Lessard-Sams Outdoor Heritage Council

MEMO: Agenda Item #8

DATE: March 13, 2015

SUBJECT: Accomplishment plan amendment, ML 2012, Ch. 264, Art. 1, Sec. 2, Subd. 5(a), DNR

Aquatic Habitat Program, Ph. IV

PRESENTER: Brian Nerbonne, DNR

Martin Jennings, Fisheries Habitat Program Supervisor, DNR Amanda Hillman, Stream Restoration Coordinator, DNR

Background:

ML 2012, Ch. 264, Art. 1, Sec. 2, Subd. 8 Payment Conditions and Capital Equipment Expenditures requires that "capital equipment expenditures for specific items in excess of \$10,000 must be itemized in and approved as part of the accomplishment plan." The DNR has requested a change in their budget to allow for the purchase of a real-time kinetic GPS survey equipment, which is estimated to be \$30,000. The DNR states that the equipment desired is a substantial upgrade in survey technology from the current laser-based equipment and will provide for greater efficiency and better design work.

Suggested Motion:

Move to approve accomplishment plan amendment, as presented.

Suggested Procedure:

Place the motion before the Council for discussion. Members question DNR staff as needed. Council votes on accomplishment plan amendment as needed.

Lessard-Sams Outdoor Heritage Council Laws of Minnesota 2012 Accomplishment Plan

Date: February 25, 2015

Program or Project Title: DNR Aquatic Habitat Program, Phase IV

Funds Recommended: \$3,480,000

Manager's Name: Brian Nerbonne Title: Stream Habitat Consultant

Organization: DNR

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monitoring and enforcement activities.

Legislative Citation: ML 2012, Ch. 264, Art. 1, Sec. 2, Subd. 5(a) Appropriation Language: \$3,480,000 in the second year is to the commissioner of natural resources to acquire interests in land in fee or permanent conservation easements for aquatic management areas under Minnesota Statutes, sections 86A.05, subdivision 14, and 97C.02, and to restore and enhance aquatic habitat. A list of proposed land acquisitions must be provided as part of the required accomplishment

plan. The accomplishment plan must include an easement stewardship plan. Up to \$25,000 is for establishing a monitoring and enforcement fund as approved in the accomplishment plan and subject to Minnesota Statutes, section 97A.056, subdivision 17. An annual financial report is required for any monitoring and enforcement fund established, including expenditures from the fund and a description of annual

Explanation of Amendment Change: The requested amendment would shift \$30,000 from salary funds for the stream habitat coordinator position to the capital equipment budget category in order to purchase real-time kinetic GPS survey equipment. Since the creation of this position and approval of the original accomplishment plan, this equipment has come down in price to allow it to become a standard practice for surveying work. Purchasing this equipment will greatly enhance the efficiency and capabilities of the stream habitat coordinator to do project design and to insure projects are built and functioning according to plans. The stream habitat coordinator position works on multiple OHF projects across appropriations, and is funded by approved accomplishment plans from ML2012 and ML2014 through June 30 of 2018. Although a reduction of \$30,000 in salary will shorten the period that the position is funded, the improvements in efficiency and the type of work that can be done are worth the tradeoff.

Corrections were made to the Output table to fix rounding errors that resulted in different acreage totals for different tables.

County Locations: Aitkin, Becker, Beltrami, Blue Earth, Cass, Chisago, Crow Wing, Dakota, Fillmore, Hubbard, Itasca, Kandiyohi, Lake, LeSueur, Meeker, Mille Lacs, Olmsted, Otter Tail, Redwood, Renville, Rice, Stearns, St. Louis, Wabasha, Wadena, Washington, and Winona.

Regions in which work will take place:

- Forest / Prairie Transition
- Metro / Urban
- Northern Forest
- Prairie
- Southeast Forest

Activity types:

- Enhance
- Protect in Easement
- Protect in Fee
- Restore

Priority resources addressed by activity:

• Habitat

Abstract:

We will use a programmatic approach to achieve prioritized aquatic habitat protection, restoration, and enhancement for lakes, trout streams, and rivers across all LSOHC planning regions of Minnesota.

Design and scope of work:

Design and Scope of Work

Problem to be addressed:

Minnesota's aquatic habitats have been degraded or threatened by a century or more of land, hydrology, and human settlement related alterations. The consequences to aquatic species have been reduced habitats for essential life history stages, lack of access to traditional spawning areas, and fragmentation of formerly continuous habitat that served as corridors to facilitate seasonal movements.

Geographically, aquatic habitats are in various states of quality and experiencing differing levels of environmental stress with a general pattern of healthy habitats under low stress in the northeast and less healthy habitats under high stress in the southern and western portions of the state (see Figure H-15 in the State Conservation and Preservation Plan). But even within this generalized pattern there are many notable exceptions – some aquatic habitats are exhibiting declining quality from local environmental stress in the otherwise low stress landscape of the northeast, while some moderate to high quality aquatic habitats still persist within the high environmental stress landscape to the west and south. Against this backdrop, DNR has a diverse infrastructure of habitat programs that provide a meaningful framework for delivering habitat protection, restoration, and enhancement throughout the state.

