

JOB REPORT

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Project No. M-7-R-2 Date 30 September 1960

Project Name: Fisheries Investigations and Related Environmental Studies.

Period Covered: July 1959 - June 1960. Job No. E-2

Continued Investigation of Climatic and Hydrographic Conditions in
the Corpus Christi Bay Area.

Objectives: To obtain information concerning the climate and hydrography
of Region M-7.

Procedure: Water samples and temperature readings were obtained at
selected stations generally between 8 a.m. and 1 p.m. (See 1958 - 1959 project
report for station sites). Dissolved oxygen was determined by a modified Winkler
method. Salinity titrations and phosphate analyses were done by Roy Spears at
the Rockport laboratory. Climatic data was obtained from the local U.S. Weather
Bureau.

Findings: This report lists climatic data for air temperature and precipi-
tation; hydrographic data is concerned with bottom water temperatures and sal-
inities. Some information on phosphates and dissolved oxygen is included in
the report. The listing of available data follows:

Monthly Average Air Temperatures:
(Degrees Farenheit)

July 1959 - June 1960
Cliff Maus Field
Corpus Christi, Texas.

| | | | |
|-----------|------|--------------|------|
| July 1959 | 83.6 | January 1960 | 56.0 |
| August | 83.2 | February | 55.4 |
| September | 81.9 | March | 59.9 |
| October | 74.2 | April | 71.1 |
| November | 58.8 | May | 74.9 |
| December | 59.1 | June | 82.1 |

Precipitation: (Inches)

| | | | |
|-----------|------|--------------|------|
| July 1959 | 2.29 | January 1960 | 1.56 |
| August | 5.58 | February | 1.07 |
| September | 2.41 | March | 1.97 |
| October | 7.73 | April | 3.26 |
| November | 0.76 | May | 1.93 |
| December | 1.52 | June | 3.77 |

Bottom Water Temperatures: (Degrees Centigrade)

| | Station | Station | |
|---------------|---------|---------|------|
| 14 July 1959 | 3 | 9 | 29.0 |
| | 4 | 10 | 29.0 |
| Average: 29.6 | 5 | 11 | 29.0 |
| | 6 | 12 | 29.5 |
| | 7 | 13 | 30.5 |
| | 8 | 14 | 30.5 |

| Date | Station | Value | Station | Value | |
|------------------|-------------------|--------------|---------|-------|-------|
| 30 August 1959 | 3 | 29.0 | 9 | 28.8 | |
| | 4 | 29.0 | 10 | 29.0 | |
| | Average 28.8 | 5 | 28.5 | 11 | 29.0 |
| | | 6 | 28.5 | 12 | 29.0 |
| | | 7 | 29.0 | 13 | 29.0 |
| | | 8 | 28.8 | 14 | 29.0 |
| | 16 September 1959 | 3 | 26.6 | 9 | 27.0 |
| | | 4 | 26.7 | 10 | 27.6 |
| | | Average 26.8 | 5 | 26.3 | 11 |
| | | 6 | 27.0 | 12 | 27.0 |
| | | 7 | 26.7 | 13 | 27.2 |
| | | 8 | 26.7 | 14 | 27.0 |
| 21 October 1959 | | 3 | 22.5 | 9 | 21.6 |
| | | 4 | 22.0 | 10 | 23.0 |
| | | Average 22.4 | 5 | 22.0 | 11 |
| | | 6 | 22.9 | 12 | 22.5 |
| | | 7 | 22.6 | 13 | 22.5 |
| | | 8 | 21.5 | 14 | 22.6 |
| | 19 November 1959 | 3 | 11.1 | 9 | 11.0 |
| | | 4 | 10.9 | 10 | ----- |
| | | Average 11.2 | 5 | 11.0 | 11 |
| | | 6 | 10.2 | 12 | 12.2 |
| | | 7 | 12.6 | 13 | 9.5 |
| | | 8 | 10.8 | 14 | 11.5 |
| 22 December 1959 | | 3 | 13.8 | 9 | 14.8 |
| | | 4 | 14.2 | 10 | 14.0 |
| | | Average 14.5 | 5 | 13.8 | 11 |
| | | 6 | 15.0 | 12 | 15.1 |
| | | 7 | 15.0 | 13 | 14.8 |
| | | 8 | 15.0 | 14 | 14.8 |
| | 22 January 1960 | 3 | 10.3 | 9 | 11.0 |
| | | 4 | 11.6 | 10 | 11.8 |
| | | Average 11.2 | 5 | 11.5 | 11 |
| | | 6 | 10.5 | 12 | 11.4 |
| | | 7 | 11.4 | 13 | 10.5 |
| | | 8 | 11.0 | 14 | 11.8 |
| 16 February 1960 | | 3 | 14.0 | 9 | 13.6 |
| | | 4 | 14.1 | 10 | 13.0 |
| | | Average 13.6 | 5 | 14.5 | 11 |
| | | 6 | 14.0 | 12 | 13.7 |
| | | 7 | 13.5 | 13 | 13.4 |
| | | 8 | 13.5 | 14 | 13.0 |
| | 29 March 1960 | 3 | 21.0 | 9 | 19.0 |
| | | 4 | 20.0 | 10 | 20.5 |
| | | Average 19.8 | 5 | 21.0 | 11 |
| | | 6 | 20.0 | 12 | 19.0 |
| | | 7 | 20.0 | 13 | 19.0 |
| | | 8 | 19.0 | 14 | 19.6 |

