

Lessard-Sams Outdoor Heritage Council Laws of Minnesota 2013 Accomplishment Plan

Date: October 19, 2012

Program or Project Title: DNR Aquatic Habitat - Phase V

Funds Recommended: \$5,250,000

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Legislative Citation: (to be completed when signed by Governor)

County Locations: Aitkin, Becker, Beltrami, Big Stone, Blue Earth, Cass, Clay, Cook, Cottonwood, Crow Wing, Douglas, Fillmore, Hubbard, Itasca, Jackson, LeSueur, Lincoln, Martin, Meeker, Olmsted, Otter Tail, Rock, Wabasha, and Winona.

Ecological Planning Regions:

- Northern Forest
- Forest / Prairie Transition
- Southeast Forest
- Prairie

Activity Type:

- Restore
- Enhance
- Protect in Fee

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 4 of the 5 LSOHC planning regions of Minnesota.

Activity Detail

Design and Scope of Work:

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. 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.

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 1 miles (77 acres) of shoreline on lakes, rivers and trout streams; ii) restore and enhance river and stream functions through in-channel reconstruction and fish barrier removal that will benefit 0.4 river miles; iii) enhance Mississippi River backwater, wetland, and floodplain habitat by removing accumulated sediments and restoring depth, which will benefit 150 acres of aquatic habitat; iv) enhance woody habitat along approximately 1000 feet of shoreline on two lakes; and v) enhance over 1,000 acres of riparian habitat on Aquatic Management Areas. 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, Shoreland Habitat Restoration Program, and Coldwater Streams Program.

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 more than 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. 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. By drawing on accumulated scientific knowledge, DNR strives to deliver the best possible restoration and enhancement projects using the best available science.

With this funding, we will:

- protect 1 mile of critical shoreline habitat by acquiring priority parcels from our AMA project list;
- implement phase-2 of a Mississippi River backwater habitat enhancement project, which will provide immediate and measurable benefits to fish and fishing;
- restore channel stability and habitat function within the Middle Fork Whitewater River adjacent to Whitewater State Park and the Middle Fork South Branch of the Zumbro River in the lakebed of former Lake Shady;
- enhance upland and riparian habitat on 32 AMA units, which will improve vegetative cover and habitat complexity;
- install shoreline woody habitat complexes on two lakes where this habitat type has been greatly reduced by a century of logging and lakeshore development;
- enhance fish passage around existing barriers at 2 project sites, which will restore access to historic spawning areas and reconnect fish to their historic range;
- improve stream habitat condition along 6 project sites, which will stabilize stream banks and increase in-stream habitat complexity; and
- enhance spawning area and juvenile fish habitat within Big Stone Lake where these habitat features have been determined to be limiting natural recruitment of fish species;
- hire temporary lands management crews to conduct habitat condition and management needs assessments for DNR lands, focusing initially on developing management plans for 100 AMA units. Land crews will provide some site development capacity (e.g., fencing, signage) and habitat restoration implementation (e.g., prairie burning, revegetation), but will focus primarily on identifying habitat improvement needs on our AMA units and develop project proposals for future OHF or partner initiated CPL funding requests; and
- hire temporary project management personnel to provide project oversight, contract management, and physical and functional assessment of "as-built" DNR stream restoration projects funded by OHF; work with partners to identify priority project locations and opportunities for future LSOHC or CLP funding; and assist partners receiving OHF funding with early project design review and permitting.

Accomplishments to date from prior appropriations include: 17 miles (1100 acres) of priority riparian habitat protected; 1 fish passage barrier removed; 4.5 miles of trout stream corridor enhanced. Many additional protection, restoration, and enhancement projects are in various stages nearing completion.

