

Job Report

Rudy Martinez
Marine Biologist

Project No. M-7-R-1 Date September 22, 1961
Project Name: Biological Survey of Area M-7
Period Covered: September 1, 1960 to August 1, 1961 Job No. D-2

Bottom Survey of Oso Bay

Abstract: The main bottom type in Oso Bay consists mostly of soft black mud. This produces a generally turbid condition; and as a result, has a pronounced effect on the total ecology. Only a few patches of vegetation are found in the bay, and these are along the west shore where a sewer plant empties into the area.

Objectives: To survey bottom types in Oso Bay and map their locations.

Procedure: Samples of the bottom were obtained by various means including by hand, with an Ekman dredge, and with plastic tubes; and the locations of the different bottom types were mapped.

Findings: Oso Bay is about six miles long in a north-south direction and about three miles wide at the upper end and one mile wide at the lower end in a east-west direction.

The main bottom type in Oso Bay consists of soft black mud. This particular type of bottom is largely responsible for the generally turbid condition found in Oso Bay, and this turbidity has a pronounced effect on the total ecology of the bay. The lack of a firm bottom prohibits attached vegetation, and the turbid water does not allow sunlight to penetrate. These are probably the two main factors why there is not much attached vegetation in the bay. The west shore of the bay, where a sewage plant empties, exhibits a firmer bottom; and this was the only place where attached vegetation was found.

There are three sewage plants that empty into Oso Bay (Figure 1). The bay has poor circulation; and as a result, a strong sewage odor is usually present.

Figure 1 shows the bottom types and their distribution in the area.

Prepared by Rudy Martinez

Accepted by Terrance Leary

Marine Biologist

Figure 1
Oso Bay Bottom Stations

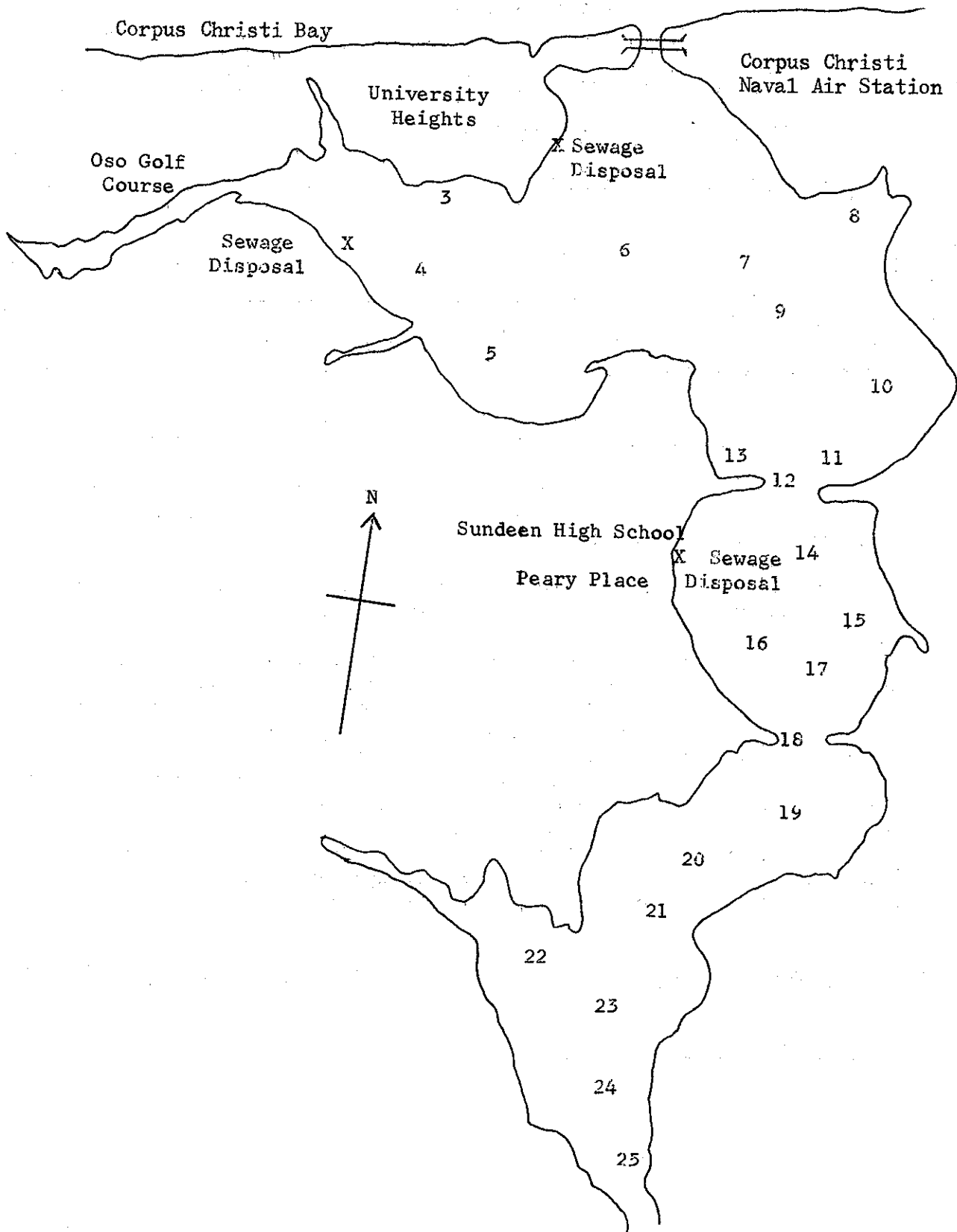


Figure 2

Station	Bottom Type	Water Depth in Feet
1	(Channel) Mud and Silt	6
2	Soft Black Mud	3
3	Sand and Black Mud	1
4	Firm Gray Clay Mud	1
5	Silt and Soft Black Mud	2
6	Gray Mud and Sand	2
7	Gray Mud and Sand	1
8	Firm Gray Clay Mud	0.5
9	Gray Mud and Sand	3
10	Soft Black Mud	1.5
11	Silt, Gray Clay Mud	2
12	Soft Black Mud	2
13	Soft Black Mud	2
14	Soft Black Mud	1
15	Soft Black Mud	1
16	Soft Black Mud	2
17	Soft Black Mud	1
18	Soft Black Mud	1
19	Soft Black Mud	1
20	Soft Black Mud	0.5
21	Firm Gray Clay Mud	0.5
22	Sand and Gray Mud	0.5
23	Sand and Gray Mud	1
24	Soft Black Mud	1
25	Soft Black Mud	0.5

