

Job Report

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Project Name: General Ecological Survey of the Matagorda Bay Area.

Period Covered: June 3, 1958 - July 18, 1958. Job No.: D-2

Inventory of Bottom Types Present and a Mapping of Their Locations
with a Description of Stations.

Abstract: The main bottom type in this area (M-4) is a blue-black mud with fine shell in the upper two or three inches. The shore areas are the only places where variation from the mud bottom occurs. Seining and trawling stations are set up to give the best possible coverage of the bay and the different bottom types.

Objective: To make a survey of the bottom types in area M-4 and map their locations.

Procedure: Cores from the bottom material were made with a hollow iron pipe and plastic tube. The bottom was also prodded with a 2 inch dowel. Perpendicular lines were run across the bay as well as parallel lines along the shore.

Findings: The main bottom type in this area is blue-black mud with fine shell in the upper two to three inches. This bottom varies from firm to very soft when prodded with a two inch dowel. The shore areas are the only places where variation from the mud bottom occurs. The shore along the peninsula has a sandy bottom extending out into Matagorda Bay about one-fourth to one-half of a mile. The north and west shores of Matagorda Bay have a similar sand strip. Clay bottoms are found in Tres Palacios Bay at Whiskey Flats, Turtle Bay at Jensen's Point, and Caracahua Bay at the causeway. There are live oyster reefs throughout the area. (Figure I)

The main factors considered in establishing seining (Figure II) and trawling stations (Figure III) were the following:

1. Total coverage of the area;
2. Sampling from all bottom types occurring in the area;
3. Accessibility to the station by boat or car.

A description of each station giving location, water depth, and bottom type is included in this report. There are a total of nine seining stations and thirty-three trawling stations set up in this area. These stations will be checked at least twice a month.

Seining Stations

Station No.

Description

1

This station is located at Palacios Bayou at the end of the road. The water is 0 to 3 feet in depth. The bottom is a hard clay with a covering of a few inches of soft mud with some oyster clumps and no vegetation.