Planning

MN State-wide Conservation Plan Priorities:

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

Plans Addressed:

- Long Range Plan for Fisheries Management
- Midwest Glacial Lakes Partnership
- Minnesota DNR AMA Acquisition Plan
- Minnesota DNR Strategic Conservation Agenda
- National Fish Habitat Action Plan
- Outdoor Heritage Fund: A 25 Year Framework
- 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
- individual lake & stream management plans

LSOHC Statewide Priorities:

- Are ongoing, successful, transparent and accountable programs addressing actions and targets of one or more of the ecological sections
- Produce multiple enduring conservation benefits
- Are able to leverage effort and/or other funds to supplement any OHF appropriation
- Allow public access. This comes into play when all other things about the request are approximately equal
- Address conservation opportunities that will be lost if not immediately acted on
- Restore or enhance habitat on state-owned WMAs, AMAs, SNAs, and state forests
- Use a science-based strategic planning and evaluation model to guide protection, restoration and enhancement, similar to the United States Fish and Wildlife Service's Strategic Habitat Conservation model
- Address wildlife species of greatest conservation need, Minnesota County Biological Survey data, and rare, threatened and endangered species inventories in land and water decisions, as well as permanent solutions to aquatic invasive species
- Provide Minnesotans with greater public access to outdoor environments with hunting, fishing and other outdoor recreation opportunities
- Ensures activities for "protecting, restoring and enhancing" are coordinated among agencies, non profits and others while doing this important work
- Target unique Minnesota landscapes that have historical value to fish and wildlife

LSOHC Prairie Section Priorities:

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

LSOHC Forest Prairie Transition Section Priorities:

- 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

LSOHC Northern Forest Section Priorities:

- Protect shoreland and restore or enhance critical habitat on wild rice lakes, shallow lakes, cold water lakes, streams and rivers, and spawning areas
- Restore and enhance habitat on existing protected properties, with preference to habitat for rare, endangered, or threatened species identified by the Minnesota County Biological Survey

LSOHC Southeast Forest Section Priorities:

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

Relationship to Other Constitutional Funds:

- No Relationships Listed

Accelerates or Supplements Current Efforts:

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. 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.

Sustainability and Maintenance:

AMA acquisitions will be sustained through fee title ownership. 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.

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.

Will local government approval be sought prior to acquisition? - **No**

Township and County support are usually obtained as part of the acquisition process. County Boards are typically notified after AMA parcels have been optioned and consistent with DNR policy.

Is the land you plan to acquire free of any other permanent protection? - **Yes**

Is this land open for hunting and fishing? - **Yes**

Whenever possible, AMA easement lands will be opened for angling, hunting, and other non-motorized light use activities consistent with M.R. 6270.0200.

Is the activity on permanently protected land and/or public waters per MS 103G.005, Subd. 15? - **Yes (AMA, Public Waters, State Parks)**

Accomplishment Timeline

Activity	Approximate Date Completed
Acquire priority fee title AMA parcels - 1 mile	June 30, 2015
Preliminary stream restoration project design assessments initiated for up to 3 projects on priority list	June 30, 2017
Completed project engineering designs for MF/SB Zumbro River and Whitewater River projects	June 30, 2015
Construction bids received and contracts awarded for MF/SB Zumbro River and Whitewater River projects	June 30, 2016
Completed major construction activities for approved projects	June 30, 2017
AMA riparian enhancement project designs and implementation plans completed; project bidding initiated	June 30, 2014
AMA riparian enhancement projects completed	June 30, 2016
AMA riparian enhancement projects assessed and sign-off	June 30, 2017
Mississippi River backwater habitat enhancement project permitting and bidding	June 30, 2014
Miss River backwater habitat enhancement project construction activities completed	June 30, 2017
20 AMA habitat condition and management needs assessments completed	June 30, 2014
40 AMA habitat condition and management needs assessments completed; initial project needs prioritized	June 30, 2015
40 AMA habitat condition and management needs assessments completed; management plans written; project needs prioritized	June 30, 2016

Outcomes

Programs in the northern forest region:

- Healthy populations of endangered, threatened, and special concern species as well as more common species
- Improved aquatic habitat indicators
- Increased availability and improved condition of riparian forests and other habitat corridors

Programs in forest-prairie transition region:

