

Job Report

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Project No. MF-R-5 Date September 9, 1964
Project Name: Analysis of Populations of Sports and Commercial Fin-Fish
and Factors Which Affect These Populations in the Coastal
Bays of Texas
Period Covered: January 1, 1963 to December 31, 1963 Job No. 13

Hydrographic and Meteorological Study of the Galveston Bay System

Abstract: Salinities in Galveston Bay increased in 1963 as compared to 1962 and 1961. An inverse correlation between salinity and river discharge - total rainfall is evident.

No detrimental freezes occurred during this study period.

Procedure: Water samples were taken monthly at 48 regular stations distributed throughout the Galveston Bay system. Temperatures, turbidity, and other pertinent meteorological and physical data were recorded at each station. Water samples were taken to the Seabrook laboratory where salinities were determined by the Mohr titration method.

Supplementary data were obtained from water samples collected as a part of different bay studies.

Information on air temperatures, wind, and precipitation was taken from "Climatological Data, Texas". River flow data were taken from unpublished records of the U. S. Department of Interior surface water recording station at Romayer, Texas.

Findings and

Discussion: Figure 1 shows locations of hydrographic stations sampled.

A. Air and Water Temperatures:

Average monthly air temperatures at the Galveston Airport and Anahuac Navigation Office are shown in Table 1. Lowest air temperature was 8.4°C. on January 24 at Anahuac; highest, 35.6°C. at Anahuac on August 9. The air temperature dropped below freezing 16 times during 1963, but no fish kills were observed.

Table 1 shows the close correlation between air and water temperatures.

B. Precipitation:

Monthly precipitation at the Anahuac Navigation Office and Galveston Airport is presented in Figure 3.

Total monthly rainfall for a three-year period (1961-1963) is shown in Figure 2. Departures of 15 inches from a long term average (45.21 inches) occurred during 1963 and 1962, while 1961 was an extremely wet year (67.24 inches).

C. Wind:

Prevailing wind, per cent of the time prevailing, and average velocity as recorded at the Galveston Airport is presented in Table 1.

"Offshore" winds (N and NE) were common during January, February, November, and December. Other months had prevailing "onshore" winds (S and SE).

Wind velocities were highest during spring and winter.

D. River Discharge:

Monthly fresh water discharge of the Trinity River in acre-feet for 1962 and 1963 is given in Figure 4.

The reduction of run-off water during 1963 as compared to 1962 is evident in salinity patterns (Figure 5).

E. Salinities:

Average monthly salinities for six arbitrary divisions of Galveston Bay are shown in Figure 5. Values were derived by averaging all salinities taken from a particular division each month (Figure 1).

Salinities were higher in 1963 than in the two previous years.

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References

U. S. Department of Commerce, Weather Bureau,
1961-1963. Climatological Data, Texas, Vol. 66 Nos. 9-12; Vol. 67, Nos. 1-12;
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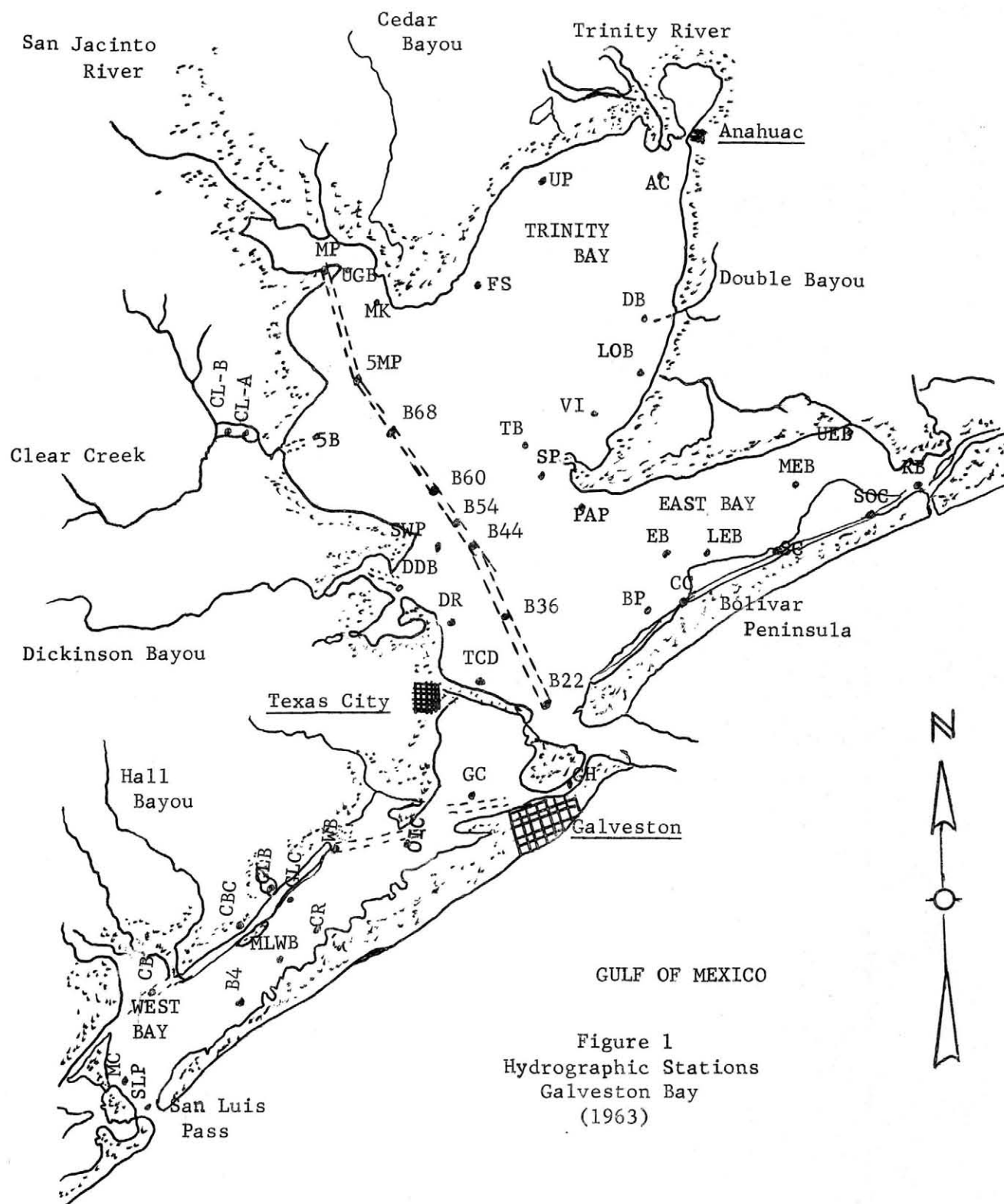
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Table 1
Hydrographic and Meteorological Data of Galveston Bay 1963

