Lessard-Sams Outdoor Heritage Council

Agenda Item Memo

DATE March 18, 2013

SUBJECT: Accomplishment Plan Amendment, ML 2012, Ch. 264, Art. 1, Sec. 2, Subd. 4e Accelerated Wetlands and Shallow Lake Enhancement, Ph. IV

Background

The Department of Natural Resources has requested an accomplishment plan amendment to make corrections to the program's budget travel line item. When the budget was developed, leased or rental equipment costs were included under contracts or professional services. However, within the state's financial system, SWIFT, leased or rental equipment expenses are classified as in-state travel. In order to accurately capture these costs, the following changes to the budget are requested.

Line Item	Current Accomplishment Plan	Amendment Request
Contracts	$2,061,000	$1,856,000
Travel	$30,000	$252,000
Professional Services	$185,000	$168,000

Equipment will be leased for four years and includes the following items:

- Two one ton pickups;
- Two utility terrain vehicles (UTV);
- Two trailers;
- One mower; and
- One Marshmaster.

Suggested Motion: Move to approve the accomplishment plan amendment as presented.

Suggested Procedure: Place a motion to approve the accomplishment plan amendment before the Council. Members question DNR program manager as needed. Council votes on accomplishment plan as amended.

Agenda Item 11

Lessard-Sams Outdoor Heritage Council

Laws of Minnesota 2012 Accomplishment Plan

Date: ~~**May 11, 2012**~~ **December 10, 2012**

Program Title: ~~Wetland and Shallow Lake Enhancement~~ Accelerated Shallow Lakes and Wetlands Enhancement, Phase 4

Manager's Name: Ricky Lien
Title: Wetland Habitat Program Supervisor
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Funds Recommended: $ 3,870,000

Legislative Citation: M.L 2012, Ch. 264, Art. 1, Sec. 2, Subd. 4(e)

Abstract:

This proposal will enhance the habitat quality of more than 20,000 acres of wetlands and shallow lakes by focusing on pre-design, design, construction and intensive management of basins.

Program Narrative

Design and Scope of Work

Approximately 30 species of waterfowl are regular migrants through Minnesota. More than a dozen breed and nest in Minnesota. While each of these species has its own particular habitat needs the common bond is a dependence on wetland habitat for survival. Meeting the needs of these waterfowl requires a complex of wetland sizes and types ranging from temporary and seasonal wetlands to large permanent shallow lakes.

Minnesota's breeding waterfowl go through five life stages in our state: Breeding, Nesting, Brood Rearing, Molting, and Migration. Each life stage has its own characteristic habitat needs. For example, for most species, especially dabbling ducks, the number of breeding pairs in the spring is driven by the number of small wetlands. The small size helps reduce disturbance by other ducks and the abundant wetland invertebrates they provide are critical to providing the fat, protein, and calcium needed by hens as they prepare for egg laying.

Nesting dabbling duck hens and some diver species require adequate upland cover for actual nesting but are dependent on nearby wetlands for continuing nutrition throughout the egg laying and incubation period. High quality shallow lakes and wetlands fill this need. Seasonal wetlands are particularly critical for dabbling ducks. Over water nesting species depend on wetlands and shallow lakes with a good interspersion of emergent vegetation for nesting sites and nesting material.

Food is critical for the survival of growing ducklings and molting hens. Seasonal wetlands fill this critical role during wet years while semi-permanent wetlands and shallow lakes increase in importance as the summer progresses. Regardless of the wetland type, poor plant and invertebrate quality due to invasive fish and nutrient loading can negate the expected benefits.

Food and protection from disturbance are the critical elements needed to attract and hold waterfowl during fall migration. Wetland quality and depth are critical drivers of wetland based food resources. Large basins provide more inherent protection from disturbance although wetland and shallow lake based refuges are very important.

An estimated 90% of Minnesota's prairie wetlands have been lost, more than 50% of our statewide wetland resource. Throughout the state, remaining shallow lakes and wetlands provide the critical habitat for each life stage of waterfowl and other wetland wildlife. Unfortunately these benefits are too often compromised by degraded habitat quality due to excessive runoff and invasive plants and fish.

High quality shallow lakes and wetlands have clear water and abundant rooted aquatic vegetation. Emergent aquatic plants such as rushes and wild rice provide protective cover from weather and predators as well as over-water nesting habitat. Submergent aquatic plants provide food in the form of seeds and tubers and critical habitat for aquatic invertebrates. Very shallow seasonal wetlands can be critical sources of invertebrates and nutritious plant seeds during spring, early summer and fall, particularly for dabbling ducks.

