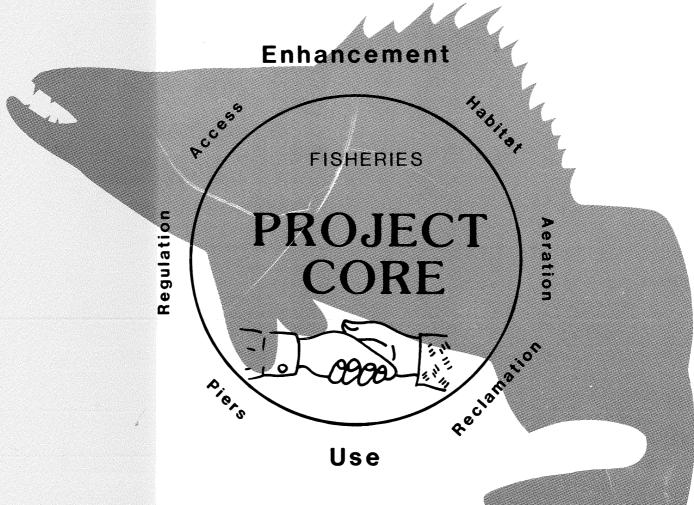


## 850061

# Department of Natural Resources Division of Fish and Wildlife Section of Fisheries

Minnesota



## Guidelines for Public Involvement in Cooperative Opportunities for Resource Enhancement



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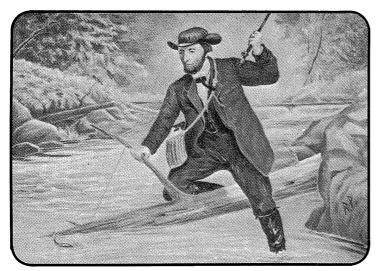
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"I Have Laid Aside Business, And Gone A Fishing"

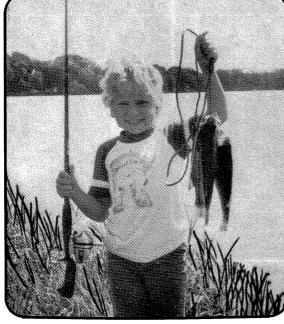


**LEGACY** 

200 Years of American Angling Heritage

## SUCCESS

## ACTION



Kids Like To Fish, Too

## PREFACE

Fishery management in Minnesota has existed since 1874. A management framework of protective regulations, habitat protection, and fish stocking programs has enabled a large fish resource to produce well for historical human population levels. The capacity for managing the resource has improved over the years despite only modest increases in funding. However, the number of anglers continues to grow, and the increasing pressure on our fisheries has resulted in distributing fish among more anglers. This is viewed by the angling public as a deterioration of their sport and a reason for intensified fish management.

The Minnesota Legislature enacted the Omnibus Fishing Bill (S.F. 634) on May 23, 1983 to implement increased fish management in Minnesota. The bill also invited the public to cooperate in fish management projects which may involve local sponsorship of projects, participation by volunteers, or cost sharing. The guidelines for project CORE (Cooperative Opportunities for Resource Enhancement), in this publication, formalize the establishment of methods and criteria for citizen cooperation and participation in the enhancement and use of our fishery resource.

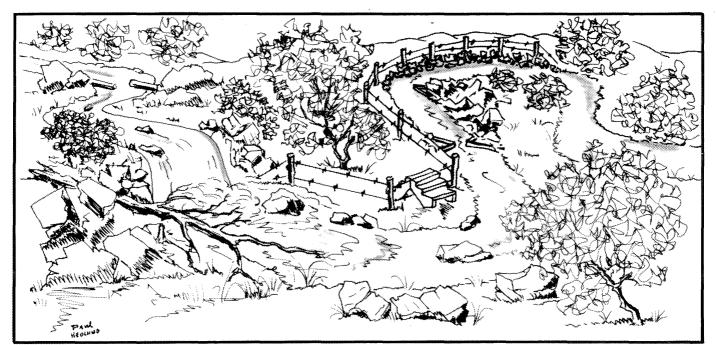
CORE projects should be action oriented to provide a positive benefit to the sport fishing community and fishery resource of Minnesota. The projects are directed toward two general areas: **habitat enhancement** and **angler use**. This pamphlet describes objectives, scope, and how to develop a project CORE proposal. It includes a map of the geographic regions of the Section of Fisheries and an application form. If you have a project in mind, find support from other anglers and submit an application.