	AIR			WIND		Average Velocity (mph)	Precipitation (inches)	Average Temperature (°C)
	Temperature (°C)	Temperature Range (°C)	Days Below Freezing	Prevailing Wind	% of Time Prevailing			
<u>January</u>								
Anahuac	8.6	23.9--8.4	12				4.87	
Galveston	8.8	22.8--7.2	12	N	17	11.9	1.54	6.1
<u>February</u>								
Anahuac	10.6	25.0--3.3	1				3.38	
Galveston	10.5	23.9--1.7	1	N	14	12.1	2.24	10.1
<u>March</u>								
Anahuac	-	28.4--2.2	0				.06	
Galveston	17.6	24.4--6.1	0	SE	23	11.0	.16	14.8
<u>April</u>								
Anahuac	23.0	30.0--9.5	0				.91	
Galveston	23.0	28.9--11.7	0	S	25	13.2	.41	20.7
<u>May</u>								
Anahuac	24.6	32.1--15.0	0				1.06	
Galveston	25.2	30.0--17.2	0	S	36	10.4	1.02	29.4
<u>June</u>								
Anahuac	-	32.1--15.0	0				4.04	
Galveston	27.8	31.7-21.7	0	S	37	10.0	5.15	28.3
<u>July</u>								
Anahuac	28.9	35.0--22.2	0				1.20	
Galveston	29.2	32.8--19.5	0	S	44	9.7	2.04	31.0
<u>August</u>								
Anahuac	29.2	35.6--20.0	0				1.30	
Galveston	29.0	33.4--18.9	0	S	30	8.1	1.44	31.1

Table 1--Continued

	AIR			WIND				Average
	<u>Temperature</u> <u>(°C)</u>	<u>Temperature</u> <u>Range (°C)</u>	<u>Days Below</u> <u>Freezing</u>	<u>Prevailing</u> <u>Wind</u>	<u>% of Time</u> <u>Prevailing</u>	<u>Velocity</u> <u>(mph)</u>	<u>Precipitation</u> <u>(inches)</u>	<u>Temperature</u> <u>(°C)</u>
<u>September</u>								
Anahuac	-	35.0--14.5	0				10.51	
Galveston	26.5	33.4--18.9	0	SE	13	9.7	8.25	30.6
<u>October</u>								
Anahuac	23.3	34.5--10.6	0				.22	
Galveston	24.7	30.6--18.4	0	SE	-	8.1	.05	25.2
<u>November</u>								
Anahuac	-	-					3.47	
Galveston	18.6	26.7--7.2	0	NE	-	12.1	2.80	17.4
<u>December</u>								
Anahuac	-	-					-	
Galveston	9.6	22.8--5.5	3	NE	-	11.0	5.52	8.1



