

Coastal Hydrographic and Meteorological Study
Project No. MH-R-4 (Job No. 8)
A. R. Martinez

Abstract

Hydrographic and climatological data collected in the field and taken from publications are presented in this report.

Rainfall totals along the coast were 30 per cent higher in 1968 than in 1967 with the heaviest rainfall occurring in June along the upper coast and in late May along the lower coast.

Salinity patterns varied from the upper to the lower coast due to different rainfall distribution, but in general readings were below normal in most bay systems as a result of an overall increase in rainfall and runoff. Salinity readings during spring (a critical time for juvenile game fish, shrimp and crab survival and growth) were 34.5 per cent lower than the corresponding period in 1967. Lowest salinities were recorded in June with averages ranging from 1.4 ppt in San Antonio Bay (compared to 23.5 ppt in 1967) to 30.4 ppt in the Upper Laguna Madre (compared to 49.5 ppt in 1967).

Water temperatures followed normal seasonal trends and varied little from the previous year. There were no fish kills caused by extreme weather conditions.

Turbidity readings were generally lower than those recorded last year, probably as a result of calmer weather.

Sediment stakes placed in the Upper Laguna Madre area indicate sand deposits of up to 39 inches at one station while slight scouring was evident at other stations.

High tides were experienced in early May with readings of over three feet above mean low tide in most areas. Tides returned to normal in early June and remained normal through August. High tides were again experienced in September as a result of the autumnal equinox and then were low throughout the remainder of the year.

Habitat modifications included routine maintenance dredging of existing channels, dredging of new channels, bulkheading and filling, marine construction, drilling of oil wells, placement of pipelines, and mud shell dredging.

Rainfall

Annual rainfall totals along the Texas coast were 30 per cent higher than during the previous year. (Table 1)

Increased rainfall during the winter resulted in flooding of rivers in several areas. The Guadalupe River, for example, reached a crest of 29.71 feet in late January and extreme flooding conditions were prevalent over most of the San Antonio Bay system.

Rainfall totals for January ranged from 2.11 inches in the Corpus Christi Bay system to 8.27 inches in the Matagorda Bay system.

Spring rains in 1968 were 39.6 per cent greater than the previous spring in 1967.

Late May rains resulted in flooding of all low lying areas in the Upper Laguna Madre, Corpus Christi and Aransas Bay systems. Total rainfall in May ranged from 5.90 inches in the Aransas Bay area to 13.24 inches in the Galveston Bay area.

Summer rains were greater than usual and low lying areas were again flooded by rising rivers and creeks. Heaviest rainfall was recorded in June with most coastal areas receiving from 6 to 13 inches of rain.

Moderate amounts of rainfall were recorded in July with totals ranging from 1.59 inches in the Lower Laguna Madre to 6.49 inches in the Galveston Bay area. Several of the bay systems were subjected to moderate flooding at this time. The Guadalupe River, for example, was at or near flood stage during the entire month of July.

August rainfall was relatively low, ranging from 0.56 inches in the Upper Laguna Madre to 3.01 inches in the Galveston Bay system.

Moderate amounts of rainfall were recorded in September with totals ranging from 3.08 inches in the Matagorda Bay System to 8.35 inches in the Corpus Christi Bay system.

Rainfall declined from October through December with totals in December ranging from 0.13 inches in the Corpus Christi Bay system to 2.30 inches in the Aransas Bay system.

Salinity

Salinity readings in 1968 were generally below normal in most bay systems as a result of increased rainfall and heavy runoff.

Heavy winter rains resulted in flooding of several major rivers and salinities were considerably lower than normal. February salinity averages, for example, ranged from 5.4 ppt in San Antonio Bay system to 22.7 ppt in the Upper Laguna Madre area.

Increased rainfall in spring resulted in salinities being 34.5 per cent lower than the corresponding period in 1967. The Matagorda Bay system salinity averaged 11.2 ppt at the tertiary stations and 13.1 ppt in the secondary stations. Flood stage conditions in the San Antonio Bay area decreased salinities from an average of 8.6 ppt in March to 4.9 ppt in May.

Salinities in the Aransas Bay system remained generally below 20 ppt through the spring. The Corpus Christi Bay system salinity increased slightly to an average of 21.9 ppt in March only to be lowered again in May to an average of 13.8 ppt.

The Lower Laguna Madre salinity remained stable but slightly below normal with an average of 31.5 ppt for the months of April and May.

Heavy rainfall in June again lowered salinities considerably and average salinities ranged from 1.4 ppt in San Antonio Bay (compared to 23.5 ppt in 1967) to 30.4 ppt in the Upper Laguna Madre (compared to 49.5 ppt in 1967).

Salinities gradually increased after July and by the end of August averages ranged from 3.3 ppt in San Antonio Bay to 38.6 ppt in the Lower Laguna Madre.

Steadily increasing salinities reached a peak in September with averages ranging from 10.2 ppt in the Aransas Bay area to 39.7 ppt in the Lower Laguna Madre area.

Moderate rainfall in late September reduced salinities slightly and by October salinities ranged from 11.3 ppt in the Aransas Bay area to 36.6 ppt in the Lower Laguna Madre area.

December salinity averages were only slightly higher than the previous month with averages ranging from 12.1 ppt in San Antonio Bay to 36.7 ppt in the Lower Laguna Madre.

Water Temperature

Water temperatures in general were low in all areas from January through February with the lowest temperatures occurring in January. There were several days when temperatures fell below freezing in January, but there were no reports of damage to marine life from severe weather.

A gradual increase in water temperature was noted from March through May. Average temperatures ranged from 15.1° C. in San Antonio Bay in March to 28.2° C. in the Lower Laguna Madre in May.

Water temperatures increased steadily in all bay areas after the end of May and average temperatures ranged from 27.3° C. in Aransas Bay in June to 30.3° C. in the Corpus Christi area in August. July temperatures ranged from an average of 28.7° C. in Galveston Bay to 30.2° C. in the Lower Laguna Madre.

A decreasing trend in water temperature was noted from September through December. Several cold waves moved across the coastal area, dropping temperatures suddenly for several days, but there were no reported fish kills from these sudden changes in water temperature. Water temperatures in September ranged from an average of 27.3° C. in the Matagorda Bay area to 29.8° C. in the Lower Laguna Madre area. October water temperatures ranged from 24.6° C. in Galveston Bay to 27.7° C. in the Corpus Christi area. November water temperatures ranged from 17.3° C. in the Matagorda Bay area to 20.3° C. in the Aransas Bay area.

Water temperatures in December were slightly higher than those recorded last year (as a result of a generally less severe winter) with averages ranging from 11.5° C. in the San Antonio area to 18.9° C. in the Lower Laguna Madre area.

Tide Levels

Tide levels were generally low throughout the winter which is a normal occurrence for this time of year. The lowest tides, of approximately one foot below normal, were recorded in February.

March tides were generally low with readings from 0.3 feet to 0.6 feet below normal.

April tides returned to normal and increased to above normal towards the end of the month. High tides of up to 3.2 feet above normal were experienced at most stations in May.

Tides returned to normal in early June and remained normal through August at most stations.

High tides were again experienced in September as a result of the autumnal equinox. Most stations had tides of about three feet above normal at this time.

Tides returned to normal in October and then dropped to below normal from November through December.

Turbidity

Turbidity readings were generally lower than those recorded last year, probably as a result of calmer weather.

Turbidity readings taken from September through November in 1967 (Hurricane Beulah) ranged from 32 ppm to 138 ppm, while this year the range was from 25 ppm to 49 ppm.

Siltation

Sediment stakes placed in the Upper Laguna Madre in 1966 were checked in March and in October 1968.

Out of ten siltation stakes checked in October all but two showed siltation of the bay bottom. Slight scouring ranging from 12 mm to 31 mm was evident at two stations in October 1968, while at the rest of the stations the amount of siltation ranged from 12 mm to 992 mm.

Habitat Modifications

Lower Laguna Madre - Modifications in this area included routine maintenance dredging of the Intracoastal Waterway along with redredging of parts of the Arroyo Colorado. A new oil well channel was dredged in the Laguna Atascosa Wildlife Refuge.

Upper Laguna Madre - Dredging operations in the Upper Laguna Madre covered approximately three acres of good nursery ground near Pita Island and approximately one-half acre of natural bottom near the Humble Channel area. A small amount of dredging was also done between spoil banks to improve water circulation near Intracoastal Waterway Marker 33.

Corpus Christi Bay - Habitat modifications in the Corpus Christi area included maintenance dredging of the Corpus Christi Ship Channel and the Corpus Christi Industrial Harbor along with bulkheading of a seawall along the west shore of Corpus Christi Bay adjacent to Ocean Drive.

Placement of pipelines and drilling of oil wells done mostly in the deeper parts of the bay resulted in minimal damage only.

Strong rains along with high tides in the Corpus Christi Pass area washed out several bridges and kept Packery Channel, Newport Pass and Corpus Christi Pass open.

Aransas Bay - No habitat modifications were reported from this area during the 1968 study period.

San Antonio Bay - Modifications in the area included mud shell dredging, laying of several pipelines, oil well drilling and dredging of a 1,100-foot channel in Espiritu Santo Bay.

Matagorda Bay - Modifications in this area included dredging of two channels in Tres Palacios Creek, construction of a concrete bulkhead on the Lynn Bayou Turning Basin, placement of 6,360 feet of 4-inch pipeline in Matagorda Bay and placement of a 12-inch pipeline in Carancahua Bay.

Galveston Bay - Two proposed hurricane protection plans and a permit for a cooling water intake channel for Houston Power and Light Company were reviewed in this area. Four pipeline locations in Trinity and Galveston Bays were approved. Two oil well locations in Galveston Bay and two landfill permits in the San Jacinto River area and the Texas City Dike area were approved. A permit was approved for a channel to be dredged from West Bay to the Intra-coastal Canal near Green's Lake.

River Discharge

River flow measurements were available for six major rivers entering coastal bay areas and are presented in Table 2. Measurements were available from January through September.

The Galveston Bay area which has received an historical average of 6.2 million acre-feet annually received 7,372,100 acre-feet through the Trinity River alone in 1968. The Matagorda Bay area received 1,131,790 acre-feet through the Lavaca-Navidad Rivers. The San Antonio Bay area had flooding of the Guadalupe River in late January, reaching a crest of 29.71 feet and flooding most of the San Antonio Bay system at this time. The San Antonio Bay area which has received an historical average of 1.4 million acre-feet annually received over 2.5 million acre-feet in 1968.

The lower coast received less rainfall than the upper coast and consequently there was a decrease in river discharge in this area. The Aransas Bay system, for example, received only 786,161 acre-feet through the Aransas-Mission Rivers which was 173,933 acre-feet less than in 1967. The Corpus Christi Bay system received only 642,230 acre-feet through the Nueces River which was 905,770 acre-feet less than the 1,548,000 acre-feet received in 1967 (Hurricane Beulah). The historic annual average for the Nueces River has been 610,000 acre-feet annually, but the Wesley Seale Dam eliminates most of this runoff before it reaches Nueces Bay.

