

DEPARTMENT : Natural Resources

STATE OF MINNESOTA

## Office Memorandum

DATE : November 8, 1993

TO : John R. Velin, LCMR Director

FROM : Duane Shodeen *DMS*

PHONE : 772-7950

SUBJECT : Subject: Status Report for Metropolitan Lakes Fishing Opportunities Study Work Program.

*I called for  
to advise  
closure soon  
fresh soon  
or soon  
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*NOV 15 1993*

JRV	<input checked="" type="checkbox"/>
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This status report follows the one previously submitted to you which was dated October 6, 1993

We have not made additional payments this fiscal year to the Contractor (C.J. Olson) hired to complete subject program. C.J. Olson is reviewing the creel census data base they developed and are correcting errors where they find them. They intend to send us the corrected version of the data base later this week or early next week. We will then have to determine if the new information meets our needs.

At this time, my most optimistic estimate for completion of this program is the end of December and then only if most of the errors can be corrected by C.J. Olson. It could take longer if a significant number of errors are related to interpreting data from non consistent creel reports, since we (DNR) would have to interpret the reported information.

cc William H. Becker  
Tim Kelly  
Joe Hiller  
Ron Payer  
John Schneider, Pres. MSC.

July 16, 1993

LCMR WORK PROGRAM 1991

I. Metropolitan Lakes Fishing Opportunities Study - Fisheries 26

Program Manager: Duane Shodeen  
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A. M.L. 91, Ch.254, Art. 1, Sec. 14, Subd. 8 (e) Appropriation: \$75,000  
Balance \$14,370

Metropolitan Lakes Fishing Opportunities: This appropriation is to the commissioner of natural resources to study metropolitan area lakes to determine if recreational fishing opportunities are being maximized. The study must be done in cooperation with the Minnesota Sportfishing Congress and other interested groups.

B. Compatible Data: During the biennium ending June 30, 1993, the data collected by projects funded under this section that have common value for natural resource planning and management must conform to information architecture as defined in guidelines and standards adopted by the Information Policy Office. In addition, the data must be provided to and integrated with the Minnesota Land Management Information Center's geographic data bases with the integration costs borne by the activity receiving funding under this section.

C. Match Requirement: \$0

II. Narrative

Lakes in and near the Metropolitan Area to improve fishing opportunities for a large portion of Minnesota's anglers. The location of metro lakes gives them high value for angling. Commensurate with this high value they require intensive, carefully planned management. This will increase opportunities to meet increasing angling pressure. This will assist development of accelerated fisheries management by: 1) Developing a profile of metro angler needs and barriers to angling in the Metropolitan Area; 2) Inventorying the management tools needed to manage each lake to its maximum; 3) Developing an accelerated fisheries management agenda to achieve maximum angling productivity from metro lakes in a manner that meets anglers needs and eliminates barriers (e.g. insufficient shore access) prohibiting angling on metro lakes.

Among the management tools reviewed will be:

- Population manipulation thru size and/or slot limits for quality fishing opportunities;
- Population manipulation thru size and or slot limits for the benefit of secondary species;
- Other special fishing regulations;
- Optimum levels of public access thru boat access, shoreland access, and/or pier access;
- Needs for water surface use regulations;

- Needs for aeration;
- Two story fish population management opportunities;
- Fish stocking; and
- Aquatic habitat restoration or enhancement with fish toxicants.

III. Objectives

A. Ascertain the needs of and angling barriers faced by metro area anglers.

A.1. Narrative: Metro lakes may be underutilized because they contain undesirable fish. In other cases, angling on lakes may be limited by lack of access or conflicting water surface use. The metro fish and angling management program should be managed to meet the public needs. The intent of this objective is to describe that need. The purpose is to develop a comprehensive set of targets for future metro fish and angling management efforts.