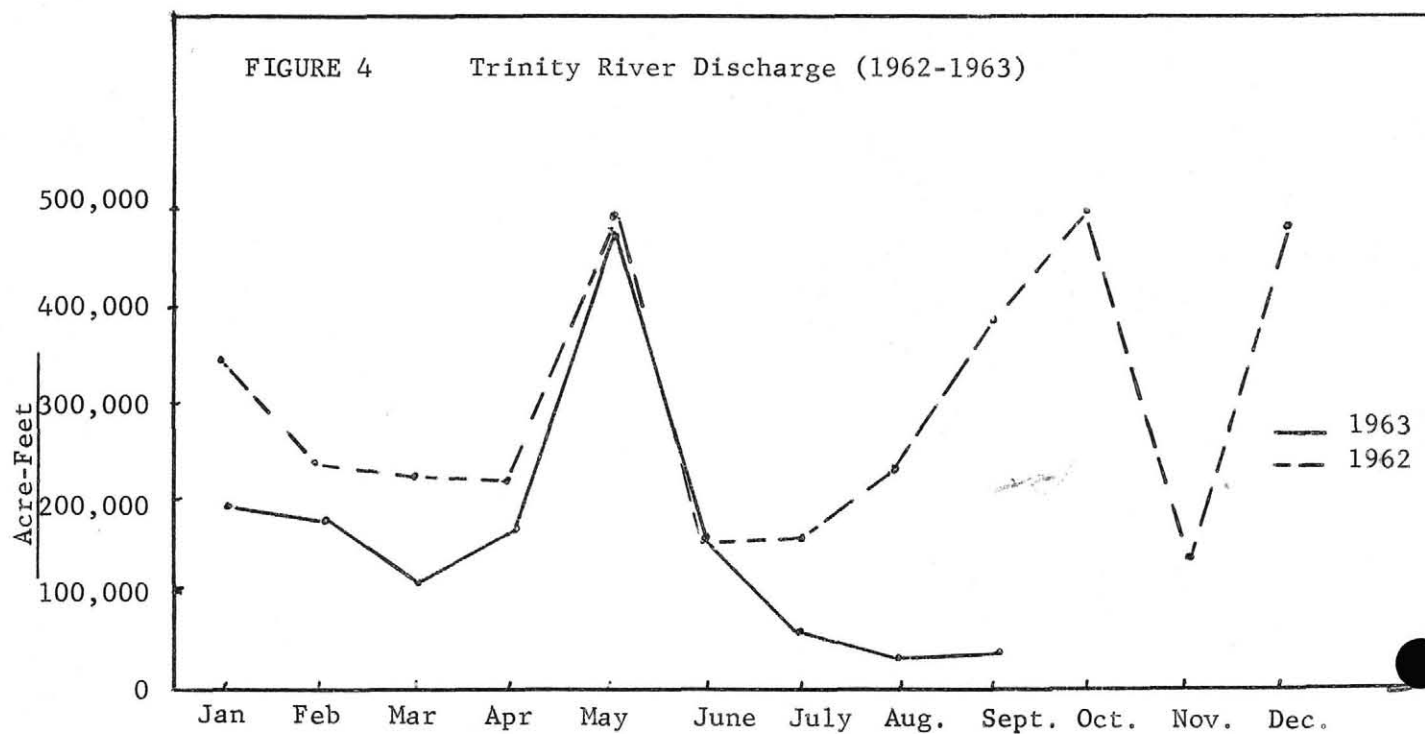
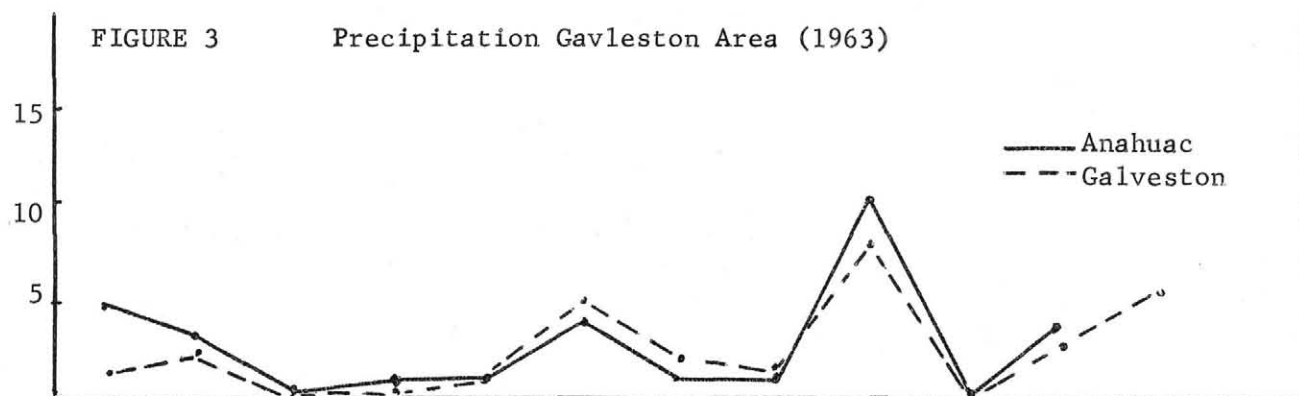
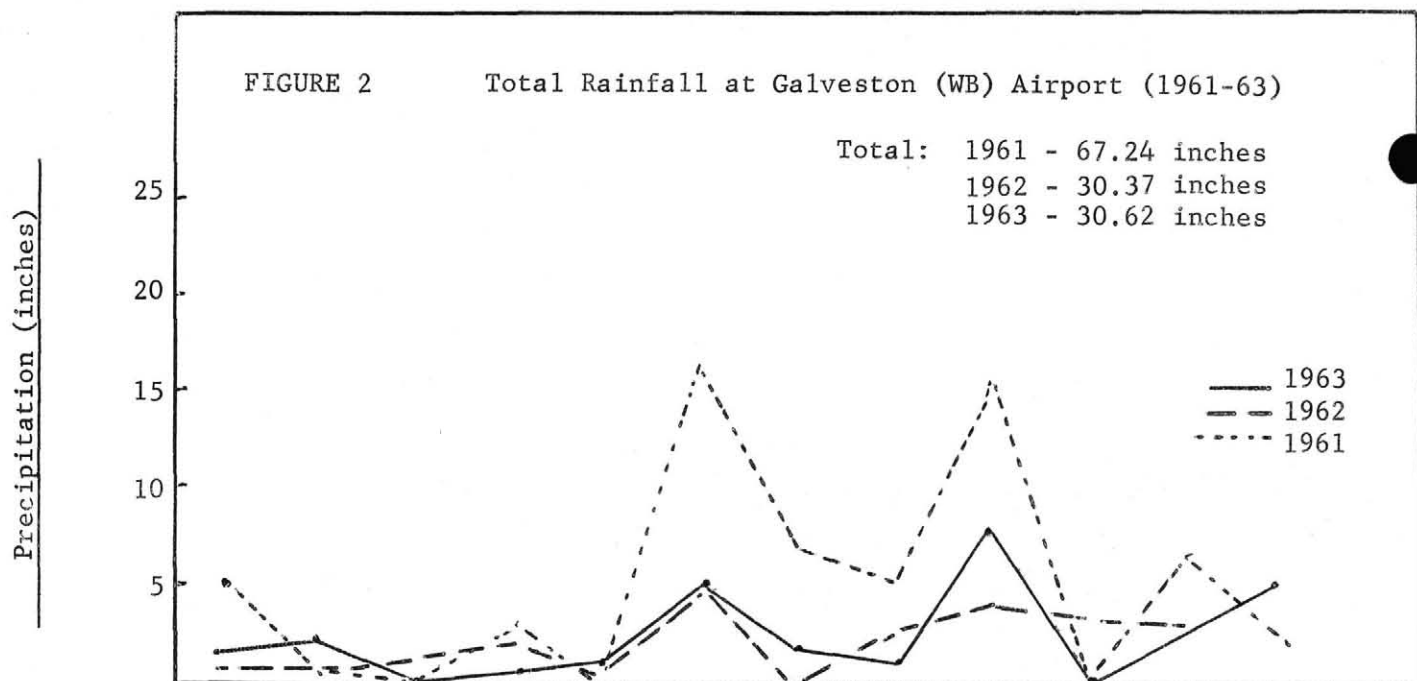