Figure 1 - Hydrographic Stations in Galveston Bay System

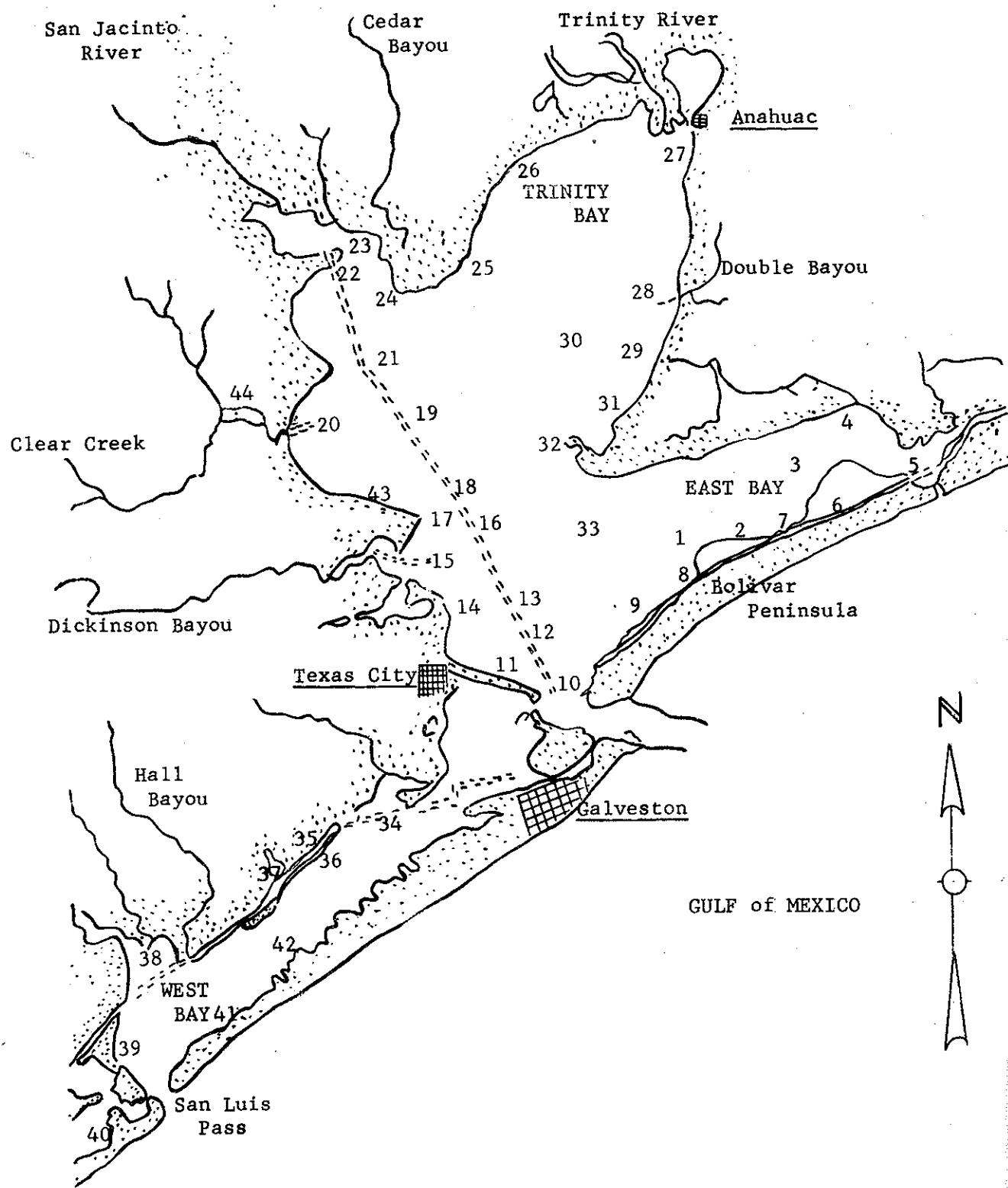


Figure 2 - Hydrographic Stations in Matagorda Bay System

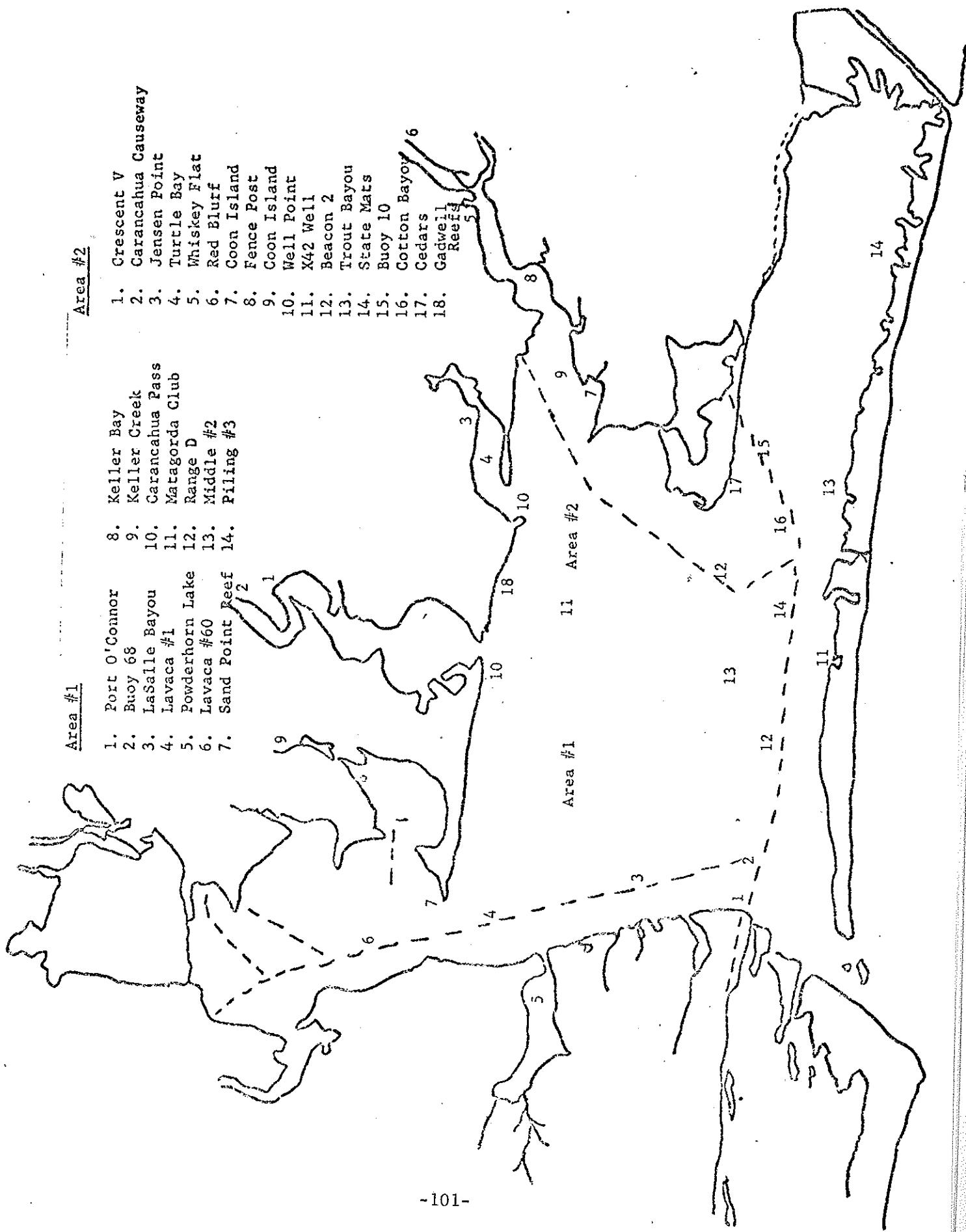


Figure 3 - Hydrographic Stations

Area #3 East Maragogda Bay

1. Dressing Point
2. Brown Cedar Cut
3. Eidelbach Flat
4. Raymond Landing
5. Gulf Cut

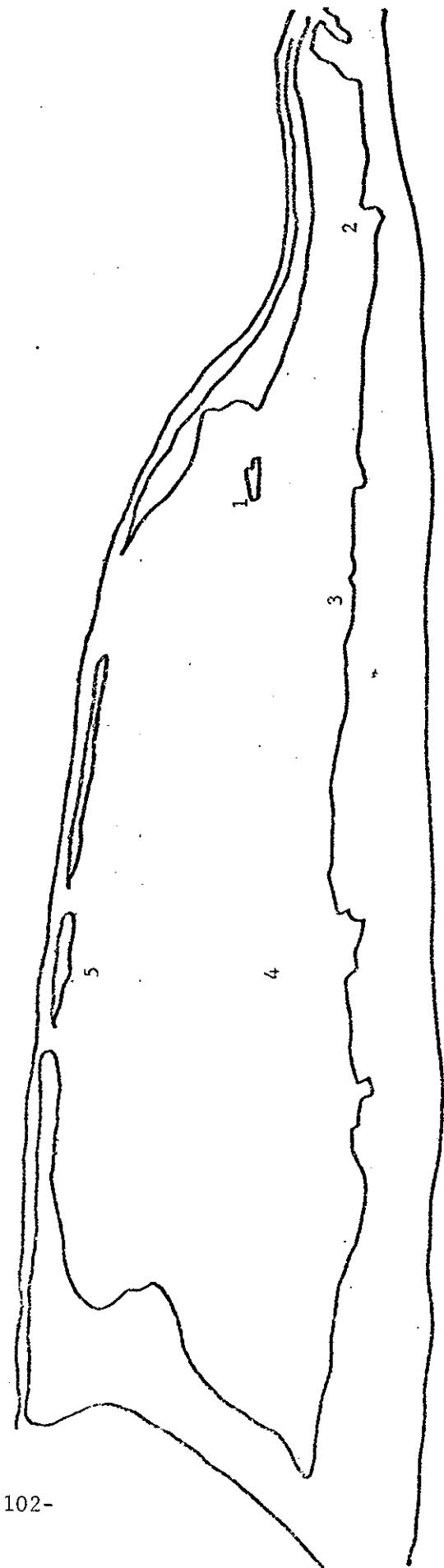


Figure 4

San Antonio Bay - Hydrographic Station

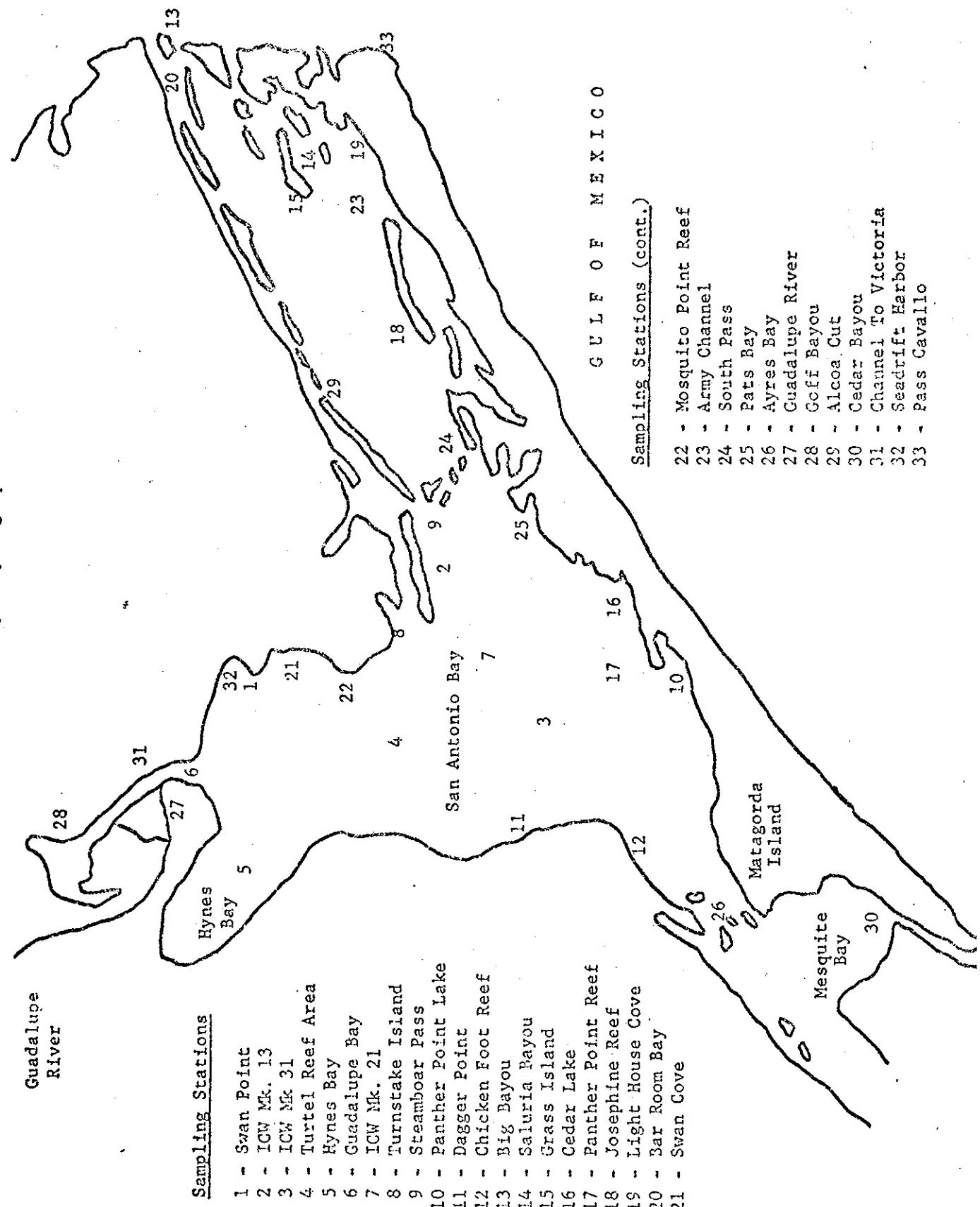
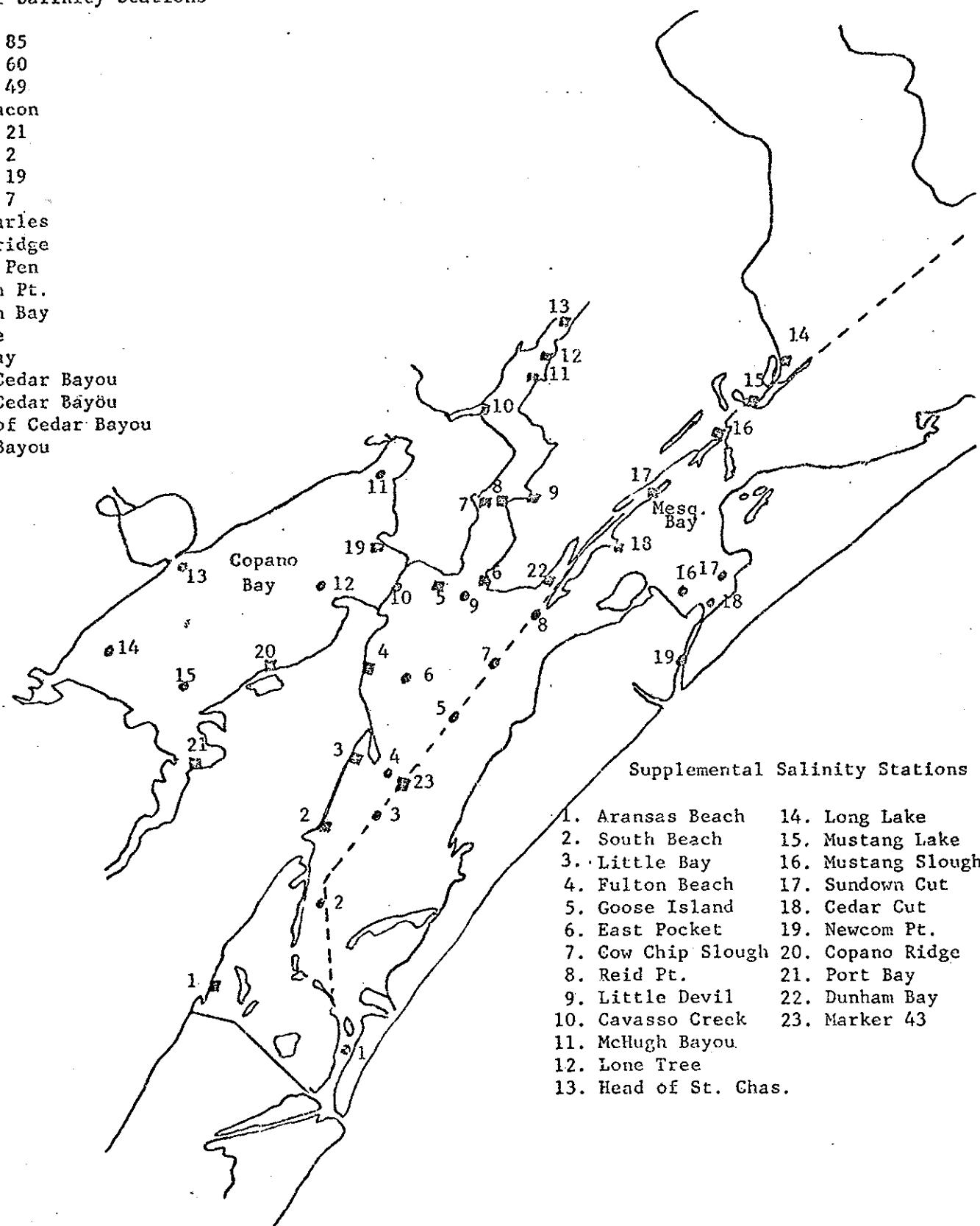