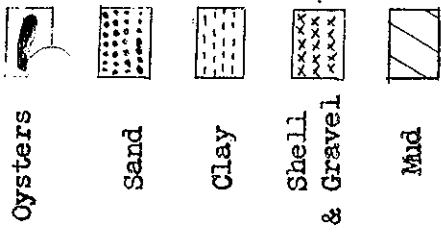


Figure I
Bottom Types in Area M-4

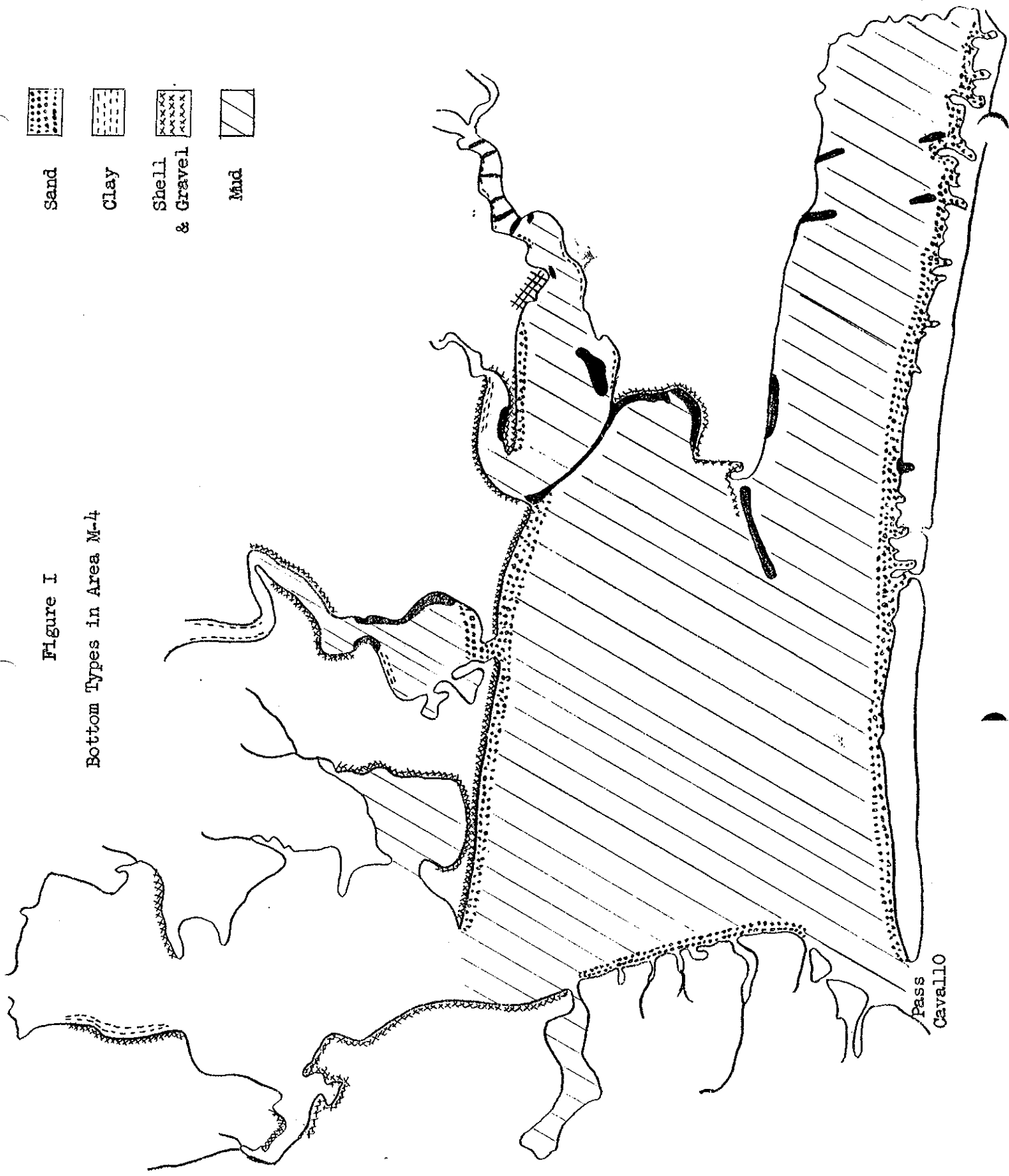
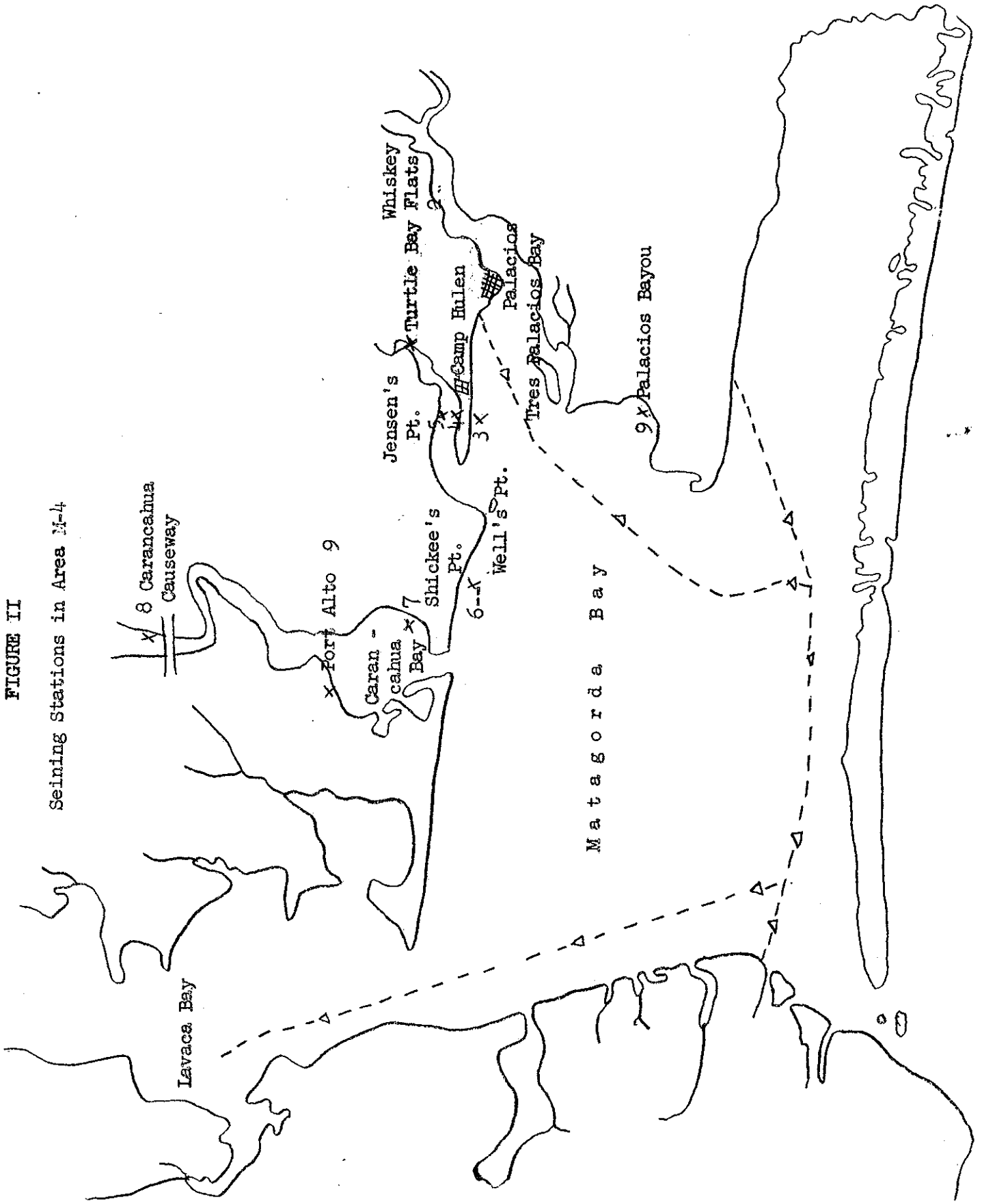