## Introduction

For many years the Department of Natural Resources has worked with the public on a variety of cooperative projects to improve and enhance fish populations. Many of these projects involved the rearing of fish in natural ponds for stocking local lakes. Recently, the Section of Fisheries introduced a plan to better utilize citizens' input into the overall state fish management program. The program, Cooperative Opportunities for Resource Enhancement (CORE), emphasizes public involvement. The Section of Fisheries has long recognized the benefits from cooperative programs designed to develop better communication and interaction with the public. CORE will help the public develop a better understanding of fish management problems and their solutions. At the same time, the Department and Section of Fisheries will become more aware of the concerns and desires of the public as they relate to fisheries management.

Cooperative projects may be initiated by anyone, with highest priority given to groups: 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 will be given first consideration because they are the most efficient way of representing the interests of the angling public.

The Department of Natural Resources, through the Section of Fisheries, is responsible for managing the fishery resources of Minnesota. Fisheries operations are conducted statewide through field stations at 27 area headquarters and six regional headquarters, with program coordination by a central staff in St. Paul. CORE projects must have Department approval so that they are biologically acceptable, properly funded, equitably distributed, and routinely monitored.

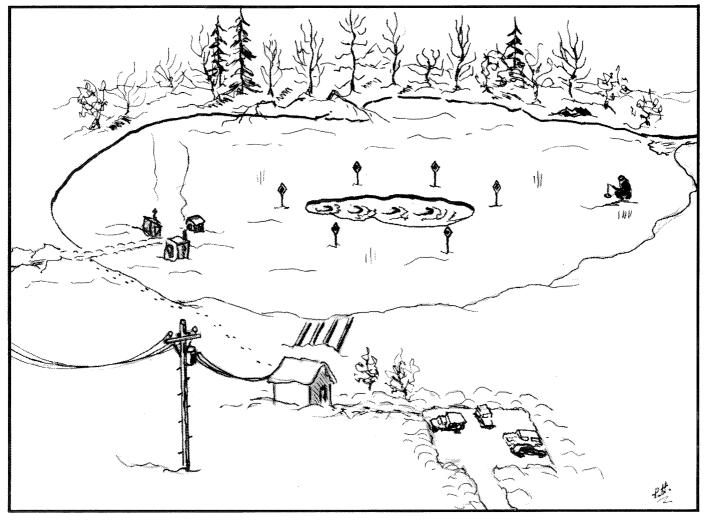


#### STREAM IMPROVEMENT

**Objectives** 

The primary objective of CORE is to involve the public in programs which will effectively enhance the quality and quantity of Minnesota's varied stream and lake fisheries resources. Some activities which can produce effective results with public involvement include stream and lake habitat improvement, fish population manipulation, management by special harvest regulations, and development of access to fishing waters. Each activity requires a different level of hands-on effort, cost sharing, planning, and evaluation. Opportunities for involvement, therefore, can include a wide range of public interests and levels of dedication. Activities developed through the CORE program can provide valuable additions to the existing programs of the Department of Natural Resources. Public involvement can hasten the initiation and accomplishment of programs important for accelerated resource development, and can call attention to the desires of the sports angler.

Opportunities to become involved in Minnesota's project CORE are divided into projects which involve **habitat enhancement** to improve the fishery resource and **angler use** projects which affect the ways in which the public can use the resource.



## LAKE AERATION

Habitat Enhancement. A healthy environment is the key element determining the quantity and guality of fish within any body of water. Environmental needs are specific for each species and mix of species. Deterioration of critical needs by use and often misuse of their environment reduces the capacity of a water to produce fish. Deficiencies can sometimes be corrected by various enhancement activities such as stream habitat improvement for trout and salmon, acquisition and development of northern pike spawning areas, and aeration of lakes. In some instances, populations of non-desirable fish species that dominate a water and suppress more desirable species may be removed by chemical reclamation and accompanying barrier installation.

