

*Rochester Committee
for Scientific Information
Rochester, NY*

*RCSI Bulletin 2
Second Report on Water Pollution*

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 THE ROCHESTER COMMITTEE FOR SCIENTIFIC INFORMATION
 SECOND REPORT ON WATER POLLUTION

November 7, 1964

The Table of Results which follows is a summary of the second series of tests conducted by the Scientific Subcommittee on Water Pollution of the R.C.S.I. Samples were collected by Dr. W. Newcomb, Dr. T. Bannister and Dr. G. Berg, and counts were made by Dr. J. R. Christensen, Dr. T. Bannister and Dr. G. Berg. The method of sampling and counting was given in the previous report. Under the conditions of these tests, counts of coliform bacteria were a reliable index of the amount of contamination of water with human fecal matter. The tests were designed conservatively to underestimate rather than overestimate the amount of pollution. The limit of detection was of the order of one thousand bacteria per 100 ml.

The results are shown proceeding downstream on the Genesee River from the area of the Barge Canal to the lakefront.

Counts of coliform bacteria in samples of
 water from rivers and streams

<u>Location</u>	<u>Date</u>	<u>Count per 100 ml.</u>
Genesee River above Barge Canal, in Genesee Valley Park (Right Bank, opposite Bridge E-157)	11 October 1964	0.6 thousand
	25 October 1964	10 thousand to 20 thousand
Red Creek entering Genesee Valley Park	25 October 1964	3 thousand
Genesee River under Elmwood Avenue Bridge (left bank)	25 October 1964	10 thousand to 20 thousand
Genesee River under Erie R.R. bridge (right bank, at River Boulevard)	11 October	1 thousand to 2 thousand
Genesee River at level of Eastman Avenue (left bank)	25 October	40 thousand to 70 thousand
Outflow of Seneca Park Pond into Genesee River	25 October	none detected
Genesee River at the dock of Rochester Yacht Club	11 October	none detected
Genesee River, 100 feet down stream from Yacht Club deck, 1 foot downstream from Irondequoit Sewer outlet	11 October	80 thousand to 0.4 million
	18 October	5 million to 10 million
	1 November	0.3 million to 0.9 million

<u>LOCATION</u>	<u>Date</u>	<u>Count per 100 ml.</u>
Genesee River, 25 feet down-stream from Irondequoit Sewer outlet.	1 November	Count of unstirred sample - 1.2 million to 2 million Count of stirred sample - 3.5 million to 4 million
Gillette Creek near outlet into Lake Ontario, under Oak Ridge Drive, Irondequoit	25 October	None detected

The samples taken below the Irondequoit sewer outlet had a flocculent, grey precipitate and a strong, objectionable smell. The shaking test confirmed that the coarse suspended matter was a source of coliform bacteria.

We concluded, that the Irondequoit sewer was the major source of contamination of the Genesee River, and that it discharged a suspension of raw human fecal matter into the river.

Ten years ago, a study of the Genesee River by the New York State Department of Health showed that the City of Rochester was the major polluter of the Genesee River (data in the Genesee River Drainage Basin Reports of 1954-1956). We found a remarkable improvement in the river water flowing through the city. A careful study of our figures indicated that some sources of river pollution still remained in Rochester, but that they were minor when compared with the outfall from Irondequoit.

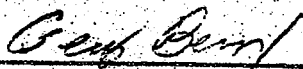
It is our feeling that this problem presents a serious health hazard. We quote two authorities on the meaning of water pollution: "The capability of polluted water to spread enteric disease is historic. More recently, other diseases - such as infectious hepatitis - have been recognized as water borne. The spread of disease through polluted water can occur at any time that vigilance is relaxed." - Hollis S. Ingram, M. D., Commissioner, New York State Dep't of Health, Health News, May 1964, p. 7.


"Continued discharge of untreated or partially treated sewage from our municipalities cannot be justified under any circumstances and should not be tolerated." - R. Hennigan, Principal Engineer, N. Y. State Office for Local Government, Health News, May 1964, p. 15.

We feel that the following health officers should take action to correct this problem. Dr. W. Ames, is the County Health Officer, whose responsibility it was to test the water of the Genesee River and to examine sewage disposal systems that lead to the river for hazards to public health. In our opinion, such tests would have shown that Irondequoit sewage has been creating a hazard to the health of the public at Ontario Beach Park, Ontario Beach and Summerville Beach, and that Irondequoit sewage is currently polluting to a hazardous extent the neighborhood of the drinking water intake of the Monroe County Water Authority.

Mr. Andrew Fuller, District Engineer from the New York State Department of Health is in charge of controlling water pollution in Monroe County. If Mr. Fuller samples the waters as we did and traces the pollution to its source, it is our opinion that he will find the town of Irondequoit is violating the state laws and regulations which prescribe a modified B rating for the Genesee River.

For the R.C.S.I., Subcommittee on Water
Pollution


George Berg, Chairman of Scientific
Committee


Thomas A. Fink, President of Rochester
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