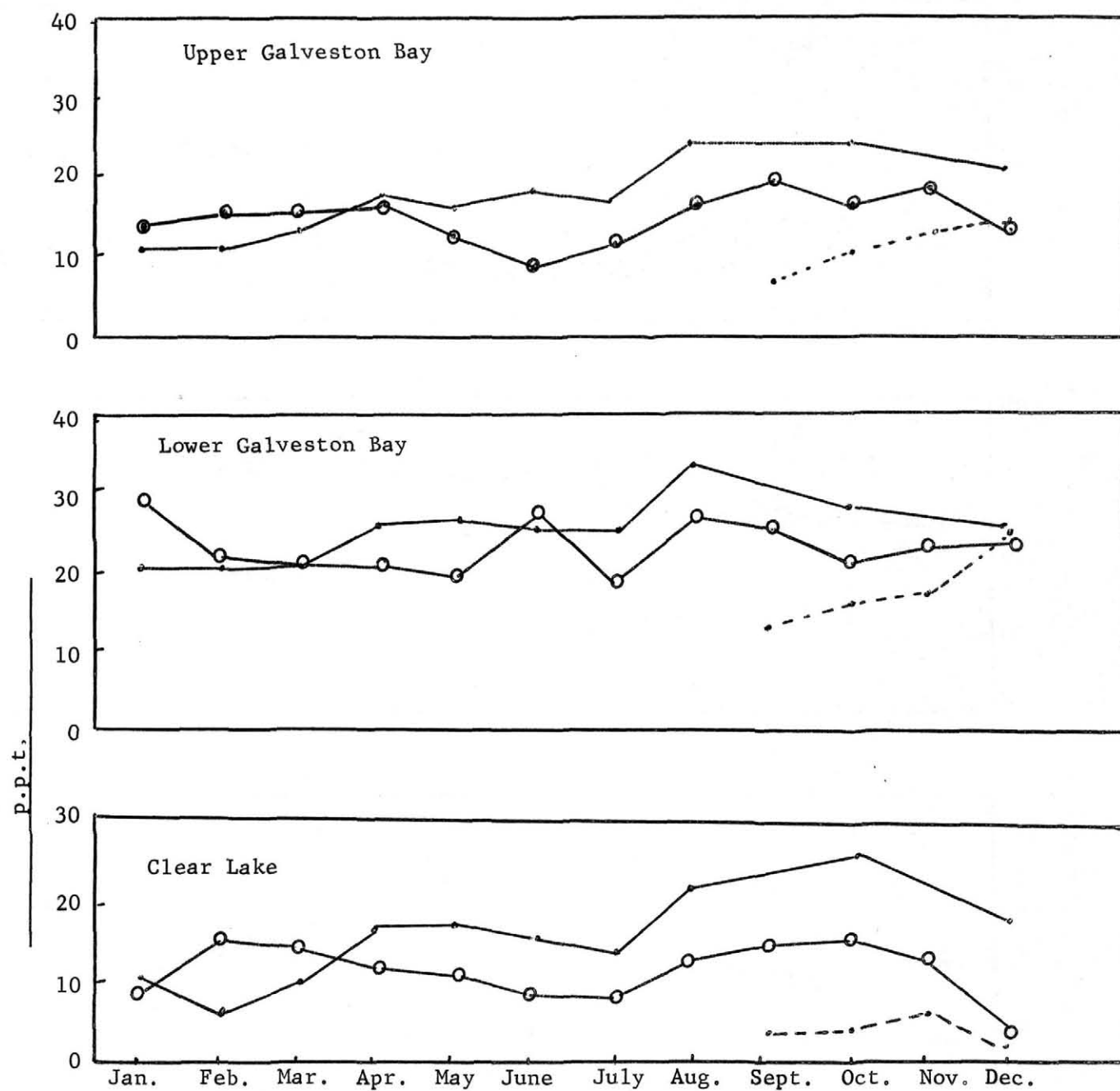
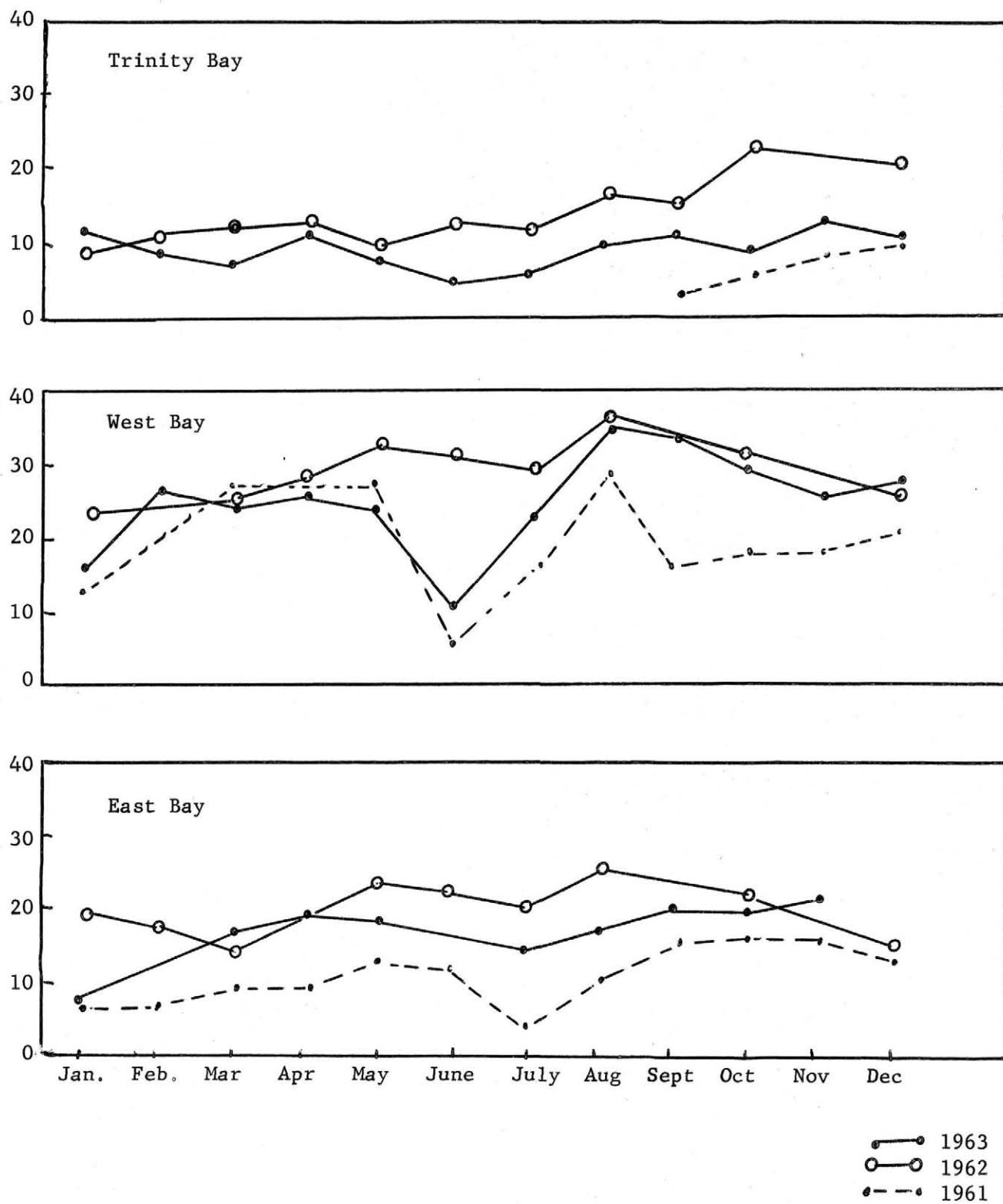


