Lessard-Sams Outdoor Heritage Council Laws of Minnesota 2009 Final Report

Date: September 12, 2013

Program or Project Title: Accelerated Shallow Lake Restorations and Enhancements, Phase 1

Funds Recommended: \$2,528,000

Manager's Name: Jon Schneider

Title: Manager - Minnesota Conservation Programs

Organization: Ducks Unlimited

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Organization Web Site: www.ducks.org

Legislative Citation: ML 2009, Ch. 172, Art. 1, Sec. 2, Subd. 4(b)

Appropriation Language: \$2,528,000 in fiscal year 2010 is to the commissioner of natural resources for an agreement with Ducks Unlimited, Inc. or successor to restore and enhance shallow lake habitats. Up to \$400,000 of this appropriation may be used for permanent easements related to shallow lake restorations and enhancements. A list of proposed easements and projects, describing the types and locations of easements, restorations, and enhancements, must be provided as part of the required accomplishment plan. The commissioner of natural resources must agree to each easement, restoration, and enhancement.

County Locations: Douglas, Fairbault, Grant, Lac qui Parle, Murray, Stearns, Wright, and Yellow Medicine.

Ecological Planning Regions:

- Forest / Prairie Transition
- Prairie
- Metro / Urban

Activity Type:

- Protect in Easement
- Enhance

Priority Resources Addressed by Activity:

- Wetlands
- Prairie

Abstract:

Ducks Unlimited enhanced 6,882 wetland acres through the bio-engineering and installation of water control structures on managed shallow lake outlets for Minnesota DNR, and protected 76 wetland and 103 upland acres on a shallow lake through a purchased conservation easement.

Activity Detail

Design and Scope of Work:

As some of the only wetland basins that remain in prairie Minnesota, shallow lakes and large wetlands throughout southern and western Minnesota have become degraded due to high, stable water levels, altered natural hydrology due to highly drained and intensively cultivated watersheds, lack of natural fish winterkill, and invasive fish (including carp) that have increased access and overwinter survival due to high, stable water levels and manmade drainage systems through which they can now travel. These factors combined with naturally fertile prairie soils result in turbid water conditions over prolonged periods which reduce aquatic plant and invertebrate abundance upon which wetland wildlife depend in our remaining prairie wetlands and shallow lakes. The result is degraded wetland conditions that do not provide the aquatic food resources wetland-dependent wildlife, especially waterfowl, require as they move through and attempt to breed in Minnesota. The lack of high quality, productive wetland habitat is especially problematic for diving ducks and brood-rearing ducks which are fully dependent on wetlands and shallow lakes for all of their food resources.

The huge watershed changes in Minnesota's agriculture-dominated prairie landscape that are largely beyond the control of conservationists leave agency wildlife managers with few options to improve and protect our remaining public water wetlands and shallow lakes. These tools primarily include acquiring and restoring land around our remaining wetlands and shallow lakes to buffer them from the effects of highly degraded and drained agricultural landscapes, and actively managing water levels in them to periodically induce temporary drought conditions to winterkill fish and rejuvenate the aquatic ecology of aquatic plants and invertebrates in them upon which waterfowl and other wetland-depending migratory birds rely.

Through our Living Lakes Initiative, Ducks Unlimited (DU) strives to help Minnesota Department of Natural

Resources (DNR) and U.S. Fish & Wildlife Service (Service) to improve and protect our remaining shallow lakes and large wetland marshes. The goal of this Outdoor Heritage Fund (OHF) grant-funded program was to support DU wetland bio-engineering assistance to help the Minnesota Department of Natural Resources (DNR) and U.S. Fish & Wildlife Service structurally improve shallow lakes outlets by designing and installing new water control structures used to enhance the aquatic habitat quality of wetlands throughout southern and western Minnesota. DU biologists and engineers worked together with Minnesota DNR shallow lake program and area wildlife managers alongside Service biologists to design and construct water control structures with fish barriers that allow managers to enhance water quality and wetland habitat conditions for wildlife through temporary water level draw-downs. DU also protects private shallow lake shoreland on managed shallow lakes by securing a conservation easement held and enforced by DU.