The quality of shallow lakes and wetlands providing wildlife habitat has declined markedly due to landscape changes, increased runoff carrying sediment and nutrients, and invasive plant and fish species. Only about one prairie wetland in five exhibits good quality vegetation while just under a third provide good habitat for invertebrates. While wetlands in the forest-prairie transition fare better with a little fewer than half providing good habitat for invertebrates they actually do a bit worse for aquatic plants due to invasive species.

The habitat quality of these shallow lakes and wetlands can be markedly improved by installing fish barriers where needed and aggressively managing water levels to meet management objectives. This proposal applies scientific assessment to diagnose specific habitat problems and recommend treatments (Pre-design), engineering design of dikes, water control structures, and fish barriers (Design), installing the design elements (Construction), and intensifying the application of management techniques (Management).

The shallow lakes and wetlands identified in this proposal for enhancement were proposed and ranked by DNR Area Wildlife Supervisors through their respective Regional Wildlife Managers. The proposals were reviewed by the Wetland Wildlife Program Consultant and the Wildlife Operations Manager prior to inclusion in this proposal.

Pre-design assessment will be conducted on 200 basins annually for four years. ~~28~~ 22 wetland and shallow lake basins have been identified for final engineering design to upgrade dikes, water level control structures, and fish barriers with ~~16~~ 12 of these designs moving to construction. Intensive management will be applied to approximately 20 basins annually for four years. This management will include, but not be limited to, managing water levels, maintaining fish barriers, inducing winterkill of fish, controlling invasive plants and fish, and encouraging native plant assemblages.

Program managers may add, delete, and substitute projects on the approved 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.

This proposal reflects the strategies of the 2006 DNR Duck Recovery Plan and 2010 Shallow Lake Plan. These plans underwent substantial review by nearly all the major wetland wildlife conservation groups in Minnesota. Stakeholders have been supportive of the strategies outlined in the plans, although some have expressed frustration with the long timeline.

Planning

Several recent statewide Minnesota planning efforts have called attention to the dramatic loss in both quantity and quality of shallow lake habitat over the last century and a half. *Minnesota Statewide Conservation and Preservation Plan*, *A Fifty-Year Vision – Minnesota Campaign for Conservation, Tomorrow's Habitat for the Wild and Rare*, and *MN DNR Duck Recovery Plan* all emphasize the importance of shallow lakes in creating viable wetland habitat complexes that are necessary for improvements in wetland wildlife populations.

The *Minnesota Statewide Conservation and Preservation Plan* identifies habitat loss and degradation as the number one driver of change for wildlife in Minnesota. This Plan specifically recommends fee acquisition for WMAs, protection of shallow lake shoreline, and restoring shallow lakes, wetlands, and wetland associated watersheds as important strategies. *Tomorrow's Habitat for the Wild and Rare - Minnesota's Comprehensive Wildlife Conservation Strategy* for species in greatest conservation need has identified significant loss and degradation of habitat as the number one management challenge and one of the principle strategies is to provide protection through selective acquisition of key habitats in each Ecological Section. Over 30 species that rely on shallow lakes and wetlands are listed as species of special concern.

Minnesota's *Long Range Duck Recovery Plan* lists the objective of restoring a breeding population of 1 million ducks by 2056. The primary strategy is the protection and restoration of

2 million additional acres of habitat including the restoration of 64,000 wetlands and actively managing 1,800 shallow lakes. In addition, LSOHC specifically recognizes the importance of shallow lakes in the Prairie ecological section.

This proposal is largely based on the objectives and strategies of the Department of Natural Resources 2006 Duck Recovery Plan and 2010 Shallow Lake Plan. The 2006 Duck Recovery Plan is similar to the Strategic Habitat Conservation model adopted by the US Fish and Wildlife Service in that it establishes a statewide duck population goal, identifies the challenges to be met in achieving that goal, proposes specific strategies and objectives for habitat restoration and protection, and selects specific metrics for evaluating progress.

The LSOHC specifically recognizes the importance of shallow lakes in the Forest, Forest Prairie Transition, and Prairie ecological sections. In addition, wetland complexes and improving wildlife habitat on WMAs were noted as important strategies within the Forest Prairie Transition, and Prairie ecological sections.