FIGURE 5 Salinities - Galveston Bay Areas (1961-1963)



—○— 1963
 —●— 1962
 - - - 1961

FIGURE 5 (Cont.)



SALINITIES - GALVESTON BAY

Station	January		February		March		April		May	
	Top	Bottom	Top	Bottom	Top	Bottom	Top	Bottom	Top	Bottom
SB	12.3	12.8	18.2	19.4	-	-	17.7	18.0	17.8	17.9
5MP	14.9	27.5	18.3	27.9	13.7	20.2	18.8	26.1	16.5	22.9
MP	15.2	26.7	13.2	26.8	10.4	20.2	17.3	22.2	14.4	15.8
UGB	15.3	17.4	11.5	16.2	10.1	11.9	15.7	15.9	14.1	14.6
MK	12.3	14.2	15.0	16.5	8.5	8.3	17.0	16.8	13.0	13.1
FS	9.6	13.0	7.3	17.2	8.1	9.8	15.7	15.7	9.3	9.7
UP	10.0	9.2	6.9	14.3	7.3	8.6	15.2	15.0	8.3	8.4
AC	4.6	8.2	5.3	13.3	9.6	11.7	10.7	10.8	2.6	3.9
DB	8.2	8.6	11.0	13.2	12.3	12.9	8.8	9.3	5.3	5.5
LOB	8.9	8.1	11.7	13.4	13.4	15.0	8.5	8.6	10.3	10.4
TB	7.8	19.0	14.1	15.8	14.8	14.4	13.6	14.1	10.7	10.8
VI	6.8	11.6	13.5	13.3	14.4	14.6	11.2	11.3	12.4	14.5
SP	7.5	16.2	13.2	13.5	15.0	14.8	13.2	14.3	16.9	16.8
PAP	12.2	20.6	14.7	18.3	14.7	14.5	20.3	20.2	21.4	21.1
B-36	29.6	30.7	23.1	28.3	21.7	23.5	28.9	29.6	28.2	29.1
B-44	16.3	29.2	20.0	30.2	17.3	22.0	26.6	28.8	25.3	29.2
B-54	11.7	27.6	15.9	29.2	14.5	22.2	21.8	28.5	21.1	25.1
SWP	15.2	20.7	20.5	-	15.0	14.9	18.8	19.7	18.9	19.1
B-60	14.8	24.5	16.0	29.7	14.7	22.5	19.0	25.5	19.9	20.1
B-68	14.1	13.5	13.9	28.6	22.3	13.0	19.1	25.5	17.0	27.1
CL-A	11.6	11.8	8.6	12.0	11.5	12.1	16.5	16.1	18.0	18.0
CL-B	10.0	9.5	4.6	11.0	8.6	9.7	16.7	16.7	16.6	16.5
DBB	17.2	17.1	17.6	20.0	17.4	18.2	19.8	20.0	22.3	23.5
DR	17.6	18.5	18.5	20.8	18.3	18.3	22.2	24.0	21.3	21.3
TCD	18.1	18.2	20.6	22.6	20.1	19.8	28.1	28.0	24.5	30.1
B-22	24.5	32.9	19.0	25.7	28.1	28.3	30.4	31.5	27.2	30.0
GC	30.3	31.2	25.5	26.5	25.6	25.5	26.1	29.1	30.3	31.6
OIC	24.1	24.4	26.2	26.2	25.1	25.4	27.3	27.7	32.2	31.8
CR	23.2	23.5	26.1	26.1	26.0	25.6	28.3	27.6	33.5	33.5
MLWB	23.6	22.7	25.4	25.5	32.7	28.4	27.5	27.8	34.1	34.0
BH	23.4	27.5	25.5	26.1	26.1	27.0	27.0	27.2	33.8	34.2
SLP	24.9	25.0	25.8	26.0	-	-	30.5	30.7	33.9	33.7
MC	25.2	25.4	24.6	24.7	25.7	25.8	29.8	29.3	33.7	33.5
CB	23.3	27.7	20.5	23.3	23.5	24.0	27.4	26.7	33.4	33.2
CBC	19.5	19.5	23.0	23.0	24.3	24.2	27.3	27.8	31.3	31.5
GLC	-	-	23.9	23.9	23.7	23.4	27.9	28.3	30.8	31.6
GLB	-	-	24.4	24.6	24.1	23.8	27.7	27.3	31.5	31.4