- Improved aquatic habitat indicators
- Protected, restored, and enhanced aspen parklands and riparian areas

Programs in southeast forest region:

- Healthier populations of endangered, threatened, and special concern species as well as more common species
- High priority riparian lands, forestlands, and savannas are protected from parcelization and fragmentation
- Improved aquatic habitat indicators
- Rivers, streams, and surrounding vegetation provide corridors of habitat
- Stream to bluff habitat restoration and enhancement will keep water on the land to slow runoff and degradation of aquatic habitat

Programs in prairie region:

- Improved condition of habitat on public lands

Budget Spreadsheet

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

Total Amount of Request: \$5,250,000

Budget and Cash Leverage

Budget Name	LSOHC Request	Anticipated Cash Leverage	Cash Leverage Source	Total
Personnel	\$1,221,000	\$0		\$1,221,000
Contracts	\$2,762,000	\$0		\$2,762,000
Fee Acquisition w/ PILT	\$685,000	\$0		\$685,000
Fee Acquisition w/o PILT	\$0	\$0		\$0
Easement Acquisition	\$0	\$0		\$0
Easement Stewardship	\$0	\$0		\$0
Travel (in-state)	\$41,000	\$0		\$41,000
Professional Services	\$75,000	\$0		\$75,000
Direct Support Services	\$188,000	\$0		\$188,000
DNR Land Acquisition Costs	\$0	\$0		\$0
Capital Equipment	\$0	\$0		\$0
Other Equipment/Tools	\$73,000	\$0		\$73,000
Supplies/Materials	\$205,000	\$0		\$205,000
DNR IDP	\$0	\$0		\$0
Total	\$5,250,000	\$0	-	\$5,250,000

Personnel

Position	FTE	Over # of years	LSOHC Request	Anticipated Cash Leverage	Cash Leverage Source	Total
Land management crew leader	2.00	3.00	\$336,000	\$0		\$336,000
Seasonal Technician - Lands crew	1.00	3.00	\$192,000	\$0		\$192,000
Seasonal Interns - Lands Crew	2.00	3.00	\$168,000	\$0		\$168,000
LSOHC Stream Project Manager	2.00	3.00	\$450,000	\$0		\$450,000
Shoreland Restoration Specialist	0.50	2.00	\$75,000	\$0		\$75,000
Total	7.50	14.00	\$1,221,000	\$0	-	\$1,221,000

Output Tables

Table 1. Acres by Resource Type

Type	Wetlands	Prairies	Forest	Habitats	Total
Restore	0	0	0	5	5
Protect in Fee with State PILT Liability	0	0	0	77	77
Protect in Fee W/O State PILT Liability	0	0	0	0	0
Protect in Easement	0	0	0	0	0
Enhance	0	0	0	13,943	13,943
Total	0	0	0	14,025	14,025

Table 2. Total Requested Funding by Resource Type

Type	Wetlands	Prairies	Forest	Habitats	Total
Restore	\$0	\$0	\$0	\$1,700,000	\$1,700,000
Protect in Fee with State PILT Liability	\$0	\$0	\$0	\$754,000	\$754,000
Protect in Fee W/O State PILT Liability	\$0	\$0	\$0	\$0	\$0
Protect in Easement	\$0	\$0	\$0	\$0	\$0
Enhance	\$0	\$0	\$0	\$2,796,000	\$2,796,000
Total	\$0	\$0	\$0	\$5,250,000	\$5,250,000

Table 3. Acres within each Ecological Section

Type	Metro/Urban	Forest/Prairie	SE Forest	Prairie	Northern Forest	Total
Restore	0	0	5	0	0	5
Protect in Fee with State PILT Liability	0	35	0	1	41	77
Protect in Fee W/O State PILT Liability	0	0	0	0	0	0
Protect in Easement	0	0	0	0	0	0
Enhance	0	272	48	12,516	1,107	13,943
Total	0	307	53	12,517	1,148	14,025