Relationship to Other Constitutional Funds

This proposal targets the enhancement of wetland wildlife habitat on shallow lakes and associated wetlands that contribute to wetland habitat complexes. These basins are managed by wildlife agencies explicitly for high quality wildlife habitat. The DNR will consult and coordinate with partners to ensure that strategic conservation actions are prioritized within L-SOHC planning sections and that the allocation of available resources is optimized with all available funding sources. Although this work will compliment the goals of other Constitutional Funding, the selection of specific projects is prioritized based on the potential benefits to wildlife rather than consideration of other goals

Relationship to Current Organizational Budget

Current DNR Division of Fish and Wildlife expenditures for wetland and shallow lake work for wildlife habitat total approximately $2.36 million out of a total Division budget of $90.3 million. The total DNR annual budget approximates $456 million. The cost of this proposal exceeds the current funding available for wetland and shallow lake management. Additional funding is necessary to accelerate wetland and shallow lake management.

Sustainability and Maintenance

The management of enhanced wetlands and shallow lakes once the construction is completed will fall on existing staff of the Department of Natural Resources. These staff are funded through license fees and legislative appropriations. Periodic enhancements such as invasive species removal, supplemental vegetation planting or water control structure installation and replacements will be accomplished through annual funding requests to a variety of funding sources including, but not limited to, the Game and Fish Fund, bonding, gifts, the Environment

and Natural Resources Trust Fund, the Outdoor Heritage Fund, and federal sources such as North American Wetland Conservation Act grants.

Outcomes

Reducing invasive species will increase the occurrence of aquatic vegetation and improve the production of invertebrates in wetlands and shallow lakes. This will lead to the ecological functional integrity of wetland complexes. Waterfowl, shorebird and other wetland wildlife use of these wetland and shallow lakes will increase, especially during migration. Improved hunting and viewing opportunities will follow the increased wildlife use.

Accomplishment Timeline

Activity	Milestone	Date completed
Design	~~28~~ 22 Final Engineering Design	~~July 2013~~ July 2014
Construction	~~16~~ 12 New or Upgraded Replacement Structures	July 2015

Attachments *(on spreadsheet workbook – 3 separate tabs):*

A. Budget
B. Proposed Outcome Tables
C. Parcel List

No Map is needed for the accomplishment plan

Attachment A. Budget Spreadsheet

Name of Proposal:	Accelerated Shallow Lakes and Wetlands Enhancement, Phase 4
Legislative Citation:	M.L. 2012, Ch. 264, Art. 1, Sec. 2, Subd. 4 E
Date:	12/10/2012

Link HERE to definitions of the budget items below.

Total Amount of Request $ 3,870,000 *From page 1 on the funding form.*

Personnel

	FTE	Over # of years	LSOHC Request	Anticipated Cash Leverage	Cash Leverage Source	Total
Position breakdown here						
Shallow Lake NR Specialists	*3*	*4*	*$ 410,000*			$ 410,000
Assessment Seasonal Interns	*3*	*4*	*$ 270,000*			$ 270,000
Wetland NR Specialists	*4*	*4*	*$ 520,000*			$ 520,000
						$ -
						$ -
						$ -
						$ -
Total	10		$ 1,200,000	$ -	$ -	$ 1,200,000

Budget and Cash Leverage ***(All your LSOHC Request Funds must be direct to and necessary for program outcomes.)***

Please describe how you intend to spend the requested funds.

Budget Item	LSOHC Request	Anticipated Cash Leverage	Cash Leverage Source	Total
Personnel - *auto entered from above*	$ 1,200,000	$ -	$ -	$ 1,200,000
Contracts	~~$2,061,000~~ *1,856,000*			$ 1,856,000
Fee Acquisition w/ PILT ***(breakout in table 7)***				$ -
Fee Acquisition w/o PILT ***(breakout in table 7)***				$ -
Easement Acquisition				$ -
Easement Stewardship				$ -
Travel (in-state)	$ ~~30,000~~ *252,000*			$ 252,000
Professional Services	$ ~~185,000~~ *168,000*			$ 168,000
Direct Support Services	*$ 260,000*			$ 260,000
DNR Land Acquisition Costs				$ -
Other				$ 134,000
Capital Equipment (*auto entered from below*)				$ -
Other Equipment/Tools	*$ 134,000*			$ 134,000
Supplies/Materials				$ -
	$ 3,870,000	$ -	$ -	$ 3,870,000

Capital Equipment ***(single items over $10,000 - auto entered into table above)***