Figure 5
1966 Salinity Stations
Aransas, Copano, Mesquite and St. Charles Bays

Regular Salinity Stations

1. Marker 85
2. Marker 60
3. Marker 49
4. Red Beacon
5. Marker 21
6. Beacon 2
7. Marker 19
8. Makker 7
9. St. Charles
10. Draw Bridge
11. Turtle Pen
12. Redfish Pt.
13. Mission Bay
14. Bayside
15. Port Bay
16. S. of Cedar Bayou
17. N. of Cedar Bayou
18. Mouth of Cedar Bayou
19. Cedar Bayou



Hydrographic Stations
Corpus Christi Area

Figure 6

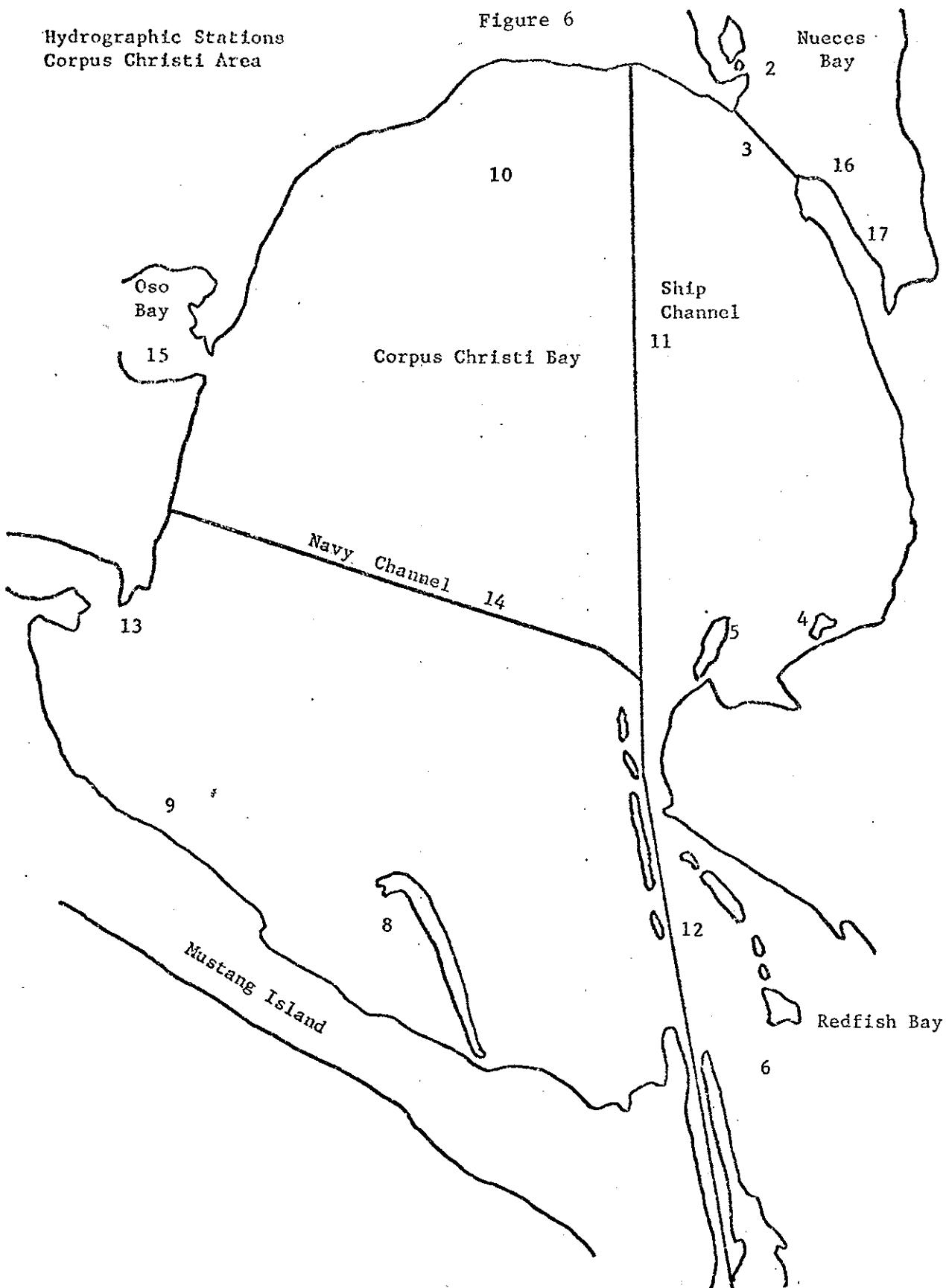


Figure 7

Map of the Upper Laguna Madre
Showing Location of Siltation and Hydrographic Stations