FIGURE II

Seining Stations in Area M-4



Station No.

Description

- 2 This station is 3 miles west of Palacios via the bay-shore road near the mouth of the Tres Palacios River. The water depth is 0 to 1.5 feet. The bottom is hard clay from shore to 50 feet out then increasingly softer until the typical bay bottom is reached. There are no shells or vegetation at this station.
- 3 This station is located on the Turtle Bay peninsula, Matagorda Bay side, approximately 500 yards from the end of the peninsula. The water depth is 0 to 1.5 feet. The bottom type is hard clay out to about 25 feet - then graduating into a hard sandy, shallow surf. There is a great number of Ruppia maritima beds in this area.
- 4 This station is located in Turtle Bay about 500 yards from the end of the Turtle Bay peninsula. The water depth is 0 to 3 feet and the bottom type is a soft mud with an abundance of oyster clumps present in the area.
- 5 This station is located at Jensen's Point Settlement on the north shore of upper Turtle Bay. The water depth is 0 to 2 feet. The bottom type is a soft mud with an abundance of oyster clumps and no vegetation.
- 6 This station is located at the end of the paved road to Well Point on the Matagorda Bay north shoreline. The water depth is from 0 to 1 foot. The bottom is hard sand bearing abundant Ruppia maritima beds and shore grass areas.
- 7 This station is located 100 yards south of Schicke's Fish Camp on the east side of Carancahua Bay. The water depth is 0 to 3 feet. The bottom type is soft mud with numerous oyster clumps and no vegetation.
- 8 This station is located on the north side of the Carancahua Bay causeway (Highway 35). The water depth is from 0 to 2.5 feet. The bottom type is a very soft mud with no shell or vegetation present.
- 9 This station is located at the Port Alto public beach of Carancahua Bay. The water depth is 0 to 1.5 feet. The bottom is a hard, barren clay.