| | <u>Station</u> | | <u>Station</u> | |
|--------------------------------|----------------|------|----------------|------|
| 26 April 1960 | 3 | 24.5 | 9 | 24.0 |
| | 4 | 24.7 | 10 | 24.0 |
| | 5 | 24.5 | 11 | 24.0 |
| Average 24.4 | 6 | 25.0 | 12 | 24.5 |
| | 7 | 24.9 | 13 | 24.2 |
| | 8 | 24.2 | 14 | 24.0 |
| 29 May 1960 | 3 | 27.1 | 9 | 27.0 |
| | 4 | 27.0 | 10 | 26.5 |
| | 5 | 28.0 | 11 | 26.7 |
| Average 27.0 | 6 | 26.8 | 12 | 27.0 |
| | 7 | 27.0 | 13 | 26.7 |
| | 8 | 27.1 | 14 | 27.0 |
| 20 June 1960 | 3 | 31.0 | 9 | 29.6 |
| | 4 | 29.5 | 10 | 30.0 |
| | 5 | 31.0 | 11 | 30.0 |
| Average 29.9 | 6 | 30.0 | 12 | 29.0 |
| | 7 | 29.5 | 13 | 29.6 |
| | 8 | 29.5 | 14 | 30.0 |
| Salinity: (Parts per thousand) | | | | |
| | <u>Station</u> | | <u>Station</u> | |
| 14 July 1959 | 3 | 25.9 | 9 | 32.2 |
| | 4 | 30.1 | 10 | 28.9 |
| | 5 | 30.1 | 11 | 29.6 |
| Average 30.6 | 6 | 31.0 | 12 | 34.5 |
| | 7 | 31.1 | 13 | 31.6 |
| | 8 | 32.0 | 14 | 30.8 |
| 30 August 1959 | 3 | 29.5 | 9 | 32.2 |
| | 4 | 31.6 | 10 | 31.0 |
| | 5 | 32.0 | 11 | 32.6 |
| Average 31.8 | 6 | 32.0 | 12 | 31.6 |
| | 7 | 32.0 | 13 | 33.9 |
| | 8 | 31.6 | 14 | 31.0 |
| 16 September 1959 | 3 | 30.7 | 9 | 34.5 |
| | 4 | 32.7 | 10 | 32.3 |
| | 5 | 32.9 | 11 | 32.5 |
| Average 32.9 | 6 | 32.3 | 12 | 33.1 |
| | 7 | 33.4 | 13 | 34.5 |
| | 8 | 34.6 | 14 | 33.4 |
| 21 October 1959 | 3 | 16.7 | 9 | 29.2 |
| | 4 | 32.7 | 10 | 18.6 |
| | 5 | 32.4 | 11 | 26.3 |
| Average 22.3 | 6 | 28.0 | 12 | 29.9 |
| | 7 | 31.0 | 13 | 28.1 |
| | 8 | 29.9 | 14 | 30.2 |
| 19 November 1959 | 3 | 27.5 | 9 | 26.4 |
| | 4 | 27.7 | 10 | 26.5 |
| | 5 | 27.2 | 11 | 26.4 |
| Average 26.8 | 6 | 27.2 | 12 | 28.2 |
| | 7 | 27.5 | 13 | 26.5 |
| | 8 | 27.2 | 14 | 27.5 |