Table 4. Total Requested Funding within each Ecological Section

Type	Metro/Urban	Forest/Prairie	SE Forest	Prairie	Northern Forest	Total
Restore	\$0	\$0	\$1,700,000	\$0	\$0	\$1,700,000
Protect in Fee with State PILT Liability	\$0	\$339,200	\$0	\$7,100	\$407,700	\$754,000
Protect in Fee W/O State PILT Liability	\$0	\$0	\$0	\$0	\$0	\$0
Protect in Easement	\$0	\$0	\$0	\$0	\$0	\$0
Enhance	\$0	\$252,500	\$1,317,600	\$412,400	\$813,500	\$2,796,000
Total	\$0	\$591,700	\$3,017,600	\$419,500	\$1,221,200	\$5,250,000

Table 5. Target Lake/Stream/River Miles

36 miles

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

Aitkin

Name	TRDS	Acres	Est Cost	Existing Protection?
Clear Lake	04625233	1	\$15,000	Yes

Becker

Name	TRDS	Acres	Est Cost	Existing Protection?
Buck Lake AMA	13841231	66	\$15,000	Yes
Ida Lake AMA	13843234	2	\$7,000	Yes
Osage Pond and Straight River AMA	14036229	28	\$15,000	Yes
Solid Bottom Creek	14238206	4	\$30,000	Yes
Straight River AMA	14036235	80	\$20,000	Yes
Upper Cormorant Lake AMA	13843205	150	\$40,000	Yes

Beltrami

Name	TRDS	Acres	Est Cost	Existing Protection?
Preece Point AMA	14633230	15	\$10,000	Yes
So Shore AMA	14633215	5	\$7,000	Yes
Turtle River	14831231	132	\$10,000	Yes

Big Stone

Name	TRDS	Acres	Est Cost	Existing Protection?
Little Minnesota River	12549229	11,984	\$40,000	Yes

Blue Earth

Name	TRDS	Acres	Est Cost	Existing Protection?
Ida Lake AMA	10528212	123	\$25,000	Yes

Cass

Name	TRDS	Acres	Est Cost	Existing Protection?
Hazel Lake AMA	14129225	94	\$25,000	Yes
Little Turtle Lake AMA	14833216	12	\$10,000	Yes
Pine River/Norway Lake	13829231	515	\$120,000	Yes
Sand Lake	14029233	1	\$15,000	Yes
Stoney Brook	13529208	13	\$9,354	Yes
Ten Mile Lake AMA p3	14031201	68	\$15,000	Yes
Upper Gull AMA	13526217	1	\$7,000	Yes
Washburn AMA	13926217	1	\$7,000	Yes
Webb Lake AMA	14030213	109	\$25,000	Yes

Clay

Name	TRDS	Acres	Est Cost	Existing Protection?
Whiskey Creek	13746225	156	\$31,000	Yes

Cook

Name	TRDS	Acres	Est Cost	Existing Protection?
Kimball and Irish Creek	06202228	5	\$8,000	Yes

Cottonwood

Name	TRDS	Acres	Est Cost	Existing Protection?
Bingham Lake AMA	10525209	19	\$10,000	Yes

Crow Wing

Name	TRDS	Acres	Est Cost	Existing Protection?
Lower Hay AMA	13729225	3	\$7,000	Yes

Douglas

Name	TRDS	Acres	Est Cost	Existing Protection?
Crestwood Hills AMA	12837204	16	\$10,000	Yes
Jessie Lake AMA	12837227	3	\$8,000	Yes
Lake Geneva AMA	12837228	4	\$8,000	Yes
Long Prairie R AMA	12938214	2	\$5,000	Yes
Tegels Slough AMA	12836226	10	\$8,000	Yes

Fillmore

Name	TRDS	Acres	Est Cost	Existing Protection?
So. Br. Root River	10310221	40	\$65,000	Yes

Hubbard

Name	TRDS	Acres	Est Cost	Existing Protection?
Straight River AMA	13935210	20	\$12,000	Yes