Item Name	**LSOHC Request**	**Leverage**
Truck		
Item 2 enter here		
Item 3 enter here		
Item 4 enter here		
Item 5 enter here		
Item 6 enter here		
Item 7 enter here		
Item 8 enter here		
Total	-	-

Attachment B. Output Tables

Name of Proposal:	Accelerated Shallow Lakes and Wetlands Enhancement, Phase 4
Legislative Citation:	M.L. 2012, Ch. 264, Art. 1, Sec. 2, Subd. 4 E
Date:	12/10/2012

Table 1 and Table 3 column totals should be the same AND Table 2 and Table 4 column totals should be the same

If your project has lakes or shoreline miles instead of land acres, convert miles to acres for Tables 1 and 3 using the following conversion:
Lakeshore = 6 acres per lakeshore mile / Stream & River Shore = 12 acres per linear mile, if both sides

Table 1. Acres by Resource Type

Describe the scope of the project in acres (use conversion above if needed)

	Wetlands	Prairies	Forest	Habitats	Total
Restore					0
Protect Fee					0
Protect Easement					0
Protect Other					0
Enhance	*1,982*				1982
Total	1982	0	0	0	

Total Acres (sum of Total column)	1982	*These two cells should be the same figure.*
Total Acres (sum of Total row)	1982	

Table 2. Total Requested Funding by Resource Type

	Wetlands	Prairies	Forest	Habitats	Total
Restore					$ -
Protect Fee					$ -
Protect Easement					$ -
Protect Other					$ -
Enhance	*$ 3,870,000*				$ 3,870,000
Total	$ 3,870,000	$ -	$ -	$ -	

Total Dollars (sum of Total column)	$ 3,870,000	*These two cells should be the same figure.*
Total Dollars (sum of Total row)	$ 3,870,000	

Check to make sure this amount is the same as the Funding Request Amount on page 1 of Main Funding Form.

Table 3. Acres within each Ecological Section

	Metro/Urban	Forest/Prairie	SE Forest	Prairie	Northern Forest	Total
Restore						0
Protect Fee						0
Protect Easement						0
Protect Other						0
Enhance	*12*	*547*		*971*	*452*	1982
Total	12	547	0	971	452	

Total Acres (sum of Total column)	1982	*These three cells should be the same figure.*
Total Acres (sum of Total row)	1982	
Total Acres from Table 1.	1982	

Attachment B. Output Tables

Table 4. Total Requested Funding within each Ecological Section

	Metro/Urban	Forest/Prairie	SE Forest	Prairie	Northern Forest	Total
Restore						$ -
Protect Fee						
Protect Easement						
Protect Other						$ -
Enhance	*$ 83,000*	*$ 1,660,000*		*$ 1,281,000*	*$ 846,000*	$ 3,870,000
Total	$ 83,000	$ 1,660,000	$ -	$ 1,281,000	$ 846,000	

Total Dollars (sum of Total column)	$ 3,870,000	*These two cells should be the same figure.*
Total Dollars (sum of Total row)	$ 3,870,000	

Check to make sure these amounts are the same
as the Funding Request Amount on page 1 of Main Funding Form.

Table 5. Target Lake/Stream/River Miles

	# miles of Lakes / Streams / Rivers Shoreline

Table 6. Acquisition by PILT Status *(enter information in acres)*

	Wetlands	Prairies	Forests	Habitats	Total
Acquired in Fee with State PILT Liability					0
Acquired in Fee w/o State PILT Liability					0
Permanent Easement ***NO State PILT Liability***					0
	0	0	0	0	

Table 7. Estimated Value of Land Acquisition by PILT Status *(enter information in dollars)*

FYI: should match total in budget table that is auto entered below

	Wetlands	Prairies	Forests	Habitats	Total	
Acquired in Fee with State PILT Liability					$ -	
Acquired in Fee w/o State PILT Liability					$ -	$ -
Permanent Easement ***NO State PILT Liability***					$ -	
	$ -	$ -	$ -	$ -		

Attachment C. Parcel List

Name of Proposal: Accelerated Shallow Lakes and Wetlands Enhancement, Phase 4
Legislative Citation: M.L. 2012, Ch. 264, Art. 1, Sec. 2, Subd. 4 (e)
Date: 12/10/2012

