Harlingen in Cameron County;

(ii) Nueces River from US Highway 77 to the Calallen Dam 1.7 kilometers (1.1 miles) upstream of U.S. Highway 77 in Nueces/San Patricio County;

(iii) Guadalupe River from State Highway 35 to the Guadalupe-Blanco River Authority Salt Water Barrier at 0.7 kilometers (0.4 miles) downstream of the confluence with the San Antonio River in Calhoun/Refugio County;

(iv) Lavaca River from FM Road 616 to a point 8.6 kilometers (5.3 miles) downstream of US Highway 59 in Jackson County;

(v) Navidad River from FM Road 616 to Palmetto Bend Dam in Jackson County;

(vi) Tres Palacios Creek from FM Road 521 to a point 0.6 kilometer (0.4 mile) upstream of the confluence with Wilson Creek in Matagorda County;

(vii) Colorado River from FM Road 521 to a point 2.1 kilometers (1.3 miles) downstream of the Missouri-Pacific Railroad in Matagorda County;

(viii) San Bernard River from FM Road 521 to a point 3.2 kilometers (2.0 miles) upstream of State Highway 35 in Brazoria County;

(ix) Chocolate Bayou from FM Road 2004 to a point 4.2 kilometers (2.6 miles) downstream of State Highway 35 in Brazoria County;

(x) Clear Creek from Interstate Highway 45 to a point 100 meters (110 yards) upstream of FM Road 528 in Galveston/Harris County;

(xi) Buffalo Bayou (Houston Ship Channel) from Interstate Highway 610 to a point 400 meters (440 yards) upstream of Shepherd Drive in Harris County;

(xii) San Jacinto River from Interstate Highway 10 upstream to the Lake Houston dam in Harris County;

(xiii) Cedar Bayou from Interstate Highway 10 to a point 2.2 kilometers (1.4 miles) upstream of Interstate Highway 10 in Chambers/Harris County;

(xiv) Trinity River from Interstate Highway 10 to a point 3.1 kilometers (1.9 miles) downstream of US 90 in Liberty County;

(xv) Neches River from Interstate Highway 10 to a point 11.3 kilometers (7.0 miles) upstream of Interstate Highway 10 in Orange County;

(xvi) Sabine River from Interstate Highway 10 upstream to Morgan Bluff in Orange County; or

(C) within one mile of the mean high tide line of the portion of rivers and streams described by subparagraph (B) of this paragraph, except for the Trinity and Neches rivers.

(i) For the portion of the Trinity River described by subparagraph (B) of this paragraph, coastal wetlands include those wetlands located between the mean high tide line on the western shoreline of that portion of the river and FM Road 565 and FM Road 1409 or located between the mean high tide line on the eastern shoreline of that portion of the river and FM Road 563.

(ii) For the portion of the Neches River described by subparagraph (B) of this paragraph, coastal wetlands include those wetlands located within one mile of the mean high tide line of the western shoreline of that portion of the river or located between the mean high tide line on the eastern shoreline of that portion of the river and FM Road 105.

(6) Critical dune area--A protected sand dune complex on the Gulf shoreline within 1,000 feet of mean high tide designated by the land commissioner under Texas Natural Resource Code, §63.121.

(7) Critical erosion area--An area designated by the land commissioner under Texas Natural Resources Code, §33.601(b).

(8) Gulf beach--A beach bordering the Gulf of Mexico that is:

(A) located inland from the mean low tide line to the natural line of vegetation bordering the seaward shore of the Gulf of Mexico; or

(B) part of a contiguous beach area to which the public has a right of use or easement:

(i) continuously held by the public; or

(ii) acquired by the public by prescription, dedication, or estoppel.

(9) Hard substrate reef--A naturally occurring hard substrate formation, including a rock outcrop or serpulid worm reef, living or dead, in an intertidal or subtidal area.

(10) Oyster reef--A natural or artificial formation that is:

(A) composed of oyster shell, live oysters, and other living or dead organisms;

(B) discrete, contiguous, and clearly distinguishable from scattered oyster shell or oysters; and

(C) located in an intertidal or subtidal area.

(11) Special hazard area--An area designated under 42 United States Code Annotated, §4001 et seq, as having special flood, mudslide or mudflow, or flood-related erosion hazards and shown on a Flood Hazard Boundary Map or Flood Insurance Rate Map as Zone A, AO, A1-30, AE, A99, AH, VO, V1-30, VE, V, M, or E.

(12) Submerged land--Land located under waters under

tidal influence or under waters of the open Gulf of Mexico, without regard to whether the land is owned by the state or a person other than the state.

(13) Submerged aquatic vegetation--Rooted aquatic vegetation growing in permanently inundated areas in estuarine and marine systems.

(14) Tidal sand or mud flat--A silt, clay, or sand substrate, without regard to whether it is vegetated by algal mats, that occur in intertidal areas and that are regularly or intermittently exposed and flooded by tides, including tides induced by weather.

(15) Water of the open Gulf of Mexico--Water in this state, as defined by Texas Water Code, §26.001(5), that is part of the open water of the Gulf of Mexico and that is within the territorial limits of the state.

(16) Water under tidal influence--Water in this state, as defined by Texas Water Code, §26.001(5), that is subject to tidal influence according to the Texas Natural Resource Conservation Commission's stream segment map. The term includes coastal wetlands.

(c) The following abbreviations, when used in this chapter, shall have the following meanings.

(1) GLO--General Land Office;

(2) PUC--Public Utility Commission;

(3) RRC--Railroad Commission of Texas;

(4) SLB--School Land Board;

(5) THC--Texas Historical Commission;

(6) TNRCC--Texas Natural Resource Conservation Commission;

(7) TPWD--Texas Parks and Wildlife Department;

(8) TSSWCB--Texas State Soil and Water Conservation Board;

(9) TWDB--Texas Water Development Board; and

(10) TxDOT--Texas Department of Transportation.

(d) To the extent that reference is made to statutory or regulatory terms or phrases which are not defined in this chapter,

such terms and phrases retain the meaning provided in the pertinent agency or political subdivision policies or regulations.

§501.4 General Procedures

(a) The commissioner of the GLO chairs the council and conducts all meetings. The council may select a vice chair who shall serve in the chair's absence.

(b) The council shall meet at least four times a year, once in each calendar quarter. Council meetings shall be scheduled for February, May, August, and November. The chair or any three members of the council may call special meetings by sending a written request to the council secretary to post notice in accordance with the Texas Open Meetings Act, Texas Government Code, Title 5, Subtitle A, Chapter 551, and sending a copy of the request to all council members.

(c) Each council member shall appoint a person to represent the member on an executive committee. The executive committee shall meet regularly in the interim between regular council meetings to coordinate implementation of council directives and review of policies, issues, or other matters that will or may be subject to council deliberation. The representative of the commissioner chairs the committee. The executive committee shall consider any matter a committee member refers to the committee.

(d) The chair shall appoint a council secretary. The secretary shall record the minutes of the meetings and perform other duties required by the council or this chapter.

(e) Council members may set items for the agenda by submitting them in writing to the secretary at least 14 days before a meeting, except that proposed actions that are the subject of a significant unresolved consistency dispute shall be placed on the agenda as provided in §505.34 and §505.66 of this title (relating to Referral of a Proposed Individual Agency Action to the Council for Consistency Review and Referral of Subdivision Actions to the Council for Consistency Review). The secretary shall notify all council members of the agenda by certified or overnight mail, hand-delivery, or telefax at least ten days before each meeting. The secretary shall notify the public of meetings as required by the Texas Open Meetings Act, Texas Government Code, Title 5, Subtitle A, Chapter 551.

(f) A majority of the council members eligible to vote shall constitute a quorum and must be present for council action. To protest the consistency of a proposed state action listed in §505.11(a) of this title (relating to Actions Subject to the Coastal Management Program), a federal action listed in §506.12 of this title (relating to Federal Actions Subject to the Coastal

Management Program), or a subdivision action listed in §505.60 o this title (relating to Review of Local Actions) shall require an affirmative vote of two-thirds of all council members. For all other actions, the council may act if a majority of a quorum agrees to the action.

(g) Time periods in this chapter do not include the day of the act or event that activates the time period. If the last day of the time period is a Saturday, Sunday, or legal holiday, the time period is considered to end the next day subsequent that is not a Saturday, Sunday, or legal holiday.

Subchapter B. GOALS AND POLICIES

§501.10 Compliance with Goals and Policies

(a) State agencies, municipalities, and counties identified in this subchapter shall comply with the goals and policies in §§501.12-501.15 of this title (relating to Goals, Administrative Policies, and Policies for Specific Activities and Coastal Natural Resource Areas) when taking an action listed in §505.11 of this title (relating to Actions and Rules Subject to the Coastal Management Program) or §505.60 of this title (relating to Local Government Actions Subject to the Coastal Management Program).

(b) The goals and policies in this subchapter apply only to those actions expressly identified in this subchapter.

(c) Compliance with the goals and policies of this subchapter does not supersede or eliminate any legal duty to comply with other applicable statutory and regulatory requirements.

§501.11 Statutory and Constitutional Limits

(a) A goal or policy may not require an agency or subdivision to perform an action that would exceed the constitutional or statutory authority of the agency or subdivision to which the goal or policy applies.

(b) The requirements of this chapter may not be applied in a manner that would result in the taking, damage, or destruction of property without adequate compensation.

(c) Nothing in these rules shall be construed as providing or allowing for the development of special area management plans, including a plan for an area designated under a national estuary program.

§501.12 Goals

The goals of the Texas Coastal Management Program (CMP) are:

(1) to protect, preserve, restore, and enhance the diversity, quality, quantity, functions, and values of coastal natural resource areas (CNRAs);

(2) to ensure sound management of all coastal resources by allowing for compatible economic development and multiple human uses of the coastal zone;

(3) to minimize loss of human life and property due to the impairment and loss of protective features of CNRAs;

(4) to ensure and enhance planned public access to and enjoyment of the coastal zone in a manner that is compatible with private property rights and other uses of the coastal zone;

(5) to balance the benefits from economic development and multiple human uses of the coastal zone, the benefits from protecting, preserving, restoring, and enhancing CNRAs, the benefits from minimizing loss of human life and property, and the benefits from public access to and enjoyment of the coastal zone;

(6) to coordinate agency and subdivision decision-making affecting CNRAs by establishing clear, objective policies for the management of CNRAs;

(7) to make agency and subdivision decision-making affecting CNRAs efficient by identifying and addressing duplication and conflicts among local, state, and federal regulatory and other programs for the management of CNRAs;

(8) to make agency and subdivision decision-making affecting CNRAs more effective by employing the most comprehensive, accurate, and reliable information and scientific data available and by developing, distributing for public comment, and maintaining a coordinated, publicly accessible geographic information system of maps of the coastal zone and CNRAs at the earliest possible date;

(9) to make coastal management processes visible, coherent, accessible, and accountable to the people of Texas by providing for public participation in the ongoing development and implementation of the Texas CMP; and

(10) to educate the public about the principal coastal problems of state concern and technology available for the protection and improved management of CNRAs.

§501.13 Administrative Policies

(a) Agency and subdivision rules and ordinances subject to

§501.10 of this title (relating to Compliance with Goals and Policies) shall:

(1) require applicants to provide information necessary for an agency or subdivision to make an informed decision on a proposed action listed in §505.11 of this title (relating to Actions and Rules Subject to the Coastal Management Program) or §505.60 of this title (relating to Local Government Actions Subject to the Coastal Management Program);

(2) identify the monitoring established to ensure that activities authorized by actions listed in §505.11 of this title (relating to Actions and Rules Subject to the Coastal Management Program) or §505.60 of this title (relating to Local Government Actions Subject to the Coastal Management Program) comply with all applicable requirements;

(3) identify circumstances in which agencies and subdivisions have the authority to issue variances from standards or requirements for the protection of CNRAs, including the grounds for granting variances; and

(4) take into account the national interest as defined in the Texas CMP Document, Chapter XX.

(b) A threshold for referral adopted by an agency under the provisions of Chapter 505 of this title (relating to Council Procedures for Consistency Reviews) of this title shall be set at a level that is reasonably calculated to ensure that actions that may have unique and significant adverse effects on coastal natural resource areas are above the threshold for referral.

§501.14 Policies for Specific Activities and Coastal Natural Resource Areas

(a) Construction of Electric Generating and Transmission Facilities.

(1) Construction of electric generating facilities and electric transmission lines in the coastal zone shall comply with the policies in this subsection.

(A) New electric generating facilities shall, where practicable, be located at previously developed sites. New electric generating facilities at undeveloped sites shall be located so that future expansion will avoid construction in critical areas, Gulf beaches, critical dunes, and washovers to the greatest extent practicable. To the extent applicable to the public beach, the policies in this subsection are supplemental to any further restrictions or requirements relating to the beach access and use rights of the public.

(B) Electric generating facilities using once-through cooling systems shall be located and designed to have the least adverse effects practicable, including impingement or entrainment of estuarine organisms.

(C) Electric generating facilities shall be constructed at sites selected to have the least adverse effects practicable on recreational uses of CNRAs and on areas used for spawning, nesting, and seasonal migrations of terrestrial and aquatic fish and wildlife species.

(D) Electric transmission lines to or on Coastal Barrier Resource System Units and Otherwise Protected Areas designated on maps dated October 24, 1990, under the Coastal Barrier Resources Act, 16 United States Code Annotated, §3503, on coastal barriers shall:

(i) be located, where practicable, in existing rights-of-way or previously disturbed areas if necessary to avoid or minimize adverse effects; and

(ii) be located at sites at which future expansion shall avoid construction in critical areas, Gulf beaches, critical dunes, and washovers to the greatest extent practicable.

(2) The PUC shall comply with the policies in this subsection when issuing certificates of convenience and necessity and adopting rules under Texas Civil Statutes, Public Utility Regulatory Act, Article 1446c, governing construction of electric generating facilities, electric transmission lines, and associated facilities in the coastal zone.

(b) Construction, Operation, and Maintenance of Oil and Gas Exploration and Production Facilities.

(1) Oil and gas exploration and production on submerged lands shall comply with the policies in this subsection.

(A) In or near critical areas, facilities shall be located and operated and geophysical and other operations shall be located and conducted in such a manner as to avoid and otherwise minimize adverse effects, including those from the disposal of solid waste and disturbance resulting from the operation of vessels and wheeled or tracked vehicles, whether on areas under lease, easement, or permit or on or across access routes thereto. Where practicable, buffer zones for critical areas shall be established and directional drilling or other methods to avoid disturbance, such as pooling or unitization, shall be employed.

(B) Lessees, easement holders, and permittees shall construct facilities in a manner that avoids impoundment or draining of coastal wetlands, if practicable, and shall mitigate

any adverse effects on coastal wetlands impounded or drained in accordance with the sequencing requirements in this subsection.

(C) Upon completion or cessation of operations, lessees, easement holders, and permittees shall remove facilities and restore any significantly degraded areas to pre-project conditions as closely as practicable, unless facilities can be used for maintenance or enhancement of CNRAs or unless restoration activities would further degrade CNRAs.

(2) To the extent applicable to the public beach, the policies in this subsection are supplemental to any further restrictions or requirements relating to the beach access and use rights of the public.

(3) The GLO and SLB shall comply with the policies in this subsection when approving oil, gas, and other mineral lease plans of operation and granting surface leases, easements, and permits and adopting rules under the Texas Natural Resources Code, Chapters 32, 33 and 51-53, governing oil and gas exploration and production on submerged lands.

(c) Discharges of Wastewater and Disposal of Waste from Oil and Gas Exploration and Production Activities.

(1) Disposal of oil and gas waste in the coastal zone shall comply with the policies in this subsection.

(A) No new commercial oil and gas waste disposal pit shall be located in any CNRA.

(B) Oil and gas waste disposal pits shall be designed to prevent releases of pollutants that adversely affect coastal waters or critical areas.

(2) Discharge of oil and gas exploration and production wastewater in the coastal zone shall comply with the following policies.

(A) All discharges shall comply with all provisions of surface water quality standards established by the TNRCC under subsection (f) of this section.

(B) To the greatest extent practicable, new wastewater outfalls shall be located where the discharge will not adversely affect critical areas. Existing wastewater outfalls that adversely affect critical areas shall be either discontinued or relocated so as not to adversely affect critical areas within two years of the effective date of this section.

(C) The RRC shall notify the TNRCC and the TPWD upon receipt of an application for a new permit to discharge produced

waters to waters under tidal influence. In determining compliance with the policies in this subsection, the RRC shall consider the effects of salinity from the discharge.

(3) The RRC shall comply with the policies in this subsection when issuing permits and adopting rules under the Texas Natural Resources Code, Chapter 91, for oil and gas waste, and under Texas Water Code, Chapter 26, and the Texas Natural Resources Code, Chapter 91, for oil and gas wastewater discharges.

(d) Construction and Operation of Solid Waste Treatment, Storage, and Disposal Facilities.

(1) Construction and operation of solid waste facilities in the coastal zone shall comply with the policies in this subsection. This subsection applies to both new facilities and areal expansion of existing facilities.

(A) A landfill at which hazardous waste is received for a fee shall not be located in a critical area, critical dune area, critical erosion area, or a 100-year floodplain of a perennial stream, delineated on a flood map adopted by the Federal Emergency Management Agency after September 1, 1985, as zone A1-99, VO, or V1-30. This provision shall not apply to any facility for which a notice of intent to file an application, or an application, has been filed with the TNRCC as of September 1, 1985.

(B) Except as provided in clauses (i) and (ii) of this subparagraph, a hazardous waste landfill shall not be located in a special hazard area existing before site development except in an area with a flood depth of less than three feet. Any hazardous waste landfill within a special hazard area must be designed, constructed, operated, and maintained to prevent washout of any hazardous waste by a 100-year flood.

(i) The areal expansion of a landfill in a special hazard area may be allowed if the applicant demonstrates that the facility design will prevent the physical transport of any hazardous waste by a 100-year flood event.

(ii) A new commercial hazardous waste management facility landfill unit may not be located in a special hazard area, unless the applicant demonstrates that the facility design will prevent the physical transport of any hazardous waste by a 100-year flood event.

(C) Hazardous waste storage or processing facilities, land treatment facilities, waste piles, and storage surface impoundments shall not be located in special hazard areas unless they are designed, constructed, operated, and maintained to prevent washout of any hazardous waste by a 100-year flood.

(D) Hazardous waste land treatment facilities, waste piles, storage surface impoundments, and landfills shall not be located within 1,000 feet of an area subject to active coastal shoreline erosion, if the area is protected by a barrier island or peninsula, unless the design, construction, and operational features of the facility will prevent adverse effects resulting from storm surge and erosion or scouring by water. On coastal shorelines which are subject to active shoreline erosion and which are unprotected by a barrier island or peninsula, a separation distance from the shoreline to the facility must be at least 5,000 feet, unless the design, construction, and operational features of the facility will prevent adverse effects resulting from storm surge and erosion or scouring by water.

(E) Hazardous waste storage or processing facilities, land treatment facilities, waste piles, storage surface impoundments, and landfills shall not be located in coastal wetlands, or in any CNRA that is the critical habitat of an endangered species of plant or animal unless the design, construction, and operation features of the facility will prevent adverse effects on the critical habitat of the endangered species.

(F) Hazardous waste land treatment facilities, waste piles, storage surface impoundments, and landfills shall not be located on coastal barriers.

(G) Hazardous waste landfills are prohibited if there is a practicable alternative to such a landfill that is reasonably available to manage the types and classes of hazardous waste which might be disposed at the landfill.

(H) The TNRCC shall not issue a permit for a new hazardous waste management facility or the areal expansion of an existing hazardous waste facility unless it finds that the proposed site, when evaluated in light of proposed design, construction, and operational features, reasonably minimizes possible contamination of coastal waters.

(I) New solid waste facilities and areal expansion of existing solid waste facilities shall be sited, designed, constructed, and operated to prevent releases of pollutants that may adversely affect CNRAs and, at a minimum, comply with standards established under the Solid Waste Disposal Act, 42 United States Code Annotated, §§6901 et seq.

(2) The TNRCC shall comply with the policies in this subsection when issuing permits and adopting rules under Texas Health and Safety Code, Chapter 361.

(e) Prevention, Response and Remediation of Oil Spills.

(1) The GLO regulations governing prevention of, response

to and remediation of coastal oil spills shall provide for measures to prevent coastal oil spills and to ensure adequate response and removal actions. The GLO regulations for certification of vessels and facilities that handle oil shall be designed to ensure that vessels and facilities are capable of prompt response and adequate removal of unauthorized discharges of oil. The GLO regulations adopted pursuant to the Oil Spill Prevention and Response Act (OSPRA), Texas Natural Resources Code, Chapter 40, shall be consistent with the State Coastal Discharge Contingency Plan adopted pursuant to OSPRA; and the National Contingency Plan adopted pursuant to the Federal Water Pollution Control Act, 33 United States Code Annotated, Chapter 26.

(2) Natural Resource Damage Assessment. GLO rules under OSPRA governing the assessment of damages to natural resources injured as the result of an unauthorized discharge of oil into coastal waters shall provide for reasonable and rational procedures for assessing damages and shall take into account the unique circumstances of the spill incident. The costs of assessing the damages shall not be disproportionate to the value of the injured resources. Plans for the restoration, rehabilitation, replacement or acquisition of equivalent resources shall provide for participation by the public and shall be designed to promote the restoration of the injured resources with all deliberate speed. The GLO rules shall be consistent with other state rules and policies and with the CMP goals and policies.

(f) Discharge of Municipal and Industrial Wastewater to Coastal Waters.

(1) TNRCC rules shall:

(A) comply with the requirements of the Clean Water Act, 33 United States Code Annotated, §1251, et seq, and implementing regulations at Code of Federal Regulations, Title 40, which include establishing surface water quality standards in order to protect designated uses of coastal waters, including the protection of uses for water supply, recreational purposes, and propagation and protection of terrestrial and aquatic life, and establishing water-quality-based effluent limits, including toxicity monitoring and specific toxicity or chemical limits as necessary to protect designated uses of coastal waters;

(B) provide for the assessment of water quality on a coastal watershed basis once every two years, as required by the Texas Water Code, §26.0135(d);

(C) to the greatest extent practicable, provide that all permits for the discharge of wastewater within a given watershed or region of a single watershed contain the same expiration date in order to evaluate the combined effects of permitted discharges on water quality within that watershed or

region;

(D) identify and rank waters that are not attaining designated uses and establish total maximum daily pollutant loads in accordance with those rankings; and

(E) require that increases in pollutant loads to coastal waters shall not:

(i) impair designated uses of coastal waters; or

(ii) result in degradation of coastal waters that exceed fishable/swimmable quality except in cases where lowering coastal water quality is necessary for important economic or social development.

(2) Discharge of municipal and industrial wastewater in the coastal zone shall comply with the following policies.

(A) Discharges shall comply with water-quality-based effluent limits.

(B) Discharges that increase pollutant loadings to coastal waters shall not impair designated uses of coastal waters and shall not significantly degrade coastal water quality unless necessary for important economic or social development.

(C) To the greatest extent practicable, new wastewater outfalls shall be located where they will not adversely affect critical areas.

(3) The TNRCC shall comply with the policies in this subsection when adopting rules and authorizing wastewater discharges under Texas Water Code, Chapter 26.

(4) The TNRCC shall consult with the Texas Department of Health when reviewing permit applications for wastewater discharges that may significantly adversely affect oyster reefs.

(g) Nonpoint Source (NPS) Water Pollution.

(1) State agencies and subdivisions with authority to manage NPS pollution shall cooperate in the development and implementation of a coordinated program to reduce NPS pollution in order to restore and protect coastal waters.

(2) In an area that the TSSWCB identifies as having or having the potential to develop agricultural or silvicultural NPS water quality problems or an area within the coastal zone, the TSSWCB shall establish a water quality management plan certification program that provides, through the local soil and

water conservation district, for the development, supervision, and monitoring of voluntary individual water quality management plans for agricultural and silvicultural lands. Each plan must be developed, maintained, and implemented under rules and criteria adopted by the TSSWCB and discharges under such a plan may not cause a violation of state water quality standards established by the TNRCC. The TSSWCB's rules shall certify a plan that satisfies the TSSWCB rules and criteria and discharges which do not cause a violation of state water quality standards established by the TNRCC. This policy is not intended, nor shall it be interpreted, to require the TSSWCB to establish non-voluntary requirements for the development, maintenance, or implementation of individual water quality management plans.

(3) TNRCC rules under Texas Health and Safety Code, Chapter 366, governing on-site sewage disposal systems, and TNRCC rules under Texas Water Code, Chapter 26, Subchapter I, governing underground storage tanks, shall require that on-site disposal systems and underground storage tanks be located, designed, operated, inspected, and maintained so as to prevent releases of pollutants that may adversely affect coastal waters.

(4) This policy shall not be interpreted or applied so as to require that either a National Pollution Discharge Elimination System (NPDES) permit for stormwater discharges issued under the Clean Water Act, §402(p), or an NPDES permit for a concentrated animal feeding operation, requiring no discharge up to and including a 25-year, 24-hour frequency storm, provide additional NPS pollution control measures in addition to those required in the permit.

(h) Development in Critical Areas.

(1) Dredging and construction of structures in, or the discharge of dredged or fill material into, critical areas shall comply with the policies in this subsection. In implementing this subsection, cumulative and secondary adverse effects of these activities will be considered.

(A) The policies in this subsection shall be applied in a manner consistent with the goal of achieving no net loss of critical area functions and values.

(B) Persons proposing development in critical areas shall demonstrate that no practicable alternative with fewer adverse effects is available.

(C) In evaluating practicable alternatives, the following sequence shall be applied:

(i) Adverse effects on critical areas shall be avoided to the greatest extent practicable.

(ii) Unavoidable adverse effects shall be minimized to the greatest extent practicable by limiting the degree or magnitude of the activity and its implementation.

(iii) Appropriate and practicable compensatory mitigation shall be required to the greatest extent practicable for all adverse effects that cannot be avoided or minimized.

(D) Compensatory mitigation includes restoring adversely affected critical areas or replacing adversely affected critical areas by creating new critical areas. Compensatory mitigation should be undertaken, when practicable, in areas adjacent or contiguous to the affected critical areas (on-site). If on-site compensatory mitigation is not practicable, compensatory mitigation should be undertaken in close physical proximity to the affected critical areas if practicable and in the same watershed if possible (off-site). Compensatory mitigation should also attempt to replace affected critical areas with critical areas with characteristics identical to or closely approximating those of the affected critical areas (in-kind). The preferred order of compensatory mitigation is:

(i) on-site, in-kind;

(ii) off-site, in-kind;

(iii) on-site, out-of-kind; and

(iv) off-site, out-of-kind.

(E) Mitigation banking is acceptable compensatory mitigation if use of the mitigation bank has been approved by the agency authorizing the development and mitigation credits are available for withdrawal. Preservation through acquisition for public ownership of unique critical areas or other ecologically important areas may be acceptable compensatory mitigation in exceptional circumstances. Examples of this include areas of high priority for preservation or restoration, areas whose functions and values are difficult to replicate, or areas not adequately protected by regulatory programs. Acquisition will normally be allowed only in conjunction with preferred forms of compensatory mitigation.

(F) In determining compensatory mitigation requirements, the impaired functions and values of the affected critical area shall be replaced on a one-to-one ratio. Replacement of functions and values on a one-to-one ratio may require restoration or replacement of the physical area affected on a ratio higher than one-to-one. While no net loss of critical area functions and values is the goal, it is not required in individual cases where mitigation is not practicable or would result in only inconsequential environmental benefits. It is also important to

recognize that there are circumstances where the adverse effects of the activity are so significant that, even if alternatives are not available, the activity may not be permitted regardless of the compensatory mitigation proposed.

(G) Development in critical areas shall not be authorized if significant degradation of critical areas will occur. Significant degradation occurs if:

(i) the activity will jeopardize the continued existence of species listed as endangered or threatened, or will result in likelihood of the destruction or adverse modification of a habitat determined to be a critical habitat under the Endangered Species Act, 16 United States Code Annotated, §§1531-1544;

(ii) the activity will cause or contribute, after consideration of dilution and dispersion, to violation of any applicable surface water quality standards established under subsection (f) of this section;

(iii) the activity violates any applicable toxic effluent standard or prohibition established under subsection (f) of this section;

(iv) the activity violates any requirement imposed to protect a marine sanctuary designated under the Marine Protection, Research, and Sanctuaries Act of 1972, 33 United States Code Annotated, Chapter 27; or

(v) taking into account the nature and degree of all identifiable adverse effects, including their persistence, permanence, areal extent, and the degree to which these effects will have been mitigated pursuant to subparagraphs (C) and (D) of this paragraph, the activity will, individually or collectively, cause or contribute to significant adverse effects on:

(I) human health and welfare, including effects on water supplies, plankton, benthos, fish, shellfish, wildlife, and consumption of fish and wildlife;

(II) the life stages of aquatic life and other wildlife dependent on aquatic ecosystems, including the transfer, concentration, or spread of pollutants or their byproducts beyond the site, or their introduction into an ecosystem, through biological, physical, or chemical processes;

(III) ecosystem diversity, productivity, and stability, including loss of fish and wildlife habitat or loss of the capacity of a coastal wetland to assimilate nutrients, purify water, or reduce wave energy; or

(IV) generally accepted recreational,

aesthetic or economic values of the critical area which are of exceptional character and importance.