Urgency and opportunity

A recent series of articles entitled Losing Our Lakes in the Minneapolis Star Tribune highlighted a few case examples of both urban and lakeshore development and their degrading effect on Minnesota's lakes. The underlying conclusion of the series was that Minnesota's current development trajectory is not only unsustainable, but it is tremendously costly and difficult (if not uncertain) to undo the ecological damage to our prized aquatic resources from short-sighted development choices. The articles have left some Minnesotans angry, frustrated, or even hopeless about the future of their common heritage.

Yet this is not the first time a story like this has been told. Dennis Anderson's four-part series, The State We're In, published by the Star Tribune nearly a decade previous highlighted a century's worth of aquatic habitat degradation that has occurred throughout the Land of 10,000 Lakes. The Anderson series stirred Minnesotans' consciousness, stimulated debate between the conservation community and policy makers, and perhaps germinated the seed leading to historic passage of the Clean Water, Land and Legacy Amendment. But it did not change what was happening on the land and in the water across Minnesota. The ensuing decade since the Anderson series was published only saw an accelerated pace of aquatic habitat degradation as the real estate bubble continued to grow and the now retiring baby-boomer generation increasingly bought up and developed their own piece of Minnesota's lake heritage. Transportation infrastructure improved to more rapidly deliver Minnesotans from their homes in metropolitan areas to lakes country and the north woods in pursuit of vacation and recreation. The increased convenience of access to lakes country fueled development of seasonal homes and with them, removal of riparian habitats and the destruction and disturbance of nearshore, shallow water habitats by docks, sand blankets, and recreational boating activities. Federal farm policy continued to underfund conservation programs while emerging biofuel energy initiatives indirectly encouraged the conversion of existing conservation lands back into row-crop production. In short, the decision-making shortcomings highlighted by the Star Tribune Losing Our Lakes series are only a symptom of much greater economic and social drivers adversely affecting aquatic habitats throughout Minnesota.

But the current economic downturn creates a significant opportunity to deliver aquatic habitat conservation via the three-legged stool of protection, restoration, and enhancement. Real estate prices have moderated and provide good conservation value for fee title and conservation easement acquisitions. The state's construction workforce is more available for conservation restoration and enhancement projects following the decline of new start-ups in the building sector. Federal economic stimulus funding is being directed at major aquatic landscapes that include Minnesota such as the Great Lakes and the Mississippi River Basin and thereby represents an opportunity to leverage significant federal dollars. Federal legislation (the National Fish Habitat Conservation Act) is currently pending in Congress that would direct an additional new funding toward aquatic habitat protection, restoration, and enhancement work nationwide. These are certainly hard times but there is also a tremendous window of opportunity to create a conservation legacy for future generations much like was achieved 80 years ago.

Scope of the work

This proposal uses a programmatic approach to achieve prioritized aquatic habitat protection, restoration, and enhancement for lakes, trout streams, and rivers across Minnesota. We propose to: i) protect over 6.8 miles (328 acres) of shoreline on lakes, rivers and trout streams; ii) restore and enhance river and stream functions in over 2 miles of in-channel reconstruction that will benefit up to nearly 160 river miles; iii) remove 300 feet (1 acre) of dysfunctional, abandoned in-lake breakwalls from Lake Mille Lacs; and iv) enhance 9 acres of Mississippi River backwater, wetland, and floodplain habitat by removing accumulated sediments and restoring depth. The

strategic approach and priority resources targeted in this proposal are supported by a number of internal and external conservation planning documents. The DNR will implement the objectives of this proposal through established and highly successful programs each having strong stakeholder support including: Aquatic Management Area Program, Stream Habitat Program, and Coldwater Streams Program.

How will this directly relate to restoring, protecting, or enhancing habitat? Why will this strategy work?

Acquisition of priority habitats provides permanent protection backed by state and federal laws. The AMA designation unit within the Outdoor Recreation System was established by the Legislature in 1992 and has strong support from conservation groups and anglers. The AMA Program currently has an inventory of 830 miles of shoreline in over 330 AMAs, which provide permanent protection of critical riparian habitats, perpetuate fish and wildlife populations, safeguard water quality, and offer public recreational access opportunities as an important additional benefit.

Channel restoration, dam modification, and shoreline enhancement work is based on proven methods and DNR experience with multiple projects. By drawing on accumulated scientific knowledge, DNR strives to deliver the best possible restoration and enhancement projects using the best available science. The stream restoration coordinator would be charged with monitoring the physical and functional assessments of the "as-built" OHF investments.

The DNR has worked on large-scale river and stream restoration projects since 1998 and has completed or assisted in design elements of over 100 stream projects addressing restoration, fish passage, dam removal and dam modification to rapids. Providing fish passage over in-stream barriers such as low-head dams reconnects fish and other aquatic species to upstream habitats essential for spawning, juvenile life stages, and overall abundance and genetic diversity. Stream restoration projects reconstruct the stream's natural pattern, profile, and dimension and address the key components of a stream: wildlife and fish habitat, water quality, connectivity to the floodplain and upstream reaches, and hydrology. Natural stream design favors hydrologic conditions that do not degrade the stream bank or bed and provides a diversity of microhabitats that are more favorable to fish and other aquatic species. As examples of implementing these strategies, DNR has conducted large-scale projects to restore the Whitewater River to its original channel and reconnected nearly the entire Minnesota portions of the Red River by direct dam removal or modification, leaving only a few dams presently remaining that impede movement of fish (primarily lake sturgeon). These are significant and durable accomplishments benefiting aquatic habitat.