Parcel Name	County	Township (25-258)	Range (01-51)	Direction most parcels are 2 with the exception of some areas of Cook County which is 1	Section (01 thru 36)	TRDS	# of acres	Revised Acres	Budgetary Estimate (includes administrative, restoration or other related costs and do not include matching money contributed or earned by the transaction)	Revised Budget	Description	Activity PF=Protect Fee PE=Protect Easement PO=Protect Other R=Restore E=Enhance	If Easement, what is the easement cost as a % of the fee acquisition?	Any existing protection? (yes/no)	Open to hunting and fishing? (yes/no)
~~Patterson Lake~~	~~Carver~~	~~116~~	~~25~~	~~2~~	~~30~~	~~11625230~~	~~276~~	0	~~$ 12,000.00~~		Design	E		Yes	Yes
Roseau WMA - Pool 1 West W(	Roseau	163	43	2	16	16343216	TBD		$ 12,000.00		Design	E		Yes	Yes
Roseau WMA - Douglas MSU	Roseau	163	43	2	33	16343233	65		$ 20,000.00		Design	E		Yes	Yes
Thief WMA - Moose R. MSU	Marshall	158	41	2	24	15841224	12		$ 20,000.00		Design	E		Yes	Yes
Manston WMA - MSU	Wilkin	135	46	2	19	13546219	160		$ 20,000.00		Design	E		Yes	Yes
~~Evergreen WMA - WCS~~	~~Koochiching~~	~~154~~	~~25~~	~~2~~	~~17~~	~~15425217~~	~~TBD~~	0	~~$ 12,000.00~~		Design	E		Yes	Yes
Cornish Flowage - WCS	Aitkin	51	23	2	23	5123223	TBD		$ 12,000.00		Design	E		Yes	Yes
Morph Meadows WMA - WCS	Itasca	147	29	2	8	1472928	TBD		$ 12,000.00		Design	E		Yes	Yes
Mille Lacs WMA - WCS	Mille Lacs	41	25	2	32	4125232	TBD		$ 20,000.00		Design	E		Yes	Yes
Graham WMA - Dike	Benton	38	30	2	2	383022	142		$ 15,000.00		Design	E		Yes	Yes
Hartford WMA - Dike	Todd	130	33	2	24	13033224	TBD		$ 15,000.00		Design	E		Yes	Yes
Lyons WMA - Mahlke WCS	Lyon	110	42	2	34	11042234	60		$ 15,000.00		Design	E		Yes	Yes
Thief WMA - MSU	Marshall	158	41	2	24	15841224	TBD		TBD		Design and Constructio	E		Yes	Yes
Roseau WMA - Pool 3 MSU	Roseau	163	43	2	17	16343217	TBD		TBD		Design and Constructio	E		Yes	Yes
Dalbo WMA - MSU	Isanti	37	25	2	9	372529	~~310~~	160	~~$ 370,000.00~~	$ 160,000.00	Design and Constructio	E		Yes	Yes
Clare Johnson WMA - WCS	Lincoln	113	45	2	9	1134529	52		$ 85,000.00		Design and Constructio	E		Yes	Yes
LQP WMA - Killen MSU	Lac qui Parle	118	42	2	3	1184223	160		$ 312,000.00		Design and Constructio	E		Yes	Yes
Carex Slough WMA - WCS	Freeborn	163	19	2	17	16319217	25		$ 165,000.00		Design and Constructio	E		Yes	Yes
Anderson Lake WMA - WCS	Lincoln	111	45	2	6	114526	15		$ 165,000.00		Design and Constructio	E		Yes	Yes
Thostenson WMA - WCS	Lincoln	111	44	2	20	11144220	14		$ 72,000.00		Design and Constructio	E		Yes	Yes
Ivanhoe WMA - WCS	Lincoln	112	45	2	32	11245232	77		$ 165,000.00		Design and Constructio	E		Yes	Yes
Miller Richter WMA - WCS	Yellow Medice	115	43	2	6	1154326	228		$ 105,000.00		Design and Constructio	E		Yes	Yes
~~North Heron WMA - MSU~~	~~Jackson~~	~~104~~	~~37~~	~~2~~	~~29~~	~~10437229~~	~~30~~	0	~~$ 315,000.00~~		Design and Constructio	E		Yes	Yes
Talcot Lake WMA - MSU	Cottonwood	105	38	2	19	10538219	80		$ 315,000.00		Design and Constructio	E		Yes	Yes
Sodus WMA - WCS	Lyon	109	42	2	1	1094221	20		$ 52,000.00		Design and Constructio	E		Yes	Yes