(2) The TNRCC and the RRC shall comply with the policies in this subsection when issuing certifications and adopting rules under Texas Water Code, Chapter 26, and the Texas Natural Resources Code, Chapter 91, governing certification of compliance with surface water quality standards for federal actions and permits authorizing development affecting critical areas; provided that activities exempted from the requirement for a permit for the discharge of dredged or fill material, described in Code of Federal Regulations, Title 33, §323.4 and/or Code of Federal Regulations, Title 40, §232.3, including but not limited to normal farming, silviculture, and ranching activities, such as plowing, seeding, cultivating, minor drainage, and harvesting for the production of food, fiber, and forest products, or upland soil and water conservation practices, shall not be considered activities for which a certification is required. The GLO and the SLB shall comply with the policies in this subsection when approving oil, gas, or other mineral lease plans of operation or granting surface leases, easements, and permits and adopting rules under the Texas Natural Resources Code, Chapters 32, 33 and 51-53, and Texas Water Code, Chapter 61, governing development affecting critical areas on state submerged lands and private submerged lands, and when issuing approvals and adopting rules under Texas Civil Statutes, Article 5421u, for mitigation banks operated by subdivisions of the state.

(3) Agencies required to comply with this subsection will coordinate with one another and with federal agencies when evaluating alternatives, determining appropriate and practicable mitigation, and assessing significant degradation. Those agencies' rules governing authorizations for development in critical areas shall require a demonstration that the requirements of paragraph (1)(A)-(G) of this subsection have been satisfied.

(4) For any dredging or construction of structures in, or discharge of dredged or fill material into, critical areas that is subject to the requirements of §501.15 of this title (relating to Policy for Major Actions), data and information on the cumulative and secondary adverse affects of the project need not be produced or evaluated to comply with this subsection if such data and information is produced and evaluated in compliance with §501.15(b)-(c) of this title (relating to Policy for Major Actions).

(i) Construction of Waterfront Facilities and Other Structures on Submerged Lands.

(1) Development on submerged lands shall comply with the policies in this subsection.

(A) Marinas shall be designed and, to the greatest

extent practicable, sited so that tides and currents will aid in flushing of the site or renew its water regularly.

(B) Marinas designed for anchorage of private vessels shall provide facilities for the collection of waste, refuse, trash, and debris.

(C) Marinas with the capacity for long-term anchorage of more than ten vessels shall provide pump-out facilities for marine toilets, or other such measures or facilities that provide an equal or better level of water quality protection.

(D) Marinas, docks, piers, wharves and other structures shall be designed and, to the greatest extent practicable, sited to avoid and otherwise minimize adverse effects on critical areas from boat traffic to and from those structures.

(E) Construction of docks, piers, wharves, and other structures shall be preferred instead of authorizing dredging of channels or basins or filling of submerged lands to provide access to coastal waters if such construction is practicable, environmentally preferable, and will not interfere with commercial navigation.

(F) Piers, docks, wharves, bulkheads, jetties, groins, fishing cabins, and artificial reefs (including artificial reefs for compensatory mitigation) shall be limited to the minimum necessary to serve the project purpose and shall be constructed in a manner that:

(i) does not significantly interfere with public navigation;

(ii) does not significantly interfere with the natural coastal processes which supply sediments to shore areas or otherwise exacerbate erosion of shore areas; and

(iii) avoids and otherwise minimizes shading of critical areas and other adverse effects.

(G) Facilities shall be located at sites or designed and constructed to the greatest extent practicable to avoid and otherwise minimize the potential for adverse effects from:

(i) construction and maintenance of other development associated with the facility;

(ii) direct release to coastal waters and critical areas of pollutants from oil or hazardous substance spills or stormwater runoff; and

(iii) deposition of airborne pollutants in

coastal waters and critical areas.

(H) Where practicable, pipelines, transmission lines, cables, roads, causeways, and bridges shall be located in existing rights-of-way or previously disturbed areas if necessary to avoid or minimize adverse effects and if it does not result in unreasonable risks to human health, safety, and welfare.

(I) To the greatest extent practicable, construction of facilities shall occur at sites and times selected to have the least adverse effects on recreational uses of CNRAs and on spawning or nesting seasons or seasonal migrations of terrestrial and aquatic wildlife.

(J) Facilities shall be located at sites which avoid the impoundment and draining of coastal wetlands. If impoundment or draining cannot be avoided, adverse effects to the impounded or drained wetlands shall be mitigated in accordance with the sequencing requirements of subsection (h) of this section. To the greatest extent practicable, facilities shall be located at sites at which expansion will not result in development in critical areas.

(K) Where practicable, piers, docks, wharves, bulkheads, jetties, groins, fishing cabins, and artificial reefs shall be constructed with materials that will not cause any adverse effects on coastal waters or critical areas.

(L) Developed sites shall be returned as closely as practicable to pre-project conditions upon completion or cessation of operations by the removal of facilities and restoration of any significantly degraded areas, unless:

(i) the facilities can be used for public purposes or contribute to the maintenance or enhancement of coastal water quality, critical areas, beaches, submerged lands, or shore areas; or

(ii) restoration activities would further degrade CNRAs.

(M) Water-dependent uses and facilities shall receive preference over those uses and facilities that are not water-dependent.

(N) Nonstructural erosion response methods such as beach nourishment, sediment bypassing, nearshore sediment berms, and planting of vegetation shall be preferred instead of structural erosion response methods.

(O) Major residential and recreational waterfront facilities shall to the greatest extent practicable accommodate

public access to coastal waters and preserve the public's ability to enjoy the natural aesthetic values of coastal submerged lands.

(P) Activities on submerged land shall avoid and otherwise minimize any significant interference with the public's use of and access to such lands.

(Q) Erosion of Gulf beaches and coastal shore areas caused by construction or modification of jetties, breakwaters, groins, or shore stabilization projects shall be mitigated to the extent the costs of mitigation are reasonably proportionate to the benefits of mitigation. Factors that shall be considered in determining whether the costs of mitigation are reasonably proportionate to the cost of the construction or modification and benefits include, but are not limited to, environmental benefits, recreational benefits, flood or storm protection benefits, erosion prevention benefits, and economic development benefits.

(2) To the extent applicable to the public beach, the policies in this subsection are supplemental to any further restrictions or requirements relating to the beach access and use rights of the public.

(3) The GLO and the SLB, in governing development on state submerged lands, shall comply with the policies in this subsection when approving oil, gas, and other mineral lease plans of operation and granting surface leases, easements, and permits and adopting rules under the Texas Natural Resources Code, Chapters 32, 33 and 51-53, and Texas Water Code, Chapter 61.

(j) Dredging and Dredged Material Disposal and Placement.

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

(A) Dredging and dredged material disposal and placement shall not cause or contribute, after consideration of dilution and dispersion, to violation of any applicable surface water quality standards established under subsection (f) of this section.

(B) Except as otherwise provided in subparagraph (D) of this paragraph, adverse effects on critical areas from dredging and dredged material disposal or placement shall be avoided and

otherwise minimized, and appropriate and practicable compensatory mitigation shall be required, in accordance with subsection (h) of this section.

(C) Except as provided in subparagraph (D) of this paragraph, dredging and the disposal and placement of dredged material shall not be authorized if:

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

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

(iii) significant degradation of critical areas under subsection (h)(1)(G)(v) of this section would result.

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

(2) Adverse effects from dredging and dredged material disposal and placement shall be minimized as required in paragraph (1) of this subsection. Adverse effects can be minimized by employing the techniques in this paragraph where appropriate and practicable.

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

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

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

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

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

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

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

(vii) avoiding the impoundment or drainage of critical areas.

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

(i) disposal or placement of dredged material in a manner that maintains physiochemical conditions at discharge sites and limits or reduces the potency and availability of pollutants;

(ii) limiting the solid, liquid, and gaseous components of material discharged;

(iii) adding treatment substances to the discharged material; and

(iv) adding chemical flocculants to enhance the deposition of suspended particulates in confined disposal areas.

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

(i) use of containment levees and sediment basins designed, constructed, and maintained to resist breaches, erosion, slumping, or leaching;

(ii) use of lined containment areas to reduce leaching where leaching of chemical constituents from the material is expected to be a problem;

(iii) capping in-place contaminated material or, selectively discharging the most contaminated material first and then capping it with the remaining material;

(iv) properly containing discharged material and maintaining discharge sites to prevent point and nonpoint pollution; and

(v) timing the discharge to minimize adverse effects from unusually high water flows, wind, wave, and tidal actions.

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

(i) where environmentally desirable, distributing the material in a thin layer;

(ii) orienting material to minimize undesirable obstruction of the water current or circulation patterns;

(iii) using silt screens or other appropriate methods to confine suspended particulates or turbidity to a small area where settling or removal can occur;

(iv) using currents and circulation patterns to mix, disperse, dilute, or otherwise control the discharge;

(v) minimizing turbidity by using a diffuser system or releasing material near the bottom;

(vi) selecting sites or managing discharges to confine and minimize the release of suspended particulates and turbidity and maintain light penetration for organisms; and

(vii) setting limits on the amount of material to be discharged per unit of time or volume of receiving waters.

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

(i) using appropriate equipment, machinery, and operating techniques for access to sites and transport of material, including those designed to reduce damage to critical areas;

(ii) having personnel on site adequately trained in avoidance and minimization techniques and requirements; and

(iii) designing temporary and permanent access roads and channel spanning structures using culverts, open channels, and diversions that will pass both low and high water

flows, accommodate fluctuating water levels, and maintain circulation and faunal movement.

(F) Adverse effects on plant and animal populations from dredging and dredged material disposal or placement can be minimized by:

(i) avoiding changes in water current and circulation patterns that would interfere with the movement of animals;

(ii) selecting sites or managing discharges to prevent or avoid creating habitat conducive to the development of undesirable predators or species that have a competitive edge ecologically over indigenous plants or animals;

(iii) avoiding sites having unique habitat or other value, including habitat of endangered species;

(iv) using planning and construction practices to institute habitat development and restoration to produce a new or modified environmental state of higher ecological value by displacement of some or all of the existing environmental characteristics;

(v) using techniques that have been demonstrated to be effective in circumstances similar to those under consideration whenever possible and, when proposed development and restoration techniques have not yet advanced to the pilot demonstration stage, initiating their use on a small scale to allow corrective action if unanticipated adverse effects occur;

(vi) timing dredging and dredged material disposal or placement activities to avoid spawning or migration seasons and other biologically critical time periods; and

(vii) avoiding the destruction of remnant natural sites within areas already affected by development.

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

(i) selecting sites and following procedures to prevent or minimize any potential damage to the aesthetically pleasing features of the site, particularly with respect to water quality;

(ii) selecting sites which are not valuable as natural aquatic areas;

(iii) timing dredging and dredged material

disposal or placement activities to avoid the seasons or periods when human recreational activity associated with the site is most important; and

(iv) selecting sites that will not increase incompatible human activity or require frequent dredge or fill maintenance activity in remote fish and wildlife areas.

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

(i) that ensure adequate flushing and avoid stagnant pockets; or

(ii) that will create the fewest practicable adverse effects on CNRAs from additional infrastructure such as roads, bridges, causeways, piers, docks, wharves, transmission line crossings, and ancillary channels reasonably likely to be constructed as a result of the project; or

(iii) with the least practicable risk that increased vessel traffic could result in navigation hazards, spills, or other forms of contamination which could adversely affect CNRAs;

(iv) provided that, for any dredging of new channels or basins subject to the requirements of §501.15 of this title (relating to Policy for Major Actions), data and information on minimization of secondary adverse effects need not be produced or evaluated to comply with this subparagraph if such data and information is produced and evaluated in compliance with §501.15(b)(1) of this title (relating to Policy for Major Actions).

(3) Disposal or placement of dredged material in existing contained dredge disposal sites identified and actively used as described in an environmental assessment or environmental impact statement issued prior to the effective date of this chapter shall be presumed to comply with the requirements of paragraph (1) of this subsection unless modified in design, size, use, or function.

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

(A) If the costs of the beneficial use of dredged material are reasonably comparable to the costs of disposal in a non-beneficial manner, the material shall be used beneficially.

(B) If the costs of the beneficial use of dredged material are significantly greater than the costs of disposal in a non-beneficial manner, the material shall be used beneficially unless it is demonstrated that the costs of using the material

beneficially are not reasonably proportionate to the costs of the project and benefits that will result. Factors that shall be considered in determining whether the costs of the beneficial use are not reasonably proportionate to the benefits include, but are not limited to:

(i) environmental benefits, recreational benefits, flood or storm protection benefits, erosion prevention benefits, and economic development benefits;

(ii) the proximity of the beneficial use site to the dredge site; and

(iii) the quantity and quality of the dredged material and its suitability for beneficial use.

(C) Examples of the beneficial use of dredged material include, but are not limited to:

(i) projects designed to reduce or minimize erosion or provide shoreline protection;

(ii) projects designed to create or enhance public beaches or recreational areas;

(iii) projects designed to benefit the sediment budget or littoral system;

(iv) projects designed to improve or maintain terrestrial or aquatic wildlife habitat;

(v) projects designed to create new terrestrial or aquatic wildlife habitat, including the construction of marshlands, coastal wetlands, or other critical areas;

(vi) projects designed and demonstrated to benefit benthic communities or aquatic vegetation;

(vii) projects designed to create wildlife management areas, parks, airports, or other public facilities;

(viii) projects designed to cap landfills or other waste disposal areas;

(ix) projects designed to fill private property or upgrade agricultural land, if cost-effective public beneficial uses are not available; and

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

(5) If dredged material cannot be used beneficially as

provided in paragraph (4)(B) of this subsection, to avoid and otherwise minimize adverse effects as required in paragraph (1) of this subsection, preference will be given to the greatest extent practicable to disposal in:

(A) contained upland sites;

(B) other contained sites; and

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

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

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

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

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

(C) an immediate and unforeseen significant economic hardship is likely if corrective action is not taken within a time period less than the normal time needed under standard procedures. The council secretary shall be notified at least 24 hours prior to commencement of any emergency dredging operation by the agency or entity responding to the emergency. The notice shall include a statement demonstrating the need for emergency action. Prior to initiation of the dredging operations the project sponsor or permit-issuing agency shall, if possible, make all reasonable efforts to meet with council's designated representatives to ensure consideration of and consistency with applicable policies in this section. Compliance with all applicable policies in this section shall be required at the earliest possible date. The permit-issuing agency and the applicant shall submit a consistency determination within 60 days after the emergency operation is complete.

(8) Mining of sand, shell, marl, gravel, and mudshell on submerged lands shall be prohibited unless there is an affirmative showing of no significant impact on erosion within the coastal zone and no significant adverse effect on coastal water quality or terrestrial and aquatic wildlife habitat within any CNRA.

(9) The GLO and the SLB shall comply with the policies in this subsection when approving oil, gas, and other mineral lease plans of operation and granting surface leases, easements, and permits and adopting rules under the Texas Natural Resources Code, Chapters 32, 33, and 51-53, and Texas Water Code, Chapter 61, for dredging and dredged material disposal and placement. TxDOT shall comply with the policies in this section when adopting rules and taking actions as local sponsor of the Gulf Intracoastal Waterway under Texas Civil Statutes, Article 5415e-2. The TNRCC and the RRC shall comply with the policies in this subsection when issuing certifications and adopting rules under Texas Water Code, Chapter 26, and the Texas Natural Resources Code, Chapter 91, governing certification of compliance with surface water quality standards for federal actions and permits authorizing dredging or the discharge or placement of dredged material. The TPWD shall comply with the policies in this subsection when adopting rules at Chapter 57 of this title (relating to Fisheries) governing dredging and dredged material disposal and placement. The TPWD shall comply with the policies in paragraph (8) of this subsection when adopting rules and issuing permits under Texas Parks and Wildlife Code, Chapter 86, governing the mining of sand, shell, marl, gravel, and mudshell.

(k) Construction in the Beach/Dune System.

(1) Construction in critical dune areas and adjacent to Gulf beaches shall comply with the policies in this subsection.

(A) Construction within a critical dune area that results in the material weakening of dunes and material damage to dune vegetation shall be prohibited.

(B) Construction within critical dune areas that does not materially weaken dunes or materially damage dune vegetation shall be sited, designed, constructed, maintained, and operated so that adverse "effects" (as defined in §15.2 of this title (relating to Coastal Area Planning)) on the sediment budget and critical dune areas are avoided to the greatest extent practicable. For purposes of this subsection, practicability shall be determined by considering the effectiveness, scientific feasibility, and commercial availability of the technology or technique. Cost of the technology or technique shall also be considered. Adverse effects (as defined in Chapter 15 of this title (relating to Coastal Area Planning)) that cannot be avoided shall be:

(i) minimized by limiting the degree or magnitude of the activity and its implementation;

(ii) rectified by repairing, rehabilitating, or restoring the adversely affected dunes and dune vegetation; and

(iii) compensated for on-site or off-site by replacing the resources lost or damaged seaward of the dune protection line.

(C) Rectification and compensation for adverse effects that cannot be avoided or minimized shall provide at least a one-to-one replacement of the dune volume and vegetative cover, and preference shall be given to stabilization of blowouts and breaches and on-site compensation.

(D) The ability of the public, individually and collectively, to exercise its rights of use of and access to and from public beaches shall be preserved and enhanced.

(E) Non-structural erosion response methods such as beach nourishment, sediment bypassing, nearshore sediment berms, and planting of vegetation shall be preferred instead of structural erosion response methods. Subdivisions shall not authorize the construction of a new erosion response structure within the beach/dune system, except for a retaining wall located more than 200 feet landward of the line of vegetation. Subdivisions shall not authorize the enlargement, improvement, repair or maintenance of existing erosion response structures on the public beach. Subdivisions shall not authorize the repair or maintenance of existing erosion response structures within 200 feet landward of the line of vegetation except as provided in §15.6(d) of this title (relating to Concurrent Dune Protection and Beachfront Construction Standards).

(2) The GLO shall comply with the policies in this subsection when certifying local government dune protection and beach access plans and adopting rules under the Texas Natural Resources Code, Chapters 61 and 63. Local governments required by the Texas Natural Resources Code, Chapters 61 and 63, and Chapter 15 of this title (relating to Coastal Area Planning) to adopt dune protection and beach access plans shall comply with the applicable policies in this subsection when issuing beachfront construction certificates and dune protection permits.

(l) Development in Coastal Hazard Areas.

(1) Subdivisions participating in the National Flood Insurance Program shall adopt ordinances or orders governing development in special hazard areas under Texas Water Code, Chapter 16, Subchapter I, and Texas Local Government Code, Chapter 240, Subchapter Z, that comply with construction standards in regulations at Code of Federal Regulations, Title 44, Parts 59-60, adopted pursuant to the National Flood Insurance Act, 42 United States Code Annotated, §§4001, et seq.

(2) Pursuant to the standards and procedures under the Texas Natural Resources Code, Chapter 33, Subchapter H, the GLO

shall adopt or issue rules, recommendations, standards, and guidelines for erosion avoidance and remediation and for prioritizing critical erosion areas.

(m) Development Within Coastal Barrier Resource System Units and Otherwise Protected Areas on Coastal Barriers.

(1) Development of new infrastructure or major repair of existing infrastructure within or supporting development within Coastal Barrier Resource System Units and Otherwise Protected Areas designated on maps dated October 24, 1990, under the Coastal Barrier Resources Act, 16 United States Code Annotated, §3503(a), shall comply with the policies in this subsection.

(A) Development of publicly funded infrastructure shall be authorized only if it is essential for public health, safety, and welfare, enhances public use, or is required by law.

(B) Infrastructure shall be located at sites at which reasonably foreseeable future expansion will not require development in critical areas, critical dunes, Gulf beaches, and washover areas within Coastal Barrier Resource System Units or Otherwise Protected Areas.

(C) Infrastructure shall be located at sites that to the greatest extent practicable avoid and otherwise minimize the potential for adverse effects on critical areas, critical dunes, Gulf beaches, and washover areas within Coastal Barrier Resource System Units or Otherwise Protected Areas from:

(i) construction and maintenance of roads, bridges, and causeways; and

(ii) direct release to coastal waters, critical areas, critical dunes, Gulf beaches, and washover areas within Coastal Barrier Resource System Units or Otherwise Protected Areas of oil, hazardous substances, or stormwater runoff.

(D) Where practicable, infrastructure shall be located in existing rights-of-way or previously disturbed areas to avoid or minimize adverse effects within Coastal Barrier Resource System Units or Otherwise Protected Areas.

(E) Development of infrastructure shall occur at sites and times selected to have the least adverse effects practicable within Coastal Barrier Resource System Units or Otherwise Protected Areas on critical areas, critical dunes, Gulf beaches, and washover areas and on spawning or nesting areas or seasonal migrations of commercial, recreational, threatened, or endangered terrestrial or aquatic wildlife.

(2) TNRCC rules and approvals for the creation of special

districts and for infrastructure projects funded by issuance of bonds by water, sanitary sewer, and wastewater drainage districts under Texas Water Code, Chapter 50; water control and improvement districts under Texas Water Code, Chapter 50; municipal utility districts under Texas Water Code, Chapter 54; regional plan implementation agencies under Texas Water Code, Chapter 54; special utility districts under Texas Water Code, Chapter 65; stormwater control districts under Texas Water Code, Chapter 66; and all other general and special law districts subject to and within the jurisdiction of the TNRCC, shall comply with the policies in this subsection. TxDOT rules and approvals under Texas Civil Statutes, Article 6663 et seq, governing planning, design, construction, and maintenance of transportation projects, shall comply with the policies in this subsection.

(n) Development in State Parks, Wildlife management Areas or Preserves. Development by a person other than the Parks and Wildlife Department that requires the use or taking of any public land in such areas shall comply with Texas Parks and Wildlife Code, Chapter 26.

(o) Alteration of Coastal Historic Areas.

(1) Development affecting a coastal historic area shall avoid and otherwise minimize alteration or disturbance of the site unless the site's excavation will promote historical, archaeological, educational, or scientific understanding.

(2) The THC shall comply with the policies in this subsection when adopting rules and issuing permits under the Texas Natural Resources Code, Chapter 191, governing alteration of coastal historic areas. The THC shall comply with the policies in this subsection when issuing reviews under the National Historic Preservation Act, §106 (16 United States Code Annotated, §470f), and the regulations enacted pursuant thereto, Code of Federal Regulations, Title 36, Chapter 1, Part 63.

(p) Transportation Projects.

(1) Transportation construction projects and maintenance programs within the coastal zone shall comply with the policies in this subsection.

(A) Pollution prevention procedures shall be incorporated into the construction and maintenance of transportation projects to minimize pollutant loading to coastal waters from erosion and sedimentation, use of pesticides and herbicides for maintenance of rights-of-way, and other pollutants from stormwater runoff.

(B) Transportation projects shall be located at sites that to the greatest extent practicable avoid and otherwise

minimize the potential for adverse effects from construction and maintenance of additional roads, bridges, causeways, and other development associated with the project; and direct release to CNRAs of pollutants from oil or hazardous substance spills, contaminated sediments or stormwater runoff.

(C) Where practicable, transportation projects shall be located in existing rights-of-way or previously disturbed areas if necessary to avoid or minimize adverse effects.

(D) Where practicable, transportation projects shall be located at sites at which future expansion will not require development in coastal wetlands except where such construction is determined to be essential for evacuation in the case of a natural disaster.

(E) Construction and maintenance of transportation projects shall avoid the impoundment and draining of coastal wetlands. If impoundment or draining cannot be avoided, adverse effects to the impounded or drained wetlands shall be mitigated in accordance with the sequencing requirements of subsection (h) of this section.

(F) Construction of transportation projects shall occur at sites and times selected to have the least adverse effects practicable on recreational uses of CNRAs and on spawning or nesting seasons or seasonal migrations of terrestrial or aquatic species.

(G) Beach-quality sand from maintenance of roadways adjacent to Gulf beaches shall be beneficially used by placement on Gulf beaches where practicable. Where placement on Gulf beaches is not practicable, the material shall be placed in critical dune areas.

(2) TxDOT rules and project approvals under Texas Civil Statutes, Article 6663b and 6663c, and Texas Civil Statutes, Article 6674a et seq, governing transportation projects within the coastal zone, shall comply with the policies in this subsection.

(q) Emission of Air Pollutants. TNRCC rules under Texas Health and Safety Code, Chapter 382, governing emissions of air pollutants, shall comply with regulations at Code of Federal Regulations, Title 40, adopted pursuant to the Clean Air Act, 42 United States Code Annotated, §7401, et seq, to protect and enhance air quality in the coastal area so as to protect CNRAs and promote the public health, safety, and welfare.

(r) Appropriations of Water.

(1) Impoundments and diversion of state water within 200 stream miles of the coast, to commence from the mouth of the river

thence inland, shall comply with the policies in this subsection.

(A) The TNRCC shall administer the law so as to promote the judicious use and maximum conservation and protection of the quality of the environment and the natural resources of the state. It is the public policy of the state to provide for the conservation and development of the state's natural resources, including:

(i) the control, storage, preservation, and distribution of the state's storm and floodwaters and the waters of its rivers and streams for irrigation, power, and other useful purposes;

(ii) the reclamation and irrigation of the state's arid, semiarid, and other land needing irrigation;

(iii) the reclamation and drainage of the state's overflowed land and other land needing drainage;

(iv) the conservation and development of its forest, water, and hydroelectric power;

(v) the navigation of the state's inland and coastal waters; and

(vi) the maintenance of a proper ecological environment of the bays and estuaries of Texas and the health of related living marine resources.

(B) In this subsection, "beneficial inflows" means a salinity, nutrient, and sediment loading regime adequate to maintain an ecologically sound environment in the receiving bay and estuary system that is necessary for the maintenance of productivity of economically important and ecologically characteristic sport or commercial fish and shellfish species and estuarine life upon which such fish and shellfish are dependent.

(C) In its consideration of an application for a permit to store, take, or divert water, the TNRCC shall assess the effects, if any, of the issuance of the permit on the bays and estuaries of Texas. For permits issued within an area that is 200 river miles of the coast, to commence from the mouth of the river thence inland, the TNRCC shall include in the permit, to the greatest extent practicable when considering all public interests, those conditions considered necessary to maintain beneficial inflows to any affected bay and estuary system.

(D) For the purposes of making a determination under subparagraph (C) of this paragraph, the TNRCC shall consider among other factors:

(i) the need for periodic freshwater inflows to supply nutrients and modify salinity to preserve the sound environment of the bay or estuary, using any available information, including studies and plans specified in and other studies considered by the TNRCC to be reliable; together with existing circumstances, natural or otherwise, that might prevent the conditions imposed from producing benefits;

(ii) the ecology and productivity of the affected bay and estuary system;

(iii) the expected effects on the public welfare of not including in the permit some or all of the conditions considered necessary to maintain the beneficial inflows to the affected bay or estuary;

(iv) the quantity of water requested and the proposed use of water by the applicant, as well as the needs of those who would be served by the applicant;

(v) the expected effects on the public welfare of the failure to issue all or part of the permit being considered; and

(vi) for the purposes of this subsection, the declarations as to preferences for competing uses of water as found in Texas Water Code, §11.024 and §11.033, as well as the public policy statement in subparagraph (A) of this paragraph.

(E) In its consideration of an application to store, take, or divert water, the TNRCC shall consider the effect, if any, of the issuance of the permit on existing instream uses and water quality of the stream or river to which the application applies. The TNRCC shall also consider the effect, if any, of the issuance of the permit on fish and wildlife habitats.

(F) On receipt of an application for a permit to store, take, or divert water, the TNRCC shall send a copy of the permit application and any subsequent amendments to the TPWD. In making a final decision on any application for a permit, the TNRCC, in addition to other information, evidence, and testimony presented, shall consider all information, evidence, or testimony presented by the TPWD and the TWDB.

(G) Permit conditions relating to beneficial inflows to affected bays and estuaries and instream uses may be suspended by the TNRCC if the TNRCC finds that an emergency exists and cannot practically be resolved in other ways. Before the TNRCC suspends a permit under this subparagraph, it must give written notice to the TPWD of the proposed suspension. The TNRCC shall give the TPWD an opportunity to submit comments on the proposed suspension within 72 hours from such time and the TNRCC shall consider those comments

before issuing its order imposing the suspension.

(H) In its consideration of an application for a permit under this section, the TNRCC shall assess the effects, if any, of the issuance of the permit on water quality in coastal waters. In its consideration of an application for a permit to store, take, or divert water in excess of 5,000 acre feet per year, the commission shall assess the effects, if any, on the issuance of the permit on fish and wildlife habitats and may require the applicant to take reasonable actions to mitigate adverse effects on such habitat. In determining whether to require an applicant to mitigate adverse effects on a habitat, the TNRCC may consider any net benefit to habitat produced by the project. The TNRCC shall offset against any mitigation required by the United States Fish and Wildlife Service pursuant to Code of Federal Regulations, Title 33, §§320-330, any mitigation authorized by this section.

(I) Unappropriated water and other water of the state stored in any facility acquired by and under the control of the TWDB may be released without charge to relieve any emergency condition arising from drought, severe water shortage, or other calamity, if the TNRCC first determines the existence of the emergency and requests the TWDB to release the water.

(J) Five percent of the annual firm yield of water in any reservoir and associated works constructed with state financial participation within 200 river miles of the coast, to commence from the mouth of the river thence inland, is appropriated to the TPWD for use to make releases to bays and estuaries and for instream uses, and the TNRCC shall issue permits for this water to the TPWD under procedures adopted by the TNRCC. This subparagraph applies only to reservoirs and associated works on which construction begins on or after September 1, 1985. This subsection does not limit or repeal any other authority of or law relating to the TPWD or the TNRCC.

(K) The TWDB, in coordination with the TNRCC and TPWD, shall identify ways to assist in providing flows to meet instream needs, including protection of water quality, protection of terrestrial or aquatic wildlife habitat, and bay and estuary inflow needs, in the implementation of the Texas Water Bank, Texas Water Code, Chapter 15, Subchapter K. This may include, but not be limited to, the purchase by the TPWD and/or the TWDB of water rights deposited in the Texas Water Bank in order to provide for existing instream uses and beneficial inflows to bays and estuaries if funds are available and such purchase is not prohibited by law. The TNRCC shall facilitate the approval of any necessary permit amendments to achieve this purpose.