Trout and salmon in streams require a balance of spawning and rearing areas. Adding structures that will provide spawning gravel, provide pools for rearing, or provide cover for hiding can improve the ability of a stream to produce fish. Proper placements of logs, boulders, planking and combinations of each in the stream channel and along stream banks are possible enhancement activities. Stable, well-vegetated stream banks control erosion and promote clear and cool water required by trout and salmon. In addition, bank side woody shrubs provide hiding cover and a supply of insects for food. Mechanical sloping, reseeding and fencing disturbed areas independently or in combination with structure development can improve stream bank condition and enhance trout and salmon. All of these techniques provide opportunities for public involvement.

Northern pike spawn in early spring over vegetation flooded by high spring water levels. Grassy flood plains are the best sites for successful hatching of eggs but are often limited in number. Natural invasion of brush and tall water plants degrades the quality of spawning sites. In addition, spawning sites may be lost by drainage, cultivation, and excessive livestock grazing. Improvement of spawning habitat by clearing and burning of brush and trees or fencing to control grazing can restore reproduction. Acquisition of spawning sites can protect them from adverse land use changes. These efforts can be strengthened through public participation.

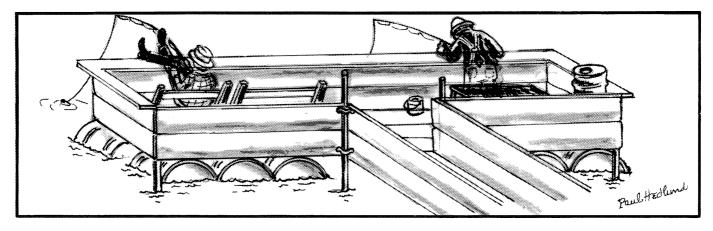
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Winterkill of fish in shallow lakes rich in nutrients from either natural or man-made sources is a common problem following long periods of ice and snow cover. Winterkill occurs when the oxygen reserve in the water is used up by animals, plant life, and chemical reactions in the lake. These low oxygen levels can be raised by artificial methods. Various aeration systems can be used to bring lake water into contact with air to replenish the oxygen supply. However, each lake is unique and all aeration systems have advantages and disadvantages. The lake and aeration system must be planned together. Public participation can accelerate the lake aeration program which prevents winterkill and expands fishing opportunities.

Safe operation of aeration systems is essential. Aeration programs operate under a permit system issued by the Department's Division of Fish and Wildlife. Financial responsibilities in the event of accident at the system site must be resolved. Posting of warning signs around the aeration zone and at points of access is required. Public involvement in aeration programs could include installing and operating equipment, evaluating results, installing and maintaining safety features, public notice, and cost sharing. Aeration projects require a substantial commitment of manpower and money by both the Department and the participants.

Changes in water quality or unauthorized introductions of undesirable species may inundate fishing waters with excessive numbers of undesirable fish. Undesirable species can compete with game species for food and space, disrupt successful reproduction, be a nuisance to fishermen, and deteriorate water quality by eliminating aquatic plants. Rehabilitation of waters by chemical application and removal of the fish can result in lakes suitable for restocking and management of desirable fish species. If chemical control of undesirable fish species is impractical, conducting a harvesting effort in conjunction with the installation of traps or barriers may be employed to impede expansion of those species. Public involvement can include assisting with chemical application activities, fish disposal, trap construction, restocking, evaluation, and cost sharing.

#### **FISHING PIERS**



Angler Use. Increasing opportunities for fishing are often hampered by a lack of physical or legal access to fishing waters. Acquisition of access privileges on private land adjoining fishing streams, either through easements or land purchase, is an important program. Construction and maintenance of pathways, fences, and fence bypass devices are typical projects on these streams. Development of fishing piers and fish shelter devices can provide and improve angling opportunities. Public assistance with construction and maintenance activities and cost sharing is possible.

Heavy use by anglers may result in a decline in the number of desirable fish in the lake or stream. In some cases, management with special harvest regulations that restrict numbers and sizes of selected species can result in improved fishing. The responses of the fish populations vary from water to water and application of special regulations should be considered experimental. Observation and evaluation of the results of each special regulation program are necessary. Public involvement in special regulation management can include evaluation, public information contacts, installation and maintenance of on-site public information signs, and aiding in voluntary creel surveys.