And habitat benefits will continue to accrue beyond the term of this grant as project sites mature and the shoreline assumes a more natural character.

Parcel selection and scoring process

To achieve the program goals of this proposal, DNR will implement AMA acquisition and stream habitat restoration projects from existing prioritized lists. Natural resource plans provide much of the criteria for prioritizing habitat protection, restoration, and enhancement activities. For example, AMA acquisition and large-scale stream restoration and enhancement projects are scored based on a suite of criteria ranging from scope of project and quality of resource benefited to project readiness and feasibility. The sum of these scores creates a ranking value from which to prioritize among the many available project opportunities. See pp. 40-41 of AMA Plan for example of scoring criteria.

Other projects are more opportunity driven such as lakeshore habitat or fish passage enhancement where the needs are ubiquitous. Priorities are then based upon willing landowners, capable partners, and magnitude of the project or benefit to the resource. Projects that enhance a sizeable length of shoreline, reconnect access to many miles of formerly severed stream, or build upon previous projects within a habitat complex are examples of prioritization considerations.

Level of stakeholder opposition to and involvement in this proposal.

DNR has held several coordination conference calls with many of our conservation partners and stakeholders over the past two months. They are informed of the aquatic habitat activities contained here and are supportive of our proposed approach.

In addition to this formal coordination with partners, we have engaged partners and stakeholders in our aquatic conservation planning. The AMA Acquisition Planning Committee developed an acquisition plan in 2007 that recommended purchasing an additional 2,595 miles of riparian lands over 25 years to meet the habitat protection needs of a rapidly changing Minnesota. This stakeholder-developed plan guides DNR's AMA program implementation.

Restoration and enhancement elements of this proposal are linked to other landscape or system-specific management plans (e.g., the Southeast MN coldwater stream plan) that have been developed through extensive internal and external coordination. These elements represent shared priorities with multiple partners and stakeholders.

All lands acquired in fee will be fully open to hunting and fishing except for Restricted Use AMAs where location or size of parcel and

proximity to residences would restrict hunting outlined in MR 6270/0200 Subp. 3.

This proposal addresses the following LSOHC priority actions by planning section:

Northern Forest Section

(1) Protect shoreland and restore or enhance critical habitat on wild rice lakes, shallow lakes, cold water lakes, streams and rivers, and spawning areas

Forest/Prairie Transition Section

(1) Protect, enhance, and restore wild rice wetlands, shallow lakes, wetland/grassland complexes, aspen parklands, and shoreland that provide critical habitat for game and non-game wildlife.

Metro Urbanizing Section

- (3) Enhance and restore coldwater fisheries systems.
- (4) Protect, enhance and restore riparian and littoral habitats on lakes to benefit game and non-game fish species.

Southeast Forest Section

(2) Protect, enhance and restore habitat for fish, game and non-game wildlife in rivers, cold water streams and associated upland habitat.

Prairie Section

- (4) Restore or enhance habitat on public lands.
- (5) Protect, restore and enhance shallow lakes.

In addition, this proposal is supported by the recommendations of the following plans:

MNDNR Strategic Conservation Agenda Update: Meets the criteria of conservation in the Mission Statement, 'work with citizens to conserve and manage the state's natural resources;" and Strategic Conservation Agenda goals to conserve, restore, and enhance Minnesota's natural lands and habitats, water resources, and watersheds.

Minnesota Conservation and Preservation Plan

This proposal addresses a number of recommendations contained in the Statewide Conservation and Preservation Plan including:

Habitat Recommendation 2, Protect critical shorelands of streams and lakes (p. 67). Fee acquisition and conservation easements are among the tools needed for protection of critical shorelines of streams and lakes. Acquiring the highest-priority shorelines "is one essential component of a multi-strategy approach to preserving the clean water legacy that Minnesota's citizens and visitors are used to experiencing." (p.69) Benefits include protection of critical shoreline habitats from degradation, public angler access, and providing areas for education and research.

Habitat Recommendation 6A, Restore habitat structure within lakes (p. 81). This recommendation seeks "... to restore the natural features of lakeshore habitats (shoreland, shoreline, and near-shore areas)."

Habitat Recommendation 6B, Protect and restore in-stream habitats (p. 82). Several approaches can be implemented to protect and restore in-stream habitats. Removal or modification of dams and installing culverts with increased capacity would improve connectivity of aquatic systems. Riparian vegetation can be restored to stabilize stream banks. Channelized streams can be reconstructed to provide a flood plain to dissipate stream energy and allow the channel to remeander, which will provide more diverse habitat for aquatic organisms.

Tomorrow's Habitat for the Wild and Rare

The State's Wildlife Action Plan is a rare species condition assessment and habitat conservation guidance document for Minnesota's species of greatest conservation need. Several aquatic species of biota are included in this plan including plants, insects, mussels, fish, and water-dependent and seasonal migrant bird species. Aquatic management actions are listed on pages 270-281 of the plan.

Minnesota's AMA Acquisition Plan 2008-2033

The DNR's AMA Acquisition Plan calls for shoreline acquisition to ensure shoreline habitat protection, water quality maintenance, and angler access for present and future generations. This plan envisions acquisition of 3,428 miles of lake and stream habitat during the next 25 years, and provides general ECS section acquisition targets (see table 2 on page 21 of the plan).