(L) An applicant for a new or amended water right permit shall submit a water conservation plan in accordance with 30 TAC §295.9 (relating to Conservation Plan). The TNRCC shall

consider the information contained in the conservation plan in determining whether any feasible alternative to the proposed appropriation exists, whether the proposed amount to be appropriated as measured at the point of diversion is reasonable and necessary for the proposed use, the term and other conditions of the water right and to ensure that reasonable diligence will be used to avoid waste and achieve water conservation. Based upon its review, the TNRCC may deny or grant, in whole or in part, the requested appropriation.

(2) The TNRCC rules and authorizations under Texas Water Code, Chapter 11, governing review and action on applications for new permits or amendments proposing changes to existing permits for diversions or impoundments of state water within 200 stream miles of the coast, and TNRCC rules and approvals governing creation of districts and issuance of district bonds for levee and flood control projects within the coastal zone, shall comply with the policies in this subsection.

(s) Levee and Flood Control Projects.

(1) Drainage, reclamation, channelization, levee construction or modification, or flood- or floodwater-control infrastructure projects shall be designed, constructed, and maintained to avoid the impoundment and draining of coastal wetlands to the greatest extent practicable. If impoundment or draining of coastal wetlands cannot be avoided, adverse effects to the wetlands shall be mitigated in accordance with the sequencing requirements in subsection (h) of this section.

(2) TNRCC rules and approvals for the levee construction, modification, drainage, reclamation, channelization, or flood- or floodwater-control projects, pursuant to the Texas Water Code, §16.236, shall comply with the policies in this subsection.

§501.15 Policy for Major Actions

(a) For purposes of this section, "major action" means an individual agency or subdivision action listed in §505.11 of this title (relating to Actions and Rules Subject to the Coastal Management Program), §506.12 of this title (relating to Federal Actions Subject to the Coastal Management Program), or §505.60 of this title (relating to Local Government Actions Subject to the Coastal Management Program), relating to an activity for which a federal environmental impact statement under the National Environmental Policy Act, 42 United States Code Annotated, §4321, et seq is required.

(b) Prior to taking a major action, the agencies and subdivisions having jurisdiction over the activity shall meet and coordinate their major actions relating to the activity. The

agencies and subdivisions shall, to the greatest extent practicable, consider the cumulative and secondary adverse effects, as described in the federal environmental impact assessment process, of each major action relating to the activity.

(c) No agency or subdivision shall take a major action that is inconsistent with the goals and policies of this chapter. In addition, an agency or subdivision shall avoid and otherwise minimize the cumulative adverse effects to coastal natural resource areas of each of its major actions relating to the activity.

Coastal Coordination Act
Implementation Rules
31 TAC §503

Chapter 503. COASTAL MANAGEMENT PROGRAM BOUNDARY

§503.1 Coastal Management Program Boundary

(a) General Description of the Coastal Management Program Boundary. The coastal management program boundary delineates the coastal zone. The inland part of the boundary is a modification of the coastal facility designation line, which is the line the State of Texas adopted under the Oil Spill Prevention and Response Act of 1991 (Texas Natural Resources Code, Chapter 40) to describe areas where oil spills are likely to enter coastal waters. Generally, the boundary encompasses the area within Texas lying seaward of the coastal facility designation line. It also includes coastal wetlands landward of the coastal facility designation line. The boundary includes areas within the following Texas counties: Cameron, Willacy, Kenedy, Kleberg, Nueces, San Patricio, Aransas, Refugio, Calhoun, Victoria, Jackson, Matagorda, Brazoria, Galveston, Harris, Chambers, Liberty, Jefferson, and Orange. The seaward reach of the boundary extends into the Gulf of Mexico to the limit of state title and ownership under the Submerged Lands Management Act (43 United States Code, §§1301 et seq), that is, three marine leagues. The following maps outline the coastal management program boundary.

(b) Particular Description of the Coastal Management Program Boundary. The boundary is more particularly described in terms of the inland boundary, the boundary with the State of Louisiana, the seaward boundary, the boundary with the Republic of Mexico, and the excluded federal lands.

(1) The inland boundary. The inland boundary encompasses the following areas:

(A) Roadway portion of boundary. The boundary begins at the International Toll Bridge in Brownsville, thence northward along U.S. Highway 77 to the junction of Paredes Lines Road (FM Road 1847) in Brownsville, thence northward along FM Road 1847 to the junction of FM Road 106 east of Rio Hondo, thence westward along FM Road 106 to the junction of FM Road 508 in Rio Hondo, thence northward along FM Road 508 to the junction of FM Road 1420, thence northward along FM Road 1420 to the junction of State Highway 186 east of Raymondville, thence westward along State Highway 186 to the junction of U.S. Highway 77 near Raymondville, thence northward along U.S. Highway 77 to the junction of FM Road 774 in Refugio, thence eastward along FM Road 774 to the junction of State Highway 35 south of Tivoli, thence northward along State Highway 35 to the junction of State Highway 185 between Bloomington and Seadrift, thence northwestward along State Highway 185 to the junction of FM Road 616 in Bloomington, thence northeastward along FM Road 616 to the junction of State Highway 35 east of Blessing, thence southward along the State Highway 35 to the junction of FM Road 521 north of Palacios, thence northeastward along FM Road 521

to the junction of State Highway 36 south of Brazoria, thence northward along State Highway 36 to the junction of State Highway 332 in Brazoria, thence eastward along State Highway 332 to the junction of FM Road 2004 in Lake Jackson, thence northeastward along FM Road 2004 to the junction of Interstate Highway 45 between Dickinson and La Marque, thence northwestward along Interstate Highway 45 to the junction of Interstate Highway 610 in Houston, thence east and northward along Interstate Highway 610 to the junction of Interstate Highway 10 in Houston, thence eastward along Interstate Highway 10 to the Louisiana State line.

(B) Tidal portion of boundary. The boundary runs at a distance of 100 yards inland from the mean high tide lines along each of the following tidal river and stream segments from the points where they intersect the roadway boundary described in subparagraph (A) of this paragraph:

(i) on the Arroyo Colorado, to a point 100 meters (110 yards) downstream of Cemetery Road south of Port Harlingen in Cameron County;

(ii) on the Nueces River, to Calallen Dam 1.7 kilometers (1.1 miles) upstream of U.S. Highway 77 in Nueces/San Patricio County;

(iii) on the Guadalupe River, to the Guadalupe-Blanco River Authority Salt Water Barrier 0.7 kilometers (0.4 mile) downstream of the confluence of the San Antonio River in Calhoun and Refugio Counties;

(iv) on the Lavaca River, to a point 8.6 kilometers (5.3 miles) downstream of U.S. Highway 59 in Jackson County;

(v) on the Navidad River, to Palmetto Bend Dam in Jackson County;

(vi) on Tres Palacios Creek, to a point 0.6 kilometer (1.0 mile) upstream of the confluence of Wilson Creek in Matagorda County;

(vii) on the Colorado River, to a point 2.1 kilometers (1.3 miles) downstream of the Missouri-Pacific Railroad in Matagorda County;

(viii) on the San Bernard River, to a point 3.2 kilometers (2.0 miles) upstream of State Highway 35 in Brazoria County;

(ix) on Chocolate Bayou, to a point 4.2 kilometers (2.6 miles) downstream of State Highway 35 in Brazoria County;

(x) on Clear Creek, to a point 100 meters (110 yards) upstream of FM Road 528 in Galveston/Harris County;

(xi) on Buffalo Bayou, to a point 400 meters (440 yards) upstream of Shepherd Drive in Harris County;

(xii) on the San Jacinto River, to Lake Houston Dam in Harris County;

(xiii) on Cedar Bayou, to a point 2.2 kilometers (1.4 miles) upstream of Interstate Highway 10 in Chambers/Harris County;

(xiv) on the Trinity River, to a point 3.1 kilometers (1.9 miles) downstream of U.S. Highway 90 in Liberty County;

(xv) on the Neches River, to a point 11.3 kilometers (7.0 miles) upstream of Interstate Highway 10 in Orange County; and

(xvi) on the Sabine River, to Morgan Bluff in Orange County.

(C) Wetlands portion of boundary. Except for the part of the boundary adjacent to the Trinity and Neches rivers, the boundary includes wetlands lying within one mile inland of the mean high tide lines of the tidal river and stream segments identified in subparagraph (B) of this paragraph.

(i) Adjacent to the Trinity River, the boundary includes wetlands within the area located between the mean high tide line on the western shoreline of the river and Farm-to-Market Road 565 and Farm-to-Market Road 1409, and wetlands within the area located between the mean high tide line on the eastern shoreline of that portion of the river and Farm-to-Market Road 563.

(ii) Adjacent to the Neches River, the boundary includes wetlands within one mile of the mean high tide line on the western shoreline of the river, and wetlands within the area located between the mean high tide line on the eastern shoreline of that portion of the river and Farm-to-Market Road 105.

(2) The boundary with the State of Louisiana. The boundary with the State of Louisiana begins in Orange County at Morgans Bluff, the northernmost extent of tidal influence, along the adjudicated boundary between the State of Texas and the State of Louisiana, as established by the United States Supreme Court in Texas v. Louisiana, 410 U.S. 702 (1973); thence it continues in a southerly direction along the adjudicated boundary out into the Gulf of Mexico until it intersects the seaward boundary.

(3) The seaward boundary. The seaward boundary is that line marking the seaward limit of Texas title and ownership under the Submerged Lands Act (43 United States Code, §1301 et seq), as recognized by the United States Supreme Court in United States v. Louisiana et al., 364 U.S. 502 (1960).

(4) The boundary with the Republic of Mexico. The boundary with the Republic of Mexico begins at a point three marine leagues into the Gulf of Mexico where the line marking the seaward limit of Texas title and ownership under the Submerged Lands Act (43 United States Code, §1301 et seq) intersects the international boundary between the United States and the Republic of Mexico, as established pursuant to the Treaty of Guadalupe-Hidalgo (February 2, 1848) between the United States and the Republic of Mexico; thence it continues in a westerly direction along the international border with the Republic of Mexico until it meets the International Toll Bridge in Brownsville.

(5) The excluded federal lands. The excluded federal lands are those lands owned, leased, held in trust by, or whose use is otherwise by law subject solely to the discretion of the federal government, its officers or agents.

Coastal Coordination Act
Implementation Rules
31 TAC §505

Chapter 505. COUNCIL PROCEDURES FOR STATE CONSISTENCY WITH COASTAL MANAGEMENT PROGRAM GOALS AND POLICIES

Subchapter A. PURPOSE AND POLICY AND STATE AGENCY ACTIONS SUBJECT TO THE COASTAL MANAGEMENT PROGRAM

§505.10 Purpose and Policy

(a) The purpose of this chapter is to ensure that state actions, subdivision actions and general plans subject to the Texas Coastal Management Program (CMP) are consistent with the CMP goals and policies. The Coastal Coordination Council (council) intends to use the consistency process to:

(1) adequately identify, address, and resolve consistency issues to the maximum extent practicable prior to final agency action;

(2) minimize the number of actions referred to the council for review or study by ensuring adequate review at the agency level and by referring to the council only those actions that present unique or significant consistency issues;

(3) avoid the creation of an additional layer of bureaucracy;

(4) avoid subjecting to regulation actions not currently subject to regulation; and

(5) provide procedural safeguards to ensure proper notice, opportunity for hearing, and fairness in decision-making.

(b) Accordingly, it is the intent of the council that consistency be achieved primarily through individual agency rules that will reflect the CMP goals and policies.

§505.11 Actions and Rules Subject to the Coastal Management Program

(a) For purposes of this chapter and Chapter 501 of this title (relating to Coastal Management Program), the following is an exclusive list of proposed individual agency actions that may adversely affect a coastal natural resource area (CNRA) and that therefore must be consistent with the CMP goals and policies:

(1) for the land office, the School Land Board, or a board for lease of state-owned lands when issuing or approving:

(A) a mineral lease plan of operations;

(B) a geophysical or geochemical permit;

(C) a miscellaneous easement;

(D) a surface lease;

(E) a structure registration;

(F) a coastal easement;

(G) a coastal lease;

(H) a cabin permit;

(I) a navigation district lease;

(J) certification of a subdivision beach access or dune protection plan; or

(K) an agency or subdivision wetlands mitigation bank.

(2) for the Public Utility Commission of Texas (PUC) when issuing a certificate of convenience and necessity.

(3) for the Railroad Commission of Texas (RRC) when issuing:

(A) a wastewater discharge permit;

(B) a waste disposal or storage pit permit; or

(C) a certification of a federal permit for the discharge of dredge or fill material.

(4) for the Texas Transportation Commission when approving:

(A) an acquisition of a site for the placement or disposal of dredge material from, or the expansion, relocation, or alteration of, the Gulf Intracoastal Waterway; or

(B) an environmental document for a transportation construction project or maintenance program.

(5) for the Texas Historical Commission (THC) when issuing:

(A) a permit for destruction, alteration, or taking of a coastal historic area; or

(B) a review of a federal undertaking affecting a coastal historic area.

(6) for the Texas Natural Resource Conservation Commission (TNRCC) when issuing or approving:

(A) a wastewater discharge permit;

(B) a permit for a new concentrated animal feeding operation located one mile or less from a critical area or coastal waters;

(C) a permit for solid or hazardous waste treatment, storage, or disposal;

(D) creation of a special purpose district or approval of bonds to construct infrastructure on coastal barriers;

(E) levee improvement or flood control projects;

(F) a certification of a federal permit for the discharge of dredge or fill material;

(G) a declaration of an emergency and request for an emergency release of water;

(H) a new permit for an annual appropriation of:

(i) 5,000 or more acre-feet of water within the program boundary; or

(ii) 10,000 or more acre-feet of water outside the program boundary but within 200 stream miles of the coast;

(I) an amendment to a water permit for an increase in the annual appropriation of:

(i) 5,000 or more acre-feet of water within the program boundary; or

(ii) 10,000 or more acre-feet of water outside the program boundary but within 200 stream miles of the coast;

(J) a change in the purpose of use of an annual appropriation of water to a more consumptive use of:

(i) 5,000 or more acre-feet of water within the program boundary; or

(ii) 10,000 or more acre-feet of water outside the program boundary but within 200 stream miles of the coast.

(K) The council may not review an action of the TNRCC described by subparagraphs (H)-(J) of this paragraph taken to implement a part of the Trans-Texas Water Program that the

Trans-Texas Water Program Policy Management Committee has found to be consistent with the CMP goals and policies. To find that the program is consistent with the CMP goals and policies, the Trans-Texas Water Program Policy Committee must:

(i) include at least three members of the council, or representatives of those members, as voting members of the committee; and

(ii) make the finding by a majority vote of those members or their representatives.

(7) for the Texas Parks and Wildlife Department (TPWD) when issuing or approving:

(A) an oyster lease;

(B) a permit for taking, transporting, or possessing threatened or endangered species;

(C) a permit for disturbing marl, sand, shell, or gravel on state-owned land; or

(D) development by a person other than the TPWD that requires the use or taking of any public land in a state park, wildlife management area or preserve.

(b) For purposes of this chapter and Chapter 501 of this title (relating to the Coastal Management Program), the following is an exclusive list of proposed agency rulemaking actions that must be consistent with the CMP goals and policies:

(1) a land office rule governing the prevention of, response to, or remediation of a coastal oil spill;

(2) TNRCC rules governing air pollutant emissions, on-site sewage disposal systems, or underground storage tanks;

(3) a State Soil and Water Conservation Board rule governing agricultural or silvicultural nonpoint source pollution;

(4) any rule governing an individual action described in subsection (a) of this section, including thresholds for referral.

(c) An agency's promulgation of rules governing or authorizing actions listed in subsection (a) or (b) of this section constitutes an action subject to the CMP as provided in Subchapter B of this chapter (relating to Council Certification of State Agency Rules and Approval of Thresholds for Referral).

(d) An action to renew, amend, or modify an existing permit, certificate, lease, easement, approval or other action is not an action under this section if the action is taken pursuant to rules that the council has certified as consistent under Subchapter B of this title (relating to Council Certification of State Agency Rules and Approval of Thresholds for Referral) and:

(1) for a wastewater discharge permit, if the action is not a major permit modification that would increase pollutant loads to coastal waters or would result in relocation of an outfall to a critical area;

(2) for solid and hazardous waste permits, if the action is not a Class III modification as defined in TNRCC rules; or

(3) for any other action, if the action only extends the time period of the existing authorization without authorizing new or additional work or activities or is not directly relevant to the CMP goals and policies.

(e) Whenever more than one state agency is involved in issuing a consistency determination for a single project, consideration should be given to the preparation of one consistency determination for all state agencies involved.

(1) Where multiple state consistency determinations are required, state agencies should consider coordinated preparation of the consistency determinations or designation of a lead agency for development of a single consistency determination. In the case where a single consistency determination will be prepared, such determination must be completed before final action is taken on any permit or authorization listed in subsection (a) of this section and required for the project. The single consistency determination must indicate whether each of the proposed actions listed in subsection (a) of this section and required for the project is consistent with the CMP goals and policies and must include information on each proposed action sufficient to support the consistency determination.

(2) An applicant, project sponsor, or other entity undertaking a project which requires more than one action listed in subsection (a) of this section may request in writing from the council either coordinated preparation of the consistency determinations or designation of a lead agency for development of a single consistency determination.

(3) To avoid duplication and time delays, it is the intent of the council, whenever possible, to provide for coordinated consistency determinations where multiple determinations are required. The council may direct the Permitting Assistance Group (as identified in ° 505.31(c) of this title (relating to Preliminary Review of Proposed Agency Actions by the

Coastal Coordination Council)) to respond to the request and facilitate coordinated consistency determinations or preparation of a single determination by a lead agency, under guidance issued by the council.

(4) The council may not protest a proposed action by an agency or subdivision pertaining to an application filed with that agency or subdivision prior to the effective date of Subchapter C of this title (relating to Consistency and Council Review of Proposed State Agency Actions).

(5) The council shall not review actions listed in this subsection if such actions are taken pursuant to an enforcement order issued prior to the effective date of Subchapter C of this title (relating to Consistency and Council Review of Proposed State Agency Actions).

Subchapter B. COUNCIL REVIEW AND CERTIFICATION OF AGENCY RULES

§505.20 Council Review and Certification of Existing Agency Rules

(a) An agency may seek council certification of any rule governing or authorizing actions listed in §505.11(a) of this title (relating to Actions and Rules Subject to the Coastal Management Program) that was proposed prior to the effective date of this section by filing a Request for Certification with the council secretary. The request shall include a copy of the rule for which the agency seeks council certification and a reasoned statement supporting the agency's determination that the rule is consistent with the CMP goals and policies.

(b) The council secretary shall distribute copies of the Request for Certification, including all supporting information, to all council members and shall place the matter on the agenda of the earliest council meeting at which consideration is practicable. Prior to the council meeting, the secretary shall publish in the Texas Register a notice of availability and request public comment on the Request for Certification.

(c) The council shall make a determination as to whether the rule should be certified as consistent with the CMP goals and policies on or before the 120th day after the secretary received the Request for Certification.

(d) If the council finds that the rule incorporates or otherwise requires the agency to comply with all applicable goals and policies of the program, the council shall issue a written certification of the rule.

(e) If the council finds that the rule does not incorporate or otherwise require the agency to comply with all applicable goals

and policies of the program, the council shall issue a written statement denying certification of the rule, explaining the basis for such denial, and recommending rule amendments necessary to obtain certification.

§505.21 Effect of Council Certification of Agency Rules and Rule Amendments

Upon the council's certification of an agency's rules pursuant to §505.20 of this title (relating to Council Review and Certification of Existing Agency Rules) or §505.23 of this title (relating to Certification of Proposed New Rules and Rule Amendments), the agency's rules are incorporated into the CMP goals and policies, and any threshold for referral approved pursuant to §505.26 of this title (relating to Council Review and Approval of Thresholds for Referral) relating to actions under those rules shall become operative and limit the council's authority to review individual actions of the agency, as provided in §505.32 of this title (relating to Requirements for Referral of a Proposed Agency Action). After an agency's rules are certified and an agency's thresholds are approved, the agency's consistency determination for an action is final and is not subject to referral and review, except as provided by §505.32 of this title (relating to Requirements for Referral of a Proposed Agency Action).

§505.22 Consistency Required for New Rules and Rule Amendments Subject to the Coastal Management Program

(a) When proposing to adopt or amend a rule listed in §505.11(b) of this title (relating to Actions and Rules Subject to the Coastal Management Program) after the effective date of this section, an agency shall include in the preamble to the proposed rule as published in the Texas Register the following:

(1) a statement that the proposed rule or rule amendment is subject to the Coastal Management Program and must be consistent with all applicable CMP policies;

(2) a reasoned justification explaining the basis upon which the agency concluded the proposed rule is consistent with each applicable CMP policy; and

(3) a request for public comment on the consistency of the proposed rule or rule amendment.

(b) Simultaneously with the filing of a proposed rule or rule amendment with the Texas Register, the agency shall submit a copy of the proposed rule or rule amendment to the council secretary who shall distribute it to all council members.

(c) During the comment period provided by the agency, council members should comment on the consistency of the proposed rule or rule amendment. As provided in the Administrative Procedure Act, the agency shall consider and respond to the comments of the public and the council on the consistency of the proposed rule or rule amendment.

(d) In addition to pre-certification review pursuant to §505.24 of this title (relating to Pre-Certification Review of Draft Rule or Rule Amendments), an agency may seek clarification or resolution of consistency issues regarding the proposed rule or rule amendment by placing the matter on the agenda of the council or executive committee.

(e) Upon adoption of the rule or rule amendment, an agency shall affirm that it has taken into account the goals and policies of the CMP by issuing a reasoned determination that the rule or rule amendment is consistent with the CMP goals and policies.

§505.23 Council Certification of Rules and Rule Amendments

(a) Upon adoption of a rule or rule amendment listed in §505.11(b) of this title (relating to Actions and Rules), the agency may seek certification from the council that the rule or rule amendment is consistent with the CMP goals and policies by filing a written Request for Certification with the council secretary. Along with the request, the agency shall provide a copy of the rule or rule amendment as adopted, copies of all public comments relating to consistency of the proposed rule or rule amendment, and any other information the agency wishes to provide. The council secretary shall distribute copies of the Request for Certification, including all supporting materials, to all council members.

(b) Except as provided in subsection (c) of this section, the council secretary shall place the matter on the agenda of the earliest council meeting at which consideration is practicable. After considering any testimony or other relevant information offered at the meeting, the council shall act on the request for certification:

(1) If it finds that the rule or rule amendment incorporates or otherwise requires the agency to comply with all applicable goals and policies of the program, the council shall issue a written certification that the rule or rule amendment is consistent with the CMP goals and policies.

(2) If it finds that the rule or rule amendment does not incorporate or otherwise require the agency to comply with all applicable goals and policies of the program, the council shall

issue a written denial of certification. The denial shall set out the grounds for the denial and recommend rule amendments necessary to obtain certification. The agency may amend the rule and resubmit it for certification.

(c) In accordance with this section, the council shall provide expedited certification of a rule or rule amendment within 26 days of the date the rule or rule amendment was adopted or before the effective date of the rule or rule amendment, whichever is later. An agency may request and the council shall provide expedited certification of an agency's rule or rule amendment only if:

(1) the agency has included in the preamble to the proposed rule or rule amendment published in the Texas Register notice that the agency will seek expedited certification upon adoption of the rule;

(2) the agency has filed with the council secretary at the time the rule is proposed a Notice of Intent to Seek Expedited Certification and attached a copy of the proposed rule or rule amendment; and

(3) the agency submitted the draft rule or draft rule amendment to the council for pre-certification review pursuant to §505.24 of this title (relating to Pre-Certification Review of Draft Rules or Draft Rule Amendments).

(d) The council may base a denial of certification only on:

(1) consistency issues raised in comments to the agency by the council, executive committee, or the public during the pre-certification review period or the public comment period, if any; or

(2) substantial changes to the proposed rule or rule amendment made upon final adoption that raise new consistency issues.

(e) Where council certification of a rule or rule amendment takes place after the effective date of a rule or rule amendment, the provisions of §505.32 of this title (relating to Requirements for Referral of a Proposed Agency Action) will be considered to be in effect to limit council review of an agency action listed in §505.11(a) of this title provided:

(1) the agency files a request for certification of the rule or rule amendment within seven days of the date of adoption;

(2) the action is undertaken pursuant to the rule or rule amendment for which certification is sought; and

(3) the action was initiated after the rule or rule

amendment was adopted and before the council acted on the request for certification.

§505.24 Pre-Certification Review of Draft Rules or Draft Rule Amendments

(a) Prior to the publication in the Texas Register of a proposed rule or rule amendment listed in §505.11(b) of this title (relating to Actions and Rules), an agency may seek pre-certification review by filing a Request for Pre-certification Review with the council secretary and attaching a copy of the draft rule or draft rule amendment and any information the agency wishes the council to consider. This request shall allow council members a minimum of 30 days to review and comment on the draft rule or rule amendment.

(b) Council members may review and comment in writing within 30 days of the date the request was received by the council secretary, unless a longer time is provided in the agency's request. In their comments, council members should identify applicable goals and policies and potential inconsistencies with such goals and policies in the draft rule or rule amendment. Council members may make recommendations to the agency on how to correct any inconsistencies. The agency shall consider the comments from the council members.

(c) The agency may request a pre-certification work session with the executive committee by placing the matter on the agenda of the earliest meeting of the executive committee at which consideration is practicable.

(d) Agencies are encouraged to seek pre-certification review to maximize opportunities to coordinate agency rules, facilitate effective and efficient implementation of the CMP, and to identify and correct possible inconsistencies in the draft rule or draft rule amendment prior to publication of the proposal in the Texas Register.

§505.25 Revocation of Certification

The council may issue a Notice of Program Deficiency if the council finds that the agency has implemented its rules in a manner that is inconsistent with the CMP goals and policies, or has amended certified rules in a manner inconsistent with the CMP goals and policies. The notice shall set forth the specific findings of deficiency, the basis for such findings, and include recommendations to correct the deficiencies within a reasonable period established in the notice. If the agency fails to correct the deficiencies as provided in the notice and within the time allowed, the council may, after notice and opportunity for public

comment, revoke certification of the agency's rules. Upon revocation of certification, §505.21 of this title (relating to Effect of Council Certification of Agency Rules and Rule Amendments) shall not apply to limit council review of any agency actions.

§505.26 Approval of Thresholds for Referral

As applicable, the provisions of §505.20 of this title (relating to Council Review and Certification of Existing Agency Rules) or §505.23 of this title (relating to Council Certification of Rule and Rule Amendments) shall be applied in requesting and responding to a request for approval of thresholds. Notwithstanding any other provision of this section to the contrary, when applying §505.20 or §505.23 to thresholds, the term "threshold" or "thresholds" shall be substituted for the term "rule" or "rules" and the term "approval" shall be substituted for the term "certified" or "certification." Thresholds for referral shall be set a level consistent with the standard in §501.13(b) of this title (relating to Administrative Policies).

Subchapter C. CONSISTENCY AND COUNCIL REVIEW OF PROPOSED STATE AGENCY ACTIONS

§505.30 Agency Consistency Determination

(a) An agency, when proposing an action listed in §505.11(a) of this title (relating to Actions and Rules Subject to the Coastal Management Program) that may adversely affect a coastal natural resource area, shall comply with the CMP goals and policies.

(b) An agency subject to subsection (a) of this section shall affirm that it has taken into account the CMP goals and policies by issuing a written determination that a proposed action is consistent with the program goals and policies or will not have any direct and significant impacts on applicable CNRAs. For purposes of these determinations, "direct" refers to impacts that are causally linked to an activity; "significant" refers to appreciable impacts on CNRAs. The agency shall include in its written determination one of the following statements:

(1) Consistency Determination. The (State Agency Name) has reviewed this proposed action for consistency with the Texas Coastal Management Program (CMP) goals and policies in accordance with the regulations of the Coastal Coordination Council, and has determined that the proposed action is consistent with the applicable CMP goals and policies.

(2) Determination of No Direct and Significant Adverse Effect. The (State Agency Name) has reviewed this proposed action

for consistency with the CMP goals and policies in accordance with the regulations of the Coastal Coordination Council, and has determined that the proposed action will not have a direct and significant adverse effect on the coastal natural resource areas (CNRAs) identified in the applicable policies.

(c) For actions that exceed the thresholds for referral, the agency shall provide a written explanation supporting the determination made under subsection (b) of this section. The explanation shall describe the basis for the agency's determination, include a description of the proposed action and its probable impacts on CNRAs, identify the CMP goals and policies applied to the proposed action, and explain how the proposed action is consistent with the applicable goals and policies or why the proposed action does not adversely affect any CNRAs.

(d) When publishing notice of receipt of an application or request for agency proposed action, the agency shall include a statement that the application or requested action is subject to the CMP and must be consistent with the CMP goals and policies. The agency shall include the council secretary on any public notice list maintained by the agency for proposed actions subject to the CMP. Upon proposal of an action listed on §505.11(a) of this title (relating to Actions and Rules Subject to the Coastal Management Program), the agency shall provide to the council secretary a one-page notice that an action subject to the CMP has been proposed.

(e) Agencies shall maintain a record of all proposed actions that are subject to the CMP and provide such record to the council on a quarterly basis.

§505.31 Preliminary Review of Proposed Agency Actions by the Coastal Coordination Council

(a) An agency, subdivision, or applicant for a permit may request and receive a preliminary consistency review of any action listed in §505.11(a) of this title (relating to Actions and Rules Subject to the Coastal Management Program) or §505.60 of this title (relating to Subdivision Actions Subject to the Coastal Management Program) prior to the agency's proposed action.

(b) A request for preliminary consistency review or a request for permitting assistance pursuant to subsection (d) of this section, shall be submitted in writing to the council secretary, the chair of the Permitting Assistance Group (as identified in subsection (c) of this section), and the agency, subdivision, or applicant, as appropriate. Upon receipt of either type of request, the council secretary shall publish in the Texas Register notice of the request including a brief explanation of the matter and the consistency issues presented, if any, and request public comment on

the consistency of the matter. Public comments shall be accepted for 30 days and be directed to the secretary who shall, upon close of the comment period, immediately distribute them to all members of the Permitting Assistance Group. A request for preliminary consistency review should identify all other local, state, and federal permits or authorizations subject to the program associated with the application.

