Original: Fish Division cc: Mr. Milton P. Adams

Mr. Ruhl

## INSTITUTE FOR FISHERIES RESEARCH

DIVISION OF FISHERIES

MICHIGAN DEPARTMENT OF CONSERVATION

COOPERATING WITH THE UNIVERSITY OF MICHIGAN

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ADDRESS
UNIVERSITY MUSEUMS
ANN ARBOR, MICHIGAN

REPORT NO. 490

REPORT OF FISH DYING IN THE HURON RIVER BELOW THE OUTLET

FOR THE MUNICIPAL WATER SOFTENING PLANT

ANN ARBOR, MICHIGAN

On September 13, 1938 a story was sent to the Ann Arbor News as follows:

Sometime in the forenoon of September 9 the sediment from ponds at the new water softener plant were flushed into the Huron River just below the Argo Dam. By noon the fish in the one-half mile of stream immediately below were starting to die; by 5 p.m. most of the fish in the first mile of stream were dead.

Contrary to a previous published notice, the fish did not suffocate but died from the poisoning effect of the sediment. Many partially affected fish were placed in fresh water and none of them survived.

The fish population in this part of the river contained about equal numbers of small-mouthed bass, carp and suckers, with fewer walleyed pike, bluegills and bullheads. Twenty-five small-mouthed bass were picked up in the vicinity of the Wall Street bridge.

Shortly after 5 p.m. additional water was allowed to enter the river from the Argo Dam. The whole river looked like a stream of milk down as far as the east end of the Municipal Golf Course. An examination on the following morning showed the fish to be dead over this entire section.

The loss of a few hundred game fish may or may not be important to the residents of Ann Arbor, but the whitewashing of the river bottom and the destruction of all natural living things through the most beautiful park development in the city certainly is of some concern to most of us.

The first report of fish dying was received about noon September 9. The survey party arrived on the stream at 3:30, at which time the water in the river at the Detroit Edison plant was partially colored white from waste material from the water softening plant. At this time the only fish found dead were small-mouthed bass and a few bluntnose minnows. The carp in the stream were showing signs of effect of the poison and were in such condition that they were easily taken by men on the stream. Many were taken away to be eaten.

There was very low water and little current in the river to carry the effluent down stream, and consequently the effect of the poison as it progressed downstream could be watched. At 5 p.m. the suckers began to show the effects of the poison by making rapid darts across the surface of the water and then turning belly up and dying.

The effects of the material were first seen at the Wall Street bridge about 5:15 or approximately 5 hours after the effluent was turned into the river.

The last fish to turn up were the bullheads, which began to show at 6:15. At this time the water was turned through the power house and the rising water brought a flood of milky white substance down the river and made the taking of any further fish impossible, although many were seen to tear across the surface of the water.

The white material turned into the river rapidly precipitated out and covered the river bottom and aquatic vegetation for half a mile or more below the Wall Street bridge.

## List of Fish Taken From River, Dead

- 25 Small-mouthed bass
- 23 Carp
- 27 Suckers (Co commersonnii)
- 9 Bluegills
- 7 Log perch
- 4 Walleye
- 1 Bullhead (A. melas)
- 1 Dogfish
- 1 Black side darter
  Great many minnows--all of which were bluntnose except one common shiner.

## Results of Chemical Analysis

Time	3:30	3:45	4:45	5:00
Station No.	1	1	2	3
Bottle No.	8	7	10	9
Carbon dioxide	0.0	0.0		0.0
Phth.	9.0	10.0		9.0
M.O.	185	185		183
рĦ	8 <b>.4</b>	8 <b>.4</b>		8.4
Oxygen	9.1	9.0	9 <b>.4</b>	9.2

Station No. 1 - Center of river at parking grounds for Detroit Edison.

Station No. 2 - 100 yards north of Wall St. Bridge -- middle of river.

Station No. 3 - 250 yards north of Wall St. Bridge -- middle of river.

On the following morning an examination showed the sediment to have whitewashed the river down to the east end of the Municipal Golf Course. No live fish were observed in this section. The whole river bottom was unsightly, being covered by a layer of sticky white substance.

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