A.2. Procedures: In the past the Department of Natural Resources, through creel census and surveys, and other agencies such as the Metropolitan Council have collected data on angler needs and barriers. These studies may contain much of the information base for a responsive management program. Therefore, they will be reviewed for relevant information. The relevant information will be extracted and summarized. We anticipate that some information will not be found in existing documents. Therefore, the project includes a survey of approximately 1000 metro residents over the age of 10 to collect that information. The survey will be based on focus group discussions with metro residents and pretested prior to full administration.

A.3. Budget:

	<u>LCMR Funds</u>	<u>Matching Funds</u>
a. Amount Budgeted:	\$41,130	\$0
b. Balance:	0	\$0

<u>A.4. Timeline for Products/Tasks</u>	<u>July91</u>	<u>Jan92</u>	<u>June92</u>	<u>Jan93</u>	<u>June93</u>
Review Existing Information	*****				
Compile Pertinent Data	*****				
Develop Survey Objectives		*****			
Conduct Focus Groups		*****			
Pretest Survey Form			*****		
Conduct Survey				*****	
Analyze Survey Data					*****
Prepare Angler Market Profile					*****

A.5. Status: Fourth status report, July 1, 1993. The Department of Natural Resources, in cooperation with the Minnesota Sportfishing Congress, reviewed four requests for proposals and selected C.J. Olson Market Research Inc. as the most qualified firm for this study. All "Products/Tasks" are completed.

A.6. Benefits: This information will guide the selection of optimum actions from among alternative fish management and alternative resource management and development activities. This objective's product is an input to objective C.

B. Assess alternative fisheries and resource management techniques, and development actions necessary to enhance the fishing quality of metro lakes for all potential species.

B.1. Narrative: Intensified metro lake management is the essence of this project. Nearly every metro lake can be more intensively managed. Most management can be intensified in more than one way. This objective is designed to identify the possible ways of improving fisheries management. This will be done for each species that can be produced under ecologically sound principles. Intensified management approaches that will be assessed include, but are not limited to: size limits; slot limits; other special use regulations; more boat access; more shoreline access; more pier access; water surface use regulation; aeration; two story fish management; fish stocking; and chemical rehabilitation.

B.2. Procedures: To the extent possible, evaluate the use patterns conflicts, fish productivity, angling pressure, fish size, local accessibility, regional accessibility, "kids' fishing pond" need, need for special regulations, need for aeration. In general the regionwide factors such as regional accessibility and watershed development rate will be calculated or modelled using standard geographic analytical techniques. Local parameters such as current and potential fish populations will be estimated by fisheries management professionals. In some cases, when primary data such as fish creel are unavailable, computer modelling will be necessary to estimate local factors like current fishing pressure.

B.3 Budget:

	LCMR Funds	Matching Funds
a. Amount Budgeted:	\$30,070	\$0
b. Balance:	\$10,570	\$0

B.4. Timeline for Products/Tasks

	July91	Jan92	June92	Jan93	June93
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Identify target lakes			*****		
Develop operational definitions of evaluation criteria			*****		
Evaluate available data			*****		
Adjust operational definitions of evaluation criteria			***		
Conduct lake assessments by species			*****		

B.5. Status: Fourth status report, due July 1, 1993. The Department of Natural Resources in cooperation with the Minnesota Sportfishing Congress has worked with C.J. Olson Market Research Inc. to complete the first two "Products/Tasks" and presently, the consultant is in the process of evaluating available data. Information from 170 creel and recreational use surveys conducted on metro lakes has been hand tabulated and entered on computer disc. Unfortunately, as of July 1, 1993 the consultant and DNR are working to correct errors in this data base.

B.6. Benefits: Lake potentials will be defined. These potentials are an input to objective C.

C. To Match Metro Angler Needs With Management Opportunities.

C.1. Narrative: The purpose of this step is to take the needs and barriers found in objective A and match them with the opportunities for management (Objective B). The result will be projects and steps to undertake to improve the Metro fishery.