Jackson

Name	TRDS	Acres	Est Cost	Existing Protection?
Rush Lake AMA	10136202	39	\$6,000	Yes

LeSueur

Name	TRDS	Acres	Est Cost	Existing Protection?
Savidge Lake AMA	11025220	13	\$10,000	Yes
St Peter AMA	11026214	50	\$15,000	Yes

Lincoln

Name	TRDS	Acres	Est Cost	Existing Protection?
Lake Benton AMA	10945203	22	\$15,000	Yes
Stay Lake AMA	11144202	44	\$7,000	Yes

Martin

Name	TRDS	Acres	Est Cost	Existing Protection?
Clam Lake AMA	10332210	7	\$3,000	Yes

Meeker

Name	TRDS	Acres	Est Cost	Existing Protection?
Minnebelle Lake AMA	11832212	6	\$3,000	Yes
Thompson Lake AMA	11732217	20	\$6,000	Yes

Olmsted

Name	TRDS	Acres	Est Cost	Existing Protection?
M Fk/So Br Zumbro River P2	10814218	0	\$1,400,000	Yes

Otter Tail

Name	TRDS	Acres	Est Cost	Existing Protection?
Dead River Walker Lake AMA	13440211	20	\$13,000	Yes

Rock

Name	TRDS	Acres	Est Cost	Existing Protection?
Stephen AMA	10245211	33	\$15,000	Yes

Wabasha

Name	TRDS	Acres	Est Cost	Existing Protection?
Miss. R. - Weaver Bottoms, P2	10913208	0	\$500,000	Yes

Winona

Name	TRDS	Acres	Est Cost	Existing Protection?
Middle Fork Whitewater R	03429219	5	\$300,000	Yes
Rush Creek	10508207	8	\$30,000	Yes

Section 2 - Protect Parcel List

Becker

Name	TRDS	Acres	Est Cost	Existing Protection?	Hunting?	Fishing?
Cotton Lake AMA	13940203	8	\$890,000	No	Limited	Full

Cass

Name	TRDS	Acres	Est Cost	Existing Protection?	Hunting?	Fishing?
Washburn Lake AMA P2	13926205	7	\$400,000	No	Full	Full

Crow Wing

Name	TRDS	Acres	Est Cost	Existing Protection?	Hunting?	Fishing?
Greenwood Lake AMA	13607207	137	\$750,000	No	Full	Full
Roosevelt Lake AMA	13826204	105	\$1,600,000	No	Full	Full
Round Lake AMA	13529236	3	\$400,000	No	Limited	Full

Hubbard

Name	TRDS	Acres	Est Cost	Existing Protection?	Hunting?	Fishing?
Spider Lake AMA p2	14133228	67	\$579,900	No	Full	Full

Itasca

Name	TRDS	Acres	Est Cost	Existing Protection?	Hunting?	Fishing?
Johnson Lake AMA	05726213	2	\$16,000	No	Full	Full

Otter Tail

Name	TRDS	Acres	Est Cost	Existing Protection?	Hunting?	Fishing?
Dayton Hollow AMA p1	13243208	7	\$149,800	No	Full	Full
Jolly Ann Lake AMA P1	13140217	96	\$695,000	No	Full	Full
Otter Tail Lake AMA	13340202	175	\$1,380,000	No	Full	Full
Rose Lake AMA Tract 1	13740221	60	\$490,000	No	Full	Full

Section 2a - Protect Parcel with Bldgs

Cass

Name	TRDS	Acres	Est Cost	# Bldgs?	Bldg Improve Desc	Value of Bldg	Disposition of Improvements
Marshall Point AMA	14230227	59	\$875,000	1	Garage	\$40,000	Removal

Crow Wing

Name	TRDS	Acres	Est Cost	# Bldgs?	Bldg Improve Desc	Value of Bldg	Disposition of Improvements
Hamlet Lake AMA	04628227	27	\$300,000	1	Shed	\$200	Demolish

Section 3 - Other Parcel Activity

No parcels with an other activity type.