Strategic Plan for Coldwater Resources Management in SE Minnesota 2004-2015

This plan establishes targets to protect, improve, and restore coldwater aquatic habitat (pgs 9-11) and fish communities. The plan identifies important issues and strategies that will enable DNR to maintain and improve the short and long-term values of the unique trout stream resource of the Southeast and provide angling clientele with diverse angling opportunities.

Red River of the North Fisheries Management Plan

The overall approach to habitat management in the Red River is to maintain, restore, enhance, and protect riverine and upland habitats and their functions. The plan includes the following recommended actions (pgs 11-12):

Red River of the North Fisheries Management Plan

Establish and maintain stable stream channels.

Improve and protect high quality fish spawning and rearing habitats within Red River and tributaries.

Provide uninterrupted fish passage/river connectivity.

Provide appropriate heterogeneous and complex physical habitat components.

Provide water of sufficient water quality to sustain healthy aquatic systems.

Re-establish a more natural flow regime.

River Resources Forum's Mississippi River Environmental Pool Plans

Midwest Glacial Lakes Partnership: Strategic Plan for Fish Habitat Conservation in Midwest Glacial Lakes
The Midwest Glacial Lakes Partnership (MGLP) is a formal Fish Habitat Partnership under the National Fish Habitat Action Plan
(.fishhabitat.). The mission of the Midwest Glacial Lakes Partnership is to work together to protect, rehabilitate, and enhance
sustainable fish habitats in glacial lakes of the Midwest for the use and enjoyment of current and future generations. MGLP has
developed a strategic plan (.MidwestGlacialLakes.org/resources/) to protect and restore aquatic habitats in naturally-formed glacial
lakes across the upper Midwest states. The MGLP strategic plan identifies a number of objectives (p. 26-29) designed to conserve
(protect, restore, and enhance) the habitats of Midwestern glacial lake fish populations, to support a broad natural diversity of aquatic
species, to promote self-sustaining fish populations, and to provide successful fishing opportunities.

National Fish Habitat Action Plan

The National Fish Habitat Action Plan is a national partnership-based framework for achieving protection and restoration of priority aquatic habitats that support a broad natural diversity of fish and other aquatic species. The plan uses a science-based approach to target priority areas and implement needed projects that address causative factors and use best management practices. The Action Plan is implemented through regional Fish Habitat Partnerships (functionally analogous to Waterfowl Joint Ventures under the North American Waterfowl Management Plan which is supported by the North American Wetlands Conservation Act). Fish Habitat Partnerships leverage national and state resources to achieve local priorities for habitat protection and restoration. (.fishhabitat.org/documents/plan/National_Fish_Habitat_Action_Plan.)

Individual Lake and Stream Management Plans

The Section of Fisheries produces individual fisheries management plans for every actively managed lake and stream resource in the state. In addition to fish population goals and objectives, these plans identify habitat actions unique to each waterbody that are needed or beneficial to sustain quality fisheries.

Our planning and evaluation model is similar to the US Fish and Wildlife Service's Strategic Habitat Conservation model in that it is composed of planning, implementation and evaluation phases in the traditional adaptive management framework. DNR develops management plans based on assessment data for actively managed lakes and streams in the state. Management plans guide fish population management and identify opportunities for habitat protection, restoration, and enhancement. Additional strategic planning documents guide habitat management activities, and these are referenced above. Proposed projects are ranked using specific criteria. Acquisition scoring criteria follow the recommendations of the AMA Acquisition Planning Committee. Considerable quantitative measurements go into the criteria development for stream restoration projects such as fish survey data, watershed evaluation, and presence of state or federally listed species. Ranked projects are approved for implementation through an internal review process. Evaluation is an integral step and, for stream restorations, involves project monitoring of fish passage, water chemistry, and continued geomorphology surveys to evaluate projects. Similar evaluations are conducted for lakeshore enhancement projects to ensure projects

are functioning as designed. From these evaluations research is driven to improve designs and continue development of future projects. We also use the research to inform professionals working on stream restoration from state, federal and private firms through a series of courses taught by the Stream Habitat Program to further stream restoration efforts.

Crops:

Will there be planting of corn or any crop on OHF land purchased or restored in this program - Not Listed

Which sections of the Minnesota Statewide Conservation and Preservation Plan are applicable to this project:

- H2 Protect critical shoreland of streams and lakes
- H6 Protect and restore critical in-water habitat of lakes and streams

Which other plans are addressed in this proposal:

- Midwest Glacial Lakes Partnership
- Minnesota DNR AMA Acquisition Plan
- National Fish Habitat Action Plan
- Red River of the North Fisheries Management Plan
- Strategic Plan for Coldwater Resources Management in Southeastern Minnesota
- Tomorrow's Habitat for the Wild and Rare
- U.S. Fish and Wildlife Service Strategic Habitat Conservation Model
- Individual Lake and Stream Management Plans

Which LSOHC state-wide priorities are addressed in this proposal:

• Not Listed

Which LSOHC section priorities are addressed in this proposal:

Forest / Prairie Transition:

• Protect, enhance, and restore wild rice wetlands, shallow lakes, wetland/grassland complexes, aspen parklands, and shoreland that provide critical habitat for game and nongame wildlife

Metro / Urban:

- Enhance and restore coldwater fisheries systems
- Protect, enhance, and restore riparian and littoral habitats on lakes to benefit game and nongame fish species