TEMPERATURES (°C) GALVESTON BAY
(Con't)

Station	July		August		October		November		December	
	Top	Bottom	Top	Bottom	Top	Bottom	Top	Bottom	Top	Bottom
GLC	31.4		31.8		25.5				8.8	
CLB	31.2		31.7		25.0				8.3	
WB	32.2		32.5		24.9				8.3	7.9
GH	32.9	31.3	32.4	30.8	25.2	25.2			8.0	
BP	31.3		33.4		25.2				8.5	
CC	31.7		32.6		25.5				8.6	
SC	31.4		32.5		25.2				7.9	7.5
SOC	31.7	31.2	33.1	31.0	25.1	24.7			8.5	8.3
RB	33.3	31.2	33.3	30.4	24.2	24.2			8.5	
UEB	31.9		31.8		24.2				8.5	
MEB	31.6		32.4		24.5				8.4	
LEB	31.5		31.8		24.5				8.4	
EB	31.2		31.4		24.9				8.4	

No data for September

TEMPERATURES (°C) GALVESTON BAY

Station	July		August		October		November		December	
	Top	Bottom	Top	Bottom	Top	Bottom	Top	Bottom	Top	Bottom
SB	30.0	29.8	20.5	30.0	24.9	24.8	15.0	15.5	8.2	8.0
5MP	30.5	29.8	30.0	30.5	25.5	24.9	11.0	12.0	8.0	15.8
MP	31.3	30.3	31.0	31.0	25.5	25.1	17.0	17.0	10.5	7.5
UGB	30.0	28.1	32.0	30.5	25.4	25.7	16.0	16.5	11.2	11.0
MK	30.4	29.8	31.0	30.0	25.7	25.8			10.0	9.9
FS	30.2	29.1	29.0	29.5	25.9	25.9			7.5	8.0
UP	29.5	28.9	30.0	30.0	25.4	25.4			7.0	7.0
AC	29.9	29.1	31.0	30.0	24.6	24.6			8.0	7.5
DB	30.7	29.9	31.0	30.0	23.9	24.9			7.0	7.5
LOB	31.0	29.8	30.5	29.5	24.9	24.9			8.0	6.5
TB	31.3	30.1	30.5	29.9	26.1	25.7			7.0	8.0
VI	31.2	29.9	31.0	30.0	25.4	25.2			8.0	8.0
SP	31.3	20.4	30.0	29.0	25.9	25.2			7.5	8.0
PAP	31.1	30.4	27.0	28.0	25.2	24.8			7.0	7.0
B-36	31.8	30.4	31.0	30.0	24.9	24.9			8.2	8.2
B-44	32.4	31.0	31.0	30.0	25.2	25.1				
B-54	30.6	30.6	31.0	30.0	25.3	25.1			8.0	8.0
SWP	30.8	29.9	31.0	30.0	25.1	24.9			8.0	8.0
B-60	31.8	30.7	31.0	30.0	24.9	24.9			7.5	7.5
B-68	30.5	29.8	31.0	30.0	24.8	25.3	15.5	16.0	7.0	7.0
CL-A	31.0	31.0	30.5	30.0	25.4	25.2			10.0	10.5
CL-B	32.5	31.0	30.5	30.0	25.4	25.0			10.0	10.0
DBB	30.2		30.8		26.0				6.7	
DR	29.7		30.8		26.0				7.1	
TCD	31.0		31.1		26.0				7.0	
B-22	30.2	29.8	31.0	30.4	25.5	25.0			7.7	7.8
GC	30.7		31.0		25.0				7.0	
OIC	31.7		31.2		25.0				7.5	
CR	30.9		30.7		25.0				8.1	
MLWB	30.8		30.5		25.0				8.2	
BH	30.8		31.0		25.0				7.7	
SLP	29.7		31.7		25.0					
MC	30.1		31.4		25.0				8.1	
CB	31.2	30.7	31.3	30.5	25.0	24.7			7.6	8.7
CBC	31.0	30.4	30.7	31.0	25.2	25.2			7.7	8.6

TEMPERATURES ($^{\circ}\text{C}$) GALVESTON BAY
(Con't)

