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"Local Issues,
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ENHANCEMENT OF FISHING IN MINNESOTA THROUGH "CORE" PROJECTS

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The Minnesota Legislature enacted the Omnibus Fishing Bill 634 on May 23, 1983 to implement increased fish management in Minnesota. The bill also invited the public to participate in fish management projects. This may involve local sponsorship of projects, participation by volunteers, or cost sharing. This program is called project CORE (Cooperative Opportunities for Resource Enhancement). CORE projects are directed toward two general areas: habitat enhancement and angler use to provide a positive benefit to the sport fishing community and fishery resource of Minnesota. These projects may be initiated by anyone, but highest priority is given to local units of government, organized fishing groups, lake associations, and resort associations. The main thrust of CORE is to get as many people involved as possible. Group projects are given first consideration because they are the most efficient way of representing the interests of the angling public. CORE projects must have approval from the Department of Natural Resources so that they are biologically acceptable, properly funded, equitably distributed, and routinely monitored.

Some activities that can produce effective results with public involvement include stream and lake habitat improvement, fish population manipulation, management by special regulations, and development of access to fishable waters. Each activity requires a different level of hands-on effort, cost sharing, planning and evaluation. Opportunities for involvement thus can include a wide range of public interests and levels of dedication. Public involvement can hasten the initiation and accomplishment of programs important for accelerated resource development.

Cooperative projects are subject to the following conditions:

1. The initiating group(s) must appoint one person to be responsible for communication with the DNR Section of Fisheries. The regional fisheries supervisor is the initial contact for CORE projects.
2. A major goal of CORE is to increase citizen co-

operation in fish management. Combined group support will provide greater individual participation by the members. Public meetings may be held to gain support and additional input.

3. Proposals to enhance of fish populations are evaluated according to their potential effect on the fish community and lake or stream system, as well as their contribution to the fishing resource. Projects in this group are expected to increase or adjust fish populations to more desirable levels. These projects encompass (but are not limited to) habitat improvement, spawning areas, fish barriers, reclamation and aeration.

4. "Use proposals" relate to the activity of fishing and are evaluated according to their potential value in recreational angling, fish utilization, and potential effect on the surrounding environment. Projects in this group should provide better access to fish populations than presently exists. These projects encompass such activities as: improving access, creating brush shelters, changing environmental regulations and constructing fishing piers.

5. Comprehensive proposals are encouraged, but those of long duration and high cost may need to be subdivided into a manageable set of projects.

6. Each project must have defined guidelines, goals and achievements, as well as stated beginning and end dates with a schedule of progress reports. When appropriate, a completion report is submitted within 60 days of the project end date.

7. Approval of CORE projects by the Section of Fisheries is based upon biological feasibility, social interactions of user groups, public support, and economic impact on the local community.

8. Funding of approved projects is subject to availability. Priority of funding will consider equitable statewide distribution as well as the project's potential value and benefit.

9. Specific projects also may be subject to approval by other agencies or legal authorities.

Applicants for CORE projects must complete a two-page application form using the above guidelines. Applications are sent to the regional fisheries supervisor where the lake or stream is located. Upon receipt of the completed application, the regional fisheries supervisor reviews it. If it meets CORE requirements and DNR objectives, the area fisheries supervisor is assigned to assist the initiator develop the proposal. Approval of projects for additions to the work plan are the responsibility of the regional fisheries supervisor.

Mink/Somers Lake CORE Projects

Mink and Somers Lakes are located 2 miles northwest of the town of Maple Lake. They have a combined surface area of about 460 acres and are considered one lake by the DNR for most management purposes. Water enters the lakes as runoff from the watershed and leaves the lake through an outlet into a ditch at the southwest part of Somers Lake. County Ditch #20 is in the Mississippi watershed and its waters eventually end up in the Mississippi River.

During the period of high water levels of the early 1980's, fish migrated upstream to these lakes. Unfortunately, the majority were undesirable species, primarily carp. An exceptionally bad winter exacerbated the problem by causing winterkill of many desirable fish. This made competition for food easier for the carp and bullhead populations. In late 1986, the outlet stopped flowing and the concentration of roughfish became more and more noticeable. Water clarity declined, and fishing was suitable only for those who like catching 4-6 inch bullheads or carp of all sizes. It was rare to catch a desirable fish. Carp were so plentiful that a commercial fisherman harvested 30,000 pounds of carp through the ice, but he was upset because they were thin. There were so many fish that the food supply was not adequate to produce fat carp.

In late 1988, I submitted the CORE application for a project to rehabilitate Mink and Somers Lakes through eradication of the existing fish population, restocking with desirable species, and installing aeration systems to prevent future winterkills.

The project progressed slowly at the beginning

because the DNR found it essential to install a fish barrier on the outlet of Somers Lake to prevent undesirable fish from migrating into the lake. Much work went into this initial project, mainly by the Division of Waters. A hydraulic study completed in January 1990 analyzed five options for a rough fish barrier. The analysis recommended replacement of an existing culvert with a smooth barrel culvert at a slightly higher elevation and greater downward slope to increase velocity. It was thought that water flow at all lake levels would be too fast for fish migration and that this would provide an effective barrier. Hydraulic modeling by the HEC2 program indicated that outlet velocities in excess of 8.5 fps will occur at all discharge rates.

Geological and archeological studies were done, and an environmental assessment workshop was held. The project was discussed with Paul Diedrich, area fisheries supervisor, at our association meeting in spring 1990, and it received unanimous support to proceed as quickly as possible.

Plans to replace the culvert required approval of the township. Permission was granted, and plans were made to replace the culvert in November 1990. DNR crews were delayed on other projects and postponed the replacement until 1991. The culvert was replaced in July 1991. The installation was neat, and the culvert looked great, but would it work? It was a wet summer, and the lake level rose enough to create a significant flow through the culvert. IT WORKED! Carp were observed on the downstream side of the culvert in the splash pool, but their repeated attempts to swim upstream were unsuccessful. As water levels fluctuated downward, the culvert continued to function as designed. The remainder of the project was not funded for this fiscal year, but the area fisheries supervisor hopes it will be funded next year.

Carp and bullhead populations continue to degrade the lakes, and the situation is unlikely to improve without reclamation -- which means eliminating the entire fish population and starting over. This would be done by applying rotenone just prior to ice cover. A favorable benefit-to-cost ratio was calculated by the DNR. The costs of the project, (\$160,000) would be borne by the state, but the association would assist with cleanup of dead fish.

Aeration is proposed to eliminate winterkill. The state would provide the equipment and the association would pay for electrical hookup and operation.

Insurance required for aeration as well as the permits and signage would be paid by the association. The aeration systems are portable and shore-based pump and baffle systems.

The association members are anxious to have the project completed. Benefits from the project will be

better fishing, improved water quality and increased property values. Our association is participating in Lake Watch and is actively working toward better quality lakes by promoting elimination of pollution. Support of the proposed county requirement to upgrade septic systems is an example of the association's intentions to improve Mink and Somers Lakes.