Northern Forest:

 Protect shoreland and restore or enhance critical habitat on wild rice lakes, shallow lakes, cold water lakes, streams and rivers, and spawning areas

Prairie:

- Restore or enhance habitat on public lands
- Protect, restore, and enhance shallow lakes

Southeast Forest:

 Protect, enhance, and restore habitat for fish, game, and nongame wildlife in rivers, cold-water streams, and associated upland habitat

Relationship to other funds:

• Clean Water Fund

The proposed habitat protection, restoration, and enhancement activities are most appropriately suited to the Outdoor Heritage Fund, although some activities will have additional secondary benefits to water quality (e.g., reduced nutrient and sediment loading). While DNR receives appropriations from the Clean Water Fund, these have been legislatively directed for such activities as data gathering, TMDL technical guidance and coordination, planning, monitoring and assessment work in support of TMDLs, and identifying non-source restoration and protection strategies. Some of these CWF activities could lead to the development of aquatic and riparian habitat projects that subsequently may be constitutionally eligible for Outdoor Heritage Fund implementation funding. DNR will ensure that OHF funds are applied to qualifying projects and will complement overall program budgets resulting in comprehensive protection, restoration, and enhancement delivery that benefits Minnesota's aquatic habitats.

How does this proposal accelerate or supplement your current efforts in this area:

This program funding will be supplemental to traditional funding sources, and is of reasonable size given the scale of DNR's recent fiscal year expenditures. Approximate Fiscal Year 2010 expenditures (not including Bonding) are presented below as an example of DNR expenses in a given year:

Expenditures in Fiscal Year 2010, not including Bonding funds

DNR total - \$456 million

Division of Ecological and Water Resources total - \$74.6 million

Division of Fish and Wildlife total - \$90.3 million

Division of Forestry total - \$83.2 million

This proposal represents slightly less than 3% of the DNR's FY10 expenditures from traditional funding sources.

Demonstrate how this funding and activity will supplement your current budget.

The program activities included in this proposal are above and beyond program activity funded through DNR base budget appropriations. In addition to legislative appropriations from Game and Fish Fund and capital bonding, the Department actively pursues other funding from a variety of sources including LCCMR, federal grants and private foundation grants to achieve aquatic habitat program outcomes. These alternative sources of funding are less certain or predictable and, thus, are not part of the Department's base budget.

How will you sustain and/or maintain this work after the Outdoor Heritage Funds are expended:

AMA acquisitions will be sustained through fee title ownership and perpetual easements held by the DNR. This is a long-term protection strategy. Long-term stewardship of fee title AMA lands is achieved through periodic and recurring monitoring of the property and boundaries for encroachment by adjoining property owners or for habitat management needs. Easement AMA lands, especially trout stream easements, additionally benefit from informal monitoring by the angling public and agency conservation partners.

River and stream restoration activities are designed to work with natural hydrology of the flowing systems so as to be durable and self-maintaining over time. Restoring natural channel function or mimicking natural riffles/rapids results in the desired habitat benefit but also provides perpetual self-maintenance.

Cost, schedule, and sources of funding

Future funding for DNR is determined by legislative appropriation therefore sources of funding cannot be adequately forecasted beyond the current biennium, however, the following costs and schedule are anticipated to result from program activities highlighted in this proposal:

AMA costs to develop acquired parcels (signage, parking, fencing, demolition and removal of structures, habitat manipulations, and similar needs) are included in this request for funding. Routine maintenance of AMA parcels will be accomplished by Area Fisheries Managers as part of their public land management responsibilities. Periodic enhancements such as invasive species removal, prescribed burning, supplemental vegetation planting, shoreline stabilization and restoration, and similar activities will be accomplished through annual funding requests from a variety of funding sources including, but not limited to, Game and Fish Fund, Bonding, Gifts, Federal Sources, Environmental Trust Fund, and Outdoor Heritage Fund.

Stream Restoration Program - Stream restoration projects are designed to be self-maintaining and require no future investments

Activity Details:

Will local government approval be sought prior to acquisition - Not Listed

Is the land you plan to acquire free of any other permanent protection - Not Listed

Is this land open for hunting and fishing - Not Listed

Will the eased land be open for public use - Not Listed

Is the land you plan to acquire free of any other permanent protection - Not Listed

Is the activity on permanently protected land per 97A.056, subd 13(f) and/or public waters per MS 103G.005, Subd. 15 - Yes (no)

Accomplishment Timeline:

Activity	Approximate Date Completed
AMA Acquisition - Acquire priority fee title & easements - 2.0 miles, 3.0 miles, 1.8 miles	June 30, 2013 - June 30, 2015
Stream Restoration - Initiate in-stream construction activity at former Lake Shady after dam removal	January 15, 2015
Stream Restoration - Completion of in-stream activity at former Lake Shady	September 30, 2015
Stream Restoration - Obtain permits and approvals for in-stream work on Kingsbury Creek	September 30, 2014
Lake Habitat Enhancement - Initiate & Complete Lake Mille Lacs breakwall removal	September 30, 2015
Lake Habitat Enhancement - Complete planning and project design for Mississippi River - Pritchard Lake habitat enhancement	June 30, 2014
Lake Habitat Enhancement - Obtain permits and approvals for in-stream activities and sediment disposal at Mississippi River- Pritchard Lake	June 30, 2014
Lake Habitat Enhancement - Complete habitat enhancement of Mississippi R Pritchard Lake	October 31, 2014

Federal Funding:

Do you anticipate federal funds as a match for this program - Not Listed

Outcomes:

Programs in the northern forest region:

• Priority aquatic habitat parcels are permanently protected through fee title or conservation easement acquisition resulting in sustainable fish and other water dependent wildlife populations.