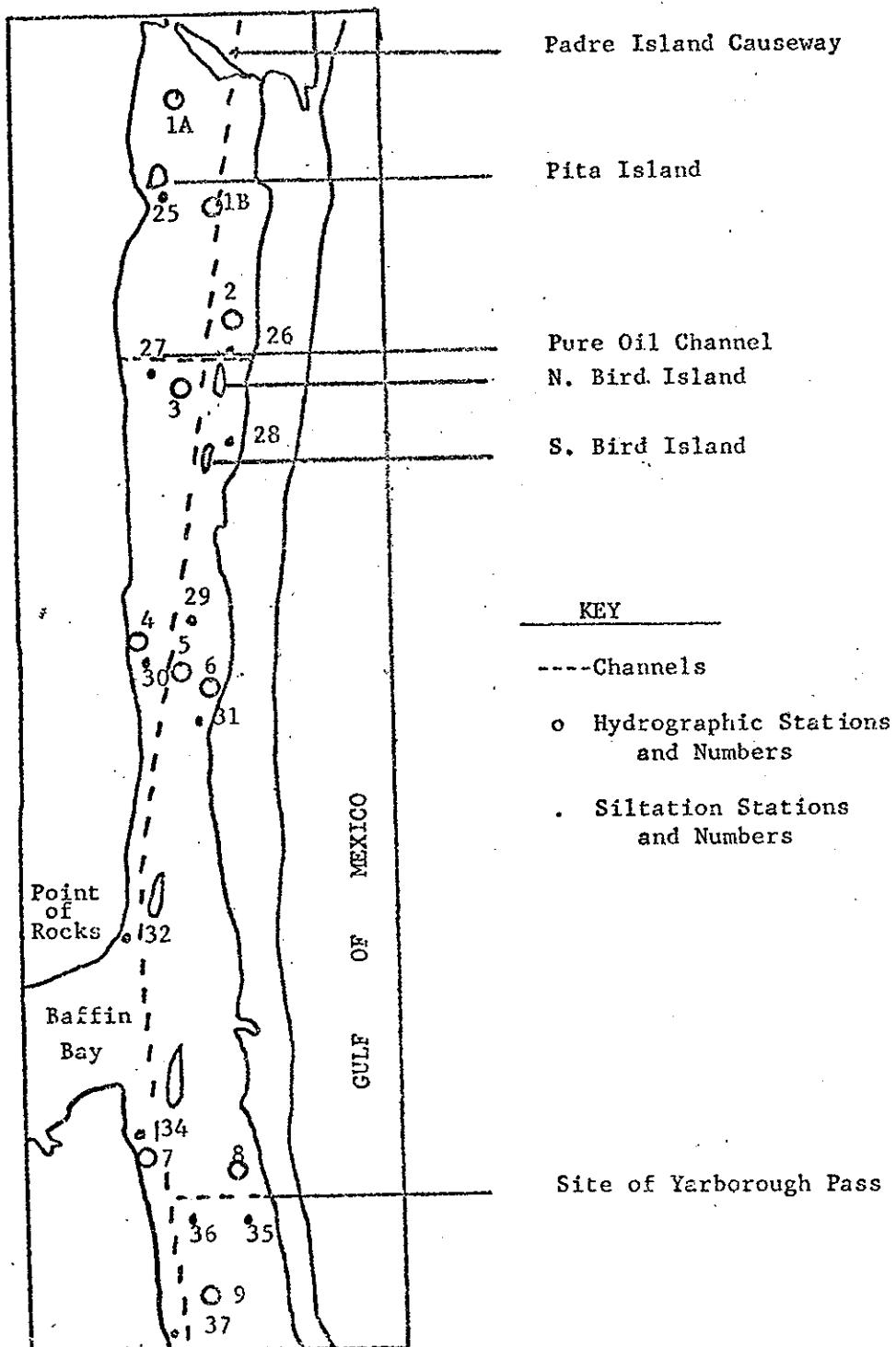


Figure 8

Location of Hydrographic Stations in the Lower Laguna Madre

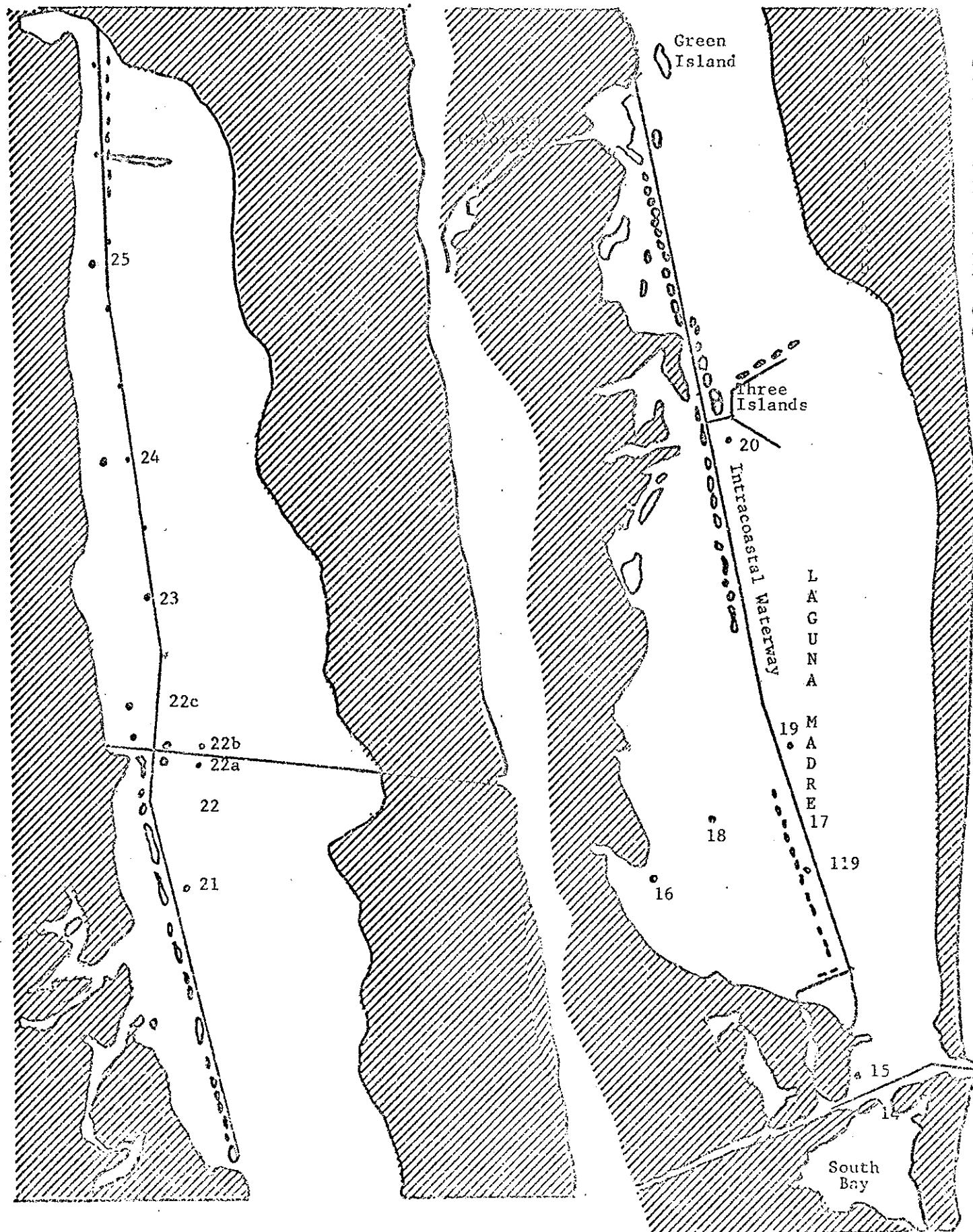


Figure 9

Salinity vs. Rainfall
(coastal average)
1968

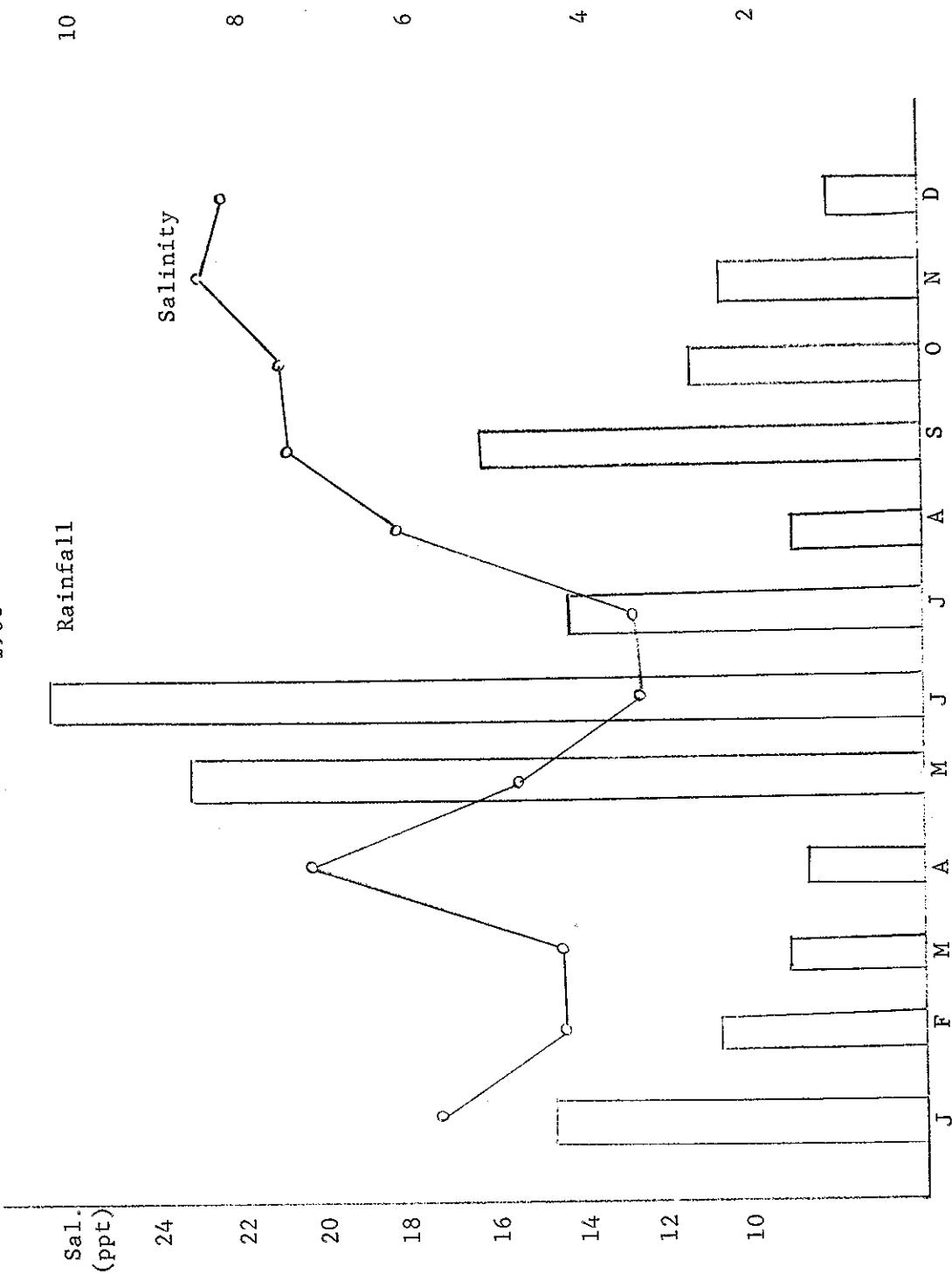


Figure 10

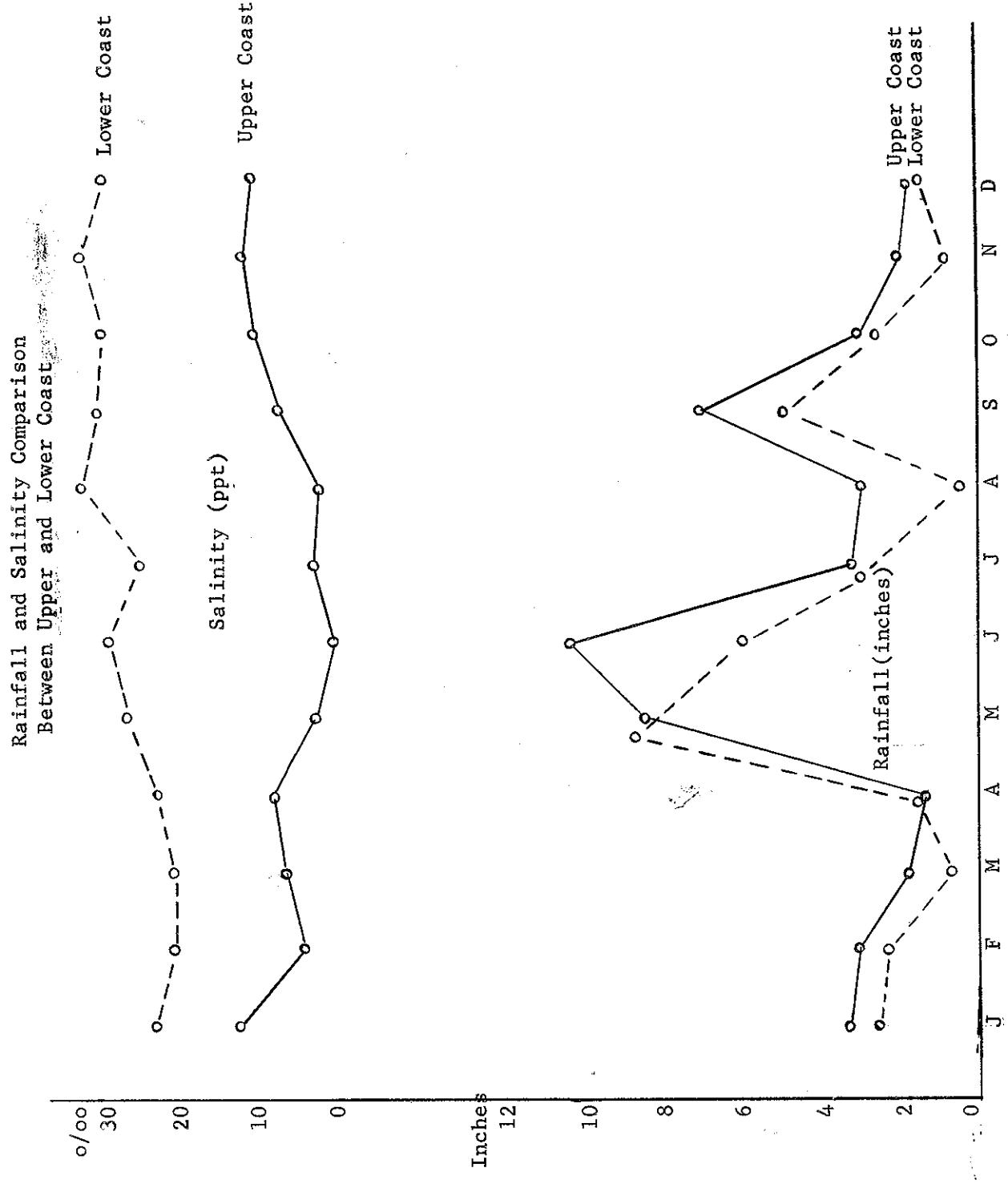


Table 1

Comparison of 1967-1968 Rainfall Totals By Area
January-December

	<u>1967</u>	<u>1968</u>	<u>Difference</u>
Galveston Bay	36.45	61.44	+ 24.99
Matagorda Bay	45.54	52.86	+ 7.32
San Antonio Bay	49.11	46.55	- 2.56
Aransas Bay	58.34	48.26	- 10.08
Corpus Christi Bay	39.78	42.25	+ 2.47
Upper Laguna Madre	36.40	37.63	+ 1.23
Lower Laguna Madre	40.06	36.00	- 4.06

Table 2

River Discharge in Acre-Feet, January-September 1968

River Systems

<u>Date</u>	<u>Trinity</u>	<u>Guadalupe</u>	<u>San Antonio</u>	<u>Mission</u>	<u>Aransas</u>	<u>Nueces</u>
January	675,500	488,470	264,900	2,950	243	220,300
February	539,700	135,100	58,330	4,080	168	39,600
March	868,900	114,900	39,780	1,378	103	27,470
April	1,696,000	173,000	40,360	918	85	6,040
May	1,627,000	306,900	128,800	68,240	10,890	270,500
June	1,316,000	387,600	50,170	16,170	1,810	32,240
July	445,400	102,600	33,110	5,680	575	31,480
August	127,800	59,130	17,980	1,165	102	6,810
September	75,800	98,120	50,790	1,360	425	7,790
Total	7,372,100	1,865,820	684,220	101,941	14,401	642,230

Table 3

Average of All Station by Month for Each Area. 1968

	<u>January</u>			
	<u>Salinity</u>	<u>W. Temp.</u>	<u>Turbidity</u>	<u>Rainfall</u>
Galveston	15.6	12.3	ND	8.02
Matagorda	16.6	12.5	ND	8.27
San Antonio	13.6	9.9	28.8	3.56
Aransas	11.2	20.2	31.7	3.57
Corpus Christi	20.4	12.8	34.2	2.11
Upper Laguna Madre	24.6	9.4	65.0	2.39
Lower Laguna Madre	21.7	14.1	31.8	3.01
	<u>February</u>			
Galveston	11.1	11.9	ND	1.99
Matagorda	12.4	14.1	ND	2.93
San Antonio	5.4	13.4	117.1	3.08
Aransas	8.3	12.4	95.6	2.58
Corpus Christi	19.5	16.4	26.2	2.42
Upper Laguna Madre	22.7	14.8	70.0	2.27
Lower Laguna Madre	22.0	17.5	48.0	1.65
	<u>March</u>			
Galveston	14.4	17.6	ND	2.92
Matagorda	8.5	20.0	ND	2.20
San Antonio	8.9	15.1	162.8	1.94
Aransas	11.7	17.6	98.9	1.74
Corpus Christi	21.9	16.3	26.5	0.90
Upper Laguna Madre	22.6	18.7	51.0	0.93
Lower Laguna Madre	ND	ND	ND	1.07
	<u>April</u>			
Galveston	14.6	22.3	ND	3.02
Matagorda	17.9	23.0	ND	1.52
San Antonio	9.5	21.9	95.7	1.26
Aransas	17.5	23.6	96.6	0.98
Corpus Christi	26.6	25.1	63.3	0.82
Upper Laguna Madre	24.9	21.4	88.0	1.33
Lower Laguna Madre	31.4	22.7	57.9	0.96

Table 3 continued

	<u>Salinity</u>	<u>W. Temp.</u>	<u>Turbidity</u>	<u>Rainfall</u>
Galveston	13.8	25.3	ND	13.24
Matagorda	8.3	26.9	130.2	9.51
San Antonio	4.9	23.2	163.4	8.63
Aransas	9.7	25.2	76.5	5.90
Corpus Christi	13.8	28.1	57.1	9.38
Upper Laguna Madre	28.0	28.2	54.0	9.78
Lower Laguna Madre	31.6	28.2	79.2	4.28
<u>May</u>				
Galveston	5.5	28.2	ND	11.18
Matagorda	6.9	28.5	91	12.64
San Antonio	1.4	27.9	250	10.48
Aransas	5.5	27.3	56	13.39
Corpus Christi	13.9	29.8	41	8.36
Upper Laguna Madre	30.4	29.3	25	6.12
Lower Laguna Madre	27.0	29.1	105	10.25
<u>June</u>				
Galveston	7.5	28.7	ND	6.49
Matagorda	3.9	30.0	92	5.07
San Antonio	1.4	29.0	135	3.71
Aransas	4.9	29.9	63	3.70
Corpus Christi	16.1	29.8	46	5.43
Upper Laguna Madre	26.6	29.7	25	3.62
Lower Laguna Madre	30.3	30.2	38	1.59
<u>July</u>				
Galveston	15.2	28.7	ND	2.90
Matagorda	9.9	30.1	88	1.07
San Antonio	3.3	29.3	118	3.01
Aransas	7.2	29.6	37	1.67
Corpus Christi	22.5	30.3	45	0.62
Upper Laguna Madre	34.6	30.0	47	0.56
Lower Laguna Madre	38.6	29.6	25	1.93
<u>August</u>				

Table 3 continued

	<u>September</u>			
	<u>Salinity</u>	<u>W. Temp.</u>	<u>Turbidity</u>	<u>Rainfall</u>
Galveston	16.4	27.4	ND	3.87
Matagorda	13.2	27.3	25.0	3.08
San Antonio	9.5	25.7	66.2	4.48
Aransas	10.2	29.5	45.8	7.57
Corpus Christi	25.6	29.5	41.0	8.35
Upper Laguna Madre	32.4	27.8	43.0	5.29
Lower Laguna Madre	39.7	29.8	29.2	3.63

	<u>October</u>			
	<u>Salinity</u>	<u>W. Temp.</u>	<u>Turbidity</u>	<u>Rainfall</u>
Galveston	15.6	24.6	ND	3.91
Matagorda	14.1	26.0	41.3	2.75
San Antonio	11.6	26.4	32.3	2.80
Aransas	11.3	25.6	41.6	3.02
Corpus Christi	25.8	27.7	34.0	2.03
Upper Laguna Madre	32.4	25.5	40.0	2.83
Lower Laguna Madre	36.6	25.8	28.5	2.61

	<u>November</u>			
	<u>Salinity</u>	<u>W. Temp.</u>	<u>Turbidity</u>	<u>Rainfall</u>
Galveston	21.9	17.9	ND	2.71
Matagorda	16.9	17.3	60.6	3.04
San Antonio	13.2	20.0	72.3	1.85
Aransas	10.6	20.3	28.2	2.01
Corpus Christi	27.6	19.3	33.0	1.70
Upper Laguna Madre	34.0	20.1	49.0	0.96
Lower Laguna Madre	38.1	20.2	42.1	4.78

	<u>December</u>			
	<u>Salinity</u>	<u>W. Temp.</u>	<u>Turbidity</u>	<u>Rainfall</u>
Galveston	18.6	14.2	ND	1.19
Matagorda	18.2	14.5	34.6	0.78
San Antonio	12.2	13.5	40.3	1.75
Aransas	13.1	16.4	306.2	2.13
Corpus Christi	28.4	18.1	40.6	0.13
Upper Laguna Madre	31.5	15.5	52.0	1.55
Lower Laguna Madre	36.7	18.8	35.0	0.24

Table 4

Galveston Bay System

<u>Station</u>	<u>January</u>	<u>February</u>	<u>March</u>			
	<u>Salinity</u>	<u>W. Temp.</u>	<u>Salinity</u>	<u>W. Temp.</u>	<u>Salinity</u>	<u>W. Temp.</u>
1	13.5	15.5	23.3	10.0	ND	21.0
2	14.4	15.5	ND	ND	ND	21.0
3	15.5	15.5	ND	ND	ND	21.0
4	12.2	15.5	ND	ND	ND	21.0
5	11.1	15.5	ND	ND	ND	21.0
6	13.3	15.5	ND	ND	ND	21.0
7	12.2	15.5	ND	ND	ND	21.0
8	16.6	15.5	ND	ND	ND	21.0
9	19.8	13.5	ND	ND	ND	21.0
10	26.6	13.5	ND	ND	ND	ND
11	25.5	13.5	ND	ND	ND	ND
12	26.1	11.0	12.8	10.0	18.9	19.0
13	23.3	10.0	13.3	10.0	16.7	19.0
14	17.7	ND	ND	ND	ND	ND
15	16.6	13.5	ND	ND	ND	ND
16	20.5	10.0	15.5	10.0	15.5	19.0
17	18.9	10.0	15.0	10.0	16.7	19.0
18	18.9	10.0	13.3	10.0	15.5	19.0
19	ND	9.0	ND	9.0	13.3	20.0
✓20	17.8	10.0	13.9	10.0	15.5	19.0
21	22.2	9.0	10.0	10.0	8.9	20.0
22	18.9	9.0	17.2	10.0	12.2	20.0
23	12.2	9.0	15.5	10.0	8.9	20.0
24	3.1	9.0	3.9	10.0	2.2	20.0
25	6.1	9.0	2.8	9.5	0.0	20.0
26	1.1	11.0	0.0	9.5	0.0	20.0
27	ND	11.0	0.0	9.5	1.1	20.0
28	8.3	11.0	0.6	9.5	4.4	20.0
29	11.1	11.0	2.8	9.5	7.8	20.0
30	10.5	11.0	5.6	9.5	8.9	20.0
31	12.2	11.0	5.6	9.5	7.8	20.0
32	13.3	11.0	3.9	9.5	10.0	20.0
33	17.8	11.0	11.1	9.5	13.3	20.0
34	ND	15.0	ND	16.0	24.4	16.0
35	17.8	15.0	20.5	16.0	22.2	16.0
36	17.8	ND	23.3	ND	22.2	16.0
37	ND	13.5	ND	ND	20.5	16.0
38	ND	14.0	ND	16.0	14.4	18.0
39	13.3	15.0	ND	14.0	26.1	19.0
40	ND	ND	ND	ND	30.0	22.0
41	ND	15.0	ND	ND	30.0	24.5
42	18.9	15.0	ND	14.0	25.5	18.0
43	ND	ND	ND	ND	17.7	16.0
44	ND	ND	ND	ND	14.4	13.0