Station	January		February		March		April		May		June	
	Top	Bottom	Top	Bottom	Top	Bottom	Top	Bottom	Top	Bottom	Top	Bottom
WB			10.3		15.4				29.5		28.1	
GH	9.4	10.4	10.1	11.0	14.9				28.7	27.6	29.9	28.6
BP	9.4		10.0	10.1					28.9		29.2	
CC	7.6		10.0		13.9				28.5		29.1	
SC	6.9		10.0		15.1				29.0		29.1	
SOC	6.8	7.2	11.0		13.5	13.3			29.2		29.1	28.2
RB	7.0	7.2	11.1		15.4	14.8			30.5	29.9	29.8	28.9
UEB	6.1		11.5		13.3				31.0		28.1	
MEB	6.0		11.5		14.2				29.7		28.1	
LEB	5.2		12.0		12.7				29.2		28.0	
EB	6.6		11.0		13.9				29.2		28.4	

TEMPERATURES (°C) GALVESTON BAY

Station	January		February		March		April		May		June	
	Top	Bottom	Top	Bottom	Top	Bottom	Top	Bottom	Top	Bottom	Top	Bottom
SB	5.8		8.9		15.0		19.8		28.0	27.9	28.0	26.0
5MP	5.4	9.5	10.3	9.7	14.7	15.0	19.4	20.4	28.2	27.5	28.4	28.3
MP	8.3	9.6	11.0	9.8	15.1	15.5	21.0	20.7	29.4	28.7	29.2	29.6
UGB	7.0		11.3		14.0		19.5		28.8	28.2	27.6	27.4
MK	4.7		10.2		14.5		19.6		28.2	28.0	27.9	28.0
FS	4.3		9.7		15.0		19.6		27.9	27.7	28.7	28.4
UP	5.4		8.9		15.0		19.4		28.9	28.3	28.4	28.2
AC	4.5		9.7		15.0		19.5		29.3	27.2	28.5	28.3
DB	4.8		8.7		15.0		19.8		28.5	27.8	28.5	28.4
LOB	4.6		8.6		15.0		20.0		28.5	27.9	28.5	28.4
TB	4.6		9.0		15.0		20.5		28.4	28.1	28.5	28.3
VI	4.5		8.7		15.0		20.0		28.6	28.2	28.0	27.8
SP	4.8		8.7		15.0		20.4		28.1	28.1	28.0	27.9
PAP	5.8		8.5		15.0		20.6		28.5	28.1	28.0	27.8
B-36	9.2	9.8	8.9	9.4	15.0	14.5	20.5	20.2	28.9	28.0	28.3	28.2
B-44	6.8	9.0	8.8	9.5	14.0	14.0	20.7	20.3	28.7	27.9	28.1	27.8
B-54	5.8	9.0	8.5	9.5	17.0	14.5	20.7	20.4	28.8	28.1	27.9	27.5
SWP	6.5		8.8	8.7	15.0		21.0		28.0	28.0	27.4	27.5
B-60	6.5	9.3	8.5	9.5	15.0	14.5	20.7	20.4	27.9	27.6	27.8	28.0
B-68	5.8	8.8	10.7	9.2	14.8	15.0	20.9	20.4	28.7	27.7	28.3	28.5
CL-A	6.0		12.2		15.0		22.4		28.8	28.8	27.1	26.8
CL-B	6.0		13.2		16.0		22.7	22.4	29.9	29.6	27.1	27.1
DBB	5.2		8.8	9.0	14.3		19.8		27.5			
DR	5.2		8.7	8.9	15.0		20.4		27.7			
TCD	5.4		8.5		14.6		20.3		27.8			
B-22	7.1	9.6	8.7	9.0	13.6	13.6			28.4	27.7	28.5	28.3
GC	9.1		9.2	9.0	15.5				28.5		28.4	
OIC	7.3		9.3		14.8				28.0		28.6	
CR	4.5		9.7		16.0				28.0		28.4	
MLWB	4.5		9.9		15.6				28.4		28.2	
BH	4.2		9.7		14.9				28.7		27.6	
SLP	5.5		10.2						27.0		28.0	
MC	5.7				15.7				28.5		28.0	
CB	4.9	5.7	11.0	10.5	16.4	15.5			28.9	28.3	27.6	27.7
CBC	5.9	6.0	11.8		16.4	16.2			29.0	28.0	28.4	28.2
GLC			10.2	9.9	15.9				29.5		28.0	
GLB			10.4	9.8	15.9				29.6		28.0	

SALINITIES - GALVESTON BAY

(Con't.)

Station	June		July		August		October		November		December	
	Top	Bottom	Top	Bottom	Top	Bottom	Top	Bottom	Top	Bottom	Top	Bottom
GLB	30.5	30.7	26.3	26.1	35.0	35.3	30.8	31.5	-	-	24.0	27.3
WB	30.6	30.7	28.1	29.2	35.7	36.1	30.1	29.5	-	-	26.6	26.6
GH	31.6	33.8	28.5	29.8	35.4	36.7	30.9	31.2	-	-	29.2	29.3
BP	28.5	28.9	21.7	25.4	29.1	33.0	28.4	30.1	-	-	17.1	17.0
CC	24.9	26.0	20.6	22.5	27.2	27.2	26.5	26.9	-	-	15.2	21.1
SC	22.2	22.3	22.0	21.5	25.9	24.7	24.1	24.6	-	-	15.5	19.5
SOC	20.4	20.3	21.5	21.6	26.3	26.9	23.6	23.5	-	-	15.8	17.7
RB	22.7	31.2	20.5	22.1	23.1	30.1	20.5	27.1	-	-	10.0	13.9
UEB	19.0	18.8	17.1	17.1	21.9	22.2	16.2	16.3	-	-	12.3	12.0
MEB	19.8	19.5	19.3	19.4	23.0	23.0	19.0	19.5	-	-	13.5	13.5
LEB	19.9	20.0	19.7	19.8	22.7	22.7	21.8	22.0	-	-	13.2	13.5
EB	22.1	22.5	19.8	20.1	23.7	24.6	25.2	25.5	-	-	16.0	16.7