**Summary.** Proper management of Minnesota's fishery resources includes a combination of enhancement and use activities. An appropriate lake management program may include rehabilitation, construction of a fish barrier, acquisition and development of access facilities, spawning areas, aeration, and special regulations. A group may decide to adopt a lake or stream and sponsor all of the needed activities or work in cooperation with other groups to fulfill management needs.

The CORE program provides an excellent opportunity for resource enhancement and for education of our youth. Utilizing youth through various social and school group activities is encouraged. If youngsters can be made aware of the interactions between man's activities and the environment, the future for Minnesota's fisheries resources will look brighter for generations to come.

## **Project Scope**

With Minnesota being geographically large and having diverse fish species and habitat types, numerous proposals are anticipated. The Section of Fisheries will seek equitable geographic distribution of projects and will coordinate duplicate or overlapping project proposals. The cost of proposed projects must be evaluated and given weight on the basis of the greatest benefit to the resource for the least cost.

Cooperative projects will be subject to the following format:

1. The initiating group(s) shall appoint one person to be responsible for all communication with the Section of Fisheries. The Regional Fisheries Supervisor will be the initial contact when starting a CORE project.

2. A major goal of CORE is to increase citizen cooperation in fish management. Combined group support will provide greater individual participation by the members. Public meetings may be held on many CORE projects to gain support and additional input.

3. Proposals for enhancement of fish populations will be evaluated according to their potential effect on the fish community and lake or stream system, as well as contribution to the fishing resource. Projects in this group would be expected to increase or adjust fish populations to more desirable levels. These proposals encompass, but are not limited to, projects such as: habitat improvement, spawning areas, fish barriers, reclamation, and aeration. 4. **Use proposals** will relate to the activity of fishing and will be evaluated according to their potential value in recreational angling, fish utilization, and potential effect on the surrounding environment. Projects in this group would be expected to provide better access to a fish population than presently exists. These proposals encompass, but are not limited to, such projects as: access, brush shelters, experimental regulations, and fishing piers.

5. Comprehensive proposals are encouraged. However, those of long duration, extensive construction, and high cost will have to be subdivided into a manageable multi-project system.

6. Each project shall have defined guidelines, goals, and achievements. They will have stated beginning and end dates with a schedule of progress reports, and, when appropriate, a project completion report submitted within 60 days of the project end date.

7. The Section of Fisheries' approval of CORE projects will be 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 may also be subject to approval by other agencies or legal authorities.

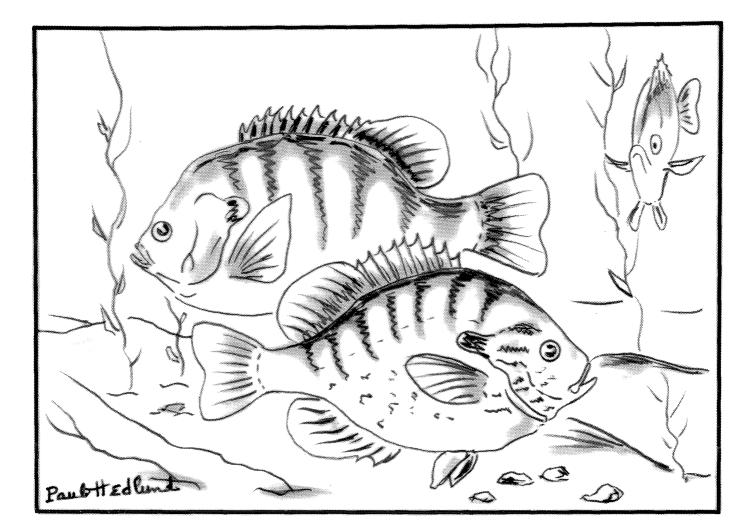
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## **Project Development**