Table 4 continued

<u>Station</u>	<u>April</u>		<u>May</u>		<u>June</u>	
	<u>Salinity</u>	<u>W. Temp.</u>	<u>Salinity</u>	<u>W. Temp.</u>	<u>Salinity</u>	<u>W. Temp.</u>
1	19.9	22.0	11.1	26.0	6.1	29.0
2	18.3	21.0	8.8	26.0	6.6	29.0
3	18.8	22.0	7.7	26.0	3.9	29.5
4	12.2	22.0	9.9	26.0	0.6	29.0
5	ND	21.0	15.5	25.0	7.2	29.5
6	14.9	22.0	15.5	25.0	5.6	29.5
7	15.5	22.0	ND	25.0	6.1	29.5
8	19.4	21.5	12.2	25.0	6.7	28.5
9	14.9	22.0	11.1	25.0	8.3	28.0
10	16.7	23.0	19.9	25.0	18.9	28.5
11	9.4	23.0	18.8	25.0	5.6	28.0
12	21.1	23.5	ND	ND	5.6	27.0
13	8.9	23.0	ND	ND	3.3	27.0
14	8.9	23.0	8.8	25.0	3.3	27.5
15	9.9	23.0	11.6	25.0	2.2	29.5
16	ND	ND	9.9	25.0	5.0	27.0
17	ND	ND	8.3	24.5	4.4	27.0
18	ND	ND	8.3	25.0	4.4	27.0
19	ND	ND	ND	ND	4.4	28.0
20	ND	ND	ND	ND	5.6	27.0
21	6.7	23.0	ND	ND	3.3	28.0
22	7.8	23.0	ND	ND	3.3	28.0
23	6.1	22.5	ND	ND	2.2	28.0
24	1.1	23.0	ND	ND	1.1	28.0
25	0.0	23.0	ND	ND	.6	28.0
26	0.0	22.5	ND	ND	.6	28.0
27	0.0	22.0	ND	ND	0.0	28.0
28	0.0	23.0	ND	ND	.6	28.0
29	0.0	23.0	ND	ND	.6	28.0
30	0.0	23.0	ND	ND	0.0	28.0
31	0.0	23.0	ND	ND	.6	28.0
32	0.0	23.0	ND	ND	.6	28.0
33	2.8	23.0	ND	ND	1.1	27.5
34	17.2	23.0	12.7	25.0	6.7	26.0
35	16.7	23.0	11.1	25.0	12.8	27.0
36	16.7	23.0	11.6	26.0	ND	ND
37	17.2	24.0	11.1	26.0	9.4	27.0
38	5.5	24.5	12.2	25.0	2.2	29.5
39	20.5	24.5	25.5	24.0	14.4	26.0
40	22.2	26.0	26.1	26.0	8.9	28.0
41	23.8	25.0	22.2	26.0	13.3	27.0
42	17.8	25.5	20.5	26.0	21.1	27.0
43	16.7	19.8	7.8	26.0	6.7	31.0
44	12.2	20.0	6.7	26.0	4.4	31.0

Table 4 continued

<u>Station</u>	<u>July</u>		<u>August</u>		<u>September</u>	
	<u>Salinity</u>	<u>W. Temp.</u>	<u>Salinity</u>	<u>W. Temp.</u>	<u>Salinity</u>	<u>W. Temp.</u>
1	4.4	28.0	11.1	26.0	14.4	28
2	3.3	28.0	8.9	26.0	11.1	27
3	3.3	29.0	8.9	26.5	11.1	28
4	5.0	29.0	8.9	26.0	9.4	27
5	4.4	29.0	6.7	26.0	15.6	27
6	8.3	29.0	16.1	28.0	16.7	28
7	11.1	29.0	18.9	28.0	19.4	28
8	11.1	29.0	18.9	28.0	18.9	28
9	16.6	27.0	13.9	29.0	14.9	28
10	18.8	27.0	23.3	29.0	23.9	28
11	25.5	28.0	17.8	28.0	23.3	29
12	5.5	27.0	27.6	30.0	23.3	27
13	4.4	27.0	25.5	30.0	19.9	27
14	15.5	28.0	14.4	28.0	19.9	28
15	8.8	28.0	17.2	28.0	17.8	29
16	23.9	27.0	19.9	30.0	17.8	27
17	17.8	27.0	15.5	30.0	16.7	26
18	6.7	27.0	15.5	30.0	17.2	26
19	4.4	28.0	12.2	28.0	11.1	27
20	2.2	27.0	11.1	28.0	12.8	27
21	3.3	28.0	9.9	29.0	16.7	27
22	6.7	28.0	7.2	29.0	14.9	27
23	3.3	28.0	6.6	29.0	12.2	26
24	1.1	28.0	6.6	29.0	11.1	26
25	0.0	28.0	7.7	29.0	11.7	25
26	0.0	27.0	3.3	29.0	9.4	26
27	0.0	27.0	1.7	29.0	8.9	26
28	0.0	27.0	1.1	29.0	10.5	25
29	0.0	27.0	3.3	29.0	9.9	25
30	0.0	28.0	6.6	30.0	8.3	25
31	0.0	28.0	6.6	30.0	11.1	26
32	0.0	28.0	12.2	30.0	9.9	26
33	4.4	28.0	15.5	30.0	14.4	27
34	6.6	31.0	27.8	29.0	19.9	25
35	6.7	32.0	26.7	30.0	21.1	25
36	6.7	31.0	24.9	30.0	21.1	25
37	6.1	32.0	24.4	30.0	22.2	26
38	3.3	29.0	16.1	31.0	13.9	28
39	18.9	30.0	31.6	31.0	25.5	32
40	10.0	30.0	26.7	29.0	30.5	34
41	17.8	35.0	34.4	35.0	22.2	38
42	17.8	32.0	27.8	30.0	24.4	32
43	9.9	31.0	11.6	29.0	6.7	26
44	0.0	26.0	6.2	31.0	11.7	29

Table 4 continued

Station	October		November		December	
	Salinity	W. Temp.	Salinity	W. Temp.	Salinity	W. Temp.
1	14.4	21	21.1	19	16.7	13.0
2	12.2	21	18.9	19	14.4	13.0
3	11.7	21	18.3	19	13.3	13.0
4	9.9	21	13.9	19	7.2	14.0
5	21.5	21	24.4	19	12.2	14.0
6	18.9	21	21.7	19	12.2	14.0
7	ND	22	21.1	19	18.3	14.0
8	14.9	22	25.5	19	18.3	14.0
9	21.1	22	27.9	18	17.8	14.0
10	28.9	23	31.6	18	20.0	14.0
11	22.2	23	29.9	18	22.2	13.0
12	16.7	24	31.1	ND	24.4	15.0
13	16.7	24	28.3	ND	21.6	15.0
14	19.9	23	24.9	18	20.0	13.0
15	17.8	23	22.2	18	ND	ND
16	15.5	24	26.1	ND	20.5	15.0
17	14.4	24	23.3	ND	19.4	15.0
18	15.5	24	24.4	ND	18.9	13.0
19	15.5	25	21.7	ND	18.9	13.0
20	13.3	25	19.9	ND	18.9	13.0
21	14.4	25	21.1	ND	17.8	13.0
22	13.3	25	21.1	ND	14.4	13.0
23	13.3	25	19.4	ND	15.5	13.0
24	12.2	25	17.8	ND	13.9	13.0
25	11.1	25	15.6	ND	14.4	13.0
26	9.4	25	11.1	ND	15.5	13.0
27	8.3	25	12.2	ND	12.2	13.0
28	10.0	25	19.9	ND	10.0	13.0
29	12.2	25	15.6	ND	12.2	13.0
30	12.2	25	18.9	ND	15.0	13.0
31	12.2	25	15.6	ND	15.5	13.0
32	11.6	25	17.2	ND	16.1	13.0
33	13.3	25	24.4	ND	17.8	13.0
34	17.8	24	24.4	15	25.0	13.0
35	17.8	24	22.8	16	23.3	12.0
36	15.5	24	21.6	15	22.2	13.0
37	19.9	23.5	20.0	16	24.4	14.0
38	9.9	30	21.1	20	14.4	17.0
39	19.9	28	28.9	17.5	31.6	16.0
40	24.9	28	34.4	18	30.0	20.0
41	25.5	29	29.9	17.5	31.1	17.5
42	21.1	28	22.2	15	24.9	15.0
43	13.3	29	20.0	18.5	19.0	13.0
44	8.9	29	15.5	17.5	18.9	14.0

Table 5

Matagorda Bay System

<u>Station</u>	<u>January</u>		<u>February</u>	
	<u>Salinity</u>	<u>W. Temp.</u>	<u>Salinity</u>	<u>W. Temp.</u>
Carancahua Pass	ND	ND	ND	ND
Cotton Bayou	18.9	13.5	14.4	12.5
Wells Point	22.9	8.0	16.6	14.0
XA2	23.3	8.0	16.7	13.0
	17.8	14.0	16.6	14.0
Lavaca #60	20.2	7.5	6.7	12.5
	6.0	14.0	12.8	13.0
Lavaca #47	22.2	8.0	11.1	12.5
	7.8	14.0	16.6	14.0
La Salle	23.9	8.0	11.7	13.0
	21.7	14.0	17.2	13.0
Buoy #68	25.5	8.0	16.1	14.0
	23.3	13.5	17.2	15.0
Range D	25.5	9.0	19.4	14.0
	21.7	14.0	19.9	14.0
Middle 2	24.4	8.0	17.2	14.0
	20.5	14.0	17.8	16.0
Piling #3	22.8	9.0	17.2	13.0
	20.5	14.0	13.3	16.0
Beacon #2	25.5	9.0	17.2	13.0
	14.4	14.5	17.8	16.0
Fence Post	18.9	8.5	11.7	13.0
Powderhorn Lake	22.8	14.5	13.3	10.3
	0.0	12.0	ND	ND
Keller Creek	18.9	15.0	0.0	12.0
	0.0	12.0	ND	ND
Carancahua Causeway	15.5	16.0	1.1	15.0
	0.0	15.5	ND	ND
Red Bluff	0.0	19.5	ND	ND
	14.4	16.5	ND	ND
Lavaca Causeway	ND	ND	ND	ND
Port Alto	13.3	21.0	14.4	18.0
Crescent V	2.2	21.0	5.0	17.0
Grassy Point	4.4	23.0	15.5	18.0
Cash Creek	5.6	22.0	12.2	16.0

Table 5 continued

Station	<u>March</u>			<u>April</u>			<u>May</u>		
	<u>Sal.</u>	<u>W.T.</u>	<u>Turb.</u>	<u>Sal.</u>	<u>W.T.</u>	<u>Turb.</u>	<u>Sal.</u>	<u>W.T.</u>	<u>Turb.</u>
Carancahua Pass	23.9	20.0	ND	43.3	23.0	ND	8.8	24.0	60
	ND	ND	ND	ND	ND	ND	6.7	26.0	80
	ND	ND	ND	17.7	22.0	45	6.7	27.0	48
Cotton Bayou	26.6	19.0	ND	22.2	21.0	ND	18.8	24.0	37
	ND	ND	ND	23.3	24.0	ND	16.7	28.0	34
	ND	ND	ND	17.7	21.0	29	13.9	28.0	36
	ND	ND	ND	ND	ND	ND	21.0	26.0	25
Wells Point	19.9	16.0	ND	19.9	23.0	ND	3.3	27.0	56
	ND	ND	ND	ND	ND	ND	7.7	26.0	31
XA2	19.9	16.0	ND	22.2	23.0	ND	11.1	29.0	26
	ND	ND	ND	ND	ND	ND	8.3	27.0	41
Lavaca #60	21.1	16.0	ND	23.3	24.0	ND	0.0	26.0	200
	ND	ND	ND	ND	ND	ND	5.0	27.0	64
Lavaca #47	22.2	16.0	ND	24.4	24.0	ND	2.2	27.0	49
	ND	ND	ND	ND	ND	ND	6.6	27.0	63
La Salle	24.4	15.0	ND	25.5	24.0	ND	14.4	27.0	29
	ND	ND	ND	ND	ND	ND	13.8	27.0	74
Buoy #68	27.8	17.0	ND	26.6	23.0	ND	22.2	27.0	37
	ND	ND	ND	ND	ND	ND	22.2	27.0	25
Range D	27.8	16.0	ND	24.4	23.0	ND	22.2	28.0	25
	ND	ND	ND	ND	ND	ND	20.5	28.0	25
Middle #2	25.5	16.0	ND	24.4	23.0	ND	18.8	27.0	27
	ND	ND	ND	ND	ND	ND	13.3	28.0	25
Piling #3	25.5	15.0	ND	23.3	22.0	ND	12.8	26.0	33
	ND	ND	ND	ND	ND	ND	11.6	28.0	26
Beacon #2	21.1	16.0	ND	27.7	23.0	ND	16.6	27.0	37
	ND	ND	ND	ND	ND	ND	9.4	29.0	25
Cedars	14.9	21.0	ND	19.9	21.0	ND	16.6	25.0	250
	ND	ND	ND	12.2	24.0	ND	2.2	26.0	125
Coon Island	ND	ND	ND	17.7	21.0	54	10.0	29.0	140
	21.7	21.0	ND	17.8	21.0	ND	16.6	25.0	25
	ND	ND	ND	19.9	24.0	ND	5.6	27.0	54
Fence Post	ND	ND	ND	16.6	22.0	29	7.2	29.0	60
	17.3	17.0	ND	17.8	24.0	ND	0.0	28.0	400
Powderhorn Lake	ND	ND	ND	ND	ND	ND	5.5	29.0	54
	18.9	22.0	ND	24.5	22.0	ND	24.4	25.0	53
Keller Creek	ND	ND	ND	25.5	25.0	ND	22.0	26.0	200
	ND	ND	ND	21.0	19.0	43	10.0	27.0	170
	17.2	24	ND	25.5	25.0	43	10.0	27.0	170
	9.4	22.0	ND	17.8	20.0	ND	6.6	26.0	48
	12.2	20.0	ND	1.1	22.0	ND	12.2	25.0	53
	ND	ND	ND	2.2	27.0	ND	0.0	26.0	90
	ND	ND	ND	6.6	21.0	53	0.0	30.0	115
	ND	ND	ND	ND	ND	ND	0.0	27.0	240