(c) The council shall create a Permitting Assistance Group. The Permitting Assistance Group shall be composed of representatives of council member agencies and other interested council members.

(1) The Permitting Assistance Group shall be convened as directed by the council or as necessary to respond to a request for preliminary consistency review.

(2) After considering the public comments received and within 45 days of receipt of a request for preliminary consistency review, the Permitting Assistance Group shall require that the following written information be produced:

(A) a statement from each agency or subdivision required to permit or approve the project as to whether the agency or subdivision anticipates approving or denying the application;

(B) if an agency or subdivision intends to deny an application, the agency's or subdivision's explanation of the grounds for denial and recommendations for resolving the grounds in a way that would allow the application to be approved;

(C) if enough information is already available, a preliminary finding as to whether the project is likely to be found consistent with the CMP goals and policies; and

(D) if the project is likely to be found inconsistent with the CMP goals and policies, an explanation and recommendation for resolving the inconsistency in a way that would allow the project to be found consistent.

(d) An individual or small business may request and receive assistance with filing applications for permits or other proposed actions described by §505.11(a) of this title (relating to Actions and Rules Subject to the Coastal Management Program). The Permitting Assistance Group shall coordinate preapplication assistance and shall provide to an individual or a small business, on request:

(1) a list of the permits or other approvals necessary for the project;

(2) a simple, understandable statement of all permit requirements;

(3) a coordinated schedule for each agency's or subdivision's decision on the action;

(4) a list of all the information the agencies or subdivisions need to declare an application for a permit or other approval administratively complete;

(5) assistance in completing the applications as needed; and

(6) if enough information is already available, and after considering all public comments, a preliminary finding as to whether the project is likely to be found consistent with the CMP goals and policies.

(e) If an agency, subdivision, or applicant has received a preliminary finding of consistency under subsection (c)(2)(C) or (d)(6) of this section and a request for referral was filed on that action alleging a significant unresolved dispute regarding the proposed action's consistency, the council may accept the request for referral only if the agency or subdivision has substantially changed the permit or proposed action since the preliminary finding was issued.

§505.32 Requirements for Referral of a Proposed Agency Action

(a) A proposed action of an agency listed in §505.11(a) of this title (relating to Actions and Rules Subject to the Coastal Management Program) may be referred to the council for review to determine consistency with the CMP goals and policies only if:

(1) the agency has proposed the action for which referral is sought;

(2) the consistency determination for the proposed action was contested by:

(A) a council member or an agency that was a party in a formal hearing under Government Code, Chapter 2001, or in an alternative dispute resolution process; or

(B) a council member or other person by the filing of written comments with the agency before the action was proposed if the proposed action is one for which a formal hearing under Government Code, Chapter 2001, is not available;

(3) a person described by subsection (a)(2) of this section files a request for referral within ten days of the date

the action is proposed alleging a significant unresolved dispute regarding the proposed action's consistency with the CMP goals and policies; and

(4) any three council members agree within 13 days of the date the action is proposed that there is a significant unresolved dispute regarding the proposed action's consistency with the CMP goals and policies and the matter is placed on the agenda for a council meeting.

(b) If consistency review thresholds are in effect under §505.26 of this title (relating to Council Review and Approval of Thresholds for Referral), the council may not review a proposed action for consistency with the CMP goals and policies unless the requirements of subsection (a) of this section are satisfied and:

(1) if the proposed action is one for which a formal hearing under Government Code, Title 10, Subtitle A, Chapter 2001, is available:

(A) the action exceeds the applicable thresholds and the agency's consistency determination was contested in a formal hearing or an alternative dispute resolution process; or

(B) the action does not exceed the applicable thresholds but may directly and adversely affect a critical area, critical dune area, coastal park, wildlife management area or preserve, or Gulf beach and a state agency contested the agency's consistency determination in a formal hearing; or

(2) if the proposed action is one for which a formal hearing under Government Code, Chapter 2001, is not available o contest the agency's determination, the action exceeds the applicable thresholds.

(c) For purposes of this subchapter, an action subject to the contested case provisions of Government Code, Chapter 2001, is proposed when a notice of a decision or order is issued under Government Code, §2001.142.

(d) The council must consider and act on a matter referred under this section before the 26th day after the date the agency or subdivision proposed the action.

Subchapter C. CONSISTENCY AND COUNCIL REVIEW OF PROPOSED STATE AGENCY ACTIONS

§505.33 Filing of Request for Referral

To seek council review of a proposed action under §505.32 of this title (relating to Requirements for Referral of a Proposed Agency

Action), a person described in §505.32(a)(2) of this title (relating Requirements for Referral of a Proposed Agency Action) may file a Request for Referral of an agency action listed in §505.11(a) of this title (relating to Actions and Rules Subject to the Coastal Management Program) with the council secretary. The request must be filed no later than ten days after the agency has proposed the action for which consistency review is sought. The Request for Referral shall include:

(1) the names, addresses, and signatures of all persons joining in the request;

(2) a certificate of service indicating that copies of the request have been provided by hand delivery or certified mail to:

(A) the agency proposing the action for which review is sought;

(B) the applicant, if any, before the agency; and

(C) if the proposed action was the subject of a formal hearing under Government Code, Chapter 2001, all persons who were named as parties to the proceeding or their representatives;

(3) a description of the proposed action for which review is sought indicating the date of the agency's proposed action and a copy of the proposed order, permit, or other official agency decision document;

(4) a statement demonstrating, by reference to the requirements of §505.32 of this title (relating to Requirements for Referral of a Proposed Agency Action), that the proposed action is subject to referral; and

(5) a clear and concise statement of the significant unresolved dispute regarding the proposed action's consistency with the CMP goals and policies, including specific reference to the applicable goals and policies and to the applicable facts in the agency's decision record.

§505.33 Filing of Request for Referral

To seek council review of a proposed action under §505.32 of this title (relating to Requirements for Referral of a Proposed Agency Action), a person described in §505.32(a)(2) of this title (relating Requirements for Referral of a Proposed Agency Action) may file a Request for Referral of an agency action listed in §505.11(a) of this title (relating to Actions and Rules Subject to the Coastal Management Program) with the council secretary. The request must be filed no later than ten days after the agency has proposed the action for which consistency review is sought. The

Request for Referral shall include:

(1) the names, addresses, and signatures of all persons joining in the request;

(2) a certificate of service indicating that copies of the request have been provided by hand delivery or certified mail to:

(A) the agency proposing the action for which review is sought;

(B) the applicant, if any, before the agency; and

(C) if the proposed action was the subject of a formal hearing under Government Code, Chapter 2001, all persons who were named as parties to the proceeding or their representatives;

(3) a description of the proposed action for which review is sought indicating the date of the agency's proposed action and a copy of the proposed order, permit, or other official agency decision document;

(4) a statement demonstrating, by reference to the requirements of §505.32 of this title (relating to Requirements for Referral of a Proposed Agency Action), that the proposed action is subject to referral; and

(5) a clear and concise statement of the significant unresolved dispute regarding the proposed action's consistency with the CMP goals and policies, including specific reference to the applicable goals and policies and to the applicable facts in the agency's decision record.

§505.34 Referral of a Proposed Agency Action to the Council for Consistency Review

(a) Upon receipt of a timely Request for Referral which satisfies the requirements of §505.33 of this title (relating to Filing of Request for Referral), the council secretary shall provide, by facsimile transmission or overnight courier, a copy to each council member.

(b) Council members shall consider the Request for Referral.

(c) To accept a Request for Referral, any three council members must agree that there is a significant unresolved dispute regarding the proposed action's consistency with the CMP goals and policies, and must submit the action to the council secretary in writing no later than 13 days after the agency has proposed the action for which referral has been requested.

(d) The council secretary will place the action on the agenda of the earliest council meeting at which consideration of the action is reasonably practicable. If no regularly scheduled meeting will allow the council to act on the referral before the 26th day after the date the agency proposed the action, the council secretary shall notify the chair who shall schedule a special meeting to consider the proposed action and any other appropriate matters. Agencies may request, and the council may provide, expedited council consideration of the proposed actions placed on the agenda.

(e) The adequacy or inadequacy of a Request for Referral shall not be a reviewable issue before the council. The council may, in its discretion, accept a deficient Request for Referral.

(f) No right to council review is created by this chapter.

§505.35 Council Procedures for Review of a Proposed Agency Action

(a) The council secretary shall, by certified mail or hand delivery, provide notice of the hearing at which the council will review a proposed action to:

(1) the agency proposing the action under review;

(2) the applicant, if any, before the agency;

(3) the person(s) filing the Request for Referral;

(4) if the action was the subject of a formal hearing under Government Code, Chapter 2001, before the agency, all persons who were named as parties to the proceeding or their representatives; and

(5) the governor, for the purpose of designating a local elected official to the council pursuant to the Texas Natural Resources Code, §33.204(d).

(b) The notice to the applicant and the agency shall include a statement that no person may conduct activities authorized by the proposed agency action that would irreparably alter or damage the CNRA identified in the applicable policy.

(c) In conducting reviews, the council shall consider only:

(1) the record before the agency proposing the action under review;

(2) the agency's findings;

(3) applicable laws and rules;

(4) any additional information provided by that agency; and

(5) the oral or written testimony of any person regarding the CMP as the testimony relates to the agency's proposed action under review.

(d) If the agency did not hold a hearing, make a record, or make findings, the council may hold a hearing and make findings necessary for a complete and thorough review.

(e) The council must consider and act on a matter referred before the 26th day after the date the agency proposed the action.

§505.36 Standard of Council Review of a Proposed Agency Action

(a) The only basis on which the council may protest a proposed agency action is that the proposed action is inconsistent with the CMP goals and policies.

(b) Following certification of an agency's rules as consistent with the CMP goals and policies pursuant to Subchapter B of this chapter:

(1) the council shall presume that the agency's consistency determination is valid if it is supported by the agency's findings of fact and conclusions of law;

(2) the burden shall be on the person filing the request for referral to demonstrate that the agency's proposed action is inconsistent with the CMP goals and policies; and

(3) any thresholds for referral approved pursuant to §505.26 of this title (relating to Council Review and Approval of Thresholds for Referral) shall become operative and limit the council's authority to review individual proposed actions of an agency as provided in §505.32 of this title (relating to Requirements for Referral of a Proposed Agency Action).

§505.37 Activities Pending Council Review of a Proposed Agency Action

Pending council review of an individual agency proposed action, no person may conduct activities authorized by the agency action that would irreparably alter or damage the CNRA identified in the applicable policy, except as otherwise provided by the Texas Administrative Procedure Act, §2001.054.

§505.38 Council Action on Review of a Proposed Agency Action

(a) The council may affirm or protest an agency's proposed action. A proposed action is consistent with the CMP goals and policies and approved by the council unless the council determines the proposed action to be inconsistent with the CMP and protests the proposed action. If the council protests the proposed action, the council shall report its findings in writing to the agency or subdivision. The report shall:

(1) specify how the proposed action is inconsistent with the CMP goals and policies; and

(2) include specific recommendations of the council regarding how the proposed action may be modified or amended to make it consistent with the CMP goals and policies.

(b) The council may recommend that an agency undertake only such actions as are within the authority of the agency. A goal or policy may not require an agency to perform an action that would exceed the constitutional or statutory authority of the agency to which the goal or policy applies.

(c) To protest an agency's consistency determination requires an affirmative vote of at least two-thirds of all council members.

§505.39 Agency Action after Council Protest

(a) After the council has protested a proposed action and reported its findings to the agency, the agency shall review the findings and recommendations and determine whether to modify or amend the proposed action to make it consistent with the CMP goals and policies. The agency shall notify the council secretary of its decision within 20 days of the date the agency receives the council's written protest. The secretary shall provide a copy of the notification to each council member by hand-delivery, facsimile, or overnight mail.

(b) Any three regular members of the council may call a special meeting to consider requesting the attorney general to issue an opinion on the consistency of the proposed action with the CMP goals and policies. A council member's request for a special meeting shall be submitted in writing to the council secretary within ten days of the date the agency notifies the council of its decision. A special meeting to consider whether to request an opinion from the attorney general shall be held within 20 days of the date the third request for a special meeting was received by the Council secretary.

(c) If the council finds that the agency did not amend or modify the proposed action either to conform substantially with the

council's recommendations or to achieve the same results as the council's recommendations, the council shall refer the matter to the attorney general for a legal opinion on consistency of the proposed action with the CMP goals and policies. The agency is stayed from taking the proposed action until the attorney general issues the opinion. The attorney general shall issue an opinion before the 26th day after the date the council requests the opinion. The attorney general shall base the opinion on the record before the agency and the council. In determining whether the proposed action is inconsistent, the attorney general shall consider the council's findings and recommendations and the agency's response to the recommendations.

§505.42 Enforcement

(a) The agency or subdivision with jurisdiction over a proposed action shall enforce provisions of the CMP.

(b) If the attorney general issues an opinion under §505.39 of this title (relating to Agency Action After Council Protest) that a proposed agency or subdivision action is inconsistent with the CMP the attorney general shall file suit in a district court of Travis County unless otherwise directed by the council.

(c) Notwithstanding the request for an opinion or the filing of a suit, the council, the agency and if a suit is filed, the attorney general, may enter into a settlement agreement with regard to the proposed action.

Subchapter D. COUNCIL ADVISORY OPINIONS ON GENERAL PLANS

§505.50 General Plans

General plans include any comprehensive statement in words, maps, illustrations, or other media issued by a state agency or political subdivision that recommends, proposes, evaluates, or formulates policies or future courses of action involving activities affecting coastal natural resource areas. For purposes of this section, general plans include, but are not limited to, the following:

(1) State Emergency Management Plan (Texas Government Code, §418.042);

(2) State Coastal Discharge Contingency Plan (Texas Natural Resources Code, §40.053);

(3) State Oil and Hazardous Substance Spill Contingency Plan (Texas Water Code, Chapter 26);

(4) State-Owned Coastal Wetlands Conservation Plan (Texas Parks and Wildlife Code, §14.002(a));

(5) State Water Quality Management Plan (Texas Water Code, §26.012);

(6) Artificial Reef Plan (Texas Parks and Wildlife Code, §89.021);

(7) State Water Plan (Texas Water Code, §16.051);

(8) Long-Range Dredging and Disposal Plan (Texas Parks and Wildlife Code, §14.002(b)(8)); and

(9) Regional Solid Waste Management Plans (Texas Health and Safety Code, §363.062).

§505.51 Request for a Non-Binding Advisory Opinion and Council Action

(a) An agency or subdivision which has produced a general plan described or listed in §505.50 of this title (relating to General Plans) may request a non-binding advisory opinion on the consistency of its general plan.

(b) The request for an advisory opinion shall be submitted in writing to the council secretary. The council secretary shall forward copies of the request to all council members. The council shall consider the general plan at the first reasonable opportunity.

(c) Prior to council issuance of an advisory opinion, the chair of the council may direct the executive committee to review the general plan and make a recommendation to the council regarding the consistency of the plan.

(d) The council shall issue the advisory opinion within 90 days of receiving the request from the agency or subdivision.

(e) The advisory opinion shall indicate whether actions taken pursuant to the plan are likely to be consistent or inconsistent with the Texas Coastal Management Program (CMP) goals and policies. The advisory opinion shall also:

(1) identify all goals and policies that apply to the general plan;

(2) identify any consistency issues of concern to the council;

(3) identify portions or provisions of the plan that are

likely to lead to future inconsistent actions; and

(4) include recommendations for the resolution of consistency issues identified in paragraphs (2) and (3) of this subsection.

§505.52 Request for Council Participation in the Development of General Plans

(a) An agency or subdivision which is producing a general plan described or listed in §505.50 of this title (relating to General Plans) may request council participation in the development of a plan by submitting a written request to the council secretary. The council shall participate in the plan development according to the schedule of the agency developing the plan.

(b) The council may direct the executive committee, or a subcommittee of the group, to participate in the development of the plan and make regular reports to the council.

(c) At the request of an agency or subdivision which is producing a general plan described or listed in §505.50 of this title (relating to General Plans), the council may enter into a memorandum of agreement establishing the manner of council participation in plan development, the criteria to be used in evaluating the plan, criteria to determine the adequacy of alternatives for resolving potential inconsistencies in the plan with the CMP goals and policies, and such other matters as are deemed appropriate by the parties to the agreement.

§505.53 Purpose and Effect of an Advisory Opinion

(a) The purpose of the advisory opinion is to notify the public and the agency or subdivision adopting or approving the plan whether actions taken pursuant to the plan are likely to be consistent with the CMP goals and policies.

(b) The advisory opinion does not ensure that any action taken pursuant to the general plan will or will not be consistent with the CMP goals and policies.

(c) The council's issuance of an advisory opinion does not obviate the requirement that state agencies and political subdivisions prepare consistency determinations in accordance with the requirements of this chapter or preclude council review of those actions.

Subchapter E. CONSISTENCY AND COUNCIL REVIEW OF LOCAL GOVERNMENT ACTIONS

§505.60 Subdivision Actions Subject to the Coastal Management Program

For purposes of this chapter and Chapter 501 of this title (relating to Coastal Management Program), issuance of a dune protection permit or beachfront construction certificate are the only proposed actions by a subdivision that may adversely affect a coastal natural resource area and that therefore must be consistent with the CMP goals and policies provided such actions authorize:

(1) construction activity that is located 200 feet or less landward of the line of vegetation and that results in the disturbance of more than 7,000 square feet of dunes or dune vegetation;

(2) construction activity that results in the disturbance of more than 7,500 cubic yards of dunes;

(3) a coastal shore protection project undertaken on a Gulf beach or 200 feet or less landward of the line of vegetation and that affects more than 500 linear feet of Gulf beach; or

(4) a closure, relocation, or reduction in existing public beach access or public beach access designated in an approved local government beach access plan, other than for a short term.

§505.62 Subdivision Consistency Determinations

(a) Prior to a proposed action identified in §505.60 of this title (relating to Subdivision Actions Subject to the Coastal Management Program), a subdivision shall comply with the CMP goals and policies.

(1) For dune protection permits, the subdivision determination made pursuant to §15.4 of this title (relating to Dune Protection Standards) that the proposed activity will not materially weaken any dune, or materially damage any dune vegetation, or reduce the effectiveness of any dune as a means of protection against erosion and high wind and water, shall constitute a determination that such permit is consistent with CMP goals and policies.

(2) For beachfront construction certificates, the subdivision determination made pursuant to §15.5 of this title (relating to Beachfront Construction Standards) that the proposed activity is consistent with the beach access portion of its approved dune protection and beach access plan and does not

interfere with, or otherwise restrict, the public's right to use and have access to and from the Gulf beach shall constitute a determination that such permit is consistent with CMP goals and policies.

(b) A subdivision proposing an action listed in §505.60 of this title (relating to Subdivision Actions Subject to the Coastal Management Program) shall affirm that it has taken into account the CMP goals and policies by issuing a written determination that the proposed action is consistent with program goals and policies.

§505.63 Preliminary Review of a Subdivision Action by the Coastal Coordination Council

(a) Prior to taking final action, a subdivision may request preliminary consistency review for any proposed action listed in §505.60 of this title (relating to Subdivision Actions Subject to the Coastal Management Program).

(b) A request for preliminary consistency review shall be submitted in writing to the council secretary, the chair of the Permitting Assistance Group (as identified in §505.31(c) of this title (relating to Preliminary Review of Proposed Agency Actions by the Coastal Coordination Council), and the applicant. Upon receipt of such request, the council secretary shall publish in the Texas Register notice of the request including a brief explanation of the matter and the consistency issues presented, if any, and request public comment on the consistency of the matter. Public comments shall be accepted for 30 days and be directed to the secretary who shall, upon close of the comment period, immediately distribute them to all members of the Permitting Assistance Group.

(c) The Permitting Assistance Group shall convene and, after considering the public comment received, respond to a request for preliminary consistency review in accordance with the pertinent provisions of §505.31 of this title (relating to Preliminary Review of Proposed Agency Actions by the Coastal Coordination Council).

§505.64 Requirements for Referral of Subdivision Actions

A proposed subdivision action listed in §505.60 of this title (relating to Subdivision Actions Subject to the Coastal Management Program) may be referred to the council for review to determine consistency with the CMP goals and policies only when:

(1) the subdivision proposed the action for which referral is sought;

(2) the consistency determination for the proposed action was contested by a council member or other person by the filing of

written comments with the subdivision;

(3) a person described in paragraph (2) of this section files a request for referral within ten days of the date the action was proposed alleging a significant unresolved dispute regarding the proposed action's consistency with the CMP goals and policies; and

(4) any three council members agree within 13 days of the date the action was proposed that there is a significant unresolved dispute regarding the proposed action's consistency with the CMP goals and policies and the matter is placed on the agenda for a council meeting.

§505.65 Filing of Request for Referral

(a) To seek council review of an action identified in §505.60 of this title (relating to Subdivision Actions Subject to the Coastal Management Program), a council member or other person must contest the consistency determination for the proposed action in accordance with §505.32 of this title (relating to Requirements for Referral of a Proposed Agency Action).

(b) The Request for Referral shall:

(1) contain the names, addresses, and signatures of all persons joining in the request;

(2) contain a certificate of service indicating that requestor has provided copies of the request by personal delivery or certified service to:

(A) the subdivision proposing the action for which review is sought; and

(B) the applicant, if other than the subdivision;

(3) describe the proposed action for which review is sought, indicate the date of the proposed subdivision action, and include a copy of the order, permit, or other official subdivision proposal;

(4) demonstrate, by reference to the requirements of §505.64 of this title (relating to Requirements for Referral of Subdivision Actions), that the action is one subject to referral;

(5) include a clear and concise statement of the claimed inconsistencies with the CMP goals and policies, including specific reference to the applicable goals and policies and to the applicable facts in the subdivision's proposal; or

(6) include a clear and concise statement of the significant unresolved dispute regarding the proposed action's consistency with the CMP goals and policies.

(c) The Request for Referral must be filed with the council secretary no later than ten days after the subdivision has proposed the action for which referral is sought.

§505.66 Referral of Subdivision Actions to the Council for Consistency Review

(a) Upon receipt of a Request for Referral which on its face meets the requirements of §505.65 of this title (relating to Filing of Request for Referral), the council secretary shall provide, by facsimile transmission or overnight courier, a copy to each council member.

(b) Council members shall consider the Request for Referral.

(c) To accept a Request for Referral, any three council members must agree to place the matter on the agenda for a council meeting and must submit the matter to the council secretary in writing no later than 13 days after the subdivision proposed the action for which referral has been requested.

(d) The council secretary shall add the proposed action to the agenda of the earliest council meeting. If no regularly scheduled council meeting will allow the council to act on the referral before the 26th day after which the subdivision proposed the action, the council secretary shall notify the chair, who shall schedule a special meeting to consider the proposed action and any other appropriate matters.

(e) The adequacy or inadequacy of a Request for Referral shall not be a reviewable issue before the council. The council may, at its discretion, accept a deficient Request for Referral.

(f) No right to council review is created by this chapter.

§505.68 Standard of Council Review for Subdivision Actions

(a) The only basis on which the council may protest a proposed subdivision action is that the proposed action is inconsistent with the CMP goals and policies.

(b) Following the land office's certification of a subdivision's dune protection and beach access plan under §15.3(o) of this title (relating to Administration) as consistent with the CMP goals and policies:

(1) the subdivision's consistency determination is final and is not subject to referral and review, except as provided in §505.64 of this title (relating to Requirements for Referral of Subdivision Actions); and

(2) the council shall presume that the subdivision's consistency determination is valid, if such determination is documented by the underlying record, and the burden shall be on the person filing the Request for Referral to demonstrate that the subdivision's proposed action is inconsistent with the CMP goals and policies.

§505.69 Activities Pending Council Review

Pending council review of a proposed subdivision action which is referred to the council, no person may conduct activities proposed by the subdivision that would irreparably alter or damage critical dunes or dune vegetation or interfere with or restrict the public's right to use and have access to and from the Gulf beach.

§505.70 Council Action on Review of Subdivision Action

(a) The council may affirm or protest the subdivision's proposed action. A proposed action is consistent with the CMP goals and policies and approved by the council unless the council determines the proposed action to be inconsistent with the CMP and protests the proposed action. If the council protests the proposed action, the council shall report its findings in writing to the subdivision. The report shall:

(1) specify how the proposed action is inconsistent with the CMP goals and policies; and

(2) include specific recommendations of the council regarding how the proposed action may be modified or amended to make it consistent with the CMP goals and policies.

(b) To protest a subdivision's consistency determination requires an affirmative vote of at least two-thirds of all council members.

(c) The council may recommend that a subdivision undertake only such actions as are within the authority of the subdivision. A goal or policy may not require a subdivision to perform an action that would exceed the constitutional or statutory authority of the subdivision to which the goal or policy applies.

§505.71 Subdivision Action after Council Protest

(a) After the council has protested a proposed subdivision action and reported its findings to the subdivision, the subdivision shall review the findings and recommendations and determine whether to modify or amend the proposed action to make it consistent with the CMP goals and policies. The subdivision shall notify the council secretary of its decision within 20 days of the date the subdivision receives the council's written protest. The secretary shall provide a copy of the notification to each council member by hand-delivery, facsimile, or overnight mail.

(b) Any three regular members of the council may call a special meeting to consider requesting the attorney general to issue an opinion on the consistency of the proposed action with the CMP goals and policies. A council member's request for a special meeting shall be submitted in writing to the council secretary within ten days of the date the subdivision notifies the council of its decision. A special meeting to consider whether to request an opinion from the attorney general shall be held within 20 days of the date the third request for a special meeting was received by the council secretary.

(c) If the council finds that the subdivision did not amend or modify the proposed action either to conform substantially with the council's recommendations or to achieve the same results as the council's recommendations, the council shall refer the matter to the attorney general for a legal opinion on consistency of the proposed action with the CMP goals and policies.

(d) The subdivision is stayed from taking the proposed action until the attorney general issues the opinion. The attorney general shall issue an opinion before the 26th day after the date the council requests the opinion. The attorney general shall base the opinion on the record before the subdivision and the council. In determining whether the proposed action is inconsistent, the attorney general shall consider the council's findings and recommendations and the subdivision's response to the recommendations.

§505.74 Enforcement

(a) The agency or subdivision with jurisdiction over a proposed action shall enforce the CMP provisions.

(b) If the attorney general issues an opinion pursuant to §505.71 of this title (relating to Subdivision Action After Council Protest) finding that a proposed subdivision action is inconsistent with the CMP and the agency or subdivision fails to implement the council's recommendation, the attorney general shall file suit in

a district court of Travis County unless otherwise directed by the council.

(c) Notwithstanding the request for an opinion or the filing of a suit, the council, the subdivision and, if a suit is filed, the attorney general, may enter into a settlement agreement with regard to the proposed action.

Coastal Coordination Act
Implementation Rules
31 TAC §506

Chapter 506. COUNCIL PROCEDURES FOR FEDERAL CONSISTENCY WITH COASTAL MANAGEMENT PROGRAM GOALS AND POLICIES

§506.11 Definitions

The following words, terms, and phrases, when used in this chapter, shall have the following meanings, unless the context clearly indicates otherwise.

Applicant--Any individual, public or private corporation, partnership, association, or other entity organized or existing under the laws of any state, or any state, regional, or local government that, following management program approval, files an application for a federal agency action to conduct an activity affecting the coastal zone.

Applicant agency--Any agency or subdivision or any related public entity such as a special purpose district, which, following federal CMP approval, submits an application for federal assistance.

Assistant administrator--The assistant administrator for Coastal Zone Management, National Oceanic and Atmospheric Administration, United States Department of Commerce.

Associated facilities--All proposed facilities:

(A) which are specifically designed, located, constructed, operated, adapted, or otherwise used, in full or in major part, to meet the needs of a federal action (e.g., activity, development project, license, permit, or assistance); and

(B) without which the federal action, as proposed, could not be conducted.

CMP boundary--The CMP boundary established in §503.1 of this title (relating to the Coastal Management Program Boundary).

Coastal area--The geographic area comprising all the counties in Texas which have any tidewater shoreline, including that portion of the bed and water of the Gulf of Mexico within the jurisdiction of the State of Texas.

Coastal zone--The portion of the coastal area located within the boundaries established by the CMP under Texas Natural Resources Code, §33.2053(k), and described in Chapter 503 of this title (relating to Coastal Management Program Boundary).

Consistency certification--The statement submitted by an applicant for a federal agency action subject to federal consistency review certifying that the proposed activity requiring

the federal agency action is consistent with the CMP goals and policies.

Consistency determination--The statement and supporting documentation submitted by a federal agency undertaking or planning a federal agency activity subject to federal consistency review certifying that the federal agency activity is consistent with the CMP goals and policies to the maximum extent practicable.

Consistent to the maximum extent practicable--Being fully consistent with the CMP unless compliance is prohibited based upon the requirements of existing law.

Federal agency action--A federal license or permit that a federal agency may issue that represents the proposed federal authorization, approval, or certification needed by the applicant to begin an activity. An action to renew, amend, or modify an existing license or permit shall not be considered an action subject to the CMP if the action only extends the time period of the existing authorization without authorizing new or additional work or activities, would not increase pollutant loads to coastal waters or result in relocation of a wastewater outfall to a critical area, or is not otherwise directly relevant to the policies in §501.14 of this title (relating to Policies for Specific Activities and Coastal Natural Resource Areas).

Federal agency activity--A function that is performed by or for a federal agency in the exercise of its statutory responsibility, including financial assistance, the planning, construction, modification, or removal or a public work, facility, or any other structure, and the acquisition, use, or disposal of land or water resources. The term does not include the issuance of a federal license or permit.