Trespalacios Bay Trawl Stations

Station	Depth in Feet.	Bottom Type	Location
Whiskey Flats	2.5 - 4	firm mud and scattered shell.	500 yards from mouth of Tres Palacios River.
Collegeport	3	firm mud and scattered shell.	100 yards S. of old Pavilion pilings.
Grassy Point	3	firm mud.	100 yards E. of point.
Fence Post Reef	3	soft mud and scattered shell.	Near stake at Bay end of reef.
Red Fish Lake	3	firm mud and shell.	100 yards from mouth of Red Fish Lake.
Gaswell #1	6	firm mud and shell.	Middle of bay, SE of Palacios pavilion.
Beacon #32	12	firm mud.	Palacios Channel.
Coon Island	4	soft mud.	100 yards W. of Coon Island.
Oliver Point	4	soft mud and scattered shell.	100 yards off of Oliver Point Pass.

Turtle Bay Stations

Station	Depth in Feet.	Bottom Type	Location
Well Point	8	firm mud.	Well Point Marker.
Turtle Bay Brush Patch	3	soft mud and scattered shell.	100 yards offshore, midway in bend of N. shore.

Matagorda Bay Trawl Stations

Station	Depth in Feet.	Bottom Type	Location
Beacon #2	10	soft mud.	Palacios channel, S. end.
Carancahua Pass	10	firm mud.	200 yards south of Carancahua Pass.
Beacon #11	12	soft mud.	Lavaca Bay channel W. of Sandy Point.
Beacon #1	12	soft mud.	Lavaca Bay channel S. of Beacon #11.
Ia Salle Bayou	10	firm mud	1 mile S. of spoilbank markers of gasline.
Buoy #68	14	firm sand and mud.	E. of Port O'Connor in Intracoastal canal.
Range Tower D.	over 16	hard sand.	2.75 miles E. of Port O'Connor.
Green's Bayou Range Tower	over 16	hard sand.	1.5 miles W. of Green's Bayou.
Outer End of Halfmoon Reef	12	soft mud.	Outer end of Halfmoon Reef.
Palacios Point	4	soft mud.	Midway between Hotel Point and Palacios Point.
Palacios Bayou	4	soft mud.	Midway between Hotel Point and Oyster Lake.
Oil Well XA2	12	soft mud.	4 miles SW of Beacon #2.
Middle #3	12	soft mud.	400 yards NW of buoy #45.
Middle #2	12	soft mud.	Middle of Matagorda Bay.
Middle #1	10	soft mud.	Midway between Sandy Point and Carancahua Pass.

East Matagorda Bay Trawl Stations

Station	Depth in Feet.	Bottom Type	Location
The Cedars	4	firm mud	Near shore between Palacios Point and Intracoastal Canal.
E. Matagorda #1	4	firm mud	Midway between Palacios Point and Mad Island.
E. Matagorda #2	4	soft mud and scattered shell	Midway between Mad Island and Shell Island.
E. Matagorda #3	3	soft mud	Midway between Big Bayou Reef and Forked Bayou Reef.
E. Matagorda #4	3	soft mud	300 yards E. of Big Bayou Reef.
Cotton Bayou Range Tower	over 16	hard sand	Mouth of E. Matagorda Bay 300 yards off of the peninsula.
Buoy #10	12	soft mud	1.5 miles ESE of Palacios Point in Intracoastal canal.

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Date Approved:

28 Sept. 1959