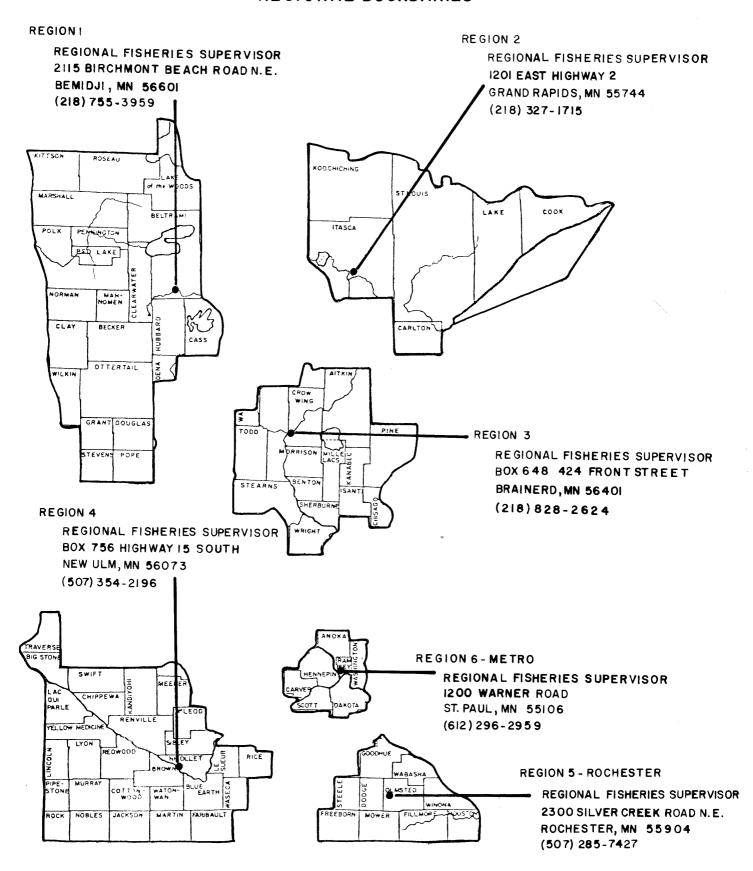
The initiator, group, or local unit of government should use these guidelines and fill in the twopage project application and return it to the Regional Fisheries Supervisor where the lake or stream is located (See Region Map, Page 10).

Upon receipt of the completed application, the Regional Fisheries Supervisor will review it and, if it meets CORE requirements and Fisheries objectives, he will assign the Area Fisheries Supervisor to assist the initiator with development of the project proposal. The Area Fisheries Supervisor will assist the initiator in fish management techniques and integrate the project into Area Fisheries Management Plans. All projects will meet the objectives of CORE and be consistent with the mission and policy of the Section of Fisheries and the Commissioner of the Department of Natural Resources. Approval of projects for addition to the work plan will be the responsibility of the Regional Fisheries Supervisor.

Upon completion of the project, a final report will be submitted to the Regional Fisheries Supervisor for evaluation and approval.



#### MINNESOTA DEPARTMENT OF NATURAL RESOURCES SECTION OF FISHERIES REGIONAL BOUNDARIES





## CORE PROJECT APPLICATION

CENTRAL	OFFICE	USE	ON	LY	/

CONT	
Name of Key Contact (initiator)	Telephone Number (include Area Code)
Address (No. & Street, RFD, Box No., City, State, Zip Code)	I
Signature	Date (Month) (Day) (Year)
PROJ	IECT
Project Name	
Project Description (Brief):	

	LOCATION			
Lake or Stream Name	County	Division of Wate	ers or Tributary	No. (if known)
Near what Town?				

SUPPORT							
Name of Supporting Group(s): Associations, Organizations, Units of Government, etc.	Membership Number						
1.							
2.							
3.							
4.							
5.							
6.							
7.							

	NARRATIVE	
Explain what project proposes to do and what i	it will achieve: (Tasks, Objectives and Goals)	
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		~
	SKETCH	
	•	

				and the second se
RECEIVED BY:	Regional	Fisheries	Supervisor's	Signature

APPROVED

Area Fisheries Station Assigned to:

DISAPPROVED



## **HOOKED ON FISHIN'?**

Anticipation . . . The Bite! . . . The Strike! All Part of the Fun of Fishing . . . May I suggest that you release a portion of your catch? . . . I do . . . Sharing is part of Minnesota's fishing fun!

Joseph alexander



10/84