Federal assistance--Assistance provided under a federal program to an applicant agency through grant or contractual arrangements, loans, subsidies, guarantees, insurance, or other forms of financial aid. Except as otherwise requested by the applicant agency, council review of federal assistance for consistency with the CMP goals and policies is limited to federal programmatic requirements for project level funding. Agency management decisions such as funding priorities and allocation of funds among various projects are not subject to review. For purposes of the review procedures in this chapter, the term includes only the transfer or commitment of funds from the federal agency directly to an applicant agency.

Federal license or permit--Any authorization, certification, approval, or other form of permission which any federal agency is empowered to issue to an applicant.

Interagency coordination group--For purposes of the general agreement in §506.28 of this title (relating to General Consistency Agreements), a group established to review proposed federal development projects and whose duties include, among other things, advising on the consistency determination. Voting members of the group shall include, at a minimum, representatives of the local project sponsor and federal and state natural resource and regulatory agencies with jurisdiction over the project. The group shall seek and promote broad participation by local governments and coastal citizen groups.

Outer continental shelf (OCS) plan--A plan for the exploration or development of, or production from, an area leased under the Outer Continental Shelf Lands Act (43 United States Code Annotated, §§1331-1356) and the rules adopted under that Act that is submitted to the secretary of the United States Department of the Interior after federal approval of the CMP.

State single point of contact--The state single point of contact for the Texas Review and Comment System as defined by 1 TAC §5.194 (concerning Definitions).

§506.12 Federal Agency Actions, Federal Agency Activities and Development Projects, and Outer Continental Shelf Plans Subject to the Coastal Management Program

(a) For purposes of this section, the following federal actions within the CMP boundary may adversely affect coastal natural resource areas (CNRAs):

(1) Federal Agency Activities and Development Projects:

(A) United States Department of the Interior. Modifications to the boundaries of the Coastal Barrier Resource System under 16 United States Code Annotated, §3503(c);

(B) United States Environmental Protection Agency. Selection of remedial actions under 42 United States Code Annotated, §9604(c);

(C) United States Army Corps of Engineers:

(i) small river and harbor improvement projects under 33 United States Code Annotated, §577;

(ii) water resources development projects under 42 United States Code Annotated, §1962d-5;

(iii) small flood control projects under 33 United States Code Annotated, §701s;

(iv) small beach erosion control projects under 33 United States Code Annotated, §426g;

(v) operation and maintenance of civil works projects under the Code of Federal Regulations, Title 33, Parts 335 and 338;

(vi) dredging projects under the Code of Federal Regulations, Title 33, Part 336;

(vii) approval for projects for the prevention or mitigation of damages to shore areas attributable to federal navigation projects pursuant to 33 United States Code Annotated, §426i; and

(viii) approval for projects for the placement on state beaches of beach-quality sand dredged from federal navigation projects pursuant to 33 United States Code Annotated, §426j;

(D) Federal Emergency Management Agency:

(i) model floodplain ordinances; and

(ii) approval or suspension of a community's eligibility to sell flood insurance under the Code of Federal Regulations, Title 44, Part 59, Subpart B;

(E) General Services Administration:

(i) acquisitions under 40 United States Code Annotated, §602 and §603; and

(ii) construction under 40 United States Code Annotated, §605;

(F) All federal agencies. All other development projects.

(2) Federal Agency Actions:

(A) Environmental Protection Agency:

(i) National Pollution Discharge Elimination System (NPDES) permits under 33 United States Code Annotated, §1342;

(ii) ocean dumping permits under 33 United States Code Annotated, §1412;

(iii) approvals under 42 United States Code Annotated, §6924(d); and

(iv) approvals of National Estuary Program Comprehensive Conservation Management Plans under 33 United States Code Annotated, §1330f;

(B) United States Army Corps of Engineers:

(i) ocean dumping permits under 33 United States Code Annotated, §1413;

(ii) dredge and fill permits under 33 United States Code Annotated, §1344;

(iii) permits under 33 United States Code Annotated, §401;

(iv) permits under 33 United States Code Annotated, §403; and

(v) Memoranda of Agreement for mitigation banking;

(C) United States Department of Transportation:

(i) approvals under 23 United States Code Annotated, §106; and

(ii) approvals under 33 United States Code Annotated, §525;

(D) Federal Aviation Administration. Certificates under 49 United States Code Annotated, §1432;

(E) Federal Energy Regulatory Commission:

(i) certificates under 15 United States Code Annotated, §717f;

(ii) licenses under 16 United States Code Annotated, §797(e); and

(iii) exemptions under 16 United States Code Annotated, §2705(d);

(F) Nuclear Regulatory Commission. Licenses under 42 United States Code Annotated, §2133.

(3) State and Local Government Applications for Federal Assistance. Federal assistance for state and local government activities that may adversely affect CNRAs. Federal assistance does not include applications from local governments and subdivisions to the Texas Water Development Board for financial assistance through

the State Water Pollution Control Revolving Fund or the Colonia Wastewater Treatment Assistance Program.

(b) For purposes of this section, the following are federal actions outside the CMP boundary but within OCS waters, or on excluded federal land located within the coastal zone, that may adversely affect CNRAs.

(1) Federal Activities and Development Projects: All federal agencies. Activities in OCS waters or within the coastal zone occurring within federal lands excluded from the CMP boundary but which may adversely affect CNRAs.

(2) Federal Agency Actions:

(A) United States Department of the Interior:

(i) permits under 43 United States Code Annotated, §1340, in OCS waters; and

(ii) rights-of-way under 43 United States Code Annotated, §1334(e), in OCS waters;

(B) Environmental Protection Agency:

(i) NPDES permits under 33 United States Code Annotated, §1342, in OCS waters;

(ii) ocean dumping permits under 33 United States Code Annotated, §1412, in OCS waters;

(C) United States Army Corps of Engineers. Ocean dumping permits under 33 United States Code Annotated, §1413, in OCS waters;

(D) United States Department of Transportation: Deep water port licenses under 33 United States Code Annotated, §1503, in OCS waters.

(3) OCS Exploration, Development, and Production Activities. United States Department of the Interior:

(A) Federal agency actions described in detail in OCS plans, including pipeline activities, that may adversely affect CNRAs;

(B) OCS lease sales within the western and central Gulf of Mexico under 43 United States Code Annotated, §1337.

(c) In the event that a proposed activity requiring a state agency or subdivision action that falls below thresholds for referral approved under Chapter 505, Subchapter B of this title

(relating to Council Certification of State Agency Rules and Approval of Thresholds for Referral) requires an equivalent federal permit or license under this chapter, the council may only determine the state agency or subdivision action's consistency by using the process provided in Chapter 505 of this title (relating to Council Procedure for State Consistency with Coastal Management Program Goals and Policies). The council's determination regarding the consistency of an action under this subsection constitutes the state's determination regarding consistency of the equivalent federal action.

(d) If an activity requiring a state agency or subdivision action above thresholds requires an equivalent federal permit or license, the council may determine the consistency of the state agency or subdivision action or the federal license or permit, but not both.

(e) The determinations regarding the consistency of an action made by the council under subsections (c) and (d) of this section constitute the state's determination regarding consistency of the equivalent agency or subdivision action or federal action.

(f) On a one-time basis, and subject to the provisions of paragraph (1) of this subsection and federal law, the council may elect to review a proposed federal license or permit action of a type that is not listed in §506.12(a)(2) of this title or a state or local government application for federal assistance of a type that is not listed in §506.12(a)(3) of this title.

(1) Once the council has reviewed a proposed federal license or permit action of a type that is not listed in §506.12(a)(2) of this title, the council may not review any other proposed federal license or permit action of that type unless the council amends §506.12(a)(2) of this title to add the federal license or permit action to the list of such actions in §506.12(a)(2) of this title. Once the council has reviewed a state or local government application for federal assistance of a type that is not specifically listed in §506.12(a)(3) of this title, the council may not review any other state or local government application for federal assistance of that type unless the council amends §506.12(a)(3) of this title to add that specific type of action to the list of actions in §506.12(a)(3) of this title.

(2) Except as provided in this subsection, the list of federal actions described in §506.12(a)(2) and (3) of this title is an exclusive list of federal licenses and permits and state and local government applications for federal assistance that are subject to council review. The council may amend the list of actions described in §506.12(a)(2) and (3) of this title from time to time, and any federal actions described in such amended lists shall be subject to council review.

(g) If the council determines a federal agency action or application for federal assistance to be consistent with the CMP goals and policies, subsequent actions taken by state agencies or subdivisions or federal agencies to implement the activity described in the application shall not be subject to review by the council if the application for the federal agency action or federal assistance describes the activity in sufficient detail to determine consistency of the completed activity.

§506.20 Consistency Determinations for Federal Agency Activities and Development Projects

(a) At the earliest practicable time, but in no event later than 90 days prior to final approval, a federal agency considering the approval of a federal agency activity or development project listed in §506.12 of this title (relating to Federal Agency Actions, Federal Agency Activities, Outer Continental Shelf Plans and Development Plans Subject to the Coastal Management Program) shall provide the council secretary with a consistency determination that includes the following information:

(1) a brief statement, based upon an evaluation of the relevant CMP provisions, indicating whether or not the proposed activity or development project will be undertaken in a manner consistent with the CMP, to the maximum extent practicable; and

(2) a detailed description of the proposed activity or development project and its associated facilities which is adequate to permit an assessment of their probable effects on CNRAs, and comprehensive data and information sufficient to support the federal agency's consistency statement. The amount of detail in the statement evaluation, activity description, and supporting information shall be commensurate with the expected effects of the activity or development project on CNRAs. While federal agencies must be consistent to the maximum extent practicable with the enforceable, mandatory policies of the CMP, the agencies need only demonstrate adequate consideration of policies which are in the nature of recommendations. Federal agencies need not evaluate effects for which the CMP does not contain mandatory or recommended policies.

(b) The chair or any three members of the council may request the federal agency to provide additional information as provided by federal regulations.

§506.21 Notification of Negative Determinations

(a) If a federal agency determines that a proposed activity or development project listed in §506.12 of this title (relating to Federal Actions Subject to the Coastal Management Program) will not

adversely affect any CNRA, the federal agency shall at the earliest practicable time, but in no event later than 90 days prior to final approval, provide the chair of the council with a notification briefly providing the reasons for the federal agency's negative determination.

(b) If the council disagrees with the negative determination and the federal agency does not modify the activity or the development project to achieve consistency with the program, the governor, with the assistance of the chair of the council, may seek mediation of the matter in accordance with federal law (as provided in the Code of Federal Regulations, Title 15, Part 930, Subpart G, §§930.110 et seq).

§506.22 General Consistency Determinations for Proposed Federal Agency Activities

(a) Federal agencies may provide a general consistency determination, in accordance with the Code of Federal Regulations, Title 15, Part 930, Subpart C, §930.37(b), for repeated federal agency activities other than development projects which cumulatively may adversely affect CNRAs.

(b) If a federal agency issues a general consistency determination, the federal agency shall periodically consult with the council to discuss the manner in which the incremental actions are being undertaken.

§506.23 Consistency Determinations for Development Projects

(a) Federal agencies may provide a single consistency determination for a proposed development project, in accordance with the Code of Federal Regulations, Title 15, Part 930, Subpart C, §930.37(c), where the agency has sufficient information to determine consistency from planning to completion.

(b) In cases where decisions related to a proposed development project will be made in phases based upon developing information, and the federal agency retains the discretion to implement alternative decisions on the basis of such information, a consistency determination shall be required for each decision in accordance with the Code of Federal Regulations, Title 15, Part 930, Subpart C, §930.37(c).

§506.24 Consistency Determinations for Federal Agency Activities Initiated Prior to Federal Approval of the Coastal Management Program

(a) Federal agencies shall provide a consistency determination for ongoing activities listed in §506.12 of this title (relating to Federal Actions Subject to the Coastal Management Program), other than development projects, initiated prior to federal approval of the CMP where the agency retains discretion to reassess and modify the activity. In accordance with the Code of Federal Regulations, Title 15, Part 930, Subpart C, §930.38(a), federal agencies shall provide the council with a consistency determination for such ongoing activities no later than 120 days after program approval.

(b) Federal agencies shall provide a consistency determination, in accordance with the Code of Federal Regulations, Title 15, Part 930, Subpart C, §930.38(b), for phased development projects described in §506.23(b) of this title (relating to Consistency Determinations for Development Projects) and initiated prior to federal approval of the CMP, for those phases of the project for which the agency retains discretion to reassess and modify the activity following CMP approval.

(c) The council shall review consistency determinations for the United States Army Corps of Engineers' ongoing maintenance of commercially navigable waterways as provided in the Memorandum of Agreement Between the Texas Coastal Coordination Council and the United States Army Corps of Engineers (Review of Coastal Maintenance Dredging Activities for Consistency with the Goals and Policies of the Texas Coastal Management Program, dated October 27, 1994).

§506.25 Public Notice and Comment

(a) Upon receipt of a consistency determination for a federal agency activity, the council secretary shall publish public notice of the consistency determination in the Texas Register.

(b) The public notice shall provide a summary of the proposed federal agency activity, announce the availability of the consistency determination for inspection, and request comment on whether the federal agency activity should be referred to the council for review and whether the activity is or is not consistent with the CMP goals and policies. Comments shall be submitted to the council secretary within 30 days of publication of the notice in the Texas Register.

(c) When appropriate, the chair or any three members of the council may extend the public comment period or schedule a public hearing on:

(1) the consistency determination; and

(2) whether referral to the council is appropriate.

(d) After the close of the public comment period, the council members shall consider any comments received in response to the public notice and determine whether the federal activity should be placed on the agenda for review because it presents a significant unresolved dispute regarding consistency with the CMP goals and policies. Upon the council members' decision, the council secretary shall immediately notify all council members, applicant, federal agency, and other affected parties, if any.

§506.26 Referral of Federal Agency Activities

(a) The council shall review any federal agency activity that any three members of the council agree presents a significant unresolved issue regarding consistency with the CMP goals and policies and place the matter on the agenda of a meeting of the council for review.

(b) To refer a federal activity to the council, any three members of the council must submit the action to the council secretary in writing.

(c) The council secretary shall place the action on the agenda of the earliest council meeting at which consideration of the federal agency activity is reasonably practicable. If no regularly scheduled council meeting will allow the council to complete a review of the action and notify the federal agency of its decision within 45 days of receipt of the consistency certification, the council secretary shall notify the chair, who shall schedule a special meeting.

(d) If the council places an action on its agenda, but will not be able to complete a review and notify the federal agency within 45 days of the date the council secretary receives a consistency determination with all required information, then the chair shall notify the federal agency of the status of the review and the basis for further delay and request an extension of time to review the matter.

(e) The federal agency may presume council agreement with the federal agency's consistency determination 45 days after the date the council secretary receives a consistency determination with all required information, unless the chair or any three members of the council request an extension of time to review the matter. Federal agencies shall approve the first request for an extension of 15 days or less. In considering whether a longer or additional extension period is appropriate, federal agencies should consider

the magnitude and complexity of, or the information contained in, the consistency determination.

(f) A federal agency shall not grant final approval for a federal agency activity identified in §506.12 of this title (relating to Federal Agency Actions, Federal Agency Activities, Outer Continental Shelf Plans Subject to the Coastal Management Program) until after the expiration of 90 days from the date the federal agency provides the council secretary with its consistency determination, unless the federal agency and the council agree to an alternative period of time.

§506.27 Council Hearing To Review Federal Agency Activities

(a) Following referral of a federal agency activity, the council shall consider the public comments received, the relevant CMP goals and policies, information submitted by the federal agency, and other relevant information and determine whether the activity is consistent with the CMP goals and policies.

(b) The council secretary shall, by certified mail or hand delivery, provide notice of the hearing at which the council will review the federal agency activity to the federal agency.

(c) If the council decides to disagree with a consistency determination, the council shall notify the federal agency and the assistant administrator of its decision to disagree with the consistency determination prior to the time, including any extensions, that the federal agency is entitled to presume the activity's consistency under §506.26(e) of this title (relating to Referral of Federal Agency Activities). An affirmative vote of two-thirds of the council members is required for the council to disagree with a consistency determination.

(d) The council's finding that a proposed activity is inconsistent with the CMP goals and policies shall include:

(1) a description of how the proposed activity is inconsistent with specific CMP goals and policies;

(2) a description of any available alternative measures that would permit the proposed activity to be conducted in a manner consistent to the maximum extent practicable with the CMP; and

(3) in cases where the council's finding is based upon the federal agency's failure to supply sufficient information, the council shall include a description of the nature of the information requested and the necessity of having such information to determine the consistency of the federal activity with the CMP.

(e) If the council finds that a proposed activity is inconsistent with the CMP goals and policies and the federal agency does not modify the activity to achieve consistency with the program, the governor, with the assistance of the chair of the council, may seek secretarial mediation (as provided in Code of Federal Regulations, Title 15, Part 930, Subpart G, §§930.110 et seq).

§506.28 General Consistency Agreements for Federal Activities; Interagency Coordination Groups for Federal Development Projects

(a) The council may issue a general consistency agreement with respect to a federal activity other than a development project. Prior to issuance of a general consistency agreement, the council shall request and consider public comments on the matter. If the conditions of a general consistency agreement are satisfied, the federal activity is deemed consistent, to the maximum extent practicable, with the CMP goals and policies and will not be subject to council review under §505.26 of this title (relating to Referral of Federal Activities).

(b) The council shall, in lieu of council review under §505.26 of this title (relating to Referral of Federal Activities), issue a consistency agreement for a federal development project for which:

(1) the federal agency has elected to establish an interagency coordination group whose duties include advising the federal agency on the consistency of the project;

(2) the interagency coordination group includes among its voting members a minimum of three council members from natural resource agencies or their representatives;

(3) the interagency coordination group, including a majority of the council members or their representatives on the interagency coordination group, finds that the federal development project is consistent, to the maximum extent practicable, with the CMP goals and policies; and

(4) the federal agency adopts the finding of the interagency coordination group and submits it to the council as its consistency determination for the project.

(c) Disposal or placement of dredged material in existing dredge disposal sites identified and actively used as described in an environmental assessment or environmental impact statement issued prior to the effective date of this chapter shall be presumed consistent with §501.14(j)(1) of this title (relating to Policies for Specific Activities and Coastal Natural Resource Areas), unless such existing disposal or placement is modified in

design, size, use, or function, provided that the material is generated by maintenance dredging of commercially navigable waterways for which a federal development project undergoes evaluation pursuant to the interagency coordination group process under subsection (b) of this section and such process was initiated prior to the adoption of this chapter, and provided further, if the interagency coordination group approves the project that requires disposal or placement in confined sites and/or beneficial use of the dredged material from those waterways and results in cessation of open water disposal of dredged material and such project is authorized in a final supplemental environmental impact statement.

§506.30 Consistency Certifications for Federal Agency Actions

(a) Upon filing an application for a federal agency action listed under §506.12 of this title (relating to Federal Actions Subject to the Coastal Management Program), the applicant shall provide to the council secretary a consistency certification that reads as follows: The proposed activity complies with Texas' approved coastal management program and will be conducted in a manner consistent with such program.

(b) The applicant shall include with the consistency certification all of the following information:

(1) a detailed description of the proposed activity and its associated facilities which is adequate to permit an assessment of their probable effects on CNRAs. Maps, diagrams, technical data, and other relevant material must be submitted when a written description will not adequately describe the proposed activity. The applicant may submit the federal application and all supporting material provided to the federal agency to meet the requirements of this paragraph, if the application and supporting material contain the required material;

(2) a list identifying all federal, state, and local permits or authorizations subject to the CMP and required for the proposed activity and its associated facilities;

(3) a brief assessment relating to the relevant elements of the CMP and the probable effects of the proposed activity and its associated facilities on CNRAs; and

(4) a brief set of findings, derived from the assessment, indicating that the proposed activity, its associated facilities, and their effects are all consistent with the CMP goals and policies.

(c) Applicants shall, to the extent practicable, consolidate related federal agency actions identified in §506.12 of this title (relating to Federal Actions Subject to the Coastal Management

Program) to assist the council in minimizing duplication of effort and unnecessary delays by reviewing all federal agency actions relating to a project at the same time.

(d) The chair or any three members of the council may request the applicant to submit additional information as provided by federal regulations. If the chair or three members of the council have not notified the applicant within 15 days that additional information is required, the certification shall be considered complete for purposes of activating the time periods within which the council must act on the certification.

§506.31 Council Assistance

Upon request of the applicant, the council shall provide assistance for development of the assessment and findings required by §506.30(b)(3) and (4) of this title (relating to Consistency Certifications for Federal License and Permit Activities).

§506.32 Public Notice and Comment

(a) Upon receipt of a consistency certification for a proposed federal agency action, the council secretary shall publish public notice of the consistency certification in the Texas Register.

(b) The public notice shall provide a summary of the proposed activity, announce the availability of the consistency certification for inspection, and request comment on whether the federal agency action should be referred to the council for review and whether the action is or is not consistent with the CMP goals and policies. Comments shall be submitted to the council secretary within 30 days of publication of the notice in the Texas Register.

(c) When appropriate, the chair or any three members of the council may extend the public comment period or schedule a public hearing on:

(1) the consistency certification; and

(2) whether referral to the council is appropriate.

(d) After the close of the public comment period, the council members shall consider any comments received in response to the public notice and determine whether the proposed federal agency action presents a significant unresolved dispute regarding consistency with the CMP goals and policies and should be placed on the agenda of the council for review. Upon council members' decision, the council secretary shall immediately notify all council members, applicant, federal agency, and other affected parties, if any.

§506.33 Referral of Federal Agency Action

(a) The council shall review any federal agency action that any three members agree presents a significant unresolved dispute regarding consistency with the CMP goals and policies.

(b) To refer a federal agency action, any three members must submit the request for referral to the council secretary in writing within 45 days of receipt of the consistency certification.

(c) The council secretary shall add the action to the agenda of the earliest council meeting at which consideration of the action is reasonably practicable. If no regularly scheduled council meeting will allow the council to complete a review of the action within 90 days of receipt of the consistency certification, the council secretary shall notify the chair, who shall schedule a special meeting.

(d) If the council has not issued a decision with respect to a proposed federal agency action within 45 days of the date when the council secretary receives a consistency certification with all required information, then the chair shall notify the applicant and the federal agency of the status of the review and the basis for further delay.

(e) If any three members of the council do not refer a proposed federal agency action to the council within 45 days of the date when the council secretary receives a consistency certification with all required information, then that proposed federal agency action is conclusively presumed to be consistent with the CMP.

§506.34 Council Hearing To Review a Federal Agency Action

(a) Following referral of a proposed federal agency action, the council shall consider the public comments received, the relevant CMP goals and policies, information submitted by the federal agency or applicant, and other relevant information and determine whether the proposed action is consistent with the CMP goals and policies within 90 days of the date the council secretary received the consistency certification.

(b) The council secretary shall, by certified mail or hand delivery, provide notice of the hearing at which the council will review the proposed federal action to the federal agency and the applicant.

(c) If the council decides to object to a consistency certification, the council shall notify the applicant, the federal agency, and the assistant administrator. The affirmative vote of

two-thirds of the council members shall be required to object to a consistency determination.

(d) The council's objection shall include:

(1) a description of how the proposed federal agency activity is inconsistent with specific CMP goals and policies;

(2) a description of any available alternative measures that would permit the proposed activity to be conducted in a manner consistent with the CMP;

(3) in cases where the council objects on the grounds of insufficient information, a description of the nature of the information requested and the necessity of having such information to determine the consistency of the activity with the CMP; and

(4) a statement informing the applicant of a right of appeal to the secretary of commerce on the grounds that the proposed activity is consistent with the objectives or purposes of the federal Coastal Zone Management Act (CZMA), 16 United States Code Annotated, §§1451-1464, or is necessary in the interest of national security as provided in the Code of Federal Regulations, Title 15, Part 930, Subpart H, §§930.120 et seq.

(e) If the council finds that the proposed federal action is inconsistent with the CMP goals and policies, the federal agency shall not proceed with the federal action, except as provided in the appeals process established in the Code of Federal Regulations, Title 15, Part 930, Subpart H, §§930.120 et seq.

§506.35 General Concurrence

The council may develop general concurrences in accordance with the Code of Federal Regulations, Title 15, Part 930, Subpart D, §930.53(c).

§506.40 Consistency Certifications for Outer Continental Shelf Plans

(a) Upon submission to the secretary of the interior or designee of an OCS plan, which must include a detailed description of the proposed activities which will require federal actions subject to federal consistency review, the person submitting the plan shall provide the council secretary with a copy of the plan along with a consistency certification that reads as follows: The proposed activities described in detail in this plan comply with Texas' approved coastal management program and will be conducted in a manner consistent with such program.

(b) The person submitting the OCS plan shall include all of the following information in support of the consistency certification:

(1) a detailed description of the proposed activities and their associated facilities which is adequate to permit an assessment of their probable effects on CNRAs. Maps, diagrams, technical data, and other relevant material must be submitted when a written description will not adequately describe the proposed activities;

(2) a list identifying all federal, state, and local actions subject to the CMP and required for the proposed activities and their associated facilities;

(3) a brief assessment relating the probable effects of the activities and their associated facilities on CNRAs to the relevant elements of the CMP; and

(4) a brief set of findings, derived from the assessment, indicating that federal actions authorizing each of the proposed activities will be consistent with the CMP goals and policies. In considering whether such federal actions will be consistent with the CMP, associated facilities authorized under such actions and the effects of such associated facilities shall be considered.

(c) The council strongly encourages persons submitting OCS plans to consolidate related federal licenses and permits that are not required to be described in detail in the plan but which are subject to council review. This consolidation will minimize duplication of effort and unnecessary delays by providing for council review of all licenses and permits relating to an OCS plan at the same time.

(d) The chair or any three members of the council may request the person submitting the plan to submit additional information as provided in federal regulations. The chair or three members of the council have not notified the person submitting the plan within 15 days that additional information is required, the certification shall be considered complete for purposes of activating the time periods within which the council must act on the certification.

§506.41 Public Notice and Comment

(a) Upon receipt of a consistency certification for an OCS plan, the council secretary shall publish public notice of the consistency certification in the Texas Register.

(b) The public notice shall provide a summary of the OCS plan, announce the availability of the consistency certification for inspection, and request comment on whether any part of the OCS plan

relating to federal agency actions required to authorize proposed activities described in detail in the OCS plan should be referred to the council for review and whether any part is or is not consistent with the CMP goals and policies. Comments shall be submitted to the council secretary within 30 days of publication of the notice in the Texas Register.

(c) When appropriate, the chair or any three members of the council may extend the public comment period or schedule a public hearing on:

(1) the consistency certification; and

(2) whether referral to the council is appropriate.

(d) After the close of the public comment period on the OCS plan, the council shall consider any comments received in response to the public notice and determine whether any part of the OCS plan relating to federal agency actions required to authorize proposed activities described in detail in the OCS plan presents significant unresolved issues regarding consistency with the CMP goals and policies and should be placed on the agenda of a meeting of the council for review. Upon the council's decision, the council secretary shall immediately notify the council members, applicant, federal agency, and other affected parties, if any.

§506.42 Referral of an Outer Continental Shelf Plan

(a) The council shall review any part of an OCS plan relating to federal agency actions required to authorize proposed activities described in detail in the OCS plan which any three members agree presents a significant unresolved dispute regarding consistency with the CMP goals and policies.

(b) To refer part of an OCS plan, three members of the council must submit the request for referral to the council secretary in writing within 45 days of receipt of the consistency certification.

(c) The council secretary shall place the action on the agenda of the earliest council meeting at which consideration of the action is reasonably practicable. If no regularly scheduled council meeting will allow the council to act on the action within 90 days of receipt of the consistency certification, the council secretary shall notify the chair, who shall schedule a special meeting.

(d) If the council has not issued a decision with respect to a matter referred under the provisions of this section within 45 days of the date the council secretary received the consistency certification with all required information, then the chair shall notify the person submitting the plan, the secretary of the

interior, and the assistant administrator of the status of the review and the basis for further delay.

(e) If any three members of the council do not refer any federal actions that will be required to authorize an activity described in detail in an OCS plan to the council within 45 days of the date the council secretary receives a consistency certification with all required information, then the council's concurrence with the consistency certification shall be conclusively presumed.

§506.43 Council Hearing To Review Outer Continental Shelf Plan

(a) Following referral of part of an OCS plan, the council shall consider the public comments received, the relevant CMP goals and policies, information submitted by the federal agency or applicant, and other relevant information and determine whether any part of the OCS plan relating to federal agency actions required to authorize proposed activities described in detail in the OCS plan is consistent with the CMP goals and policies within 90 days of the date the council secretary received the consistency certification.

(b) The council secretary shall, by certified mail or hand delivery, provide notice of the hearing at which the council will review a part of the OCS plan to the person submitting the OCS plan, the secretary of the interior, and the assistant administrator.

(c) If the council decides to object to a consistency certification, the council shall notify the person submitting the plan, the secretary of the interior, and the assistant administrator. The affirmative vote of two-thirds of the council members is required to object to a consistency certification.

(d) The council's objection shall include:

(1) a description of how the activity requiring the federal action described in the OCS plan will be inconsistent with the CMP goals and policies;

(2) a description of any available alternative measures that would permit the activity requiring the federal action to be conducted in a manner consistent with the CMP;

(3) in cases where the council objects on the grounds of insufficient information, a description of the nature of the information requested and the necessity of having such information to determine the consistency with the CMP of the federal action authorizing the activity described in the OCS plan; and

(4) a statement informing the person submitting the plan of a right of appeal to the secretary of commerce on the grounds

that the federal action authorizing the activity described in the OCS plan will be consistent with the objectives or purposes of the CZMA or is necessary in the interest of national security as provided in the Code of Federal Regulations, Title 15, Part 930, Subpart H, §§930.120 et seq.

(e) If the council objects to a consistency certification related to a federal action authorizing an activity described in detail in an OCS plan, the federal agency shall not take the federal action when it is proposed, except as provided in the appeals process established in the Code of Federal Regulations, Title 15, Part 930, Subpart H, §§930.120 et seq.