Programs in forest-prairie transition region:

• Restore stream channel connectivity for 158 miles of stream habitat in the Zumbro River, thereby preventing downstream movement of sediment, restoring historic fish accessibility and movements, and enhancing fishing opportunities within the project area.

Programs in metropolitan urbanizing region:

• Convert 1/2 acre impounded trout stream into 400 feet of restored, free-flowing channel that will restore connectivity and trout accessibility to previously dammed reach of Kingsbury Creek.

Programs in southeast forest region:

• Restore longshore sand movement and reduce habitat for undesirable species like carp, bullheads, and Eurasian watermilfoil as an outcome of removing dysfunctional breakwalls that change natural movement patterns of sandy lake substrate and degrade walleye spawning habitat.

Programs in prairie region:

• Mississippi River - Pritchard Lake habitat enhancement will restore and protect aquatic vegetation, increase depth diversity for overwintering fish, and provide quality angling opportunities for largemouth bass, northern pike, bluegill, crappie and perch. It will also provide improved habitat for wading and shorebirds as well as numerous species of migrating waterfowl that use the Mississippi Flyway. Hunters and fishermen will benefit directly with better duck hunting and improved fishing, especially during winter.

Budget Spreadsheet

Budget reallocations up to 10% do not require an amendment to the Accomplishment Plan

How will this program accommodate the reduced appropriation recoomendation from the original proposed requested amount

Not Listed

Total Amount of Request: \$ 3480000

Budget and Cash Leverage

BudgetName	LSOHC Request	Anticipated Leverage	Leverage Source	Total
Personnel	\$ 178,000 <u>148,000</u>	\$0		\$ 178,000 <u>148,000</u>
Contracts	\$1,701,000	\$0		\$1,701,000
Fee Acquisition w/ PILT	\$910,000	\$0		\$910,000
Fee Acquisition w/o PILT	\$0	\$0		\$0
Easement Acquisition	\$400,000	\$0		\$400,000
Easement Stewardship	\$25,000	\$0		\$25,000
Travel	\$30,000	\$0		\$30,000
Pro fessio nal Services	\$160,000	\$0		\$160,000
Direct Support Services	\$26,000	\$0		\$26,000
DNR Land Acquisition Costs	\$0	\$0		\$0
Capital Equipment	\$ 0 30,000	\$0		\$ 0 30,000
Other Equipment/Tools	\$0	\$0		\$0
Supplies/Materials	\$50,000	\$0		\$50,000
DNR IDP	\$0	\$0		\$0
Total	\$3,480,000	\$0		\$3,480,000

Personnel

Position	FTE	Over#ofyears	LSOHC Request	Anticipated Leverage	Leverage Source	Total
Stream Habitat Intern	2.00	2.00	\$15,000	\$0		\$15,000
Stream Restoration Coord	1.00	2.00	\$ 163,000 <u>133,000</u>	\$0		\$ 163,000 <u>133,000</u>
Total	3.00	4.00	\$ 178,000 <u>148,000</u>	\$0		\$ 178,000 <u>148,000</u>

Capital Equipment

Item Name	LSOHC Request	Anticipated Leverage	Leverage Source	Total
Real-time kinetic GPS survey equipment	\$ <u>30,000</u>	\$ <u>O</u>		\$30,000
Total	\$ 0 30,000	\$0		\$ 0 30,000

Output Tables

Table 1a. Acres by Resource Type

Туре	Wetlands	Prairies	Forest	Habitats	Total
Restore	0	0	0	25	25
Pro tect in Fee with State PILT Liability	0	0	0	206 <u>207</u>	206 <u>207</u>
Protect in Fee W/O State PILT Liability	0	0	0	0	0
Pro tect in Easement	0	0	0	122 <u>123</u>	122 <u>123</u>
Enhance	0	0	0	6	6
Total	0	0	0	359 <u>361</u>	359 <u>361</u>

Table 2. Total Requested Funding by Resource Type

Туре	Wetlands	Prairies	Forest	Habitats	Total
Restore	\$0	\$0	\$0	\$1,409,000	\$1,409,000
Protect in Fee with State PILT Liability	\$0	\$0	\$0	\$1,107,000	\$1,107,000
Protect in Fee W/O State PILT Liability	\$0	\$0	\$0	\$0	\$0
Protect in Easement	\$0	\$0	\$0	\$458,000	\$458,000
Enhance	\$0	\$0	\$0	\$506,000	\$506,000
Total	\$0	\$0	\$0	\$3,480,000	\$3,480,000

Table 3. Acres within each Ecological Section

Туре	Metro Urban	Fo rest Prairie	SEForest	Prairie	N Forest	Total
Restore	0	0	24	0	2 <u>1</u>	26 <u>25</u>
Protect in Fee with State PILT Liability	7	60	14 <u>13</u>	27	100	208 <u>207</u>
Protect in Fee W/O State PILT Liability	0	0	0	0	0	0
Protect in Easement	9	3	31	6	75 <u>74</u>	124 <u>123</u>
Enhance	0	0	0 <u>5</u>	0	1	<u> 46</u>
Total	16	63	69 <u>73</u>	33	178 <u>176</u>	359 <u>361</u>

