Original: Fish Division cc: Education Division Mr. Burroughs, Game Division Mr. Fred Zinn

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DIVISION OF FISHERIES MICHIGAN DEPARTMENT OF CONSERVATION COOPERATING WITH THE UNIVERSITY OF MICHIGAN

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## July 22, 1946

REPORT NO. 1057

## EXAMINATION OF THE PROPOSED WAR MEMORIAL

RECREATIONAL AREA FOR BATTLE CREEK

by

## W. F. Carbine

The location, description, and purpose of the war memorial recreational area are contained in a seven page brochure furnished by Mr. Fred Zinn. of the Battle Creek Rotary Club.

On Monday, July 15. I contacted Mr. Zinn and discussed the plans that he has proposed for the Battle Creek River. I spent the entire afternoon cruising the river and contacting Consumers Power Co. officials and fishermen. Conservation officer, Zene W. Blackmer, of Battle Creek, accompanied me on a further check of the river on Tuesday morning, July 16.

At the present time, the Battle Creek River is subject to considerable fluctuation in flow. Heavy spring floods inundate large portions of the area being considered for the memorial and low water in late summer in some years leaves an almost stagnant river. This problem of water fluctuation is most important to the fisheries. Accepted soil conservation practices along the entire Battle Creek River watershed in future years should almost entirely eliminate this factor and provide a more or less steady continuous flow the year-round.

Pollution is the second factor that must be considered. At present

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the river is polluted by city and industrial sewage, garbage, and rubbish. There is no question but what the pollution problem will be taken care of if the memorial recreational objective becomes a reality.

All other factors upon which good fish production is dependent are already present. Adequate aquatic vegetation can be found which provides excellent cover and food for fish. Gravel and rubble bottom is also present in most of the stream and this is a very productive bottom type for the production of fish food organisms and the most desirable required for spawning by the species of fish present in the river.

The following species of fish are known to inhabit the Battle Creek River: smallmouth bass, largemouth bass, bluegills, pumpkinseed sunfish, black crappies, northern pike, bullheads, earp, suckers, redhorse, dogfish, and several species of minnows. According to Mr. Blackmer, fishing for northern pike and smallmouth bass is very good. Many people were observed fishing on all stretches of the river on July 15 and 16.

Since fishing is reported to be fairly good at present, very little need be done to improve conditions for fish life other than control of erosion and pollution. Vegetation and bottom types are excellent, and should furnish adequate food, cover, and spawning facilities. The presence of carp may be harmful, but several procedures could be used to control or eliminate them (poison and dams). Stream improvement devices could be installed to increase the carrying capacity and to improve conditions for certain species. Several low dams could also be constructed as well as one larger dam with a 5 or 6 foot head. The ponds thus created would be ideal for fish life and would provide swimming, boating, and other types of recreation. Many canals and ponds could be created in the low area south of the river. The dirt removed from the canals and ponds could be used as much needed fill. The canals and ponds would provide fishing,

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boating, canceing, swimming, and other types of recreation. Water birds, rustic bridges, and landscaping would make this an extremely attractive area. Several ponds could be constructed for holding fish for display purposes and would be an added drawing card for visitors. Several ponds could be set aside for fishing by children only.

The area definitely can be made more attractive for fish. Its value as an educational and recreational area are considerable and well worth the effort required to bring this project to a successful conclusion.

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Report approved by A. S. Hazzard Report typed by M. A. Klaphaak