§506.44 Effect of Council Concurrence

(a) If the council either issues a concurrence or is conclusively presumed to concur with the consistency certification of a person submitting an OCS plan, then the person submitting the plan shall not be required to submit additional consistency certifications to the council secretary for the individual federal actions that will be required to authorize the activities described in detail in the OCS plan.

(b) To allow the council to monitor those federal actions that relate to activities described in detail in an OCS plan whose consistency certification has received council concurrence, the person submitting the OCS plan shall provide the council secretary with copies of applications for those federal actions when they are filed.

§506.50 Notice to the Council of Applications for Federal Assistance

(a) If the state single point of contact receives an application for federal assistance listed in §506.12 of this title (relating to Federal Actions Subject to the Coastal Management Program), the state single point of contact shall provide a copy of such application to the council secretary.

(b) The council secretary shall distribute copies of the applications to all council members.

§506.51 Referral of Applications for Federal Assistance

(a) The council shall review any application for federal assistance that any three members of the council refer to the council for review.

(b) To refer an application for federal assistance to the council, three members must submit the request for referral to the council secretary in writing.

(c) The council secretary shall add the application to the agenda of the earliest council meeting at which consideration of the action is reasonably practicable.

(d) If three members do not refer an application to the council within 30 days of the date the council secretary receives a copy of the application, then the application is conclusively presumed to be consistent with the CMP.

§506.52 Council Hearing To Review Applications for Federal Assistance

(a) Following referral of an application for federal assistance, the council shall review and either concur with or object to the application for federal assistance within the schedule established in the regulations governing the Texas Review and Comment System (1 TAC §§5.191 et seq, concerning Introduction and General Provisions of Texas Review and Comment System).

(b) The council secretary shall, by certified mail or hand delivery, provide notice of the hearing at which the council will review the application for federal assistance to the applicant, the federal agency, and the assistant administrator.

(c) The council's objection shall include:

(1) a description of how the proposed activity is inconsistent with specific CMP goals and policies;

(2) a description of any available alternative measures that would permit the proposed activity to be conducted in a manner consistent with the CMP;

(3) in cases where the council objects on the grounds of insufficient information, a description of the nature of the information requested and the necessity of having such information to determine the consistency of the activity with the CMP; and

(4) a statement informing the applicant of a right of appeal to the secretary of commerce on the grounds that the proposed activity is consistent with the objectives or purposes of the Coastal Zone Management Act or is necessary in the interest of national security as provided in the Code of Federal Regulations, Title 15, Part 930, Subpart H, §§930.120 et seq.

(d) If the council objects to an application for federal assistance, the federal agency shall not approve assistance for the activity, except as provided in the appeals process established in the Code of Federal Regulations, Title 15, Part 930, Subpart H, §§930.120 et seq.

APPENDIX D

List of Networked Agency Statutory Authority

APPENDIX D

List of Networked Agency Statutory Authorities

Texas Civil Statutes
Article 1446c,
Article 5415e-2,
Article 5421u,
Article 6663
Article 6674a

Texas Health and Safety Code
Chapter 361,
Chapter 366
Chapter 382

Texas Natural Resources Code
Chapter 32
Chapter 33
Chapter 40
Chapter 51
Chapter 52
Chapter 53
Chapter 61
Chapter 63
Chapter 91
Chapter 191

Texas Parks and Wildlife Code
Chapter 26
Chapter 86

Texas Water Code
Chapter 11
Chapter 15 - Subchapter K
Chapter 16
Chapter 26
Chapter 50
Chapter 54
Chapter 61
Chapter 65
Chapter 66

Texas Local Government Code
Chapter 240, Subchapter Z

APPENDIX E

Memoranda of Agreement

APPENDIX E1

Coastal Coordination Council and U.S. Army Corps of Engineers MOA

GLO Contract No. 95-024

Memorandum of Agreement
Between The Texas Coastal Coordination Council
and
The United States Army Corps of Engineers
Regarding
Review of Coastal Maintenance Dredging Activities
for
Consistency with the Goals and Policies of the
Texas Coastal Management Program

Whereas, marine commerce is a vital element of the economy of the State of Texas and the benefits derived therefrom are realized directly or indirectly by the entire state; and

Whereas, coastal public lands, coastal wetlands, and other critical areas located on both publicly and privately owned lands are similarly vital elements of the state's economy, and essential to the maintenance, preservation, and enhancement of the environment, wildlife, and fisheries, the benefits of which are also realized directly or indirectly by the entire state; and

Whereas, it is the policy of the State of Texas to support the marine commerce and economy of this state by providing for the navigation of the state's coastal waters in an environmentally sound fashion and to prevent waste of both publicly and privately owned natural resources, to prevent or minimize adverse impacts to the environment, and to maintain, preserve, and enhance wildlife and fisheries;

Whereas, the Coastal Coordination Council anticipates federal approval of the Texas Coastal Management Program, whose goals and policies are designed to foster a prosperous economy and a productive coastal environment; and

Whereas, upon federal approval of the Texas Coastal Management Program, the United States Army Corps of Engineers will be required to prepare consistency determinations and to comply to the maximum extent practicable with the Texas Coastal Management Program when carrying out maintenance dredging activities in Texas' coastal area; and

Whereas, the timelines in applicable Coastal Zone Management Act regulations at 15 CFR, Part 930, Subpart C, do not allow sufficient time for the Corps to prepare consistency determinations, or for the Council to respond to them, in a comprehensive manner designed to achieve long term planning of maintenance dredging activities; and

Whereas, the Council and the Corps have determined it to be in their best interest to agree to a more appropriate schedule for the preparation and review of consistency determinations, as provided by 15 CFR §930.34(b) and §930.41(b-c).

NOW, THEREFORE, the Council and the Corps enter into this agreement establishing a more effective process for ensuring that Corps maintenance dredging activities are consistent with the Texas Coastal Management Program.

I. Definitions.

The following definitions apply to this agreement:

Corps: Galveston District, United States Army Corps of Engineers

Council: Coastal Coordination Council

CMP: Texas Coastal Management Program

Preliminary consistency assessment: A one-to-two page written assessment that briefly describes the maintenance dredging activities expected to occur over the life of a project (including the timing of the activities and known or anticipated dredged material disposal area locations and designs) and identifies any issues and/or difficulties the Corps may have in conducting the maintenance activities consistently with the applicable CMP policies.

Consistency determination: A determination that includes the information required by 31 TAC §506.20(1) and (2). The determination shall cover all maintenance dredging activities to be conducted on a project over the expected life of the project.

Maintenance dredging activities: Includes, without limitation, any dredging, placement or disposal of dredged material, levee construction, excavation, filling, or other modification of a navigable water of the United States conducted by the Corps or on behalf of the Corps on any existing channels, basins, or associated works that are part of a federally authorized project, for the purpose of maintaining the project's authorized depth after construction of the project.

Project: Any one of the projects or individual segments of a project listed in section II.

II. Preliminary Consistency Assessments.

A. Within 120 days following the effective date of this agreement, the Corps agrees to prepare and submit to the Council preliminary consistency assessments on all maintenance dredging activities to be conducted on the following projects within Texas' coastal area:

1) Gulf Intracoastal Waterway (GIWW) (5 segments)
2) Cow Bayou
3) Adams Bayou
4) Trinity River and Tributaries (Channel to Liberty)
5) Channel to Port Bolivar
6) Double Bayou
7) Cedar Bayou
8) Light Draft Channel (Buffalo Bayou)
9) Five Mile Cut
10) Clear Creek and Clear Lake
11) Offatts Bayou Channel
12) Chocolate Bayou Channel
13) San Bernard River Channel
14) Colorado River Channel
15) Mouth of Colorado River
16) Channel to Red Bluff
17) Lynn Bayou Turning Basin
18) Port Lavaca Harbor of Refuge
19) Channel to Palacios
20) Channel to Victoria
21) Channel to Seadrift
22) Little Bay (Fulton)
23) Channel to Rockport
24) Channel to Aransas Pass including Turning Basin and Conn Brown Harbor
25) Channel to Port Aransas
26) Jewel Fulton Canal
27) Channel to Port Mansfield
28) Channel to Harlingen
29) Port Isabel Side Channels
30) Port Isabel Small Boat Harbor
31) Brownsville Fishing Harbor
32) Sabine-Neches Waterway to junction with Neches River Channel
33) Neches River Channel
34) Sabine River Channel
35) Houston Ship Channel (2 segments)
36) Galveston Harbor and Channel
37) Texas City Channel
38) Greens Bayou Channel
39) Barbour Terminal Channel

40) Bayport Channel
41) Freeport Harbor
42) Matagorda Ship Channel
43) Corpus Christi Ship Channel (2 segments)
44) Channel to La Quinta
45) Brazos Island Harbor - Brownsville Channel
46) Channel to Port Isabel

B. The Corps agrees to prepare and submit to the Council a preliminary consistency assessment on each project or project segment listed in this section. However, where appropriate, the Corps may divide a project into segments and prepare preliminary consistency assessments on each segment of a single project.

C. The Corps agrees to attach to each preliminary consistency assessment copies of all environmental assessments and environmental impact statements for the project that is the subject of the preliminary consistency assessment, as well as any other information on the project the Corps determines to be appropriate to include with the assessment.

D. The Council agrees to provide the Corps and the project's Local Sponsor with a written analysis of each preliminary consistency assessment identifying issues of concern, any additional information requirements, and any CMP policies warranting greater attention within 75 days of receiving a preliminary consistency assessment. The Council's analysis will not bind the Council when it reviews and responds to a Corps consistency determination submitted under section IV of this agreement.

E. The Corps waives any requirement that the Council respond to the preliminary consistency assessment by submitting a formal consistency agreement or disagreement within 45 days and shall not presume consistency when the Council does not respond within 45 days.

III. Council review pending Corps submission of consistency determinations.

A. Except as provided in subsection B of this section, for so long as the Corps meets the deadlines in the schedule for submission of consistency determinations established in section IV, the Council shall not formally disagree with the consistency of any maintenance dredging activities conducted on a project except in response to a consistency determination for the project submitted by the Corps under section IV.

B. The Corps shall submit a consistency determination under 15 CFR Part 930, Subpart C, for any maintenance dredging activities for a project for which a consistency determination has not been submitted under section IV of this agreement if the activities constitute a change in maintenance dredging practices for the project requiring the preparation of an environmental assessment or environmental impact statement. The Council may review and formally disagree with such a consistency determination as provided in 15 CFR Part 930, Subpart C.

IV. Schedule for submission of consistency determinations.

A. Year One. Within the first six months following the effective date of this agreement, the Corps agrees to complete and submit consistency determinations on the following projects listed under section II:

1) Sabine-Neches Waterway - Entrance to junction with Neches River Channel
2) Neches River Channel
3) Sabine River Channel
4) Cow Bayou
5) Adams Bayou
6) Channel to Port Isabel
7) Port Isabel Side Channels
8) Port Isabel Small Boast Harbor

Before the end of the first year following the effective date of this agreement, the Corps agrees to complete and submit consistency determinations on the following projects listed under section II:

1) Freeport
2) Brazos Island Harbor
3) Brownsville Fishing Harbor
4) Channel to Harlingen
5) Mouth of Colorado River
6) Colorado River Channel
7) GIWW - Sabine River to High Island
8) GIWW - High Island to Brazos River
9) Channel to Palacios

B. Year Two. Within 18 months following the effective date of this agreement, the Corps agrees to complete and submit consistency determinations on the following projects listed under section II:

1) Cedar Bayou
2) Light Draft Channel (Buffalo Bayou)
3) Five Mile Cut
4) Greens Bayou Channel
5) Barbour Terminal Channel
6) Bayport Channel
7) Houston Ship Channel - Morgans Point to Turning Basin
8) Texas City Channel

Before the end of the second year following the effective date of this agreement, the Corps agrees to complete and submit consistency determinations on the following projects listed under section II:

1) Houston Ship Channel - Entrance to Morgans Point
2) Trinity River and Tributaries (Channel to Liberty)
3) Channel to Port Bolivar
4) Double Bayou
5) Clear Creek and Clear Lake
6) Galveston Harbor and Channel
7) Offatts Bayou Channel
8) GIWW - Brazos River to Port O'Connor
9) Little Bay (Fulton)

C. Year Three. Within 30 months following the effective date of this agreement, the Corps agrees to complete and submit consistency determinations on the following projects listed under section II:

1) GIWW - Port O'Connor to Corpus Christi
2) Corpus Christi Ship Channel - Entrance to Beacon 82
3) Corpus Christi Ship Channel - Beacon 82 to Viola Turning Basin
4) Channel to La Quinta
5) Jewel Fulton Canal
6) Channel to Aransas Pass
7) Channel to Rockport
8) Channel to Port Aransas
9) Channel to Victoria

Before the end of the third year following the effective date of this agreement, the Corps agrees to complete and submit consistency determinations on the following projects listed under section II:

1) GIWW - Corpus Christi to Port Isabel
2) Matagorda Ship Channel
3) Channel to Red Bluff
4) Lynn Bayou
5) Port Lavaca Harbor of Refuge
6) Chocolate Bayou Channel
7) San Bernard River Channel
8) Channel to Seadrift
9) Channel to Port Mansfield

V. Extension of time for the Council to review consistency determinations.

A. As provided in 15 CFR §930.41(b), the Corps hereby extends the time allowed for the Council to review and respond to consistency determinations prepared and submitted under Section IV. This extension of time will allow the Council at least 120 days following the Corps submission of a consistency determination to review and either agree with or disagree with the Corps' consistency determination.

B. The Corps shall not presume the Council's agreement at any time during the 120-day period. If at the end of the 120-day period, the Council has not responded by either agreeing with or disagreeing with the Corps' consistency determination, then the Corps may presume that the Council agrees with the consistency determination; provided that upon request of the Council, the Corps shall provide one additional extension of 45 days for Council response on each project.

VI. Ongoing coordination.

The Council and the Corps agree to meet at least quarterly to facilitate the development and submission of consistency determinations and the resolution of disagreements concerning consistency determinations. The Council and the Corps agree that coordination will include appropriate involvement of project local sponsors.

VII. Council disagreement.

A. If the Council disagrees with a Corps consistency determination submitted under Section IV, the Council will notify the Corps, the project's Local Sponsor, and the assistant administrator of this decision and provide the Corps and the project's Local Sponsor with the following:

1. a description of how the proposed activity is inconsistent with specific goals and policies of the CMP;

2. a description of any available alternative measures that would permit the proposed activity to be conducted in a manner consistent to the maximum extent practicable with the CMP;

3. where the Council's decision to disagree is based upon a finding that the Corps failed to supply sufficient information, a description of the nature of the information requested and the necessity of having such information to determine the consistency of the project with the CMP; or

4. any other relevant and appropriate information.

B. Following notice of the Council's disagreement, the Corps shall not advertise for bids on or enter into contracts for any maintenance dredging on the project that is the subject of the disagreement until after 90 days following notice of the Council's decision to disagree; provided that emergency dredging activities may be undertaken where necessary in response to an emergency described in section IX.

C. For any project or project segment for which the state disagrees with the Corps' consistency determination, the Council and the Corps agree to negotiate a resolution of the disagreement as provided in this subsection. The Council and the Corps agree to initiate and pursue informal negotiations or appropriate alternative dispute resolution (including but not limited to mediation, arbitration, or secretarial mediation as provided in 15 CFR §930.110 et seq. in coordination with the Governor's Office) on a project for a period of up to two years following the Corps' submission of its consistency determination for the project. The period for negotiation or alternative dispute resolution shall not exceed two years unless the Council and the Corps mutually agree otherwise. The Council or the Corps may pursue any course of action or remedy allowed or provided by law if at the end of the two-year period the disagreement is not

resolved or if during the two-year period the negotiation or alternative dispute resolution process is terminated by either party because of an impasse or is otherwise concluded without resolving the disagreement.

D. A consistency determination for a project may include a schedule for implementing changes to current maintenance dredging practices that are required in order for maintenance dredging of the project to be consistent with the CMP.

E. The Council and the Corps agree to coordinate with the project's Local Sponsor during the period of negotiation or alternative dispute resolution.

VIII. Council agreement.

A. Following the Council's agreement with a consistency determination under Section IV, the Council shall not formally disagree with individual dredging contracts or other dredging activities for the project that are conducted as described and addressed in the project's consistency determination.

B. The Council may formally disagree with individual dredging contracts or other dredging activities that are not conducted as described and addressed in the project's consistency determination.

C. If maintenance dredging activities for a project will be conducted in a manner at variance with the project's consistency determination, the Corps shall submit a revised consistency determination to the Council at least 90 days prior to final Corps approval of the activities as provided in 15 CFR, Part 930, Subpart C.

IX. Emergency dredging activities.

Emergency dredging activities are limited to those activities that are necessary to respond to an unacceptable hazard to life or navigation, an immediate threat of significant loss of property, or an immediate and unforeseen significant economic hardship. In the event of such an emergency, the Corps agrees to comply with the notice and consultation provisions of the CMP emergency dredging policy (See 31 TAC §501.14(j)(7)).

X. Extensions of time; Amendments.

The Council and the Corps may extend any deadline or amend any other provision set out in the Memorandum by mutual agreement in writing. Calendar days will be used in calculating days under this agreement.

XI. Effective date.

This agreement becomes effective on the later of the date of federal approval of the CMP or the date the Council's rules implementing the CMP become effective.

Garry Mauro
Coastal Coordination Council

Date: 10-19-94

Colonel Robert B. Gatlin
District Engineer
U.S. Army Engineer District
Galveston

Date: 10-27-94

S.A.
G.C.
D.C.

APPENDIX E2

State Agency MOAs on Rule Certification

Texas Department of Transportation

DEWITT C. GREER STATE HIGHWAY BLDG. • 125 E. 11TH STREET • AUSTIN, TEXAS 78701-2483 • (512) 463-8585

April 11, 1996

The Honorable Garry Mauro, Chairman
Coastal Coordination Council
Stephen F. Austin Building
1700 North Congress Avenue
Austin, Texas 78701-1495

Dear Commissioner Mauro:

This letter is in response to your letter dated, March 19, 1996, to Commissioner David Laney of the Texas Transportation Commission. To assist the State of Texas in meeting the requirements for federal approval of the Texas Coastal Management Program (CMP) the Office of Ocean and Coastal Resource Management has requested the Coastal Coordination Council (CCC), and those agencies that have requested certification of rules subject to the CMP, provide a commitment to seek and maintain certification with the CMP. This letter of agreement represents that commitment for the Texas Department of Transportation (TxDOT).

TxDOT intends to seek CCC review and certification of rules and rule amendments that are subject to the CMP, as provided in the Coastal Coordination Act and in accordance with the procedures adopted by the CCC (31 TAC §§505.20-505.26).

Sincerely,

Wm. G. Burnett, P.E.
Executive Director

cc: Mr. David Laney, Commissioner, Texas Transportation Commission

RECEIVED
APR 18 1996
EXECUTIVE

Memorandum of Agreement
Between the Railroad Commission of Texas
and the
Coastal Coordination Council
for Certification of Agency Rules
Subject to the Texas Coastal Management Program

WHEREAS, effective and efficient implementation of the Coastal Management Program is in the interest of all Texans and

WHEREAS, the Coastal Coordination Act and the rules of the Coastal Coordination Council allow agencies to submit their rules to the Council for certification of consistency with the goals and policies of the Coastal Management Program; and

WHEREAS, agencies whose rules are certified by the Council may establish, for Council approval, thresholds that limit Council review to unique and significant agency actions; and

WHEREAS, review and certification of agency rules is a more effective and efficient way to ensure consistency of agency actions with the goals and policies of the Coastal Management Program than Coastal Coordination Council review of permits and other individual agency actions;

NOW, THEREFORE, BE IT RESOLVED, the undersigned agency intends to seek Council review and certification of its rules and rule amendments that are subject to the Coastal Management Program, as provided in the Coastal Coordination Act and in accordance with the procedures adopted by the Council (31 TAC §§505.20-505.26).

RAILROAD COMMISSION OF TEXAS

Carole Keeton Rylander, Chairman

Barry Williamson, Commissioner

Charles R. Matthews, Commissioner

Date: 4/2/96

COASTAL COORDINATION COUNCIL

Garry Mauro, Chairman

Date: 4-22-96

Memorandum of Agreement
Among Agencies Responsible for Implementation
of the
Texas Coastal Management Program
for Certification of Agency Rules

WHEREAS, effective and efficient implementation of the Coastal Management Program is in the interest of all Texans; and

WHEREAS, the Coastal Coordination Act and the rules of the Coastal Coordination Council allow agencies to submit their rules to the Council for certification of consistency with the goals and policies of the Coastal Management Program; and

WHEREAS, agencies whose rules are certified by the Council may establish, for Council approval, thresholds that limit Council review to unique and significant agency actions; and

WHEREAS, review and certification of agency rules is a more effective and efficient way to ensure consistency of agency actions with the goals and policies of the Coastal Management Program than Coastal Coordination Council review of permits and other individual agency actions;

NOW, THEREFORE, BE IT RESOLVED, the undersigned agencies intend to seek Council review and certification of their rules and rule amendments that are subject to the Coastal Management Program, as provided in the Coastal Coordination Act and in accordance with the procedures adopted by the Council (31 TAC §§505.20-505.26).

Lee Bass
Chairman
Parks & Wildlife Commission of Texas

Date: 3-28-96

Garry Mauro
Chairman
Coastal Coordination Council

Date: 4-22-96

Memorandum of Agreement
Among Agencies Responsible for Implementation
of the
Texas Coastal Management Program
for Certification of Agency Rules

WHEREAS, effective and efficient implementation of the Coastal Management Program is in the interest of all Texans; and

WHEREAS, the Coastal Coordination Act and the rules of the Coastal Coordination Council allow agencies to submit their rules to the Council for certification of consistency with the goals and policies of the Coastal Management Program; and

WHEREAS, agencies whose rules are certified by the Council may establish, for Council approval, thresholds that limit Council review to unique and significant agency actions; and

WHEREAS, review and certification of agency rules is a more effective and efficient way to ensure consistency of agency actions with the goals and policies of the Coastal Management Program than Coastal Coordination Council review of permits and other individual agency actions;

NOW, THEREFORE, BE IT RESOLVED, the undersigned agencies intend to seek Council review and certification of their rules and rule amendments that are subject to the Coastal Management Program, as provided in the Coastal Coordination Act and in accordance with the procedures adopted by the Council (31 TAC §§505.20-505.26).

Barry R. McBee
Chairman
Texas Natural Resource Conservation Commission

Date: April 11, 1996

Garry Mauro
Chairman
Coastal Coordination Council

Date: 4-22-96

SCHOOL LAND BOARD
of the
STATE OF TEXAS

RESOLUTION

WHEREAS, effective and efficient implementation of the Coastal Management Program is in the interest of all Texans; and

WHEREAS, the Coastal Coordination Act and the rules of the Coastal Coordination Council allow agencies to submit their rules to the Council for certification of consistency with the goals and policies of the Coastal Management Program; and

WHEREAS, agencies whose rules are certified by the Council may establish, for Council approval, thresholds that limit Council review to unique and significant agency actions; and

WHEREAS, review and certification of agency rules is a more effective and efficient way to ensure consistency of agency actions with the goals and policies of the Coastal Management Program than Coastal Coordination Council review of permits and other individual agency actions;

NOW, THEREFORE, BE IT RESOLVED, the School Land Board intends to seek Council review and certification of its rules and rule amendments that are subject to the Coastal Management Program, as provided in the Coastal Coordination Act and in accordance with the procedures adopted by the Council (31 TAC §§505.20-505.26).

Garry Mauro

Garry Mauro
Chairman, School Land Board
Date: 4-2-96

APPENDIX F

Narrative Boundary Description and Boundary Maps

Appendix F

COASTAL MANAGEMENT PROGRAM BOUNDARY

§503.1 Coastal Management Program Boundary

(a) General Description of the Coastal Management Program Boundary. The coastal management program boundary delineates the coastal zone. The inland part of the boundary is a modification of the coastal facility designation line, which is the line the State of Texas adopted under the Oil Spill Prevention and Response Act of 1991 (Texas Natural Resources Code, Chapter 40) to describe areas where oil spills are likely to enter coastal waters. Generally, the boundary encompasses the area within Texas lying seaward of the coastal facility designation line. It also includes coastal wetlands landward of the coastal facility designation line. The boundary includes areas within the following Texas counties: Cameron, Willacy, Kenedy, Kleberg, Nueces, San Patricio, Aransas, Refugio, Calhoun, Victoria, Jackson, Matagorda, Brazoria, Galveston, Harris, Chambers, Liberty, Jefferson, and Orange. The seaward reach of the boundary extends into the Gulf of Mexico to the limit of state title and ownership under the Submerged Lands Management Act (43 United States Code, §§1301 et seq), that is, three marine leagues. The following maps outline the coastal management program boundary.

(b) Particular Description of the Coastal Management Program Boundary. The boundary is more particularly described in terms of the inland boundary, the boundary with the State of Louisiana, the seaward boundary, the boundary with the Republic of Mexico, and the excluded federal lands.

(1) The inland boundary. The inland boundary encompasses the following areas:

(A) Roadway portion of boundary. The boundary begins at the International Toll Bridge in Brownsville, thence northward along U.S. Highway 77 to the junction of Paredes Lines Road (FM Road 1847) in Brownsville, thence northward along FM Road 1847 to the junction of FM Road 106 east of Rio Hondo, thence westward along FM Road 106 to the junction of FM Road 508 in Rio Hondo, thence northward along FM Road 508 to the junction of FM Road 1420, thence northward along FM Road 1420 to the junction of State Highway 186 east of Raymondville, thence westward along State Highway 186 to the junction of U.S. Highway 77 near Raymondville, thence northward along U.S. Highway 77 to the junction of FM Road 774 in Refugio, thence eastward along FM Road 774 to the junction of State Highway 35 south of Tivoli, thence northward along State Highway 35 to the junction of State Highway 185 between Bloomington and Seadrift, thence northwestward along State Highway 185 to the junction of FM Road 616 in Bloomington, thence northeastward along FM Road 616 to the junction of State Highway 35 east of Blessing, thence southward along the State Highway 35 to the junction of FM Road 521 north of Palacios, thence

northeastward along FM Road 521 to the junction of State Highway 36 south of Brazoria, thence northward along State Highway 36 to the junction of State Highway 332 in Brazoria, thence eastward along State Highway 332 to the junction of FM Road 2004 in Lake Jackson, thence northeastward along FM Road 2004 to the junction of Interstate Highway 45 between Dickinson and La Marque, thence northwestward along Interstate Highway 45 to the junction of Interstate Highway 610 in Houston, thence east and northward along Interstate Highway 610 to the junction of Interstate Highway 10 in Houston, thence eastward along Interstate Highway 10 to the Louisiana State line.

(B) Tidal portion of boundary. The boundary runs at a distance of 100 yards inland from the mean high tide lines along each of the following tidal river and stream segments from the points where they intersect the roadway boundary described in subparagraph (A) of this paragraph:

(i) on the Arroyo Colorado, to a point 100 meters (110 yards) downstream of Cemetery Road south of Port Harlingen in Cameron County;

(ii) on the Nueces River, to Calallen Dam 1.7 kilometers (1.1 miles) upstream of U.S. Highway 77 in Nueces/San Patricio County;

(iii) on the Guadalupe River, to the Guadalupe-Blanco River Authority Salt Water Barrier 0.7 kilometers (0.4 mile) downstream of the confluence of the San Antonio River in Calhoun and Refugio Counties;

(iv) on the Lavaca River, to a point 8.6 kilometers (5.3 miles) downstream of U.S. Highway 59 in Jackson County;

(v) on the Navidad River, to Palmetto Bend Dam in Jackson County;

(vi) on Tres Palacios Creek, to a point 0.6 kilometer (1.0 mile) upstream of the confluence of Wilson Creek in Matagorda County;

(vii) on the Colorado River, to a point 2.1 kilometers (1.3 miles) downstream of the Missouri-Pacific Railroad in Matagorda County;

(viii) on the San Bernard River, to a point 3.2 kilometers (2.0 miles) upstream of State Highway 35 in Brazoria County;

(ix) on Chocolate Bayou, to a point 4.2 kilometers (2.6 miles) downstream of State Highway 35 in Brazoria County;

(x) on Clear Creek, to a point 100 meters (110 yards) upstream of FM Road 528 in Galveston/Harris County;

(xi) on Buffalo Bayou, to a point 400 meters (440 yards) upstream of Shepherd Drive in Harris County;

(xii) on the San Jacinto River, to Lake Houston Dam in Harris County;

(xiii) on Cedar Bayou, to a point 2.2 kilometers (1.4 miles) upstream of Interstate Highway 10 in Chambers/Harris County;

(xiv) on the Trinity River, to a point 3.1 kilometers (1.9 miles) downstream of U.S. Highway 90 in Liberty County;

(xv) on the Neches River, to a point 11.3 kilometers (7.0 miles) upstream of Interstate Highway 10 in Orange County; and

(xvi) on the Sabine River, to Morgan Bluff in Orange County.

(C) Wetlands portion of boundary. Except for the part of the boundary adjacent to the Trinity and Neches rivers, the boundary includes wetlands lying within one mile inland of the mean high tide lines of the tidal river and stream segments identified in subparagraph (B) of this paragraph.

(i) Adjacent to the Trinity River, the boundary includes wetlands within the area located between the mean high tide line on the western shoreline of the river and Farm-to-Market Road 565 and Farm-to-Market Road 1409, and wetlands within the area located between the mean high tide line on the eastern shoreline of that portion of the river and Farm-to-Market Road 563.

(ii) Adjacent to the Neches River, the boundary includes wetlands within one mile of the mean high tide line on the western shoreline of the river, and wetlands within the area located between the mean high tide line on the eastern shoreline of that portion of the river and Farm-to-Market Road 105.

