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September 29, 1933

Report 228

MEMORANDUM REGARDING CONTINUED EMERGENCY CONSERVATION WORK

As a result of several conferences and a trip north to Lake County, I beg to submit the following suggestions. I would like to add that the Institute agrees fully with the Fish Division officials as regards the desirability and practicability of the several projects which have already been proposed.

1. Checking lake and stream projects for work during the December 1 to June 1 period.--Intelligent planning of the work projected to be done in the six months period mentioned will require all the time that the trained workers can give to this planning. Even if the projects involving fish work should be cut in half, most of October and November should be spent in laying out the winter-spring campaign. The projects as now submitted specify as I understand it only the man-months of work for lake and for stream work from each given camp. The selection of the actual waters to be worked on, the budgetting of the time among these waters, the starting of petitions for work on waters with private riparian holdings, a reconnaissance survey of the waters to lay out the detailed improvements called for, the advance revision of the schedules as between lake and stream work in one camp, and as between total lake and stream work in different camps, will call for an immense amount of work in the near future. It would seem legitimate and desirable that the men doing this checking should be continued in E.C.W. positions while planning the work for the next six months period.

Check-up on Upper Peninsula work.--An inspection trip covering the lake and stream work in the Upper Peninsula has been suggested, the party to be led by A. B. Cook, Jr., and to include also Hubbs, Eschmeyer and Tarzwell. This seems important, but we suggest certain changes. As we understand that Mr. MacClure has not undertaken any considerable amount of lake work as yet, it would seem unnecessary for Eschmeyer to accompany the party. Such lake work as may have been done could be seen by Eschmeyer as (or if) he makes the rounds of the Upper Peninsula to lay out lake work for the next period. Tarzwell reports he should have two weeks to check the stream work in detail. I suggest he accompany the party and then stay longer for the definite check-up. If the latter work seems beyond the limits of E.C.W. activity, Tarzwell could be paid by the Institute for Fisheries Research for this period. I suggest further that Mr. C. S. Johnson be assigned to this inspection trip, because of his knowledge of the Upper Peninsula and because of the advisability of giving him supervision over additional stream and lake improvement work. The Institute feels that this inspection trip is important from the standpoints of efficiency in E.C.W. work and of the development of water improvement technique. The projected revision of the Stream Improvement Bulletin ~~particularly calls~~ and the drawing up of a Lake Improvement Bulletin particularly calls for checking work and getting all ideas together.

Personnel Suggestions.--I recommend that R. W. Eschmeyer and Clarence Tarzwell be retained as skilled workers for the period December 1 to June 1, and also for the period of October and November for the purpose of checking work for the six months period. Considering the responsibilities and work involved, it would seem fitting that these men be raised a grade in ranking and salary.

These two men ought to have as assistants in the survey one helper each, preferably men who will be continued as construction foremen through the next 6 months. We recommend Eugene Kuhne and Walter L. Steinfatt for these positions.

Eschmeyer should spend a week or two in Ann Arbor probably toward the end of November checking over the improvement schedule, then should get back into the field to organize and supervise lake improvement work on the ice. He should be assigned to Ann Arbor or be given a leave of absence from the E.C.W. during the period of breakup of the ice, when lake work could not be carried on effectively. During the period he would work with us in putting together the Manual for the Improvement of Michigan Lakes.

Tarzwell could get the stream work planned and organized and could get the winter work underway so as to require relatively little detailed supervision during the coldest period (January and February at least). During this time he could put in his time most effectively in helping to revise the stream improvement bulletin--which would render more effective the stream improvement under the E.C.W. in Michigan and elsewhere.

Mr. C. S. Johnson has done very excellent work on the Pere Marquette bank erosion and stream improvement project. His ability in handling men and in constructional work ought to be utilized if possible in the six months period (Dec. 1 to June 1). Mr. Johnson's capabilities would be too much restricted by assigning him to a single project. He could very satisfactorily handle stream and probably also lake work from several camps. If this could be arranged, he could be well used also in October and November laying plans for the next 6 months. Johnson's familiarity with the Upper Peninsula would come in very handily if he could be given work there, especially in the western part of the peninsula. Incidentally Johnson has remarked that he knows a number of men who have worked for him in the past and who could very effectively handle any water work which might be undertaken under Johnson's supervision.

Projects suggested for the E.C.W.--In our last trip north certain very desirable water improvement projects were encountered. These are suggested here for consideration in drawing up the detailed program for work over the December 1 to June 1 period:

A. Bank erosion control on the Muskegon River between Roger's Dam and M 131. This project could be carried out most easily from the Big Rapids Camp, which we note is scheduled for movement to near White Cloud. Possibly the work could be done before the move takes place. Or the men could be trucked over from the Baldwin or White Cloud locations (about 1 hour run). Here are two very large "high banks" actively eroding into the wooded areas above. These are particularly unsightly, and must be harming the stream seriously from a fish-condition standpoint. The holding of these banks would form a fine demonstration of erosion and silting control, because the work is close to the trunk-line highway. Mr. C. S. Johnson should be asked to draw up the detailed estimates on this project if it should be considered worthy of proposal.

B. Stream improvement in the Muskegon River near Paris.--This stream offers a very fine opportunity for a large-scale experiment in improving a fairly large river. The stream here is excellent bass water and supports some adult trout. It could be narrowed and deepened, by wing dams of different materials (logs; boulders; brush and stone or Mississippi River type). The portion suggested for the work is that lying along and near the state fish hatchery. This would make of the work a fine demonstration. The likelihood of improving fishing materially is very great. The stream has a marked excess of food production, but has a limited fish population owing to its wide shallow character (supposed to have been produced by log driving). Mr. Fortney of the Paris Hatchery agrees that this would be a fine thing to do. Equipment on the Pere Marquette could be moved to this job. Tarzwell or Johnson should make the estimates of man-months, etc. I would suggest that the work be done over a two-mile stretch, involving at least five installations of each type of wing dam construction. Some low-bank control could be added to all-around advantage.

C. Extension of stream improvement demonstration on Paris Creek.--

The very useful public demonstration of stream improvement methods which Mr. Fortney has installed on Paris Creek off M 131 could be extended to very good advantage. Additional types could be installed, with appropriate signs, labels and models. Though within private riparian holdings, this is a public project and the owner we feel sure would gladly petition for the work as he has to late cooperated thoroughly with Mr. Fortney, who favors this extension of the project. Probably a 12 man crew for two weeks would suffice for this project. The especial point of this demonstration is that it gives the interested public a very fine and concrete idea of stream improvement methods, and thus extends satisfactorily improvement work by individuals.

D. Lake improvement project: Wolf Lake, Lake County.-- Mr. Fortney reports the need for and public call for lake improvement work in Wolf Lake, Lake County. Mr. Eschmeyer has a note to check this lake with the idea in view of including it in the schedule for lake operations.

E. Raising Tawas Lake by earth dam.--Some correspondence is at hand relative to local requests for the raising of the level of Tawas Lake, which is becoming according to local testimony too shallow and weedy for good fishing. Mr. Eschmeyer will examine this lake soon. Should the raising of the lake level appear desirable and practicable, we submit that this would be a logical and interesting E.C.W. project. Large earth dams have been constructed by the C.C.C. to produce recreational lakes in Iowa, Nebraska and in the Dakotas, so there are plenty of precedents for such a project in Michigan.

INSTITUTE FOR FISHERIES RESEARCH

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Director

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