No Data For September

SALINITIES - GALVESTON BAY

Station	June		July		August		October		November		December	
	Top	Bottom	Top	Bottom	Top	Bottom	Top	Bottom	Top	Bottom	Top	Bottom
SB	18.2	18.4	16.6	17.2	23.6	24.0	24.9	25.1	24.3	23.8	-	-
SMP	18.1	19.2	17.4	21.9	23.9	31.7	23.9	23.9	26.8	28.1	22.5	25.5
MP	16.0	24.7	16.6	21.0	23.2	28.0	22.9	23.4	24.5	27.5	19.2	26.5
UGB	17.3	17.5	16.0	16.2	21.4	21.9	23.1	23.5	24.0	24.2	18.3	19.0
MK	16.8	16.9	15.0	15.1	23.0	22.5	25.1	25.0	-	-	18.7	19.0
FS	13.9	13.7	11.3	13.4	18.9	19.4	24.6	24.5	-	-	18.9	21.7
UP	19.8	10.5	7.3	8.3	12.8	14.4	21.8	21.5	-	-	19.7	20.7
AC	5.2	5.2	7.5	8.0	14.0	14.3	22.4	22.6	-	-	18.9	19.0
DB	7.5	8.7	10.8	11.0	13.5	14.2	22.7	21.0	-	-	19.8	19.7
LOB	11.9	11.8	12.3	12.6	14.0	14.5	22.8	22.5	-	-	20.0	22.7
TB	14.4	14.6	14.8	14.6	18.5	19.4	22.5	24.1	-	-	22.4	23.5
VI	11.4	11.5	15.4	15.6	16.6	22.4	21.5	21.5	-	-	20.8	20.6
SP	16.6	19.0	14.5	15.9	24.0	25.2	21.3	25.0	-	-	23.0	23.2
PAP	22.4	22.4	22.0	22.0	31.4	32.2	21.6	25.5	-	-	24.0	23.6
B-36	33.2	33.2	29.0	32.5	36.0	37.5	30.8	31.7	-	-	28.0	28.7
B-44	28.4	32.2	25.1	29.5	37.2	34.1	28.1	31.3	-	-	26.7	28.6
B-54	24.8	25.0	20.7	27.2	31.3	35.4	25.7	29.0	-	-	24.6	27.5
SWP	20.6	20.8	17.5	19.3	27.5	28.3	26.0	26.5	-	-	23.5	23.5
B-60	23.1	25.2	19.9	26.8	28.1	34.1	25.5	29.3	-	-	23.5	25.0
B-68	20.4	28.9	20.1	24.2	27.2	32.5	26.1	28.0	25.4	26.6	24.0	25.4
CL-A	15.5	16.0	16.6	16.6	21.7	22.9	23.9	23.8	-	-	18.9	18.9
CL-B	15.7	16.2	11.3	15.0	22.5	22.8	23.0	23.4	-	-	16.0	20.0
DBB	8.7	22.7	17.8	18.8	27.7	27.7	25.5	25.8	-	-	22.0	23.2
DR	22.9	25.7	23.4	22.7	30.7	30.1	26.5	27.2	-	-	23.7	22.9
TCD	25.8	27.2	25.4	26.3	32.9	33.0	27.8	27.5	-	-	23.3	23.2
B-22	34.0	33.2	33.2	32.6	37.4	35.9	30.9	31.6	-	-	28.4	28.2
GC	31.5	31.6	30.1	30.6	35.3	37.8	29.8	29.8	-	-	27.8	27.8
OIC	30.0	30.2	30.8	30.1	36.0	36.9	28.9	29.0	-	-	27.9	28.3
CR	32.5	33.1	26.0	25.5	36.7	35.1	30.2	30.5	-	-	27.8	28.2
MLWB	32.7	32.8	25.5	25.6	36.4	36.2	31.5	31.8	-	-	26.6	26.6
BH	33.8	33.7	31.4	32.5	36.7	37.6	32.3	32.0	-	-	27.5	27.5
SLP	34.6	34.6	34.9	34.7	37.5	38.5	32.6	33.0	-	-	-	-
MC	33.7	33.8	34.6	34.3	37.0	37.7	32.8	32.5	-	-	28.4	28.3
CB	25.6	32.8	28.6	28.8	33.7	36.2	30.3	32.0	-	-	25.0	27.6
CBC	32.8	33.2	27.0	27.4	35.3	35.2	30.8	31.5	-	-	18.5	26.6
GLC	30.6	32.7	27.4	27.4	34.5	35.2	31.2	30.8	-	-	-	-

SALINITIES - GALVESTON BAY
(Con't.)

Station	January		February		March		April		May	
	Top	Bottom	Top	Bottom	Top	Bottom	Top	Bottom	Top	Bottom
WB	-	-	24.4	25.2	24.6	24.3	27.2	27.3	31.7	32.0
GH	29.0	30.6	22.4	28.6	18.4	23.0	-	-	28.8	29.0
BP	31.6	32.5	21.7	24.4	-	-	-	-	26.2	26.9
CC	25.5	22.4	21.7	21.6	19.6	20.4	-	-	26.9	26.5
SC	20.4	26.7	21.0	21.4	15.7	15.7	-	-	25.6	25.8
SOC	21.5	22.8	24.0	24.5	13.4	13.6	-	-	26.1	26.0
RB	20.1	20.5	14.8	15.3	9.3	11.0	-	-	22.6	31.0
UEB	14.6	22.2	13.1	14.3	11.1	10.7	-	-	18.7	18.3
MEB	15.3	23.8	16.8	18.1	14.0	14.0	-	-	22.0	22.3
LEB	16.0	20.2	13.5	14.7	16.5	16.2	-	-	22.4	22.5
EB	16.3	27.1	13.8	16.9	16.1	16.0	-	-	22.0	23.3