| | <u>Station</u> | | <u>Station</u> | |
|------------------|----------------|------|----------------|------|
| 22 December 1959 | 3 | 27.5 | 9 | 28.2 |
| | 4 | 28.7 | 10 | 28.0 |
| | 5 | 27.9 | 11 | 27.8 |
| Average 27.9 | 6 | 29.4 | 12 | 29.7 |
| | 7 | 29.2 | 13 | 28.3 |
| | 8 | 28.2 | 14 | 27.9 |
| 22 January 1960 | 3 | 27.6 | 9 | 28.7 |
| | 4 | 28.5 | 10 | 28.7 |
| | 5 | 28.6 | 11 | 28.3 |
| Average 29.9 | 6 | 24.9 | 12 | 27.9 |
| | 7 | 27.7 | 13 | 30.3 |
| | 8 | 28.8 | 14 | 28.3 |
| 16 February 1960 | 3 | 28.1 | 9 | 29.7 |
| | 4 | 28.9 | 10 | 28.8 |
| | 5 | 29.5 | 11 | 28.6 |
| Average 29.0 | 6 | 30.5 | 12 | 30.5 |
| | 7 | 31.0 | 13 | 29.2 |
| | 8 | 29.6 | 14 | 28.2 |
| 29 March 1960 | 3 | 28.9 | 9 | 29.5 |
| | 4 | 29.2 | 10 | 29.7 |
| | 5 | 29.6 | 11 | 28.9 |
| Average 29.1 | 6 | 30.1 | 12 | 29.5 |
| | 7 | 30.2 | 13 | 30.5 |
| | 8 | 29.2 | 14 | 29.1 |
| 26 April 1960 | 3 | 30.9 | 9 | 31.0 |
| | 4 | 30.9 | 10 | 31.2 |
| | 5 | 30.9 | 11 | 30.8 |
| Average 30.9 | 6 | 30.9 | 12 | 30.3 |
| | 7 | 31.3 | 13 | 30.8 |
| | 8 | 30.7 | 14 | 30.9 |
| 29 May 1960 | 3 | 34.0 | 9 | 35.1 |
| | 4 | 34.0 | 10 | 34.5 |
| | 5 | 34.0 | 11 | 33.9 |
| Average 34.3 | 6 | 33.6 | 12 | 33.9 |
| | 7 | 33.6 | 13 | 35.7 |
| | 8 | 34.9 | 14 | 34.8 |
| 20 June 1960 | 3 | 34.2 | 9 | 36.6 |
| | 4 | 35.8 | 10 | 34.1 |
| | 5 | 35.7 | 11 | 35.5 |
| Average 35.2 | 6 | 35.7 | 12 | 35.5 |
| | 7 | 35.5 | 13 | 36.4 |
| | 8 | 36.3 | 14 | 35.5 |

Phosphates: (ug-atoms PO₄ - P/Liter)

| | <u>Station</u> | |
|------------------|----------------|------|
| 30 November 1959 | 4 | 0.50 |
| | 6 | 0.68 |
| | 8 | 0.34 |
| | 14 | 0.50 |

| | <u>Station</u> | |
|------------------|----------------|------|
| 22 December 1959 | 4 | 0.52 |
| | 6 | 0.73 |
| | 8 | 0.32 |
| | 14 | 0.51 |
| 27 January 1960 | 4 | ---- |
| | 6 | 0.81 |
| | 8 | 0.50 |
| | 14 | 0.52 |
| 16 February 1960 | 4 | 0.25 |
| | 6 | 0.48 |
| | 8 | 1.75 |
| | 14 | 0.48 |
| 30 March 1960 | 4 | 0.35 |
| | 6 | 0.65 |
| | 8 | 0.35 |
| | 14 | 0.70 |
| 26 April 1960 | 4 | 0.20 |
| | 6 | 0.80 |
| | 8 | 0.65 |
| | 14 | 0.60 |
| 29 May 1960 | 4 | 0.35 |
| | 6 | 0.40 |
| | 8 | 0.50 |
| | 14 | 0.20 |
| 20 June 1960 | 4 | 0.10 |
| | 6 | 0.30 |
| | 8 | 0.50 |
| | 14 | 0.30 |

Bottom Water Dissolved Oxygen: (Parts per million)

| | <u>Station</u> | |
|------------------|----------------|-----|
| 17 February 1960 | 4 | 2.7 |
| | 6 | 4.8 |
| | 8 | 2.5 |
| | 14 | 5.6 |
| 29 March 1960 | 4 | 2.6 |
| | 6 | 2.8 |
| | 8 | 2.6 |
| | 14 | 2.4 |
| 28 April 1960 | 4 | 3.8 |
| | 6 | 4.0 |
| | 8 | 4.2 |
| | 14 | 3.0 |
| 29 May 1960 | 4 | --- |
| | 6 | 4.4 |
| | 8 | 2.6 |
| | 14 | 4.0 |
| 20 June 1960 | 4 | 6.4 |
| | 6 | 2.0 |
| | 8 | 3.2 |
| | 14 | 1.8 |

Comments: The job segment report presents data which will be available for later use in a more comprehensive report on Region M-7. No attempt has been made to interpret the data in this report.

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Accepted by

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Date

12 December 1960