Table 5 continued

<u>Station</u>	<u>March</u>			<u>April</u>			<u>May</u>		
	<u>Sal.</u>	<u>W.T.</u>	<u>Turb.</u>	<u>Sal.</u>	<u>W.T.</u>	<u>Turb.</u>	<u>Sal.</u>	<u>W.T.</u>	<u>Turb.</u>
Carancahua Causeway	13.9	27.0	ND	7.2	22.0	ND	11.1	28.0	53
	10.0	20.0	ND	6.7	22.0	ND	7.7	25.0	57
	ND	ND	ND	5.7	26.0	ND	0.0	26.0	250
	ND	ND	ND	7.7	23.0	35	0.0	28.0	180
Red Bluff	8.3	23.0	ND	8.9	20.0	ND	3.3	27.0	120
	3.9	21.0	ND	ND	ND	ND	0.6	24.0	135
	ND	ND	ND	0.0	27.0	ND	ND	ND	ND
	ND	ND	ND	0.0	22.0	110	0.0	27.0	250
Lavaca Causeway	ND	ND	ND	ND	ND	ND	ND	ND	ND
Port Alto	22.2	27.0	ND	19.9	27.0	ND	0.0	27.0	280
Crescent V	15.5	26.0	ND	14.4	22.0	ND	0.0	27.0	100
Grassy Point	16.6	24.0	ND	13.3	26.0	50	0.0	27.0	190
Cash Creek	9.9	25.0	ND	16.7	25.0	ND	0.0	29.0	370
	<u>June</u>			<u>July</u>			<u>August</u>		
Carancahua Pass	7.7	27.0	45	6.0	29.0	110	7.2	30.0	47
	8.9	28.5	25	5.0	29.0	94	13.3	29.5	25
Cotton Bayou	16.6	27.0	37	9.9	28.0	40	15.5	30.0	25
	12.2	28.5	25	11.7	29.5	25	20	30.0	25
Wells Point	9.9	28.5	200	5.0	29.0	83	13.3	29.0	30
	ND	ND	ND	5.0	30.0	56	14.4	28.5	25
XA2	11.1	28.0	150	10.6	29.0	53	15.5	30.0	48
	ND	ND	ND	7.7	30.0	36	16.6	29.0	25
Lavaca #60	4.4	29.0	100	0.6	29.0	34	11.7	30.0	44
	ND	ND	ND	2.2	30.0	58	14.4	29.0	37
Lavaca #47	7.8	28.5	72	2.8	29.0	45	13.9	30.0	34
	ND	ND	ND	6.6	30.0	31	14.4	29.0	25
La Salle	11.1	29.0	4.1	11.1	29.0	34	18.3	29.5	25
	ND	ND	ND	8.8	30.0	25	19.9	29.5	25
Buoy #68	24.9	29.0	33	7.8	28.5	50	29.0	30.0	25
	ND	ND	ND	11.6	30.5	35	23.8	29.5	25
Range D	24.9	28.0	39	30.5	29.5	25	30.5	30.0	25
	ND	ND	ND	18.8	30.5	25	24.4	29.5	29
Middle #2	13.9	29.0	33	9.4	29.0	59	21.1	30.0	25
	ND	ND	ND	12.2	31.0	25	21.0	30.0	26
Piling #3	11.1	29.0	35	9.4	29.0	25	19.4	30.0	25
	ND	ND	ND	11.1	31.5	25	23.3	30.0	25
Beacon #2	11.7	29.5	65	7.2	30.0	64	17.7	30.5	25
	ND	ND	ND	7.7	31.5	25	16.6	30.0	25
Mad Island	5.0	28.0	130	1.1	29.0	160	11.1	29.0	112
	12.2	28.5	25	10.0	30	137	22.2	29.5	110
Cedars	4.4	28.0	150	2.2	29.0	90	12.7	30.0	63
	10.0	28.0	29	5.0	30.0	170	16.7	29.5	95
Coon Island	4.4	28.0	95	5.5	29.5	45	4.4	31.0	51
	2.2	28.5	52	4.4	30.0	46	11.1	29.5	54
Fence Post	2.2	28.5	134	0.0	29.0	200	5.6	31.0	102
	ND	ND	ND	.5	31.5	50	7.3	29.5	150

Table 5 continued

<u>Station</u>	<u>June</u>			<u>July</u>			<u>August</u>		
	<u>Sal.</u>	<u>W.T.</u>	<u>Turb.</u>	<u>Sal.</u>	<u>W.T.</u>	<u>Turb.</u>	<u>Sal.</u>	<u>W.T.</u>	<u>Turb.</u>
Powderhorn Lake	4.4	30.0	125	0.0	32	360	1.1	29.5	86.5
	10.0	27.0	ND	0.0	29.5	90	1.1	29.0	180
Keller Creek	1.1	30.0	100	0.0	32.0	148	0	30.0	103
	0.0	28.0	ND	0.0	30.5	150	0	29.0	95
Carancahua Causeway	0.6	31.0	135	0.0	32.0	78	0	30.0	166
	0.0	28.0	ND	0.0	31.0	85	0	29.0	200
Red Bluff	0.0	31.0	135	0.0	31.0	100	0.0	31.5	142
	0.0	29.0	ND	0.0	30.0	85	0.0	30.5	67
Port O'Connor	12.2	30.5	26	8.9	29.5	45	16.1	30.0	33
Lavaca Causeway	2.2	30.0	147	0.0	31.0	140	2.2	35.0	215
Port Alto	1.6	33.0	282	0.0	34.0	55	2.8	35.0	85
Crescent V	2.2	29.0	33	0.0	34.0	165	ND	ND	ND
Grassy Point	0.5	29.0	47	0.0	29.0	120	ND	ND	ND
Cash Creek	0.0	30.5	132	0.0	30.0	117	0.0	30.5	190
Cemetery	0.0	31.0	66	0.0	30.0	97	0.0	30.0	141
	<u>September</u>			<u>October</u>			<u>November</u>		
Carancahua Pass	21.1	29.0	50	18.8	26.0	25	17.8	20.6	25
	16.1	24.5	25	15.5	27.5	25	22.2	15.2	25
Cotton Bayou	27.8	20.0	25	22.2	26.5	25	21.1	21.5	25
	21.1	26.5	25	19.9	27.0	25	23.3	15.5	25
Wells Point	17.7	28.0	25	17.2	27.0	25	21.1	12.5	25
	17.8	25.5	25	18.8	22.5	25	21.1	14.5	25
XA2	18.8	28.0	25	18.3	27.0	25	21.1	13.5	25
	18.9	25.5	25	18.8	22.5	25	23.3	15.0	25
Lavaca #60	11.1	26.0	25	16.6	27.5	25	17.7	13.0	25
	13.9	25.5	25	16.6	23.0	25	18.8	15.0	25
Lavaca #47	14.4	27.0	25	16.6	27.3	25	18.8	13.0	36
	16.1	25.5	25	17.7	23.5	25	22.2	15.0	25
La Salle	15.5	27.5	25	22.7	27.0	25	19.9	14.0	50
	23.3	25.8	25	19.9	23.5	25	22.2	16.0	25
Buoy #68	17.7	27.0	25	23.8	27.2	25	25.5	13.5	35
	26.6	26.7	25	22.2	23.5	25	24.4	16.0	25
Range D	23.3	27.5	25	23.8	26.5	25	22.2	14.5	34
	26.6	26.7	25	22.2	23.5	25	23.3	16.0	25
Middle #2	22.2	28.0	25	22.2	26.3	33	21.1	14.5	41
	22.8	26.3	25	21.0	23.8	25	23.3	17.0	25
Piling #3	21.0	28.0	25	19.8	26.5	25	21.1	14.5	30
	22.8	26.9	25	22.2	23.5	25	23.3	16.5	25
Beacon #2	16.0	29.0	25	18.8	26.5	25	21.1	14.0	25
	17.8	27.0	25	19.9	23.5	25	22.2	16.5	25
Mad Island	21.2	29.0	40	18.8	25.5	33	18.9	17.0	25
	17.7	25.8	70	17.2	27.5	25	22.2	15.0	25
Cedars	22.2	29.0	80	18.8	26.5	60	18.3	21.3	25
	19.9	26.7	43	17.2	28.0	38	22.2	15.3	25
Coon Island	16.7	29.5	30	14.3	25.5	25	17.8	21.1	25
	12.2	26.5	31	17.2	27.5	25	16.6	15.5	25
Fence Post	6.6	28.0	25	16.1	27.0	25	17.7	13.0	25

Table 5 continued

<u>Station</u>	<u>September</u>			<u>October</u>			<u>November</u>		
	<u>Sal.</u>	<u>W.T.</u>	<u>Turb..</u>	<u>Sal.</u>	<u>W.T.</u>	<u>Turb.</u>	<u>Sal.</u>	<u>W.T.</u>	<u>Turb.</u>
Powderhorn Lake	6.6	28.5	90	16.1	25.0	25	14.4	24.5	44
	9.9	27.0	60	15.0	25.5	50	21.1	14.0	25
	11.1	26.0	50	15.5	30.0	140	12.2	19.0	200
Keller Creek	5.5	29.0	53	2.2	25.0	35	5.6	22.5	70
	0.0	26.0	75	0.0	26.0	65	2.2	15.0	25
Carancahua Causeway	1.1	29.5	143	0.0	25.0	30	2.8	23.5	160
	0.0	29.5	70	0.0	26.0	112	3.3	13.5	35
	0.6	29.0	120	0.0	25.0	94	5.0	19.0	145
Turtle Bay	2.2	29.0	150	9.4	27.5	25	6.1	24.0	250
	5.6	24.0	80	5.6	26.0	25	14.4	13.5	25
	1.1	29.5	25	2.2	29.0	95	10.5	21.5	170
Red Bluff	1.1	28.0	5.5	2.2	26.5	45	5.0	22.0	45
Port O'Connor	18.8	25.0	25	22.2	28.0	25	23.3	19.0	27
Lavaca Causeway	0.0	27.0	80	9.9	29.0	83	15.5	19.5	180
Port Alto	5.6	27.0	50	10.5	28.5	48	13.3	19.0	190
Crescent V	0.6	32.0	25	2.8	26.5	87	9.9	20.0	118
Grassy Point	8.3	26.0	150	18.9	26.0	25	ND	ND	ND
Cash Creek	0.0	26.0	36	0.0	25.0	137	12.2	19.8	300
Cemetery	0.0	26.0	200	0.0	24.5	160	15.5	19.5	128
<u>December</u>									
Carancahua Pass	22.2	13.5	25	Fence Post			12.2	16.5	25
Cotton Bayou	22.2	13.5	25	Powderhorn Lake			19.9	14.3	71
Wells Point	22.2	13.0	25				19.9	14.3	25
XA2	23.2	13.5	25	Keller Creek			13.5	13.5	35
Lavaca #60	16.6	13.5	25	Carancahua Causeway			12.1	14.3	50
Lavaca #47	15.5	13.5	25	Turtle Bay			19.5	19.5	85
La Salle	22.2	13.5	25	Red Bluff			17.5	17.5	25
Buoy #68	24.4	13.8	25	Port O'Connor			28.9	14.9	30
Range D	25.5	14.8	25	Lavaca Causeway			16.7	13.0	35
Middle 2	25.5	15.0	25	Port Alto			16.1	14.3	45
Piling #3	23.2	15.0	25	Crescent V			12.8	17.5	47
Beacon #2	15.4	16.0	25	Grassy Point			ND	ND	ND
Mad Island	18.8	14.5	25	Cash Creek			11.7	18.0	32
Cedars	22.2	13.0	25	Cemetery			17.8	17.5	33
Coon Island	19.9	13.5	25						

Table 6
San Antonio Bay System

<u>Station</u>	<u>January</u>			<u>February</u>			<u>March</u>		
	<u>Sal.</u>	<u>W.T.</u>	<u>Turb.</u>	<u>Sal.</u>	<u>W.T.</u>	<u>Turb.</u>	<u>Sal.</u>	<u>W.T.</u>	<u>Turb.</u>
1	10.3	8.6	25	0.0	14.6	111	0.0	12.6	156
2	14.7	8.2	25	2.2	14.8	141	1.7	12.0	206
3	11.1	8.1	25	0.0	14.8	181	5.0	12.5	161
4	8.9	8.3	25	0.0	14.8	191	1.7	12.2	130
5	1.9	8.9	27	0.0	13.8	235	0.6	12.9	530
6	0.0	10.1	26	0.0	13.2	263	0.0	13.0	359
7	23.9	6.9	25	23.3	12.4	25	30.0	15.6	25
8	24.4	7.1	25	20.5	12.0	25	30.5	15.7	25
9	17.2	15.0	25	8.3	12.1	25	9.4	19.7	25
10	11.1	14.1	52	2.8	12.6	32	13.3	19.5	115
11	16.1	16.2	32	0.6	15.4	67	3.3	19.7	58
12	24.4	7.1	25	7.8	11.1	110	ND	ND	ND
<u>April</u>			<u>May</u>			<u>June</u>			
1	0.0	12.6	156	3.0	24.2	114	0.0	27.5	172
2	8.9	22.8	31	3.9	21.5	196	0.0	28.2	459
3	6.9	23.5	36	3.9	21.7	167	1.4	28.5	409
4	1.9	22.9	71	0.3	21.8	202	0.0	28.4	364
5	0.0	23.8	168	0.0	21.8	385	0.0	28.6	198
6	0.0	23.6	113	0.0	21.7	233	0.0	28.4	297
7	24.4	20.7	43	23.9	20.7	75	6.1	26.5	48
8	24.4	21.0	25	15.5	20.7	58	2.8	26.9	57
9	12.2	15.3	102	3.3	26.8	41	1.1	27.5	57
10	10.0	22.4	68	0.0	27.3	175	ND	ND	ND
11	4.2	21.3	121	ND	ND	ND	ND	ND	ND
12	16.7	21.9	295	0.0	26.9	151	0.0	28.5	84

