

Brushy Creek

Report of Fisheries Investigations

Pollution Studies

by

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and

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Dingell-Johnson Project F-2-R-8, Job C-1
February 1, 1960 - January 31, 1961

H. D. Dodgen - Executive Secretary

Texas Game and Fish Commission
Austin, Texas

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A B S T R A C T

Three cases of pollution were investigated during the year. Two involved oil well pollution and one involved domestic sewage from a city treatment plant. Fines were paid in the case of the oil well operators and the contamination ceased. The municipal pollution was stopped and repairs to the sewage disposal plant were begun.

Segment Completion Report

State of TEXAS

Project No. F-2-R-7

Name: Fisheries Investigations and Surveys of the Waters of Region 6-B.

Job No. C-1

Title: Pollution Studies

Period Covered:

February 1, 1959 - January 31, 1960

ABSTRACT

Two examples of stream pollution were investigated during the period reported for. One involved the discharge of waste oil into Williamson Creek, in Travis County. Investigation resulted in legal action being instigated against the responsible party.

The cause of the second kill, on Brushy Creek in Williamson County, was not determined.

OBJECTIVES

To determine the source and nature of natural or man-made pollutants which affect fish populations.

TECHNIQUES

Investigations were made of all reported fish-kills in an effort to establish their extent and cause. In conjunction with other work done under the project, all situations encountered which suggested possible cases of pollution were checked. Standard chemical tests for dissolved oxygen, carbon dioxide, chlorides, and pH were used in areas suspected of being polluted.

FINDINGS

Two examples of stream pollution were discovered during the segment.

Williamson Creek

On June 23, 1959, State Game Warden Ben Gaddy contacted project personnel regarding alleged pollution of Williamson Creek inside the city limits of Austin in Travis County.

Investigations revealed that the Capital Supply Company of Austin had discharged waste oil into the stream. The results of dissolved oxygen determinations above and below the point of oil discharge revealed the following:

Average D. O. above oil discharge: 2.7 ppm.

Average D. O. below oil discharge: 1.1 ppm.

Above the point of pollution, invertebrate types and numbers were profuse. No trace of invertebrates could be discovered below the spot where the oil discharge entered the stream.

These findings were turned over to W. J. Cutbirth, Assistant Executive Secretary, Game and Fish Commission, and legal action was instigated against the Capital Supply Company.

Brushy Creek

On February 5, 1959, correspondence was received from Mr. E. C. Overall of San Antonio regarding a fish-kill on Brushy Creek in Williamson County, just below Round Rock.

Investigation disclosed that a kill was in progress in the area reported. The kill began several hundred yards below the city sewer plant and continued for several miles downstream.

Sewer effluent and water samples from the creek were collected and turned over to the State Health Department. Nothing considered to be toxic to fish was found in subsequent chemical analysis. The City of Round Rock reported that the sewer plant had been operating properly with no unusual overloads.

Further investigation failed to reveal any possible cause for the fish-kill.

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Date March 31, 1960

Segment Completion Report

State of TEXAS

Project No. F-2-R-8

Name: Fisheries Investigations and Surveys
of the Waters of Region 6-B.

Job No. C-1

Title: Pollution Studies

Period Covered:

February 1, 1960 - January 31, 1961

OBJECTIVES

To determine the source and nature of natural or man-made pollutants which affect the fish population.

TECHNIQUES

Investigations were made of all reported fish kills in an effort to establish their cause and extent. In conjunction with other work done under the project, all situations encountered which suggested possible cases of pollution were checked. Standard chemical tests for dissolved oxygen, carbon dioxide, chlorides, and pH were used in areas suspected of being polluted. In addition water samples were taken to the State Health Department for more complete analysis.

FINDINGS

On the 19th of May, 1960, a letter was received from Mr. E. C. Overall of San Antonio reporting a case of pollution on Brushy Creek in Williamson County. Investigations were made and the source of pollution was found to be the City of Round Rock sewage disposal plant. The system was found to be carrying an overload and partially-treated sewage was being dumped into the stream.

This fact was brought to the attention of the mayor and city council of the City of Round Rock. The State Health Department was notified and began immediate investigation. Repairs to the disposal plant were started and the pollution ceased.

On June 16, a suspected case of oil well pollution was investigated on Skull Creek near Altair, Texas. A fish kill was in progress, the water was discolored and the dissolved oxygen below the point of entry of the effluent was 0.00 p.p.m. Above the point of entry dissolved oxygen was recorded at 7 p.p.m.

A sample of the effluent was taken to the State Health Department for analysis. The effluent was found to be drilling mud with a high percentage of tannin and oil. The State Game Warden filed charges against the operator of the drilling crew and a fine was collected.

Another case almost identical in nature was investigated on a small unnamed tributary of the Colorado River near Columbus, Texas, on July 22. The pollutant was found to be drilling mud with a high percentage of tannin and oil. Again the State Game Warden filed charges and a fine was collected.

In both cases the cause of the pollution coincided with the completion of drilling so no danger of further pollution was present.

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Date February 10, 1961