Table 4. Total Requested Funding within each Ecological Section

Туре	Metro Urban	ForestPrairie	SEForest	Prairie	N Forest	Total
Restore	\$0	\$0	\$1,337,000	\$0	\$72,000	\$1,409,000
Protect in Fee with State PILT Liability	\$35,400	\$321,000	\$72,000	\$142,800	\$535,800	\$1,107,000
Protect in Fee W/O State PILT Liability	\$0	\$0	\$0	\$0	\$0	\$0
Pro tect in Easement	\$32,100	\$10,500	\$117,200	\$21,100	\$277,100	\$458,000
Enhance	\$0	\$0	\$303,500	\$0	\$202,500	\$506,000
Total	\$67,500	\$331,500	\$1,829,700	\$163,900	\$1,087,400	\$3,480,000

Target Lake/Stream/River Feet or Miles

8.98

Parcel List

For restoration and enhancement programs ONLY: Managers may add, delete, and substitute projects on this parcel list based upon need, readiness, cost, opportunity, and/or urgency so long as the substitute parcel/project forwards the constitutional objectives of this program in the Project Scope table of this accomplishment plan. The final accomplishment plan report will include the final parcel list.

Section 1 - Restore / Enhance Parcel List

Cass

Name	TRDS	Acres	Est Cost	Existing Protection?
Woman Lake AMA, P9	14128232	14	\$0	No
Mille Lacs	•			
Name	TRDS	Acres	EstCost	Existing Protection?
ake Mille Lacs	04327233	1	\$0	
Olmsted				
Name	TRDS	Acres	EstCost	Existing Protection?
Middle Fork/So Br Zumbro River	10814218	24	\$0	No
St. Louis				
Name	TRDS	Acres	EstCost	Existing Protection?
Kingsbury Creek	04915213	1	\$0	
Wabasha				
Name	T RDS	Acres	EstCost	Existing Protection?
Mississippi R - Weaver Bottoms Phase 1	10913208	9	\$0	Yes

Section 2 - Protect Parcel List

Name	TRDS	Acres	EstCost	Existing Protection?	Hunting?	Fishing?
Flowage Lake AMA, P2	04923230	50	\$0	No	Yes	
Becker						
Name	TRDS	Acres	EstCost	Existing Protection?	Hunting?	Fishing?
Bad Medicine Lake AMA, P13	14237205	8	\$0	No	No	Yes
Big Cormorant Lake AMA, P1	13843224	19	\$600,000	No	No	Full
Big Sugar Bush AMA	14140208	22	\$300,000	No	Full	
Cotton Lake AMA P2	13940203	8	\$890,000	No	Full	
Hungry Lake AMA, P2	13839208	50	\$0	No	Yes	
Lake Andrusia AMA P1	14631207	6	\$120,000	No	Full	
Maud Lake AMA	13842221	24	\$236,400	No	Full	
Muud Lake AMA	13842228	13	\$413,200	No	Full	
Rock Lake AMA	14040217	23	\$350,000	No	Full	
Rock Lake AMA	14040220	99	\$0	No	Yes	
Rock Lake AMA P2	14040217	23	\$350,000	No	Full	
To ad Lake AMA, P3	13938216	88	\$0	No	No	Yes
White Earth Lake AMA	14240216	7	\$209,200	No	Limited	
Wolf Lake AMA	13937229	63	\$295,400	No	Full	
Beltrami						
Name	TRDS	Acres	EstCost	Existing Protection?	Hunting?	Fishing?
Turtle Lake AMA	14833215	19	\$0	No	Yes	
Blue Earth						
Name	TRDS	Acres	EstCost	Existing Protection?	Hunting?	Fishing?
Blue Earth River AMA, P3	10528234	105	\$0	No	Yes	
Shaokotan AMA P1	11146224	16	\$54,000	No	Full	