In partnership with Minnesota DNR, DU designed and implemented eight shallow lake enhancement projects that improved 6,882 acres through the bio-engineering design and installation of water control structures and pumps equipped with fish barriers features. Minnesota DNR wildlife field staff used these structures to conduct temporary water level draw-downs to simulate natural drought conditions that winterkilled invasive fish (especially carp), consolidated sediments and nutrients, and rejuvenated the aquatic ecology of shallow lakes. These capital investments will last for decades, and will continue to be used periodically by Minnesota DNR wildlife field staff to manage and further enhance shallow lake habitat through annual state duck stamp funding.

The shallow lakes enhanced through this grant include 316-acre Jennie Lake in Douglas County, 4,076-acre Lake Christina and Lake Ina complex in Douglas County, 1,166-acre Rice Lake in Faribault County, 218-acre Ash Lake in Grant County, 165-acre Cory Lake on Hamlin WMA in Lac qui Parle County, 171-acre Round Lake on Shetek WMA in Murray County, 330-acre Smith Lake in Wright County, and 440-acre Curtis Lake in Yellow Medicine County. In addition, DU also engineered new water control structures for the Service on Rydell National Wildlife Refuge and for the Minnesota DNR on Malardi state Wildlife Management Area (WMA) that will be installed through future 2010 and 2012 OHF grants to DU after permits and funding have been secured. Finally, DU also secured a purchased conservation easement on Fish Lake in Stearns County that permanently protects 179 acres in perpetuity, which DU will annually monitor and enforce with stewardship endowment funding provided by the landowner.

Planning

MN State-wide Conservation Plan Priorities:

• H4 Restore and protect shallow lakes

Plans Addressed:

- Ducks Unlimited Living Lakes Initiative
- Long Range Duck Recovery Plan
- Managing Minnesota's Shallow Lakes for Waterfowl and Wildlife
- North American Waterfowl Management Plan
- Northern Plains Prairie Potholes Regional Shorebird Conservation Plan
- Outdoor Heritage Fund: A 25 Year Framework
- Tomorrow's Habitat for the Wild and Rare
- U.S. Fish and Wildlife Service Strategic Habitat Conservation Model
- U.S. Prairie Pothole Joint Venture Plan

LSOHC Statewide Priorities:

- Are ongoing, successful, transparent and accountable programs addressing actions and targets of one or more of the ecological sections
- 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

LSOHC Prairie Section Priorities:

- Restore or enhance habitat on public lands
- Protect, restore, and enhance shallow lakes
- Protect expiring CRP lands
- Protect, enhance, and restore migratory habitat for waterfowl and related species, so as to increase migratory and breeding success

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
- Protect, enhance, and restore migratory habitat for waterfowl and related species, so as to increase migratory and breeding success

LSOHC Metro Urban Section Priorities:

No Metro Urban Priorities Listed

Relationship to Other Constitutional Funds:

• No Relationships Listed

Sustainability and Maintenance:

All water control structures, pumps, and fish barriers will be constructed for the Minnesota DNR and US Fish & Wildlife Service are on land under their control, and will be managed for decades by field staff from these public wildlife agencies. Regular, periodic assessments of the shallow lake basins will be conducted by DNR Wildlife's shallow lakes program and assisted by DU field biologists to evaluate shallow lake condition and document improvements.

A financial contribution to endow annual conservation easement monitoring and enforcement was made by the private landowner from whom DU secured a conservation easement. All DU conservation easements are monitored and visited annually to ensure protected habitat is maintained.

