Original: Fish Division
cc: Mr. Ruhl
Dr. Eschmeyer

INSTITUTE FOR FISHERIES RESEARCH
DIVISION OF FISHERIES
MICHIGAN DEPARTMENT OF CONSERVATION
COOPERATING WITH THE
UNIVERSITY OF MICHIGAN

ALBERT S. HAZZARD, PH.D.
DIRECTOR

ADDRESS
UNIVERSITY MUSEUMS
ANN ARBOR, MICHIGAN

June 22, 1938

REPORT NO. 481

LINCOLN LAKE FLOODING PROJECT*

On June 14th the writers visited Lincoln Lake and other lakes in the group to briefly examine these waters. The investigation was a very superficial one and any conclusions given below must obviously be regarded as tentative.

In several respects the flooding project would perhaps be beneficial:

1. The total shoal area would apparently be increased if the water level were raised as proposed. A considerable acreage of low, marshy land would be inundated. It might be expected that a decidedly greater amount of shoal would be beneficial for fish life.
2. The total volume of water would be greatly increased and a larger fish population could presumably be supported. According to reports, the fishing pressure on these lakes is constantly increasing and a greater area of fish supporting water should be desirable.
3. Blue Lake, in the chain, is a marl lake with very little shoal area. This lake would undoubtedly be benefited considerably by an increase in level.

---

* See also Mr. J. H. Stephenson's memorandum for the files under date of June 7, 1938.

4. Masten Lake is still relatively low even though water levels in general are now high. The lake has considerable shallow water. An increase of a few feet in level would probably be desirable.

What changes in the fish population would result from the flooding cannot be predicted, nor could they be accurately predicted even if a survey of present conditions were made. In newly impounded waters fishing generally is exceptionally good for a period of several years and then declines after the immediately available fertilizing substances have been removed by the water. The trend in the Lincoln Lake flooding might be similar to that generally found in newly impounded waters.

Though not of immediate interest to the fisheries worker, the probable increase in property value resulting from the flooding deserves consideration. Many additional cottage sites would undoubtedly be available if the water were raised. Some areas are not suitable for cottages at present because of the wide marshy borders. A few cottages at the base of Lincoln Lake would need to be moved, however, if the dam were restored.

The expenditure of large sums of money to raise the water level would probably not be justified since the effect of this change on fishing cannot be predicted. If, however, the work can be done as a W.P.A. project, with the value of the project considered secondary to relieving the unemployment situation in that vicinity, the project might well be encouraged. It seems probable that fishing would benefit from an increase in water level as proposed.

If the dam were constructed, the Department should insist that it be of a type which would permit regulating the water level.

We agree with Mr. Stephenson that the Department might best act in an advisory capacity only, leaving responsibility for any actual construction to some other agency.

INSTITUTE FOR FISHERIES RESEARCH
A. S. Hazzard, Director

By R. W. Eschmeyer and
W. F. Carbine