Environment and Natural Resources Trust Fund 2011-2012 Request for Proposals (RFP)

LCCMR ID: 220-H Project Title: Aquaculture Reduction in Natural Wetlands
Category: H. Other Ideas
Total Project Budget: \$ \$250,000
Proposed Project Time Period for the Funding Requested: 3 yrs, July 2011 - June 2014
Other Non-State Funds: \$ 0
Summary:
Evaluate intensive aquaculture techniques to determine if fish production can be increased which will reduce the number of ponds needed meet fish production goals.
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Web Address
Location
Region: Statewide
Ecological Section: Statewide
County Name: Statewide
City / Township:

Funding Priorities Multiple Benefits Outcomes Knowledge Ba	se
Extent of Impact Innovation Scientific/Tech Basis Urgency	
Capacity ReadinessLeverageEmploymentTOTAL	%

2011-2012 MAIN PROPOSAL

PROJECT TITLE: Intensive rearing of walleyes to reduce impact on wetlands

I. PROJECT STATEMENT

DNR Fisheries agreed to increase walleye fingerling stocking in response to public concern that walleye fishing was declining on some lakes that depend on stocking. In 2000, the legislature provided increased funding for this effort, known as the accelerated walleye program. At that time, DNR Fisheries increased its rearing pond acreage and fingerling production efforts. However, "mild" winters and resulting lack of winterkill caused production to be below the goal of 120,000 to 130,000 pounds in 2000 and 2002. Mild winters during the two years preceding the accelerated walleye plan also resulted in reduced fingerling production.

At the same time, the private aquaculture industry has increased their production efforts, which has contributed to a growing concern about competition between fish rearing and wildlife interests. Competition for suitable wetlands limits the potential for DNR Fisheries to add more ponds to its fingerling rearing operation, which means ponds are utilized more frequently than preferred. It is better to rotate ponds in and out production to maximize production capabilities.

Since expanding the number and amount of wetlands in production is unlikely, the best way to achieve increased production may be a more intensive approach using pond management techniques on a select group of rearing ponds. DNR Fisheries will identify specific techniques to improve the effectiveness and efficiency of its walleye culture program to enhance annual production from less shallow wetlands. Producing enough walleyes to meet management objectives with fewer ponds will allow more ponds to be idled these ponds can be restored in necessary.

II. DESCRIPTION OF PROJECT ACTIVITIES

The DNR along with project partners would select up to 20 of ponds currently used by the DNR for walleye production, approximately 1200 acres of water, which will then be managed using intensive aquaculture techniques with a goal of producing 50 pounds of walleye fingerlings per acre, currently using passive management a rearing pond will produce 4 to 6 pounds per acre. A minimum of 5 to 10 ponds would be taken out of production. These ponds would be used to see if restoration of wetland ecology can be accomplished. Any remaining walleyes, fathead minnows or other species would be actively removed and utilized.

Pond selection will occur in July – August of 2011. Management activities will start November of 2011. Ponds are stocked with fry in the spring and netted in fall, winter, and spring. Netted fish are stocked into lakes.

Spring of 2012 idled ponds will be sampled for fish that may have survived the winter.

Summer of 2012 and 2013 plant surveys of idled ponds and ponds used in fish production.

Each basin will be individually identified. The costs associated with managing and restoration will be identified for each specific project.

Outcome

This project's goals are to develop techniques for intensive aquaculture, which will allow the DNR and private aquaculture to use less natural wetlands to produce walleye fingerlings and other species of fish to meet fisheries management goals. Reducing the number of wetlands for fish production will reduce conflicts between fisheries' management objectives and goals and wildlife's.

III. PROJECT STRATEGY

A. Project Team/Partners

Contract with a university and private aquaculture.

B. Timeline Requirements

Site selection in summer of 2011, management activities would start in fall of 2011 and continue for up to three years. Report will be created and completed at the end of the third year that will detail results and provide recommendations for increasing production to reduce aquacultures foot print in natural wetlands.

C. Long-Term Strategy and Future Funding Needs

MN DNR will use intensive aquaculture techniques developed during this project to reduce the number of walleye rearing ponds utilized across the state which should reduce impacts on wetlands, decrease the potential for spread of aquatic invasives and fish diseases, reduce conflicts between competing interests for utilizing wetlands, and reduce the cost of producing fish used to stock Minnesota's lakes.

2011-2012 Detailed Project Budget

IV. TOTAL TRUST FUND REQUEST BUDGET 3 years

BUDGET ITEM (See list of Eligible & Non-Eligible Costs, p. 13)	AMOUNT
Personnel:	
	NA
Contracts: Project will be contracted out to a university.	
	\$250,000
Equipment/Tools/Supplies:	
def i streetfree	NA
Assuriation (Fee Title or Dermonent Feeements)	INA
Acquisition (Fee Title or Permanent Easements):	
	NA
Travel:	
	NA
Additional Budget Items:	
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	NA
	NA NA
TOTAL ENVIRONMENT & NATURAL RESOURCES TRUST FUND \$ REQ	UEST \$ 250,000

V. OTHER FUNDS

SOURCE OF FUNDS	AMOUNT	<u>Status</u>
Other Non-State \$ Being Applied to Project During Project Period:		Indicate:
		Secured or
		Pending
	\$-	
Other State \$ Being Applied to Project During Project Period: Shared services with Minnesota Department of Natural Resources.		Secured
	\$3,150	
In-kind Services During Project Period:		
	\$-	
Remaining \$ from Current ENRTF Appropriation (if applicable):		Indicate:
		Unspent?
		Not Legally
		Obligated?
	\$-	Other?
Funding History: Indicate funding secured prior to July 1, 2011 for activities		
directly relevant to this specific funding request. State specific source(s) of funds.	\$-	

LCCMR Project Manager qualifications and Organization Description

Neil Vanderbosch is the Cool and Warmwater Project Coordinator. He coordinates all walleye stocking and production activities for the Minnesota Department of Natural Resources (DNR). The DNR stocks over 500 lakes annually with walleyes and produces 120,000 pounds of walleyes used for stocking.

The DNR's mission is to work with citizens to conserve and manage the state's natural resources, to provide outdoor recreation opportunities, and to provide for commercial uses of natural resources in a way that creates a sustainable quality of life. The department consists of several divisions based on the state's natural resources, such as Fish and Wildlife, Forestry, Lands and Minerals, Parks and Trails, and Ecological Resources and Waters, as well as four regions and four support bureaus.