Outcomes

Programs in forest-prairie transition region:

• No Programs Listed

Programs in metropolitan urbanizing region:

• No Programs Listed

Programs in prairie region:

• No Programs Listed

Budget Spreadsheet

Total Amount: \$2,528,000

Budget and Cash Leverage

Budget Name	Request	Spent	Cash Leverage (anticipated)	Cash Leverage (received)	Leverage Source	Total (original)	Total (final)
Personnel	\$266,000	\$167,500	\$0	\$372,900		\$266,000	\$540,400
Contracts	\$2,025,000	\$2,096,000	\$0	\$544,800	Ducks Unlimited	\$2,025,000	\$2,640,800
Fee Acquisition w/ PILT	\$0	\$0	\$0	\$0		\$0	\$0
Fee Acquisition w/o PILT	\$0	\$0	\$0	\$0		\$0	\$0
Easement Acquisition	\$213,000	\$135,900	\$0	\$119,600	Ducks Unlimited	\$213,000	\$255,500
Easement Stewardship	\$0	\$0	\$0	\$0		\$0	\$0
Travel	\$24,000	\$9,000	\$0	\$56,500	Ducks Unlimited	\$24,000	\$65,500
Professional Services	\$0	\$113,200	\$0	\$5,600	Ducks Unlimited	\$0	\$118,800
Direct Support Services	\$0	\$0	\$0	\$0		\$0	\$0
DNR Land Acquisition Costs	\$0	\$0	\$0	\$0		\$0	\$0
Capital Equipment	\$0	\$0	\$0	\$0		\$0	\$0
Other Equipment/Tools	\$0	\$0	\$0	\$0		\$0	\$0
Supplies/Materials	\$0	\$6,400	\$0	\$11,700	Ducks Unlimited	\$0	\$18,100
DNR IDP	\$0	\$0	\$0	\$0		\$0	\$0
Total	\$2,528,000	\$2,528,000	\$0	\$1,111,100		\$2,528,000	\$3,639,100

Personnel

Position	FTE	Over # of years	Spent	Cash Leverage	Leverage Source	Total
Conservation Program Manager	0.25	3.00	\$25,100	\$27,300	Ducks Unlimited	\$52,400
Biologists	0.15	3.00	\$13,500	\$52,500	Ducks Unlimited	\$66,000
Engineers	1.25	3.00	\$128,900	\$293,100	Ducks Unlimited	\$422,000
Total	1.65	9.00	\$167,500	\$372,900		\$540,400

Output Tables

Table 1. Acres by Resource Type

Туре	Wetlands (original)	Wetlands (final)					Habitats (original)		Total (original)	Total (final)
Restore	0	0	0	0	0	0	0	0	0	0
Protect in Fee with State PILT Liability	0	0	0	0	0	0	0	0	0	0
Protect in Fee W/O State PILT Liability	0	0	0	0	0	0	0	0	0	0
Protect in Easement	180	76	0	103	0	0	0	0	180	179
Enhance	6,000	6,882	0	0	0	0	0	0	6,000	6,882
Total	6,180	6,958	0	103	0	0	0	0	6,180	7,061

Table 2. Total Requested Funding by Resource Type

Туре	Wetlands (original)		Prairies (original)	Prairies (final)	I .		Habitats (original)	1	Total (original)	Total (final)
Restore	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Protect in Fee with State PILT Liability	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Protect in Fee W/O State PILT Liability	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Protect in Easement	\$225,000	\$57,800	\$0	\$78,400	\$0	\$0	\$0	\$0	\$225,000	\$136,200
Enhance	\$2,303,000	\$2,391,800	\$0	\$0	\$0	\$0	\$0	\$0	\$2,303,000	\$2,391,800
Total	\$2,528,000	\$2,449,600	\$0	\$78,400	\$0	\$0	\$0	\$0	\$2,528,000	\$2,528,000

Table 3. Acres within each Ecological Section

Туре	Urban	Metro Urban (final)		Forest Prairie (final)		SE Forest (final)	Prairie (original)	Prairie (final)	N Forest (original)	N Forest (final)	Total (original)	Total (final)
Restore	0	0	0	0	0	0	0	0	0	0	0	0
Protect in Fee with State PILT Liability	0	0	0	0	0	0	0	0	0	0	0	0
Protect in Fee W/O State PILT Liability	0	0	0	0	0	0	0	0	0	0	0	0
Protect in Easement	0	0	0	0	0	0	0	179	0	0	0	179
Enhance	0	330	0	4,392	0	0	0	2,160	0	0	0	6,882
Total	0	330	0	4,392	0	0	0	2,339	0	0	0	7,061

