



GOLDEN CRESCENT COUNCIL OF GOVERNMENTS

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TRANSMITTAL

Following is a brief report that presents the status of activities related to the control of beach and shoreline erosion in bays of the Texas Coast. As requested by the Board of Directors the staff of the Golden Crescent Council of Governments has conducted a quick search of related programs looking toward a beach erosion control project in Calhoun County. To inform you that such projects are being contemplated and implemented, the findings of this brief search are being reported to individuals concerned with Coastal lands.

Shoreline
BF 47.03

REPORT OF GOLDEN CRESCENT
COUNCIL OF GOVERNMENTS
ON BEACH EROSION CONTROL

BACKGROUND

In September 1973, copies of bills that had been passed by the State Legislature relative to the Coastal Zone were collected by the COG office. The staff distributed some of these to interested persons and agencies. Regional Planner, Gary Damuth, discussed implementation of actions allowed by the enabling legislation such as establishing dune protection lines in Calhoun County with several people. One of these individuals was Lee Wright, District Conservationist for Calhoun County. A copy of the bills and a synopsis of each, was sent to Mr. Wright at the Work Unit Office of the Soil Conservation District in Calhoun County could be informed about the content of the bills. This activity renewed interest about the content of the bills. This activity renewed interest in a beach erosion control project that had been discussed at a previous meeting.

The Chairman of the Calhoun County Soil and Water Conservation District, Mr. Alvin Hahn, also a member of the Board of the Golden Crescent Council of Governments, requested that the project be introduced at a GCCOG Board meeting. As a result the staff was asked to obtain information about a possible grant or funds for a pilot project whereby salt tolerant vegetation would be used to stabilize bay beach erosion.

EXPLANATION OF PROJECT
NEEDS AND BENEFITS

Beach and shoreline erosion in the Matagorda-Lavaca Bay system is critical. The results of this erosion are detrimental in many respects:

- (1) loss of productive land,
- (2) siltation of the bays,
- (3) loss of vegetation necessary to game fish production,
- (4) loss of beach areas used for recreational purposes,
- (5) disruption of physical facilities along the shore, and
- (6) loss of private land.

No specific proposal for an erosion control project has been developed for Calhoun County. However, preliminary planning envisions utilization of salt tolerant vegetation which will be planted in the water and on the shore to stabilize both areas in accordance with tidal variations.

The elimination of erosion is not the only benefit of the project. The vegetation itself will provide habitat for game fish and will also act to actually rebuild the shoreline as sediments are trapped by the vegetation.

OFFICES AND PERSONS
CONTACTED

In an effort to explore all possible avenues a number of agencies and persons were contacted for additional information.

Soil Conservation Service Office, Fort Bend County, Roy Haueger, Area Conservationist. (Spoke with Mr. Keller in that office).

Soil Conservation Service Office, Chambers County, Willie Baham, Area Conservationist.

Texas A&M University, Range Science Department, Dr. J. D. Dodd.

Texas Parks and Wildlife Marine Research Station, Seadrift, Texas, Ray Childress.

Texas Parks and Wildlife, Austin, Texas, Tom D. Moore, Chief Wildlife Planning. (Spoke to Mr. Sharp.)

General Land Office, Austin, Texas, Wayne Oliver, Head Environmental Planning Section.

Division of Planning Coordination, Office of the Governor, Natural Resources Section, John M. Gosdin.

Texas Coastal and Marine Council, Joe C. Moseley, Executive Director.

SYNOPSIS OF INFORMATION ACQUIRED

It appears that the federal Coastal Zone Management Act of 1972 does not allocate money for construction for this type of erosion control pilot project. The officials contacted stated that the law appropriates funds for planning in the first year; these will be made available in February, 1974. The second year of funding could include this type project as "managerial methodology" as the result of planning for such a project.