Table 6 continued

	<u>July</u>			<u>August</u>			<u>September</u>		
<u>Station</u>	<u>Sal.</u>	<u>W.T.</u>	<u>Turb.</u>	<u>Sal.</u>	<u>W.T.</u>	<u>Turb.</u>	<u>Sal.</u>	<u>W.T.</u>	<u>Turb.</u>
1	0.0	29.3	157	0.0	29.7	161	2.5	24.6	52
2	0.0	28.5	181	1.1	29.1	258	10.6	24.8	53
3	0.0	28.5	130	6.4	29.3	149	6.4	25.0	118
4	0.0	28.6	185	0.0	29.0	168	3.1	25.1	122
5	0.0	28.7	134	0.0	28.9	124	0.0	25.1	88
6	0.0	29.1	149	0.0	29.0	201	0.0	25.0	88
7	7.8	29.2	25	23.3	30.1	25	23.3	27.8	25
8	6.1	29.7	48	11.7	29.6	25	24.4	28.3	25
9	0.0	29.2	158	0.0	28.7	67	ND	ND	ND
10	0.0	30.1	252	0.0	29.7	143	ND	ND	ND
11	1.1	28.8	37	0.6	30.1	48	ND	ND	ND
12	0.0	28.7	248	0.0	29.5	78	15.5	25.8	25
	<u>October</u>			<u>November</u>			<u>December</u>		
	<u>Sal.</u>	<u>W.T.</u>	<u>Turb.</u>	<u>Sal.</u>	<u>W.T.</u>	<u>Turb.</u>	<u>Sal.</u>	<u>W.T.</u>	<u>Turb.</u>
1	5.6	24.8	35	10.3	20.2	53	7.2	12.1	25
2	16.1	27.0	25	12.8	20.9	78	11.7	12.3	25
3	8.3	27.4	28	14.4	21.8	70	10.6	12.3	25
4	5.6	27.7	25	9.7	20.9	93	6.9	12.4	25
5	2.8	27.7	64	4.2	20.3	152	0.3	12.8	78
6	0.0	27.2	53	3.6	20.9	127	0.0	12.7	130
7	23.3	25.4	25	24.4	21.0	25	28.9	14.5	42
8	23.3	23.9	25	24.4	21.5	25	28.3	13.2	25
9	17.8	25.4	25	ND	ND	ND	20.0	14.4	25
10	19.4	23.3	25	12.2	21.0	28	11.1	15.5	33
11	6.1	26.7	25	ND	ND	ND	7.8	17.4	25
12	ND	ND	ND	ND	ND	ND	13.3	12.4	25

Table 7
Aransas Bay System

<u>Aransas Bay</u>			<u>January</u>			<u>February</u>			<u>March</u>		
<u>Station</u>	<u>Sal.</u>	<u>W.T.</u>	<u>Turb.</u>	<u>Sal.</u>	<u>W.T.</u>	<u>Turb.</u>	<u>Sal.</u>	<u>W.T.</u>	<u>Turb.</u>		
1	16.7	24.0	25	9.9	15.0	68	15.8	12.1	25		
2	14.7	21.1	25	11.1	13.5	50	10.4	17.6	41		
3	12.8	19.5	30	8.9	10.2	110	9.9	16.5	54		
4	10.5	18.0	28	7.2	10.0	82	9.2	16.7	49		
9	14.9	18.5	25	8.9	11.5	47	13.0	13.0	56		
10	11.1	19.0	27	5.7	12.0	160	11.4	13.0	136		
<u>Mesquite Bay</u>											
18	5.0	20.0	31	5.0	14.0	156	13.3	19.8	140		
19	3.3	20.0	38	6.1	14.0	255	12.7	19.6	220		
20	21.1	19.5	25	8.3	13.0	59	30.0	18.8	67		
21	22.7	18.5	25	11.1	13.0	87	31.1	18.8	60		
<u>Copano Bay</u>											
12	12.2	22.5	25	9.4	11.5	138	8.9	19.1	72		
13	7.2	9.0	31	8.9	10.0	125	8.3	15.8	111		
14	10.5	20.5	33	7.7	13.0	66	10.5	13.3	70		
15	7.2	22.0	112	6.1	14.5	148	8.8	12.8	170		
17	15.5	19.0	26	9.4	11.0	87	8.9	17.0	62		
<u>Port Bay</u>											
11	7.7	23.0	25	8.9	12.0	44	9.0	20.7	173		
<u>St. Charles Bay</u>											
5	13.3	19.0	31	6.6	10.5	57	7.9	17.3	36		
6	ND	ND	ND	5.0	12.5	42	9.9	20.0	65		
7	ND	ND	ND	3.3	13.0	67	6.1	16.8	36		
8	ND	ND	ND	4.4	13.0	57	6.1	16.7	40		
16	ND	ND	ND	6.1	13.0	42	6.1	16.8	35		

Table 7 continued

<u>Aransas Bay</u>			<u>April</u>			<u>May</u>			<u>June</u>		
<u>Station</u>	<u>Sal.</u>	<u>W.T.</u>	<u>Turb.</u>	<u>Sal.</u>	<u>W.T.</u>	<u>Turb.</u>	<u>Sal.</u>	<u>W.T.</u>	<u>Turb.</u>		
1	17.5	25.2	33	14.9	26.2	30	10.0	27.7	25		
2	16.8	24.3	68	14.3	25.7	58	6.4	28.6	66		
3	14.4	21.7	82	10.9	22.7	77	5.0	25.7	46		
4	13.7	24.0	64	8.3	23.6	116	5.2	25.6	91		
9	18.9	23.1	36	10.4	24.7	44	7.8	28.0	25		
10	16.3	22.6	44	11.5	25.0	38	10.5	27.6	23		
<u>Mesquite Bay</u>											
18	22.2	21.5	230	14.3	25.8	85	10.5	28.0	57		
19	22.2	22.0	250	14.3	26.0	180	8.9	28.0	77		
20	22.5	21.8	200	16.3	26.0	130	21.7	27.5	97		
21	26.6	21.9	220	23.2	26.2	170	16.6	27.0	100		
<u>Copano Bay</u>											
12	10.9	25.1	73	8.8	25.2	107	2.2	25.9	50		
13	11.8	22.3	76	8.1	23.1	71	3.3	26.1	66		
14	13.3	23.6	107	6.5	25.4	54	2.2	28.8	34		
15	8.9	23.2	226	3.5	25.7	110	0.0	28.2	61		
17	13.3	21.0	85	13.3	22.8	51	5.6	25.8	75		
<u>Port Bay</u>											
11	8.9	23.2	25	5.0	25.0	24	2.0	27.1	38		
<u>St. Charles Bay</u>											
5	12.3	22.7	52	7.6	23.8	75	4.8	25.5	44		
6	10.5	25.0	54	1.1	25.0	25	0.0	27.5	38		
7	10.5	24.9	57	0.0	25.2	25	0.0	28.0	77		
8	11.1	25.7	36	0.0	25.0	25	0.0	28.0	72		
16	11.1	25.1	39	0.6	25.6	40	0.0	28.0	48		

Table 7 continued

<u>Aransas Bay</u>			<u>July</u>			<u>August</u>			<u>September</u>		
<u>Station</u>	<u>Sal.</u>	<u>W.T.</u>	<u>Turb.</u>	<u>Sal.</u>	<u>W.T.</u>	<u>Turb.</u>	<u>Sal.</u>	<u>W.T.</u>	<u>Turb.</u>		
1	7.8	33.0	25	16.9	30.8	25	16.8	28.5	25		
2	4.4	31.9	30	9.1	30.6	61	14.3	26.5	61		
3	2.8	28.0	45	5.5	27.1	82	12.8	27.6	56		
4	0.3	27.8	58	3.9	28.1	106	10.7	28.8	93		
9	6.7	28.8	211	9.4	30.0	25	17.5	27.0	25		
10	3.1	28.5	94	8.3	29.5	25	14.9	26.9	28		
<u>Mesquite Bay</u>											
18	12.2	30.0	47	11.7	30.1	32	15.6	32.0	31.0		
19	11.7	29.5	73	9.9	30.0	25	16.1	32.5	46.0		
20	22.4	30.0	81	27.8	31.0	25	27.2	31.0	31		
21	24.4	30.0	112	29.9	32.0	25	28.3	31.0	66		
<u>Copano Bay</u>											
12	1.1	31.0	36	1.9	29.4	95	5.4	27.2	123		
13	0.8	28.8	25	2.2	28.1	97	7.6	27.8	117		
14	1.9	29.5	85	2.8	29.9	40	8.6	28.1	45		
15	0.5	28.4	61	1.8	29.7	30	5.0	27.4	61		
17	0.0	30.0	75	2.2	28.6	25	8.9	30.0	93		
<u>Port Bay</u>											
11	1.7	32.1	38	1.9	30.0	25	2.6	29.4	25		
<u>St. Charles Bay</u>											
5	0.3	29.2	55	4.2	28.5	25	8.1	28.8	25		
6	0.0	31.0	53	2.2	29.0	25	4.5	31.0	25		
7	0.0	29.5	37	1.1	28.5	25	2.5	31.5	25		
8	0.0	30.5	73	3.3	29.0	25	3.9	31.5	25		
16	0.0	30.0	76	4.4	28.5	25	5.0	32.0	25		

Table 7 continued

<u>Aransas Bay</u>			<u>October</u>			<u>November</u>			<u>December</u>		
<u>Station</u>	<u>Sal.</u>	<u>W.T.</u>	<u>Turb.</u>	<u>Sal.</u>	<u>W.T.</u>	<u>Turb.</u>	<u>Sal.</u>	<u>W.T.</u>	<u>Turb.</u>		
1	14.0	25.7	25	17.0	24.0	25	21.3	15.8	25		
2	11.8	26.6	26	15.0	20.2	32	18.9	14.1	45		
3	9.8	24.3	33	13.7	18.7	66	16.9	15.8	30		
4	9.9	25.9	47	13.5	19.3	25	16.1	17.8	35		
9	13.6	27.2	25	ND	ND	ND	21.1	13.3	25		
10	13.3	27.0	25	ND	ND	ND	11.7	12.8	25		
<u>Mesquite Bay</u>											
18	17.8	27.2	33	ND	ND	ND	ND	ND	ND		
19	18.3	27.5	37	ND	ND	ND	ND	ND	ND		
20	30.0	30.0	46	ND	ND	ND	ND	ND	ND		
21	30.5	29.5	72	ND	ND	ND	ND	ND	ND		
<u>Copano Bay</u>											
12	7.4	25.5	105	8.9	20.6	25	11.1	16.9	167		
13	8.8	25.2	45	9.1	18.3	25	11.1	16.3	32		
14	8.3	27.5	27	ND	ND	ND	15.6	13.3	33		
15	6.9	27.8	37	ND	ND	ND	7.2	13.3	28		
17	10.6	23.9	25	12.2	14.4	25	15.0	18.3	25		
<u>Port Bay</u>											
11	5.4	26.2	25	8.1	23.1	25	8.3	16.7	208		
<u>St. Charles Bay</u>											
5	9.3	25.0	25	11.7	19.7	25	14.4	17.8	25		
6	6.1	26.1	57	8.1	20.0	25	ND	ND	ND		
7	5.0	26.7	92	8.1	20.1	25	ND	ND	ND		
8	4.5	25.6	72	8.9	20.0	25	ND	ND	ND		
16	8.3	26.1	44	11.0	20.0	25	ND	ND	ND		

Table 8
Corpus Christi Bay System

Station	<u>January</u>			<u>February</u>			<u>March</u>		
	Sal.	W.T.	Turb.	Sal.	W.T.	Turb.	Sal.	W.T.	Turb.
1	0.0	20.0	57	11.6	17.0	25	22.2	20.0	35
2	0.0	20.0	55	9.9	17.0	25	11.1	20.0	25
3	23.3	15.0	40	11.6	17.0	25	27.8	15.0	25
4	24.4	10.0	25	21.0	16.0	25	23.3	15.0	25
5	24.4	10.0	25	22.2	16.0	25	24.4	15.0	25
6	25.5	10.0	25	22.2	15.0	25	23.3	15.0	25
7	25.5	10.0	25	22.2	15.0	25	23.3	15.0	25
8	24.9	10.0	25	22.2	16.0	25	23.3	15.0	25
9	24.9	11.0	25	22.2	16.0	25	22.2	15.0	25
10	24.9	11.0	25	22.2	16.0	25	22.2	15.0	25
11	23.3	9.0	25	22.2	15.0	25	22.2	15.0	30
12	25.9	10.0	25	22.2	16.0	25	23.3	15.0	25
13	24.9	11.0	25	22.2	16.0	25	23.3	15.0	25
14	24.9	11.0	25	22.2	16.0	25	22.2	16.0	25
15	24.9	15.0	25	22.2	20.0	55	22.2	16.0	25
16	0.0	20.0	55	16.6	17.0	25	18.8	20.0	25
17	0.0	20.0	45	16.6	17.0	25	22.2	20.0	35
<u>April</u>			<u>May</u>			<u>June</u>			
1	22.0	25.0	300	0.0	30.0	120	6.6	32.0	110
2	24.4	25.0	350	0.0	30.0	155	5.6	30.0	130
3	27.2	26.0	76	3.5	29.5	95	6.7	30.5	120
4	27.2	25.0	25	14.2	27.0	120	14.6	30.5	25
5	27.7	25.0	25	14.2	27.0	25	14.6	31.0	25
6	27.2	25.0	25	20.9	27.5	25	18.2	30.5	25
7	27.7	25.0	25	20.9	27.5	25	17.4	31.0	25
8	27.2	26.0	25	20.9	27.5	25	17.0	30.5	25
9	27.7	26.0	25	22.2	28.0	25	17.0	29.5	25
10	27.2	23.0	25	14.4	27.5	25	13.3	30.0	25
11	27.2	25.0	25	14.2	27.5	55	15.5	29.5	25
12	27.8	25.0	25	20.8	29.0	25	18.2	31.0	25
13	27.8	26.0	25	23.4	29.0	25	22.2	31.0	25
14	27.8	26.0	25	18.3	27.5	25	22.2	30.0	25
15	27.8	23.0	25	20.6	27.5	25	16.1	30.5	25
16	24.4	25.0	25	3.5	28.0	120	6.6	30.0	25
17	24.4	25.0	25	3.5	27.5	155	6.6	31.0	25