C.2. Procedures: This step is a lake by lake assessment based on needs and potential. A program will be designed to improve opportunities. A phasing plan and cost estimation, on a biennial basis, will be provided.

C.3. Budget:

	LCMR Funds	Matching Funds
a. Amount Budgeted:	\$3,800	\$0
b. Balance:	\$3,800	\$0

C.4. Timeline for Products/Tasks

	July91	Jan92	June92	Jan93	June93
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Option selection				*****	
Prioritization				*****	
Phasing				*****	
Cost estimation				*****	

C.5. Status: Forth status report, due July 1, 1993. Dependent on completion of objective B.

C.6. Benefits: The steps necessary, timing of, and associated cost of improving metro lake opportunities will be known. Based on this knowledge an improvement program can be undertaken.

IV. Evaluation: During the project period, FY92-93 biennium, the program can be evaluated on its ability to develop measurement factors for angler needs and barriers and operational lake angling potential parameters by species.

In the mid-term, the project can be evaluated on reallocation of existing state funds to program implementation.

In the long-term, the project can be evaluated on the results of creel censuses on lakes with accelerated fisheries related management.

V. Context: Related Current and Previous Work

A. Current metropolitan fisheries management is not directed by a system plan. This is unacceptable in a region where demand currently exceeds supply.

B. This work will direct the application of existing fisheries management efforts. It may expose overall shortfalls in fisheries management effort requiring additional supplemental development and management effort.

C. No complete fisheries systems plans have been completed. LCMR funded long range fish and wildlife management does address aquatic system objectives and species objectives. The department has studied the angling market and has information available to develop angling profiles. This data comes from creel census projects, angler surveys and population studies.

D. Not Applicable

E. Not Available

VI. Qualifications

1. Program Managers:

Duane Shodeen  
Regional Fisheries Supervisor  
Metro Region -- Minnesota Department of Natural Resources

William H. Becker  
Research Unit Supervisor  
Office of Planning  
Minnesota Department of Natural Resources  
St. Paul Office

B.S. Business Administration (Marketing), University of Missouri, 1971.

M.S. Forestry and Outdoor Recreation, Utah State University, 1976.

Thesis Title: Self-Interest of Urban Residents as Expressed by Their Choice of Recreation Development Funding Modes

Additional experience includes work with: the United States Forest Service, Doniphan District, Mark Twain National Forest; Jackson County (Missouri) Park Department; Institute for the Study of Outdoor Recreation and Tourism, Utah State University; consulting with the State of Georgia, Department of Natural Resources and the City of Savannah, Georgia, Park and Recreation Department; Mr. Becker has served on the National Recreation Data Archive Committee, the Sea Grant Advisory Board, the Minnesota Tourism Center advisory board, the Great Salt Lake Advisory Board, and the U.S. Corps of Engineers Upper Mississippi River Recreation Economics Study Advisory Committee, the Lake Minnetonka Strategic planning Technical Advisory Committee, the U.S.F.S Public Recreation Area Visitor Survey Advisory Committee, and the Lake States Forest Resource Assessment technical committee. In his present capacity he has conducted or managed over many socio-economics surveys, assessments and inventories related to public use of resources. He has written or managed the preparation of three Statewide Outdoor Recreation Plans, and participated in the development of the report of the Governors Commission on Minnesotans Outdoors. He has conducted or managed research for settlement of disputed issues including: Minnesota boat motor fuel consumption; Minnesota snowmobile fuel consumption; Ontario-Minnesota angling economy; Minnesota off-road vehicle fuel use; Root River Trail use; recreational/tourism value of acidification of sensitive Minnesota lakes; the effects of public access on water surface use; and the impact of marina development on the Lower St. Croix.

2. Major Cooperators:

The Minnesota Sportfishing Congress

VII. Reporting Requirements

Semiannual status reports will be submitted not later than January 1, 1992, July 1, 1992, January 1, 1993, and a final status report by June 30, 1993.