(2) The boundary with the State of Louisiana. The boundary with the State of Louisiana begins in Orange County at Morgans Bluff, the northernmost extent of tidal influence, along the adjudicated boundary between the State of Texas and the State of Louisiana, as established by the United States Supreme Court in Texas v. Louisiana, 410 U.S. 702 (1973); thence it continues in a southerly direction along the adjudicated boundary out into the Gulf of Mexico until it intersects the seaward boundary.

(3) The seaward boundary. The seaward boundary is that line marking the seaward limit of Texas title and ownership under the Submerged Lands Act (43 United States Code, §1301 et seq), as recognized by the United States Supreme Court in United States v. Louisiana et al., 364 U.S. 502 (1960).

(4) The boundary with the Republic of Mexico. The boundary with the Republic of Mexico begins at a point three marine leagues into the Gulf of Mexico where the line marking the seaward limit of Texas title and ownership under the Submerged Lands Act (43 United States Code, §1301 et seq) intersects the international boundary between the United States and the Republic of Mexico, as established pursuant to the Treaty of Guadalupe-Hidalgo (February 2, 1848) between the United States and the Republic of Mexico; thence it continues in a westerly direction along the international border with the Republic of Mexico until it meets the International Toll Bridge in Brownsville.

(5) The excluded federal lands. The excluded federal lands are those lands owned, leased, held in trust by, or whose use is otherwise by law subject solely to the discretion of the federal government, its officers or agents.

FIGURE 7

Texas Coastal Management Program Map Index

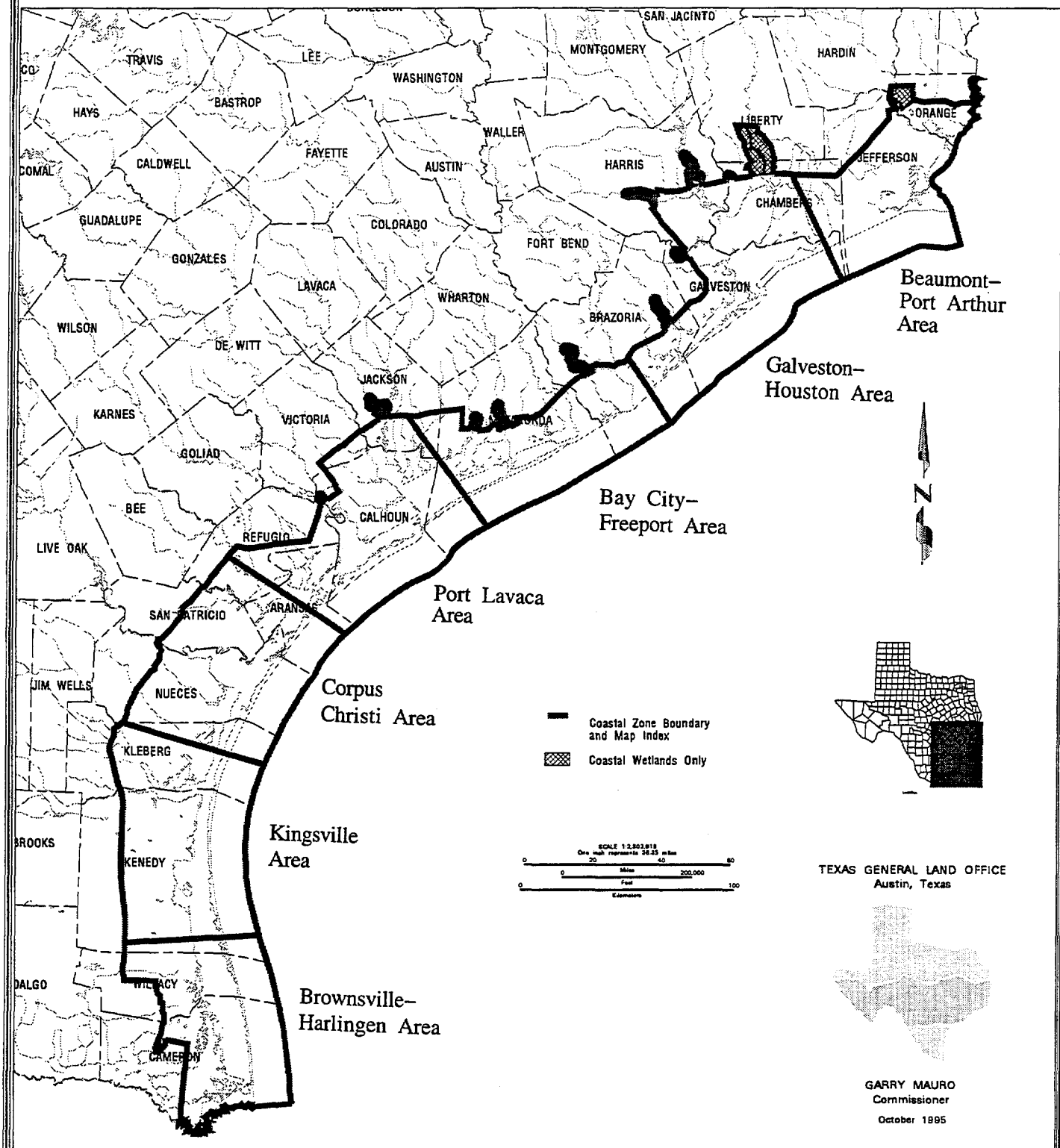
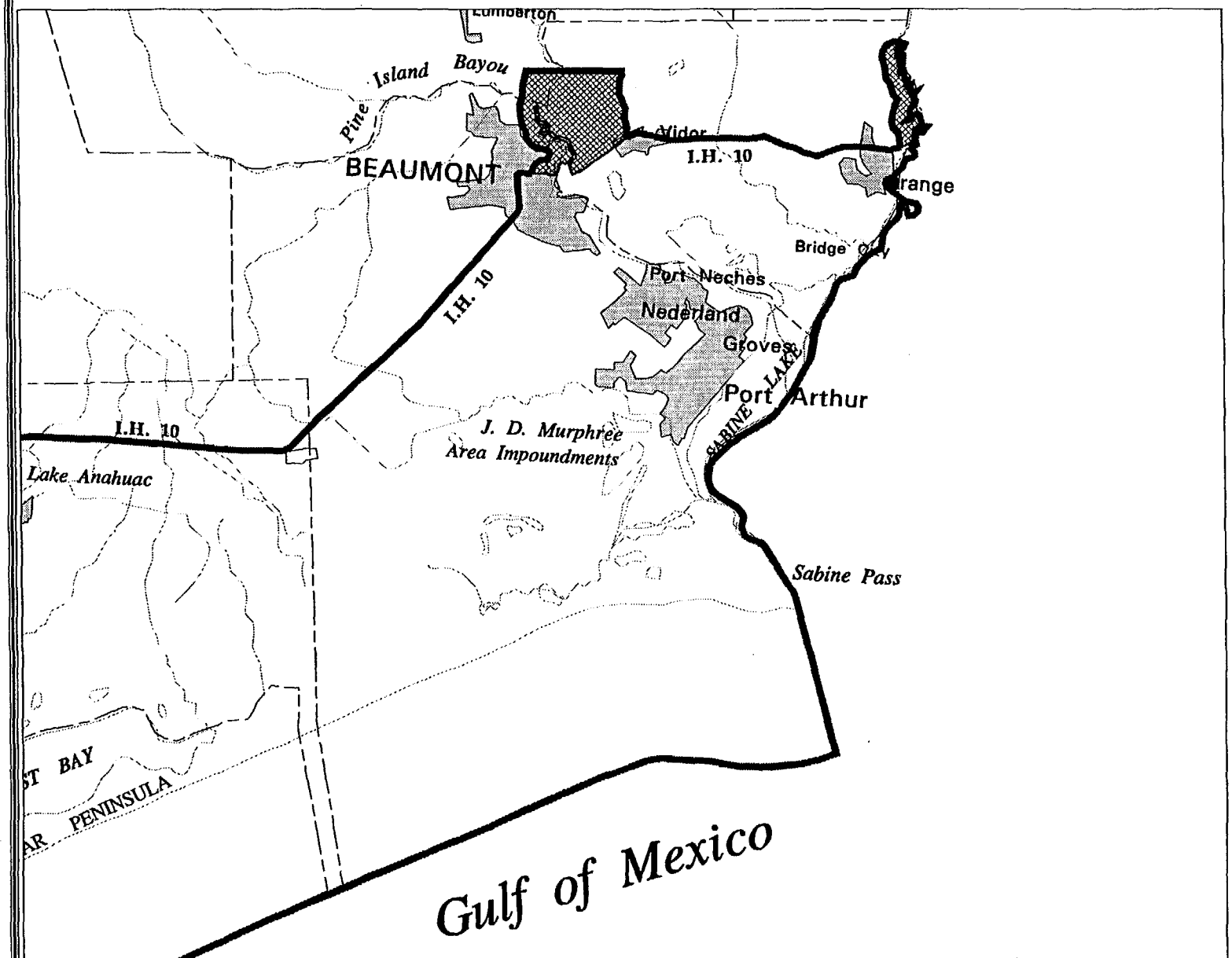


FIGURE 8

Beaumont - Port Arthur Area



TEXAS GENERAL LAND OFFICE
Austin, Texas

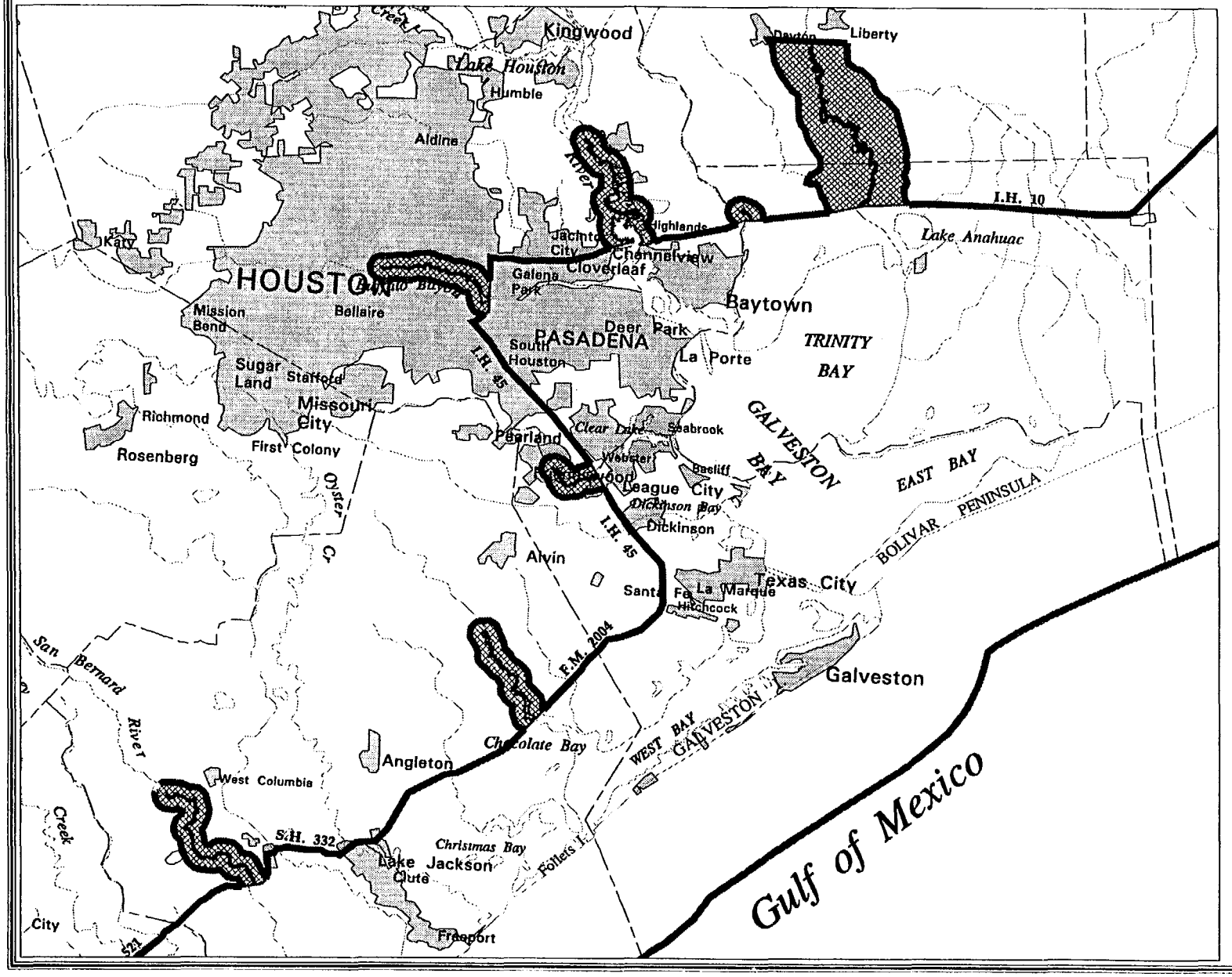
GARRY MAURO
Commissioner
October 1995

N

Coastal Zone Boundary
Coastal Wetlands Only
County Boundary
Stream, Shoreline
Lake, Bay
Urban Area

FIGURE 9

Galveston - Houston Area



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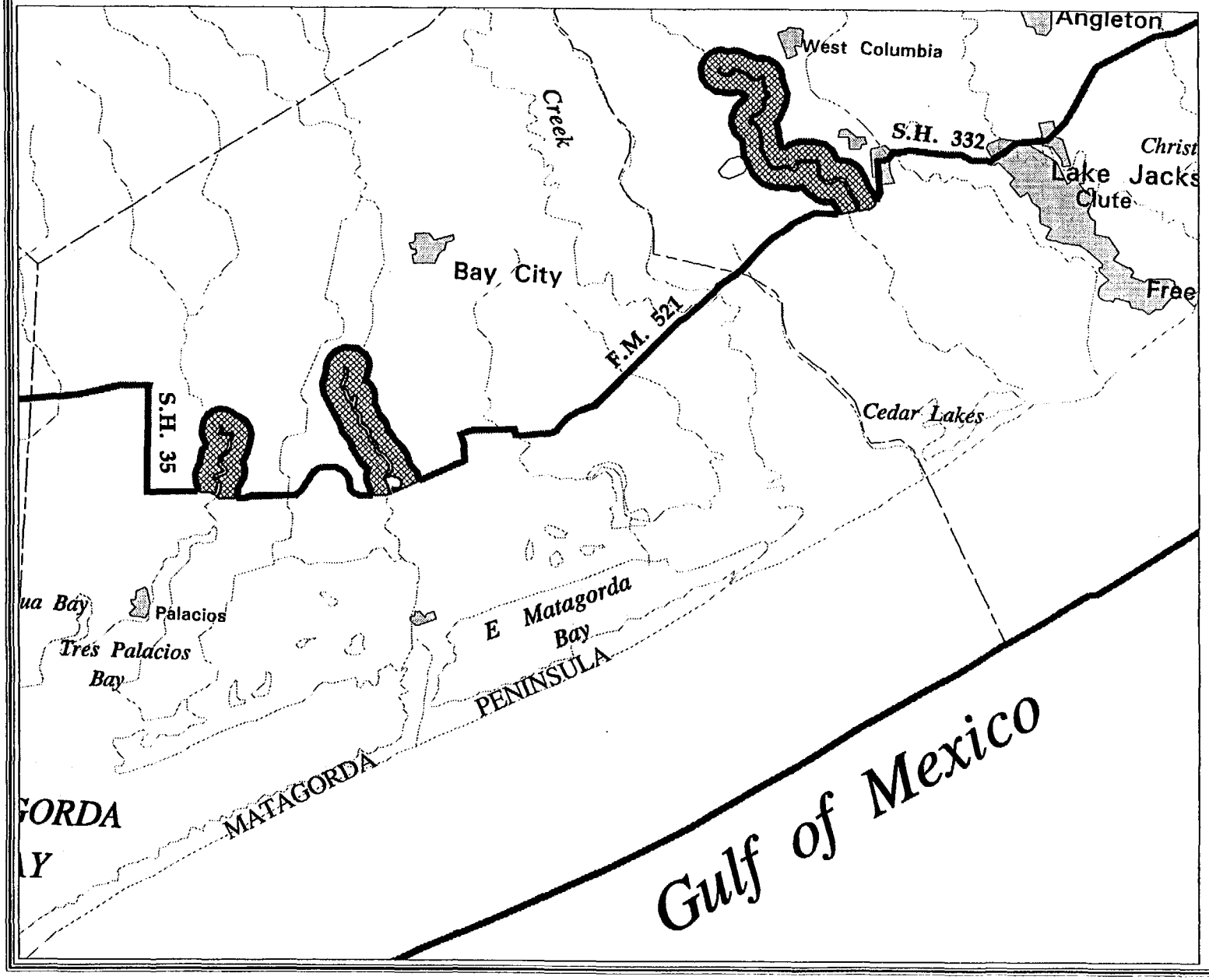
Austin, Texas

GARRY MAURO
Commissioner

October 1995

FIGURE 10

Bay City - Freeport Area



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Austin, Texas

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Commissioner

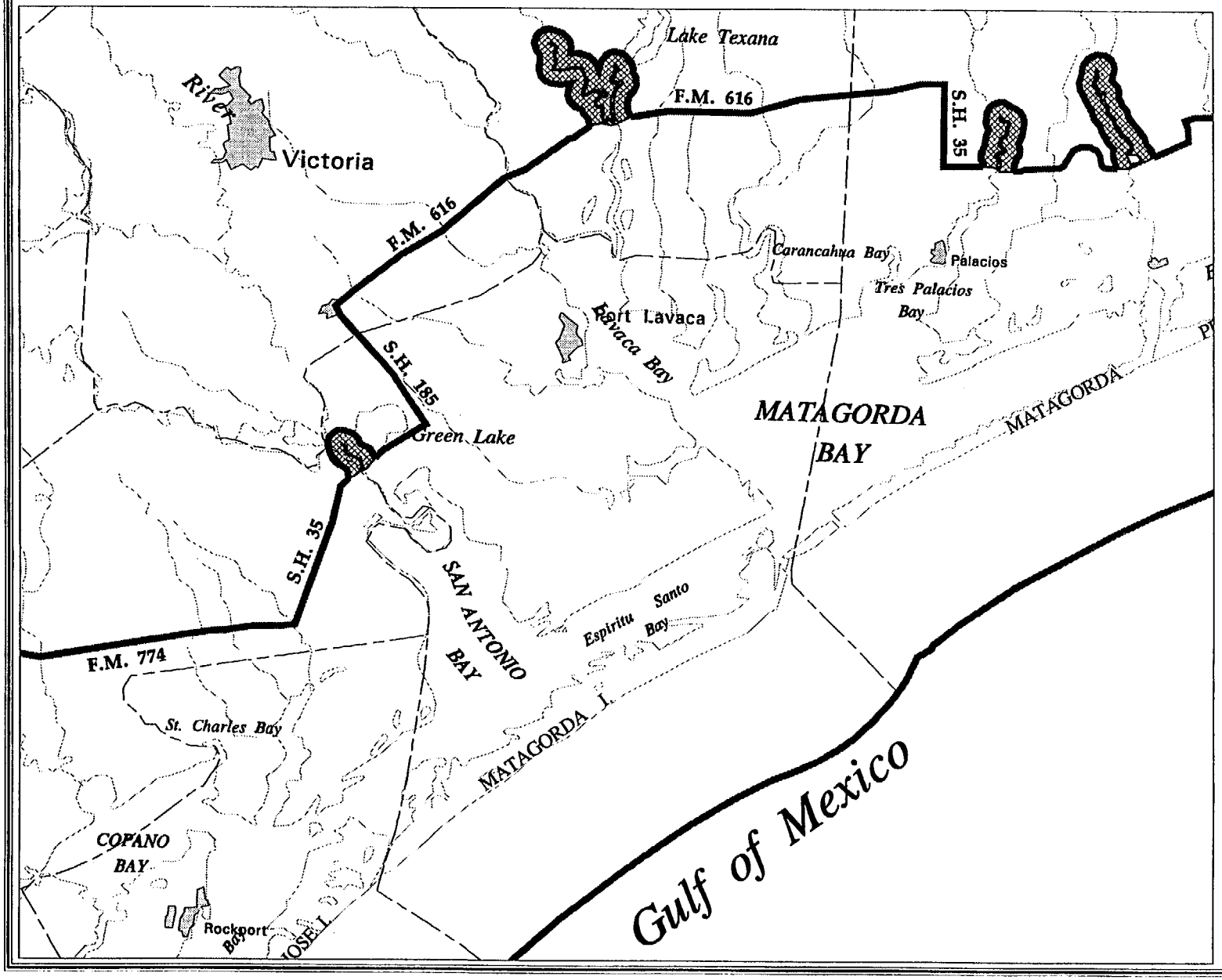
October 1995

N

Coastal Zone Boundary
Coastal Wetlands Only
County Boundary
Stream, Shoreline
Lake, Bay
Urban Area

FIGURE 11

Port Lavaca Area



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Austin, Texas

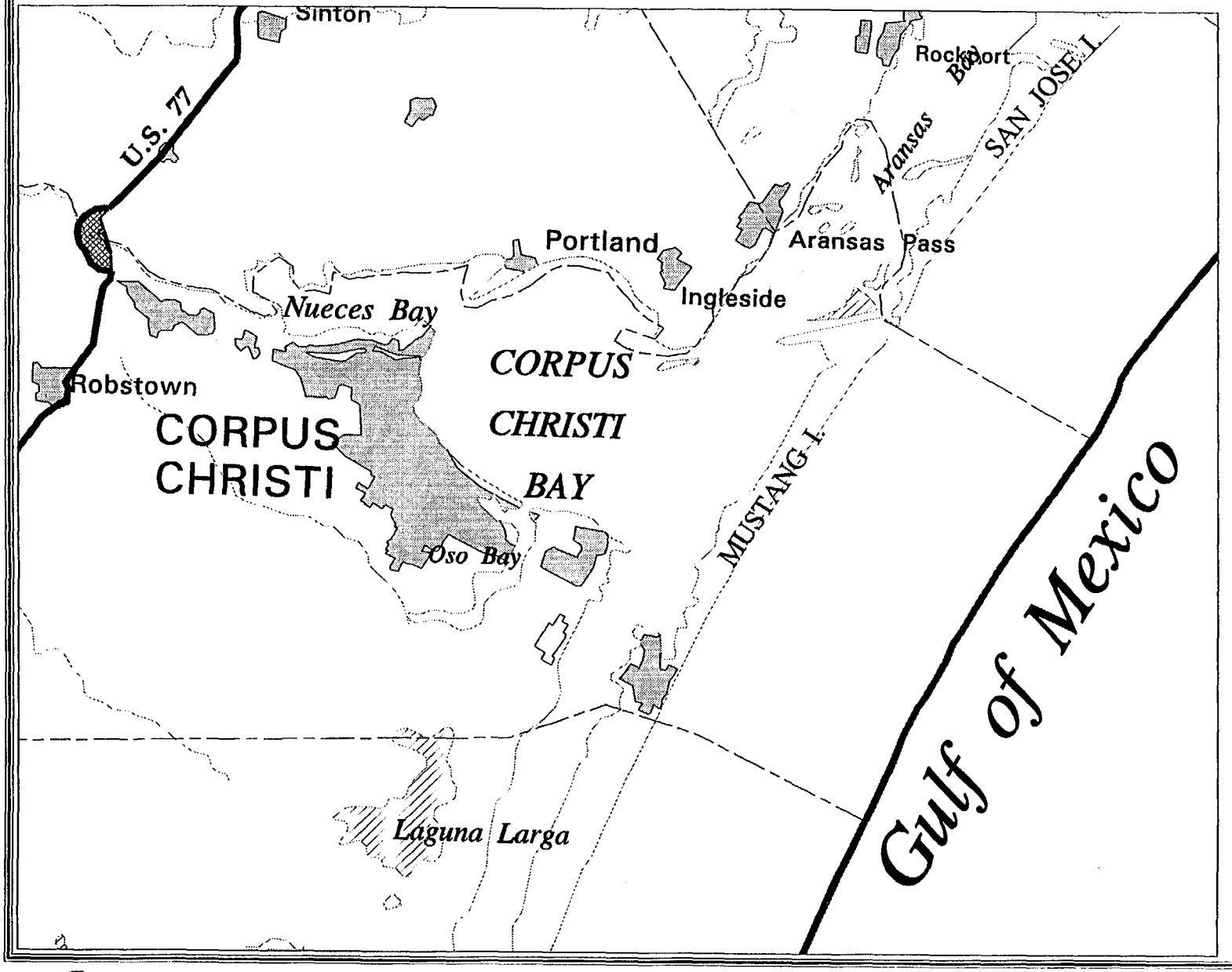
GARRY MAURO
Commissioner
October 1995

N

Coastal Zone Boundary
Coastal Wetlands Only
County Boundary
Stream, Shoreline
Lake, Bay
Urban Area

FIGURE 12

Corpus Christi Area



TEXAS GENERAL LAND OFFICE
Austin, Texas

GARRY MAURO
Commissioner

October 1985

N

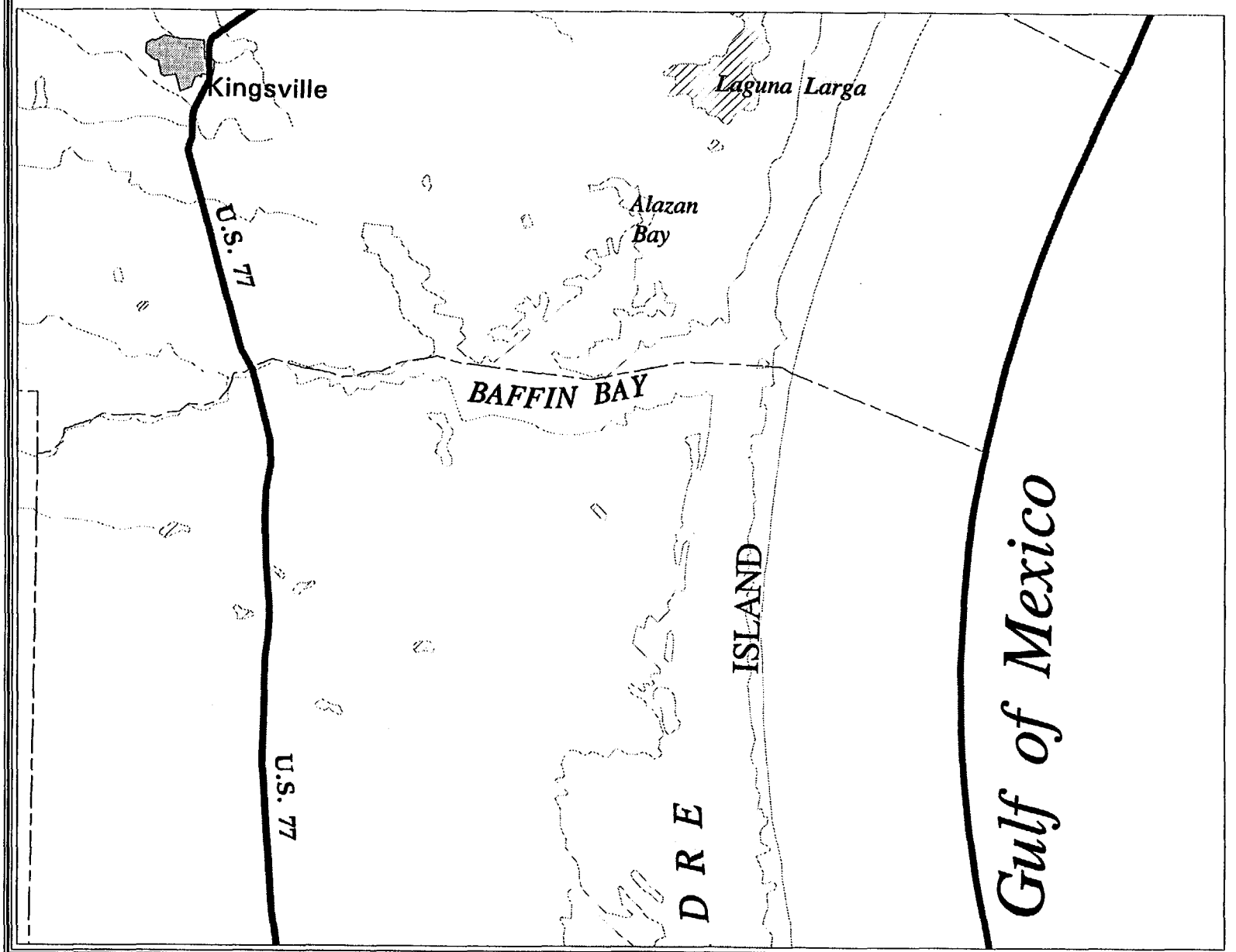
Coastal Zone Boundary
Coastal Wetlands Only
County Boundary
Stream, Shoreline
Lake, Bay
Urban Area

SCALE 1:431,163
One inch represents 6.85 miles

Location

FIGURE 13

Kingsville Area



TEXAS GENERAL LAND OFFICE
Austin, Texas

GARRY MAURO
Commissioner

October 1995

N

Coastal Zone Boundary
Coastal Wetlands Only
County Boundary
Stream, Shoreline
Lake, Bay
Urban Area

SCALE 1:479,158
One inch represents 7.56 miles

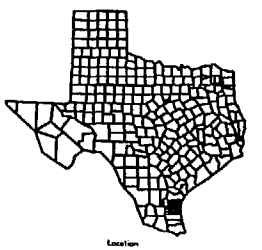
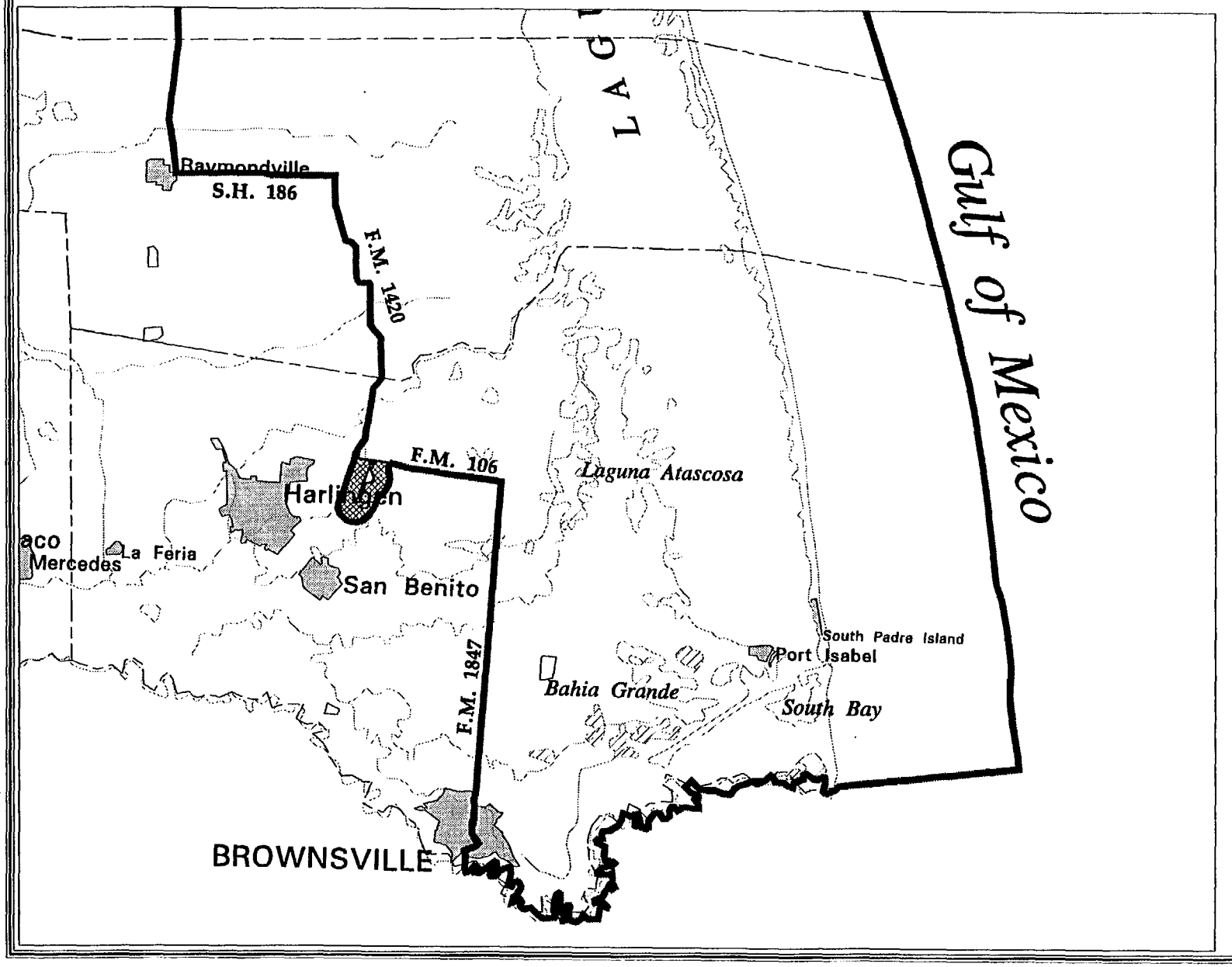


FIGURE 14

Brownsville - Harlingen Area



TEXAS GENERAL LAND OFFICE
Austin, Texas

GARRY MAURO
Commissioner

October 1995

N

Coastal Zone Boundary
Coastal Wetlands Only
County Boundary
Stream, Shoreline
Lake, Bay
Urban Area

APPENDIX G

Texas Nonpoint Source Program

APPENDIX G

TEXAS COASTAL NONPOINT SOURCE PROGRAM

Summary of Development and Status of State NPS Programs

The Clean Water Act Amendments passed by Congress in 1972 included §208, which required states preparing areawide waste treatment plant to consider aspects of nonpoint-source pollution (NPS). In particular, different types of activities normally associated with NPS had to be identified, including agriculture, silvaculture, urban construction, and mining activities. Once NPS problems were identified, then methods could be examined to abate or restrict them through the use of "best management practices" (BMPs).