Table 4. Total Requested Funding within each Ecological Section

Туре	Metro Urban (original)	Metro Urban (final)	Forest Prairie (original)	Forest Prairie (final)	SE Forest (original)	SE Forest (final)			N Forest (original)		Total (original)	Total (final)
Restore	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Protect in Fee with State PILT Liability	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Protect in Fee W/O State PILT Liability	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Protect in Easement	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$136,200	\$0	\$0	\$0	\$136,200
Enhance	\$0	\$129,300	\$0	\$1,631,500	\$0	\$0	\$0	\$631,000	\$0	\$0	\$0	\$2,391,800
Total	\$0	\$129,300	\$0	\$1,631,500	\$0	\$0	\$0	\$767,200	\$0	\$0	\$0	\$2,528,000

Table 5. Target Lake/Stream/River Miles (original)

0 miles

Table 5. Target Lake/Stream/River Miles (final)

0 miles

Parcel List

Section 1 - Restore / Enhance Parcel List

Dougl	las
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Name	TRDS	Acres	Est Cost	Existing Protection?
Jennie Lake	12940235	316	\$71,400	Yes
Lake Christina & Lake Anka	13040207	4,076	\$1,551,100	Yes

Fairbault

Name	TRDS	Acres	Est Cost	Existing Protection?
Rice Lake	10427229	1,166	\$154,000	Yes

Grant

Name	TRDS	Acres	Est Cost	Existing Protection?
Ash Lake	13044225	218	\$24,800	Yes

Lac qui Parle

Name	TRDS	Acres	Est Cost	Existing Protection?
Hamlin WMA - Cory Lake	11744228	165	\$144,600	Yes

Murray

Name	TRDS	Acres	Est Cost	Existing Protection?
Shetek WMA - Round Lake	10840217	171	\$105,500	Yes

Wright

Name	TRDS	Acres	Est Cost	Existing Protection?
Smith Lake	11927231	330	\$128,500	Yes

Yellow Medicine

Name	TRDS	Acres	Est Cost	Existing Protection?
Curtis Lake	11338219	440	\$151,500	Yes

Section 2 - Protect Parcel List

Stearns

Name	TRDS	Acres	Est Cost	Existing Protection?	Hunting?	Fishing?
Kauller LLP Conservation Easement	12335234	179	\$136,200	No	Not Applicable	Not Applicable

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.

Completed Parcel: Ash Lake

# of Total Acres:	218
County:	Grant
Township:	130
Range:	44
Direction:	2
Section:	25
# of Acres: Wetlands/Upland:	218

of Acres: Forest:

of Acres: Prairie/Grassland:

Amount of Shorline: (Linear Feet)
Name of Adjacent Body of Water (if applicable): Ash Lake
Has there been signage erected at the site: Yes
Total cost of Restoration/Enhancement: \$188,050

Completed Parcel: Curtis Lake

of Total Acres: 440

County: Yellow Medicine

Township: 113
Range: 38
Direction: 2
Section: 19
of Acres: Wetlands/Upland: 440

of Acres: Forest:

of Acres: Prairie/Grassland:

Amount of Shorline: (Linear Feet)
Name of Adjacent Body of Water (if applicable): Curtis Lake
Has there been signage erected at the site: Yes
Total cost of Restoration/Enhancement: \$316,663

Completed Parcel: Hamlin WMA - Cory Lake

of Total Acres: 165

County: Lac qui Parle

Township: 117
Range: 44
Direction: 2
Section: 28
of Acres: Wetlands/Upland: 165

of Acres: Forest:

of Acres: Prairie/Grassland:

Amount of Shorline: (Linear Feet)
Name of Adjacent Body of Water (if applicable): Cory Lake
Has there been signage erected at the site: Yes
Total cost of Restoration/Enhancement: \$298,418