Table 8 continued

<u>Station</u>	<u>July</u>			<u>August</u>			<u>September</u>		
	<u>Sal.</u>	<u>W.T.</u>	<u>Turb.</u>	<u>Sal.</u>	<u>W.T.</u>	<u>Turb.</u>	<u>Sal.</u>	<u>W.T.</u>	<u>Turb.</u>
1	5.9	28.5	118	14.9	30.0	74	21.3	29.0	113
2	4.2	28.5	125	14.9	30.5	110	20.8	29.0	121
3	12.1	29.0	75	21.1	30.5	105	21.3	28.5	113
4	19.4	30.5	25	23.2	30.0	25	27.7	30.0	25
5	19.4	30.5	25	23.2	30.0	25	27.7	30.0	25
6	20.3	30.5	25	24.9	30.5	25	27.7	30.0	25
7	20.1	30.5	25	24.9	30.5	25	27.7	30.0	25
8	18.6	30.5	25	24.9	30.5	25	27.7	30.5	25
9	22.4	30.0	25	25.6	31.5	25	27.7	30.5	25
10	16.0	30.0	25	22.2	30.5	25	27.7	28.0	25
11	17.6	30.0	25	24.7	30.0	25	27.7	29.5	25
12	19.5	30.5	25	24.9	30.0	25	27.7	30.0	25
13	22.4	30.0	25	26.2	31.5	25	27.7	30.5	25
14	18.6	30.5	25	24.4	30.0	25	27.7	30.5	25
15	20.3	28.5	25	22.2	30.1	55	24.6	29.0	25
16	18.5	28.5	25	18.3	29.5	105	21.3	28.5	25
17	6.5	28.5	130	14.9	30.5	110	21.3	28.5	25
<u>October</u>			<u>November</u>			<u>December</u>			
1	22.8	26.5	50	23.9	15.0	69	28.3	16.0	78
2	21.7	27.0	58	22.8	15.0	80	27.8	16.0	85
3	27.2	28.5	25	26.6	20.0	25	28.3	16.5	25
4	27.2	27.5	25	28.8	19.5	25	27.8	16.0	25
5	27.2	27.5	25	28.8	19.5	25	27.8	16.0	25
6	27.2	28.0	25	28.3	23.0	25	28.3	23.0	25
7	27.2	28.0	25	28.9	23.0	25	28.9	23.0	25
8	27.7	28.0	25	28.9	22.0	25	28.9	22.0	25
9	27.7	28.0	25	28.9	15.5	25	28.9	15.5	25
10	27.2	28.5	25	28.3	15.5	25	28.9	16.5	71
11	27.2	27.5	25	28.8	15.5	25	28.9	16.5	70
12	27.7	28.0	25	28.3	20.0	25	28.3	20.0	25
13	27.7	28.0	25	28.9	20.0	25	28.0	20.0	25
14	27.7	28.0	25	28.0	20.0	25	28.9	20.0	25
15	27.2	28.0	25	28.0	20.5	25	28.9	16.5	51
16	24.2	26.0	87	24.4	20.5	60	27.8	16.0	45
17	24.2	27.0	58	23.9	20.5	65	27.8	16.0	85

Table 9
Upper Laguna Madre

<u>Station</u>	<u>January</u>			<u>February</u>			<u>March</u>		
	<u>Sal.</u>	<u>W.T.</u>	<u>Turb.</u>	<u>Sal.</u>	<u>W.T.</u>	<u>Turb.</u>	<u>Sal.</u>	<u>W.T.</u>	<u>Turb.</u>
25	19.4	10.5	75	23.8	10.0	25	24.4	22.0	48
26	18.8	11.5	60	24.9	14.5	110	24.9	20.0	46
27	18.8	12.0	80	24.4	16.0	70	23.9	20.5	49
28	17.2	11.5	70	24.4	16.0	68	ND	ND	ND
29	16.6	12.0	68	24.4	15.0	70	23.3	18.0	30
30	16.1	12.5	70	24.4	15.0	83	22.7	19.0	68
31	17.7	12.5	90	23.8	15.5	90	20.5	17.5	40
32	14.9	13.0	60	22.2	15.0	70	22.2	17.5	58
34	17.7	13.0	63	19.9	15.5	74	19.9	18.0	62
35	17.7	13.0	110	20.5	15.5	88	19.4	18.0	47
36	17.7	12.5	73	20.5	16.0	75	21.6	17.5	53
37	20.5	12.5	68	ND	15.5	60	21.6	17.5	55
Mkr. 21	18.8	13.5	54	23.3	11.0	30	26.0	20.5	40
Landcut	19.9	12.5	60	21.1	16.5	60	22.7	17.0	70

	<u>April</u>			<u>May</u>			<u>June</u>		
	<u>Sal.</u>	<u>W.T.</u>	<u>Turb.</u>	<u>Sal.</u>	<u>W.T.</u>	<u>Turb.</u>	<u>Sal.</u>	<u>W.T.</u>	<u>Turb.</u>
25	22.7	20.5	70	25.5	29.0	40	29.4	28.0	25
26	24.4	20.5	90	25.5	28.0	55	29.8	29.0	28
27	24.4	20.5	115	25.5	27.5	63	33.3	29.0	25
28	24.4	21.0	105	27.2	28.0	52	ND	ND	ND
29	24.9	21.0	135	28.3	29.0	58	33.3	29.8	25
30	23.8	20.5	95	25.5	27.5	55	ND	ND	ND
31	23.3	21.0	70	31.0	28.5	50	29.8	29.8	25
32	23.8	22.0	100	22.2	28.6	70	28.3	29.9	34
34	25.5	22.0	80	32.2	28.5	61	28.3	29.8	25
35	25.5	21.5	70	ND	ND	ND	32.7	30.0	25
36	27.7	22.0	87	ND	ND	ND	31.1	28.5	25
37	27.7	22.5	77	32.2	28.5	56	32.7	29.5	25
Mkr. 21	23.3	21.5	63	27.7	28.5	40	22.2	29.5	25
Landcut	27.7	22.0	74	33.3	27.5	58	33.3	29.0	25

Table 9 continued

<u>Station</u>	<u>July</u>			<u>August</u>			<u>September</u>		
	<u>Sal.</u>	<u>W.T.</u>	<u>Turb.</u>	<u>Sal.</u>	<u>W.T.</u>	<u>Turb.</u>	<u>Sal.</u>	<u>W.T.</u>	<u>Turb.</u>
25	23.3	29.0	40	31.6	29.5	40	27.2	27.0	35
26	25.5	29.5	25	30.5	29.0	25	38.3	29.0	40
27	26.6	29.5	30	31.6	29.5	35	36.1	28.0	43
28	26.0	29.0	25	ND	ND	ND	ND	ND	ND
29	27.2	30.0	33	36.0	31.0	50	28.9	27.0	40
30	27.2	30.0	25	34.4	30.5	50	32.7	27.0	50
31	28.3	30.0	29	37.2	31.0	40	31.1	26.5	40
32	23.8	29.5	30	31.0	30.5	110	31.2	28.0	50
34	26.0	30.0	34	37.2	30.5	100	30.0	28.5	48
35	28.3	29.0	42	37.5	30.5	40	33.3	28.5	45
36	28.8	30.0	40	38.8	31.0	50	31.1	29.0	57
37	27.7	29.5	30	38.8	31.0	45	36.1	28.5	50
Mkr. 21	23.8	30.5	38	31.0	29.0	25	23.9	26.0	25
Landcut	27.2	29.5	25	38.3	29.0	25	39.4	27.5	40
<u>October</u>				<u>November</u>			<u>December</u>		
25	29.9	24.0	30	30.5	20.0	30	31.1	17.0	25
26	30.5	24.5	25	31.6	22.0	38	31.6	16.5	25
27	31.6	24.0	36	30.5	20.0	40	31.1	16.0	25
28	29.9	25.0	25	ND	ND	ND	ND	ND	ND
29	33.3	24.5	55	33.9	21.5	48	33.3	17.0	25
30	31.6	27.0	33	33.3	19.5	70	33.3	17.0	44
31	30.5	26.5	40	31.6	21.0	40	33.9	17.0	50
32	33.9	27.0	60	32.7	21.5	60	34.4	17.0	58
34	34.4	26.5	67	36.6	21.0	58	35.5	16.5	62
35	ND	ND	ND	37.7	21.0	64	37.2	16.5	63
36	ND	ND	ND	36.6	21.0	60	36.1	16.5	60
37	37.2	26.0	40	38.8	20.6	50	36.6	16.5	50
Mkr. 21	29.4	25.5	25	29.9	19.0	30	31.1	17.0	30
Landcut	36.6	26.0	43	39.4	20.5	45	37.2	16.5	54

Table 10
Lower Laguna Madre

Station	<u>January</u>			<u>February</u>			<u>March</u>		
	Sal.	W.T.	Turb.	Sal.	W.T.	Turb.	Sal.	W.T.	Turb.
14	29.4	14.0	25	30.5	20.0	45	ND	ND	ND
15	27.8	14.0	25	31.1	18.0	25	ND	ND	ND
16	23.3	14.5	25	24.4	19.0	25	ND	ND	ND
17	19.9	14.0	25	23.3	18.0	30	ND	ND	ND
18	22.2	14.5	25	21.6	19.0	25	ND	ND	ND
19	18.3	14.0	25	19.4	18.0	80	ND	ND	ND
20	16.1	14.0	25	17.7	19.5	45	ND	ND	ND
21	19.9	13.5	25	19.4	16.0	50	ND	ND	ND
22	21.0	15.0	25	19.9	17.0	50	ND	ND	ND
22a	20.5	13.0	64	20.5	16.5	65	ND	ND	ND
22c	19.9	15.0	25	19.9	16.5	80	ND	ND	ND
23	21.0	15.0	25	20.5	17.0	65	ND	ND	ND
24	21.6	14.0	25	22.2	15.0	35	ND	ND	ND
25	23.3	13.5	64	17.7	15.5	55	ND	ND	ND
	<u>April</u>			<u>May</u>			<u>June</u>		
14	34.9	24.0	27	32.1	28.0	37	31.6	30.0	28
15	34.4	23.0	25	32.1	27.0	25	34.4	30.0	85
16	36.6	23.0	25	30.5	27.5	37	31.6	28.5	150
17	36.1	22.5	70	32.2	27.0	85	34.4	28.5	260
18	36.6	23.0	130	31.0	28.0	160	32.7	28.5	300
19	34.4	22.0	140	32.2	27.5	240	28.8	28.0	290
20	34.4	25.0	85	33.8	29.0	270	33.8	30.0	175
21	28.8	22.0	65	33.3	26.0	25	17.2	30.0	30
22	28.3	23.0	47	32.1	27.0	25	10.5	29.5	27
22a	27.2	22.0	27	32.2	27.0	25	22.2	28.5	25
22c	26.6	22.5	32	28.8	31.5	30	18.8	29.0	25
23	25.5	22.5	38	29.9	30.0	25	23.3	29.0	25
24	22.0	22.0	31	31.0	30.5	25	28.8	29.0	25
25	21.5	21.5	50	30.5	30.0	100	29.4	28.5	25

Table 10 continued

<u>Station</u>	<u>July</u>			<u>August</u>			<u>September</u>		
	<u>Sal.</u>	<u>W.T.</u>	<u>Turb.</u>	<u>Sal.</u>	<u>W.T.</u>	<u>Turb.</u>	<u>Sal.</u>	<u>W.T.</u>	<u>Turb.</u>
14	34.9	29.0	30	36.6	26.0	25	36.6	29.0	25
15	34.4	30.0	25	36.6	26.0	25	37.2	29.5	25
16	34.4	30.0	75	38.3	30.0	25	39.9	29.5	25
17	34.4	29.5	40	37.1	30.0	25	37.7	30.0	25
18	33.3	30.0	65	38.3	30.0	25	39.9	30.0	80
19	32.7	30.0	35	40.5	30.0	25	43.8	29.5	30
20	32.7	30.0	70	40.5	30.0	25	42.2	30.0	25
21	32.1	32.0	45	39.9	31.5	25	42.7	29.0	25
22	29.4	31.0	25	38.8	32.0	25	40.5	31.0	25
22a	28.8	31.0	25	41.0	30.0	25	39.4	31.0	25
22c	26.6	30.5	25	38.8	31.5	25	40.5	29.5	25
23	22.2	31.0	25	37.7	30.0	25	35.5	30.0	25
24	23.8	30.0	25	37.7	29.5	25	39.9	30.0	25
25	23.8	29.5	25	37.7	28.5	25	40.5	29.5	25
<u>October</u>				<u>November</u>			<u>December</u>		
14	32.2	26.0	40	ND	ND	ND	34.4	21.0	37
15	32.2	27.0	25	35.5	21.0	62	33.3	19.5	40
16	39.4	25.0	25	39.9	20.0	105	34.4	18.5	25
17	37.2	24.5	25	36.6	20.0	38	34.4	19.0	25
18	38.8	25.0	32	39.4	20.5	80	36.6	19.0	32
19	37.2	24.5	25	38.3	20.0	25	37.1	19.0	25
20	36.1	27.0	45	39.9	22.0	38	40.5	20.0	32
21	36.1	24.5	25	36.6	18.0	25	37.2	17.5	25
22	38.8	27.0	25	37.7	20.0	25	35.5	20.5	35
22a	36.6	26.0	25	37.7	19.5	25	36.1	18.0	25
22c	38.3	25.5	25	37.2	20.0	25	36.6	18.0	32
23	37.7	26.5	25	37.7	21.0	25	39.4	18.0	42
24	36.6	26.5	25	38.8	20.0	25	38.8	18.0	53
25	34.4	26.0	33	39.4	20.0	50	39.4	18.0	62