The State of Texas Senate Bill 644, the Coastal Public Lands Management Act of 1973, gives the School Land Board "the authority to select and to purchase fee and lesser interests in lands of the coastal area for the creation..., and research facilities". Section 6, paragraph (g) states, "The Board may study various coastal engineering problems, such as the protection of the shoreline against erosion..."

Section 8, paragraph a,4 states, "The Board may lease coastal public lands: To a scientific or educational organization or institution for the purpose of conducting scientific research." Though Senate Bill 644 does not provide money, it does provide a legal means to acquire land for an erosion project and indicates a source of technical assistance.

Texas A&M University, Range Science Department, is working with the Galveston and Brazoria Soil and Water Conservation Districts to develop beach erosion control projects. The two districts have committed themselves to pay a percentage of the total project cost according to Dr. Dodd of Texas A&M Range Science Department. Dr. Dodd is attempting to obtain funds from the Corps of Engineers.

There has been a similar beach erosion control project funded by Corps of Engineers funds on the Upper Texas Coast. The project is underway for an initial 18 month period to do screening for plant material which will stabilize erosion of clay beaches. After suitable plant materials are found, the plans for shaping and planting the beach areas will be developed. Presently, there are clay bluffs being undercut by tides. A similar situation exists in upper Lavaca Bay.

The Brazoria and Galveston County erosion control projects being prepared by Texas A&M and the Soil and Water Conservation Districts of both counties are directed at sand beaches. Calhoun County has both types of beaches, clay and sand, so the work being conducted up the coast should be applicable. However, the variation in the environmental conditions may be such that

different vegetation may be more acclimated to the Lavaca Bay area.

The future success of this project for Calhoun County and others depends on the cooperation and coordination of the various interests involved. Agency competition must not thwart cooperation when erosion is eating away at the shore at the rate of several feet a year. Different environments along the coast dictate that pilot projects should be established in several different areas; however, potential sponsors of projects must not be overanxious to the point that available funds are spread so thin that the lack of proper attention would cause a project to fail.

Success of the project is more likely if the expertise of all concerned agencies can be incorporated into the planning and implementation phases. The Texas Parks and Wildlife Department is responsible for game fish management. The potential that erosion control offers to improved game fish production and management should be investigated. Marine biologists are needed to evaluate the full impact of the erosion control project on the marine environment. The General Land Office and School Land Board need to study the inter-relationships associated with the shore building potential of erosion control.

The Calhoun Soil and Water Conservation District and the Golden Crescent Council of Governments can be the initial source of local support for an erosion control pilot-project in this region.

The magnitude of the beach and shoreline erosion problem is so great that its effects go beyond the County and the Region. All possibilities should be searched out to see that such a project can become a reality.

A copy of this report is being forwarded to:

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| The Honorable William Patman | Senator |
| The Honorable A. R. Swartz | Senator |
| The Honorable Joe Wyatt | Representative |
| Alvin Hahn | Chairman, Calhoun County SWCD and Board Member of GCCOG |
| Judge Willis Jetton | Calhoun County Judge Board Member of GCCOG |
| Judge Sam Seale | Jackson County Judge Third Vice President of GCCOG |
| Dr. J. D. Dodd | Texas A&M Univefsity, Professor Range Science Dept. |
| Wayne Oliver | General Land Office, Director Environmental Planning Division |
| Joe Moseley | Texas Coastal and Marine Council, Executive Director |
| Tom D. Moore | Texas Parks and Wildlife Department, Austin, Chief Wildlife Planning |
| Joe Harris | Division of Planning Coordination, Director, Division of Natural Resources, Office of the Governor |
| Ray Childress | Texas Parks and Wildlife, Marine Research Station, Seadrift |
| Lee Wright | Calhoun County Soil Conservation Service, Area Conservationist |
| Charles Trost | Houston-Galveston Area Council, Planning Director |
| James W. Hinds | Coastal Bend Council of Governments, Public Affairs Director |
| John Wasser | South East Texas Regional Planning Commission, Director, Regional Planning |