Many states, including Texas, undertook §208 studies to identify NPS problems. The former Texas Department of Water Resources, a predecessor to the TNRCC, conducted studies on separate segments of rivers to assess the severity of NPS problems and corresponding BMPs to be used to address these problems. During the development of the §208 report, the Governor issued two executive orders delineating the responsibilities of the two principal agencies involved with NPS control in Texas - the Texas Department of Water Resources (now TNRCC) was designated the state agency responsible for coordinating the §208 report, while the Texas State Soil and Water Conservation Board (TSSWCB) was designated as the agency responsible for identifying management strategies and controls for agricultural and silvacultural NPS.

In 1987, Congress again amended the Clean Water Act, introducing a significant shift in focus on NPS. The 1987 amendments set a timetable for states to identify NPS problems and determine BMPs to control or abate them. Federal funds were made available to partially finance the NPS studies. If a state did not conduct the studies, the Act directed EPA to do them.

Section 319 of the Clean Water Act provides two basic requirements for states. First is the assessment report in which a state studies its waters to identify those unable to attain water quality standards because of NPS and to identify NPS sources contributing significantly to the pollution of those waters. In this assessment, the state must identify BMPs that can be used to alleviate pollution resulting from these NPS pollution sources.

The second phase of the program calls for the state to adopt a NPS management program, a four-year plan to implement BMPs for specific NPS on the target waters identified in the assessment report. The program must include a schedule for implementing BMPs on the identified waters or sources. Types of programs that may be used to implement BMPs include "non-regulatory or regulatory programs for enforcement, technical assistance, financial assistance, education, training, technological transfer, and demonstration projects."

In October 1987, Texas undertook development of its NPS assessment report. This report was done through contracting with different entities that analyzed the NPS problem and discussed five topics: (1) establishment of a statewide stream monitoring network and USGS monitoring network and identification of affected watersheds that were monitored and evaluated; (2) critical groundwater areas in the state; (3) critical agricultural and silvacultural NPS problems in the state; (4) an examination of the 16-county region of the Dallas/Ft. Worth area; (5) a similar study of the 13-county Houston-Galveston region; and (6) 20 selected watersheds exhibiting the most severe NPS impacts.

These areas were analyzed using existing monitored and evaluated data. In the foreword to this report, the Texas Water Commission noted that because state water quality standards were written to protect water quality in many cases for average conditions throughout the year, NPS impacts were determined to be not severe enough to violate the standards as written. The Commission noted, however, that better evaluative techniques for NPS may reveal more severe impacts than were indicated using only available data.

After contracting studies to develop this additional information, the Commission revised the Assessment Report in 1989. The report identified a number of watersheds that either currently or potentially were not meeting water quality standards because of NPS pollution contributions. The report also contained descriptions of existing NPS programs administered by the Commission at that time, including programs for the proper design, installation, maintenance, and removal of private sewage facilities (e.g., septic tanks) and petroleum storage tanks; industrial discharge permits; water quality permitting of livestock and poultry production (including confined animal feeding operations); and rules providing for the protection of water quality from development in the recharge zone of the Edwards Aquifer.

In 1988, the Texas Water Commission published and submitted to EPA its Nonpoint Source Water Pollution Management Report. The report included a number of state programs which seek to establish appropriate BMPs and their implementation through various regulatory and nonregulatory programs: These include:

- the urban NPS pollution program under §26.177 of the Texas Water Code, providing for the implementation of water pollution abatement plans by all cities of 5,000 population or more;

- the Texas Department of Health (now TNRCC) program for the proper design, installation, maintenance, and removal of on-site sewerage systems (e.g., septic tanks) under Chapter 366 of the Texas Health and Safety Code;

- the protection of water quality through the regulation of petroleum production and distribution by the Texas Railroad Commission pursuant to §26.131 of the Texas Water Code;

- the TSSWCB's efforts in working with Soil and Water Conservation Districts (SWCDs) in educating farmers and ranchers in the latest techniques to prevent soil erosion and protect surface water and groundwater quality;

- the Texas Water Commission's (now TNRCC) efforts in cooperation with the underground water conservation districts to find and plug abandoned wells;

- the Texas Water Commission's (now TNRCC) efforts to clean up hazardous waste sites through the state and federal Superfund programs;

- the protection of wetlands pursuant to the enforcement of state water quality standards and the implementation of the state's §401 water quality certification program;

- the Texas Department of Agriculture's pesticide use training and labeling programs;

- the natural resource agencies' cooperative Fish Kill and Pollution Complaint System, which maintains a central, statewide reporting system to provide early warning notice and coordination in the event of spills, pollution reports, and fish kills;

- the Texas State Department of Highways and Public Transportation (now Texas Department of Transportation) erosion control efforts implemented through road construction contract provisions;

- the Transportation Department's "Don't Mess With Texas" advertising campaign for litter control;

- the General Land Office's "Adopt a Beach" program;

- the Texas Water Commission's (now TNRCC) land-based sand and gravel mining and washing operation and control program pursuant to §§26.121 and 26.040, Texas Water Code;

- the Texas Water Commission's (now TNRCC) program to control the discharge of waste from boats, including a requirement for the certification of proper onboard marine sanitation devices, the prohibition against the discharge of waste, treated or otherwise, into certain designated water bodies, and the use of certified pumpout facilities pursuant to §§26.044 and 26.045, Texas Water Code;

- water quality protection and instream and riparian habitat protection, mitigation, and restoration requirements necessary for the approval by the Texas Water Commission (now TNRCC) of applicable water right applications and related water and stream diversion and impoundment projects pursuant to §§11.147, 11.150, and 11.152, Texas Water Code;

- the Texas Parks and Wildlife Department's instream sand and gravel mining and washing operation control program;

- the Texas Water Commission's (now TNRCC) industrial stormwater runoff control program under §26.121 of the Texas Water Code;

- the Texas Water Commission's (now TNRCC) petroleum storage tank program under subchapter I, Chapter 26, Texas Water Code;

- the Texas Air Control Board's (now TNRCC) permitting program controlling airborne sources of NPS;

- the Texas Department of Health (now TNRCC) municipal landfill permit and control program under the Texas Health and Safety Code; and

- the Texas Water Commission's (now TNRCC) well head protection program to assist public water supply operators in identifying and controling possible sources of groundwater contamination.

Since the 1988 Management Report, the TNRCC in conjunction with the TSSWCB has submitted to the EPA an annual report on NPS activities for the State of Texas. These subsequent reports have not only provided updates to existing reports, but have also identified new programs such as:

- the TNRCC's Rural Outreach Program for the proper disposal of agricultural chemicals;

- the Clean Texas 2000 program, which provides financial assistance to communities for household hazardous waste and waste oil collections and public education campaigns to encourage prevention of nonpoint-source pollution;

- the Soil and Water Conservation Board's recent authorization, under Texas Water Code §26.1311 and §201.026, Texas Agriculture Code, to require water quality management plans for agricultural activities (explained in more detail below);

- the TNRCC's Texas Watch program, which consists of volunteer private citizens who are trained to sample for water quality and report problems in areas where they live;

- the National Estuary Programs for Galveston Bay and Corpus Christi and their water quality assessments and recommended plans of action;

- the TNRCC's Non-point Source Program, which provides technical assistance to local communities in the implementation of nonpoint-source prevention and control

programs, conducts demonstration projects, and distributes information on NPS prevention and control through a technology transfer program;

- the Texas Clean Rivers Program, a regional water quality assessment initiative authorized under §§26.0135 and 26.0136, Texas Water Code, and administered by the TNRCC and designed to collect water quality information including the assessment of the impacts of NPS pollution;

- the development of a watershed management approach by the TNRCC, which will examine all the activities which may impact water quality in a watershed and seek to integrate and coordinate related regulatory programs;

- the requirement to submit a water conservation plan with an application for a water right which, in part, provides for the efficient use of water by implementing measures to prevent contaminated runoff from irrigation and leaking conveyance systems which may be transporting water containing contaminants (30 TEX. ADMIN. CODE ANN. §288.4); and

- the recent designation of Clear Lake, adjacent to Galveston Bay, as a "no-discharge" lake where the discharge of waste from boats, treated or otherwise, is prohibited.

Soil and Water Conservation Board Program

The TSSWCB is the legislatively designated lead agency for management of agricultural/silvicultural nonpoint-source abatement programs in Texas. The board has been involved with nonpoint-source pollution since 1975. In 1980, the agency published a Statewide Control Strategy for Agricultural Nonpoint Source Pollution and provided oversight on development of a similar document for silviculture. These documents were developed pursuant to the federal Clean Water Act and outlined the original approach to addressing agricultural and silvicultural nonpoint sources of pollution in Texas. The basic approach was patterned after the time-tested and proven state soil and water conservation programs that have been in place since the 1940s: voluntary implementation of best management practices combined with education, technical assistance, and financial assistance.

After passage of the federal Water Quality Act of 1987, the TSSWCB prepared both the agricultural and silvicultural component of an assessment of nonpoint source impacted waters in the state and a four-year management program to address waters in the assessment. The management program superseded the control strategy developed in 1980. This program, like the original, is based on the voluntary implementation of best management practices, education, technical assistance, and financial assistance. Section 319 of the Clean Water Act, which instigated development of the state management program, introduced a new program by which cooperative agreements are entered into by state and federal agencies. The cooperative agreement program, which was created to assist in implementing the state's management program, has primarily been used to fund demonstration projects.

Programs developed to satisfy requirements of federal legislation resulted in development of good concepts to solve the perceived problems; however, one extremely important element had been missing, and its absence impeded the successful and measurable implementation of solutions. That element was an institutional mechanism to define specifically what a person must do to be considered as adequately managing or controlling nonpoint-source pollution and to document and give credit for doing so. Within the limits of existing knowledge and current technology, Senate Bill 503, passed by the 73rd Texas Legislature in 1993, put in place such a mechanism.

As lead agency for agricultural and silvicultural nonpoint source pollution abatement in Texas, the TSSWCB is responsible for maintaining an approved statewide management program which satisfies federal requirements contained in Section 319 of the Clean Water Act. The first management program developed by the TSSWCB was approved by the Environmental Protection Agency in 1989 and has been in an implementation stage since then. A major revision of this management program was completed in 1993 and approved by the Environmental Protection Agency in 1994. It will remain effective until 1997. The current program incorporates pertinent provisions of Senate Bill 503 programs and is managed as a part of the state's overall nonpoint source pollution abatement efforts.

Another responsibility of the lead agency is to administer the cooperative agreement program contained in Section 319. Prior to federal fiscal year 1994, this program was administered solely by the Texas Natural Resource Conservation Commission, under which the TSSWCB subcontracted projects for agriculture and silviculture. Since 1995 the TSSWCB has been involved in both contracted and direct cooperative agreement activities.

The TSSWCB is responsible for the implementation and management of water quality management programs authorized by Senate Bill 503, which consist of: (1) water quality management plan, (2) complaint, (3) cost-share.

The TSSWCB adopted the Natural Resources Conservation Service (NRCS) Field Office Technical Guide as the criteria applicable for water quality management plans. The Field Office Technical Guide contains technical information, important conservation considerations for natural resources, quality criteria and treatment levels, conservation management system guide sheets by land use, information on the effects of applied conservation treatments, and practice standards and specifications. The guide is specifically tailored for the geographic area of each district. It is consistent with requirements of federal programs for agricultural and silvicultural nonpoint-source management. Each SWCD annually reviews and adopts the technical guide as the criteria for use within the district. Both the TSSWCB and SWCDs are involved in development and maintenance of the technical guide.

The TSSWCB coordinates the programs and activities of Texas' 214 SWCDs through an organizational structure in which owners and operators of the state's farm and grazing lands govern themselves with respect to soil and water resources. It is a program of voluntary

participation and the most realistic and cost-effective means of achieving the state's goal to abate agricultural and silvicultural nonpoint-source pollution.

The state's water quality management plan program provides agricultural and silvicultural producers an opportunity to comply with state water quality laws through traditional, voluntary incentive-based programs. Agricultural and silvicultural producers now have the opportunity to develop and implement site-specific water quality management plans in cooperation with local SWCDs. Certified water quality management plans ensure that farming or ranching operations are carried out in a manner consistent with state water quality goals.

Local SWCDs provide the technical assistance to develop the plans through agreements with the USDA Natural Resources Conservation Service or the TSSWCB. After being approved by the district, a developed plan requires TSSWCB certification.

Steps to Obtain a Certified WQMP

- Producers may request planning assistance from the SWCD in the county where their farm or ranch is located.
- Producers agree to become district cooperators if they are not already.
- Producers become involved in the planning process, selecting BMPs to suit their economic and operational objectives.
- Both the producer and the local SWCD approve a developed plan which meets the Technical Guide.
- The plan is then reviewed by the TSSWCB to ensure its consistency with state water quality standards. If it is consistent, the plan is certified.
- To remain in compliance with state water quality rules and regulations, as well as to receive program benefits, a producer must implement the certified plan as specified and agree to its implementation schedule.

Annual status reviews are conducted by the staff of the TSSWCB. These reviews are made with the producer or his/her representative present. Local SWCD directors and NRCS personnel are invited to attend and participate in the review. During the annual status review, the progress made in applying the practices in the plan, the condition of existing practices, the need for revision or modification, and the need for follow-up assistance are observed and noted.

When items needing correction are noted during the review, they are discussed with the local SWCD board. If it is determined that corrective action is required, the producer is

advised and strategies are developed to rectify problems. In situations where the producer is unable or unwilling to take corrective steps, the TSSWCB and the local SWCD may de-certify the plan.

The TSSWCB, in a cooperative effort with the TNRCC, developed a Memorandum of Agreement. This agreement recognizes each agency's responsibilities and the areas of program interface that need to be coordinated. The Memorandum of Agreement was adopted as a rule in 31 TAC Section 523.5 on March 15, 1994.

A cost-share program administered by the TSSWCB and SWCDs effectively provides incentives for implementation of water quality management plans and pays a portion of the costs of water quality protective practices that provide benefits to the public. Eligible practices are selected based on their impact on water quality. Producers receiving cost-share funds are required to commit to implementing the total water quality management plan and to maintaining it a minimum of two years after implementation. Coordination with other cost-share programs is carried out to ensure that there is no overlap or duplication. Maximum use and benefit is made of other cost-share programs by coordinating practices cost-shared so that they are complementary to each other and result in a greater incentive to apply higher priority practices and systems.

SWCDs administer the cost-share program within their boundaries to ensure maximum effectiveness and efficiency. Priorities are set locally by each district, and practices are selected from those approved by the TSSWCB that are applicable within each district. Districts approve individual applications for cost-share assistance, and provide the TSSWCB with certification once the practice or practices have been installed in accordance with applicable standards and specifications. Based upon the district certification, the TSSWCB causes a warrant to be issued to the producer.

The TSSWCB and SWCDs respond to complaints of possible water quality impairment by agricultural/silvicultural activities. Complaints are received both from the public and through referrals from the TNRCC and other agencies. SWCDs are involved in complaint resolution procedures to the maximum extent possible. Any site visits, investigations, or sampling is carried out in conjunction with the local district officials. The TSSWCB regional offices assist in the resolution process on an as-needed and as-available basis in the investigation and sampling procedures, and help coordinate the process with the SWCDs and affected landowners.

Typically, ten days are allowed for a response from a person who has been determined to be in need of taking corrective action. If the corrective action involves development and implementation of a water quality management plan, 45 days are usually allowed for the person to request assistance from the SWCD. Development of the plan is then dependent upon the process of plan development within the district. If a complaint is found to be valid, and a producer fails or refuses to take corrective action, the complaint is referred to the

TNRCC for that agency to take whatever action it deems necessary, up to and including enforcement action.

The TSSWCB has five regional offices established to serve areas where significant levels of water quality management program activity are anticipated. One office is located at Dublin to serve the North Bosque River, Upper Leon River, and Nolan River watersheds, and another at Mt. Pleasant serves the Lake Fork Creek Watershed and other concentrated dairy and poultry areas in east Texas. A third office at Hale Center serves the area where arsenic has been detected in groundwater, portions of the Canadian River Watershed, and the upper portions of the Brazos River Watershed where small concentrations of pesticides have been detected in playa lake soils. The fourth office, at Wharton, serves the upper coast and major rice-producing areas. The fifth office, at Harlingen, serves the lower coastal area including the Lower Rio Grande Valley and Arroyo Colorado Watershed.

June 6, 1996

Mr. Jeffrey R. Benoit
Director
Office of Ocean and Coastal Resource Management
1305 East-West Highway
Silver Spring, Maryland 20910

Dear Mr. Benoit:

Last year, Governor George W. Bush submitted the Texas Coastal Management Program (CMP) to the National Oceanic and Atmospheric Administration (NOAA) for federal approval. After federal approval, the nonpoint pollution control provisions of §6217 of the Coastal Zone Act Reauthorization Amendments of 1990 will apply to the CMP.

The State of Texas believes that its existing nonpoint authorities and programs provide the basis for a coastal nonpoint program that is approvable under §6217. However, we recognize that NOAA and the Environmental Protection Agency (EPA) cannot make a final finding on that issue because the type and amount of nonpoint information submitted clearly does not constitute a complete description and assessment of Texas' current coastal nonpoint program under the requirements set out in NOAA and EPA Coastal Nonpoint Program guidance dated January 1993 and March 16, June 21, and June 28, 1995.

The State of Texas commits to submit to NOAA and EPA a complete coastal nonpoint program within thirty months of CMP approval. If NOAA and EPA find, at that time, that Texas has failed to submit an approvable coastal nonpoint program, state law directs the governor to withdraw the CMP from the National Coastal Zone Management Program.

Texas' lead nonpoint agencies are the Texas Natural Resource Conservation Commission for state surface water quality standards and urban nonpoint sources and the State Soil and Water

Garry Mauro
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Conservation Board for agricultural and silvicultural nonpoint sources. Both of these agencies are represented on the Coastal Coordination Council. We look forward to working with you and your staff on this matter.

Sincerely,

Garry Mauro

Garry Mauro
Chairman
Coastal Coordination Council

GM/CKC/tn

APPENDIX H

Summary of National Interest Statements

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Summary of National Interest Statements Received from Federal Agencies

U.S. Department of Agriculture (USDA)

The Natural Resources Conservation Service maintains that the U.S. Department Agriculture has a national interest in water resources development, encompassing such activities as flood control, erosion control, the construction of dams, dikes, levees, etc., and wetlands.

U.S. Department of Commerce (USDOC)

Economic Development Administration (EDA): The EDA furthers the national interest in the planning for and the siting of facilities through the discretionary award of assistance for local projects which are consistent with overall local planning to enhance economic development, and upon which there is the opportunity for state and metropolitan area review and comment.

National Marine Fisheries Service (NMFS): The mission of NMFS is stewardship of the nation's living marine resources. NMFS has primary federal responsibility for the conservation, management, and development of living marine resources and for the protection of certain marine mammals and endangered species under numerous federal laws. NMFS also has responsibilities to the U.S. commercial and marine recreational fishing industry, including fishermen; to the states; and to the general public. Under these responsibilities, NMFS seeks to achieve continued optimum utilization of living marine resources for the benefit of the nation.

U.S. Department of Defense (DOD)

The DOD's national interest is in the provision of national defense and in the establishment of new or expanded defense siting on land, in the air, and on or under the water.

Air Force: The Air Force requests that the state program recognize that national defense is an essential element of national interest and is one of the high-priority uses of air, land, and water resources.

Army: The Army maintains that Army Reserve Centers should be considered areas of national interest because they are a vital part of our national defense.

Navy: National interests in the coastal zone include installations and activities used for defense and defense training because they directly support the ability of the Navy to carry out its Joint Mission of Littoral Warfare. Joint Littoral Warfare is the ability to mass overwhelming force and deliver it ashore to influence, deter, contain, and overcome an enemy. Amphibious forces with their supporting units give the Commander the ability to establish another front of operations against an enemy. Tasks implicit in this mission include, but are not limited to, mine countermeasures operations, anti-submarine warfare, and anti-surface warfare. The area of control to support operations in the littoral area extends from the shore to the open ocean and inland from the shore over that area that can be supported and defended directly from the sea. The intent of this mission is to transition forces from an oceanic transit to regional support. The ability to train in this mission area and maintain those forces is vital to mission success.

Army Corps of Engineers: The Army Corps of Engineers has national interest in facilities and programs administered by the Galveston District which identify areas of federal involvement in the coastal zone. This involvement does not constitute "overriding" national concern except in the case of a national emergency, when navigation projects would be a vital part of a defense program.

U.S. Department of Energy (DOE)

Access to domestic energy resources is a matter of national interest. Production of domestic gas and oil resources has strategic value to the U.S. It creates high-wage jobs, enhances overall U.S. global competitiveness, preserves the environment, bolsters the economy by preventing the export of American purchasing power and savings and improving the balance of trade, and increases energy security by reducing vulnerability to supply disruption of the U.S. or its allies. It also preserves U.S. gas and oil exploration and development technology leadership and spreads the use of the best environmental standards to the rest of the world.

U.S. Department of Housing and Urban Development (HUD)

The national interest, as defined in HUD legislation, in almost all respects is similar to or identical with current or emerging state interests. These concerns of national interest include adequate housing supply, sound community development or redevelopment, and flood and storm disaster prevention and assistance.

U.S. Department of the Interior (DOI)

U.S. Fish and Wildlife Service (USFWS): The USFWS statement of national interest includes the conservation, management, and enhancement of fish and wildlife resources, particularly migratory waterfowl, anadromous fish, and endangered and threatened species populations and their habitats, as well as aquatic and wetland ecosystems and water quality.

National Park Service (NPS): The NPS, under its Organic Act of 1916, is charged with managing the parks to "conserve the scenery and the natural and historic objects and the wildlife therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for future generations." The General Authorities Act of 1970 defined the National Park System as including all the areas administered by the NPS "for park, monument, historic, parkway, recreational, or other purposes."

Minerals Management Service (MMS): As a bureau of the Department of the Interior, the Minerals Management Service's primary responsibilities are to manage the mineral resources located on the nation's Outer Continental Shelf (OCS), collect revenue from the federal OCS and onshore federal and Indian lands, and distribute those revenues.

Federal Emergency Management Agency (FEMA)

FEMA's mission is to assist state and local governments, individuals, and volunteers in being prepared to save lives and protect real and personal property from natural and technological hazards. In executing these responsibilities, FEMA seeks to achieve a partnership with state and local governments, industry, individuals, first responders, volunteers, and other federal agencies.

U.S. Geological Survey (USGS)

USGS has a national interest in the following coastal natural resources and activities: the definition of the hydrodynamics, flow, sedimentation, and salinity of coastal systems; the development of predictive computer models to assist in managing these systems; assessment of hydrology, water quality, ecology and use of coastal surface water and groundwater resources; investigations of coastal water-resource contamination by point and nonpoint sources; and mapping of wetlands, floodplains, tidal boundaries, bathymetry, and hydrogeology, aided by the use of geographic information system technology.

Federal Energy Regulatory Commission (FERC)

FERC regulates the construction and operation of hydropower facilities located on navigable waters or otherwise within federal jurisdiction; the construction and operation of natural gas facilities; the interstate sale of natural gas for resale and transportation; and the interstate transportation of crude oil and petroleum products. FERC also regulates interstate sales for resale and transmission of electric power and the rates, terms, and conditions of such sales and transmission; certifies qualifying facilities under Section 210 of the Public Utility Regulatory Policies Act; and makes exempt wholesale generator determinations under Section 32(a) of Public Utility Holding Company Act.

General Services Administration (GSA)

The GSA is responsible for acquiring, constructing, and disposing of facilities for federal agencies and the courts, as well as providing goods and services. The acquisition and management of the buildings and land required by federal agencies to conduct government business are done in the national interest. GSA's interests are those of proprietor and lessor. The functions performed by the agencies occupying GSA-controlled space may also be of national interest.

U.S. Nuclear Regulatory Commission (NRC)

The NRC is responsible for the licensing and related regulation of nuclear facilities and materials. The NRC's principal concern is to assure public and occupational radiological health and safety and environmental compatibility. The NRC has no overriding national interest in locating a site within the coastal zone.

U.S. Department of Transportation (USDOT)

USDOT's national interest includes construction, maintenance, operation, and improvement of the nation's transportation systems on and under the land, on and under the water, and in the air. Of special interest in the coastal zone are deepwater ports and oil and hazardous substance pollution prevention and response. USDOT's general policy is to assure protection, preservation, and enhancement of the nation's wetlands to the fullest extent practicable.

U.S. Coast Guard (USCG): The USCG's activities include aid to navigation, boating safety, national defense, bridge administration, maritime law enforcement, marine environmental protection and response, marine safety (including marine inspection and licensing), port safety and security, search and rescue, and waterways management.

Federal Highways Administration (FHWA): The FHWA's activities include planning and providing for improvement of the national highway system, including emergency evacuation routes.

Research and Special Programs Administration (RSPA): RSPA activities include research and analysis of transportation and socioeconomic effects and regulating hazardous materials transportation issues, including pipeline safety.

Maritime Administration (MARAD): MARAD's activities include fostering the development of the American merchant marine to meet national security and domestic and foreign commerce needs, development of ports and intermodal transportation systems, and maintaining the National Defense Reserve Fleet.

Department of Health and Human Services (HHS)

Centers for Disease Control and Prevention (CDC): The HHS has no facilities, programs, or projects of national interest within the Texas coastal zone at this time. Should a need to address the national interest in the area of public health arise, that interest would be addressed through coordination with the Texas Department of Health and the HHS Region VI office.

U.S. Environmental Protection Agency (EPA)

EPA's national interest in the coastal zone is in protecting human health and environmental quality. EPA provides standards and regulations affecting water resources, as well as controls on pesticides and toxic substances, solid waste disposal, and abandoned hazardous waste sites. Its interest is to maintain a strong federal floor of protection while providing substantial involvement of state and local government and the public in decision-making.