Completed Parcel: Jennie Lake

# of Total Acres:	316
County:	Douglas
Township:	129
Range:	40
Direction:	2
Section:	35
# of Acres: Wetlands/Upland:	316

of Acres: Forest:

of Acres: Prairie/Grassland:

Amount of Shorline: (Linear Feet)
Name of Adjacent Body of Water (if applicable): Jennie Lake
Has there been signage erected at the site: Yes
Total cost of Restoration/Enhancement: \$257,261

Completed Parcel: Kauller LLP Conservation Easement

of Total Acres: 179
County: Steams
Township: 123
Range: 35
Direction: 2
Section: 34
of Acres: Wetlands/Upland: 76

of Acres: Forest:

of Acres: Prairie/Grassland: 103

Amount of Shorline: (Linear Feet)
Name of Adjacent Body of Water (if applicable): Fish Lake
Has there been signage erected at the site: Yes

Annual Reporting Organization Name: Ducks Unlimited, Inc.
Annual Reporting Manager Name: Jon Schneder

Annual Reporting Address: 311 East Lake Geneva Road

Annual Reporting City: Alexandria
Annual Reporting State: MN
Annual Reporting Zip: 56308

Annual Reporting Email: jschneider@ducks.org
Annual Reporting Phone: 320-762-9916
Purchase Date: December 04, 2009

Purchase Price:\$255,000Appraised Value:\$328,000Professional Service Costs:\$3,000Total Project Cost:\$274,175Donations:\$11,000

Easement Holder Organization Name: Wetlands America Trust

Easement Holder Manager Name: Jamie Brown
Easement Holder Address: One Waterfowl Way

Easement Holder City:MemphisEasement Holder State:TNEasement Holder Zip:38120

Easement Holder Email:jbrown@ducks.orgEasement Holder Phone:901-758-3787Responsible Organization Name:Ducks Unlimited, Inc.

Responsible Manager Name: Jamie Brown

Responsible Address: One Waterfowl Way

Responsible City:MemphisResponsible State:TNResponsible Zip:38120

Responsible Email:jbrown@ducks.orgResponsible Phone:901-758-3787Underlying Fee Owner:Kauller, LLC

Completed Parcel: Lake Christina & Lake Anka

of Total Acres: 4076
County: Douglas
Township: 130
Range: 40
Direction: 2
Section: 07
of Acres: Wetlands/Upland: 4076

of Acres: Forest:

of Acres: Prairie/Grassland:

Amount of Shorline: (Linear Feet)

Name of Adjacent Body of Water (if applicable): Lakes Christina and Anka

Has there been signage erected at the site: Yes
Total cost of Restoration/Enhancement: \$2,010,004

Completed Parcel: Rice Lake

of Total Acres: 1166
County: Fairbault
Township: 104
Range: 27
Direction: 2
Section: 29
of Acres: Wetlands/Upland: 1166

of Acres: Forest:

of Acres: Prairie/Grassland:

Amount of Shorline: (Linear Feet)
Name of Adjacent Body of Water (if applicable): Rice Lake
Has there been signage erected at the site: Yes
Total cost of Restoration/Enhancement: \$129,510

Completed Parcel: Shetek WMA - Round Lake

# of Total Acres:	171
County:	Murray
Township:	108
Range:	40
Direction:	2
Section:	17
# of Acres: Wetlands/Upland:	171

of Acres: Forest:

of Acres: Prairie/Grassland:

Amount of Shorline: (Linear Feet)
Name of Adjacent Body of Water (if applicable): Round Lake
Has there been signage erected at the site: Yes
Total cost of Restoration/Enhancement: \$129,510

Completed Parcel: Smith Lake

# of Total Acres:	330
County:	Wright
Township:	119
Range:	27
Direction:	2
Section:	31
# of Acres: Wetlands/Upland:	330

of Acres: Forest:

of Acres: Prairie/Grassland:

Amount of Shorline: (Linear Feet)
Name of Adjacent Body of Water (if applicable): Smith Lake
Has there been signage erected at the site: Yes
Total cost of Restoration/Enhancement: \$159,231