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Cass						
Name	T RDS	Acres	EstCost	Existing Protection?	Hunting?	Fishing?
Five Mile Point, P2	14329212	7	\$0	No	No	Yes
Horseshoe Lake AMA, P2	13930216	5	\$0	No	Yes	
Lost Lake AMA	14330214	4	\$0	No	Yes	
Marshall Point AMA	14230227	21	\$100,000			
Miller Bay AMA, P1	14230236	46	\$0	No	Yes	
Miller Bay AMA P2	14129206	4	\$300,000	No	Full	
Ten Mile Lake AMA, P4	14031205	32	\$0	No	Yes	
Washburn Lake AMA	13926205	7	\$100,000	No	Yes	
Woman Lake AMA, P8	14128231	25	\$0	No	Yes	
Chisago						
Name	TRDS	Acres	Est Cost .	Existing Protection?	Hunting?	Fishing?
Sunrise Lake AMA	03420217	46	\$0	No	Yes	
Crow Wing						
Name	TRDS	Acres	EstCost	Existing Protection?	Hunting?	Fishing?
Camp Cuyuna AMA, P4	13727201	200	\$0	No	Yes	
Greenwood Lake AMA P1	13627207	137	\$750,000	No	Full	
Hamlet Lake AMA	04628227	31	\$0	No	Yes	
Dakota				•	•	
Name	TRDS	Acres	EstCost	Existing Protection?	Hunting?	Fishing?
	11418229	66		No	Yes	Ŭ,
Vermillion River AMA, P6	11419222	160		No	Yes	
Vermillion Piver AMA	11419223	50	\$0	No	Yes	
Fillmore						
Name	TRDS	Acres	EstCost	Existing Protection?	Hunting?	Fishing?
Little Jordan Creek	10412221	2	\$12,700		No No	Full
Rice Creek AMA, P8B	10411223	2	\$8,600	No	No	Full
Spring Valley Hatchery AMA	10313227	27		No	Yes	i un
Hubbard						
Name	TRDS	Acres	EstCost	Existing Protection?	Hunting?	Fishing?
Spider Lake	14133228	20		No No	Yes	113111116.
Itasca	14100220	20	ΨΟ	110	103	
Name	TRDS	Acres	EstCost	Existing Protection?	Hunting?	Fishing?
Rig Too Much Lake	14825213	Acres 1		No	Yes	risining:
Pirds Evo Lako AMA	14826228	66	\$0	No	Yes	
Eagle Lake AMA, P1	05925201	33	¢∩	No	Yes	
Horseshoe Lake AMA, P1	05925210	18		No	Yes	
1 - 1 1 - 1 0040	05720226	2	\$0	No	Yes	
Kandiyohi				<u> </u>	l .	1
Name	TRDS	Acres	EstCost	Existing Protection?	Hunting?	Fishing?
	12135234	5		No	Yes	i ioning.
Norway Lake AMA	12135205	11	\$180,600		Full	
Lake		11	Ψ100,000	<u> </u>	I	1
Name	TRDS	Acres	EstCost	Existing Protection?	Hunting?	Fishing?
Pantism Pivor AMA	05707228	Acres 11	\$33,500		No	Full
LeSueur				<u> </u>	l .	1
Name	TRDS	Acres	EstCost	Existing Protection?	Hunting?	Fishing?
		7		No	Yes	7 1311111g :
				l	l	1
Meeker	TRDS	A - u - a -	Eat Ca at	Evicting Dug to the co	U#a2	Fishin=2
Name Crooplost ANA		Acres	EstCost	Existing Protection?	Hunting?	Fishing?
GreenleafAMA	11830220	51	\$0	No	Yes	<u> </u>

Olmsted

Olmsted						
Name	TRDS	Acres	Est Co st	Existing Protection?	Hunting?	Fishing?
Middle Br Whitewater AMA	10610210	37	\$0	No	Yes	
MIII Creek AMA, P4	10512223	14	\$77,100	No	No	Full
Otter Tail		•				•
Name	TRDS	Acres	EstCost	Existing Protection?	Hunting?	Fishing?
Brandenberg Cr, P2	13338230	32	\$0	No	Yes	
Jolly Ann Lake AMA P3	13140217	96	\$696,000	No	Full	
Marion Lake AMA, P1A & 1B	13539207	7	\$0	No	Yes	
Otter Tail Lake AMA	13340202	175	\$950,000	No	Full	
Rose Lake AMA P1	13740221	60	\$490,000	No	Full	
Redwood						
Name	TRDS	Acres	EstCost	Existing Protection?	Hunting?	Fishing?
Sanborn AMA	10936227	104	\$0	No	Yes	
Renville						
Name	T RDS	Acres	Est Co st	Existing Protection?	Hunting?	Fishing?
Whispering Ridge AMA, P3	11436228	97	\$0	No	Yes	
Whispering Ridge AMA, P4	11436229	38	\$0	No	Yes	
Whispering Ridge AMA, P6	11436233	159	\$0	No	Yes	
Rice						
Name	T RDS	Acres	EstCost	Existing Protection?	Hunting?	Fishing?
Cannon River AMA, P2	11023211	500	\$0	No	Yes	
Dundas AMA	11120215	59	\$0	No	Yes	
Stearns						
Name	TRDS	Acres	EstCost	Existing Protection?	Hunting?	Fishing?
Sandshell AMA	12729225	86	\$0	No	Yes	
St. Louis						
Name	T RDS	Acres	EstCost	Existing Protection?	Hunting?	Fishing?
Tallus Island AMA	04915223	51	\$0	No	Yes	
Wabasha						
Name	TRDS	Acres	EstCost	Existing Protection?	Hunting?	Fishing?
Gorman Creek AMA, P2	10911201	11	\$58,900	No	No	Full
Middle Creek AMA, P1	10912203	7	\$41,000	No	No	Full
Zumbro River AMA	10914222	13	\$0	No	Yes	
Wadena						
Name	T RDS	Acres	Est Co st	Existing Protection?	Hunting?	Fishing?
Spirit Lake AMA	13835228	51	\$0	No	Yes	
Washington						
Name	TRDS	Acres	Est Co st	Existing Protection?	Hunting?	Fishing?
Grey Cloud AMA, P1	02721230	60	\$0	No	Yes	
Winona		•				
Name	TRDS	Acres	EstCost	Existing Protection?	Hunting?	Fishing?
Cedear Valley Creek AMA, P15	10606232	3	\$13,500	No	No	Full

Section 2a - Protect Parcel with Bldgs

No parcels with an activity type protect and has buildings.

Section 3 - Other Parcel Activity

No parcels with an other activity type.