ABSTRACT

PROJECT TITLE: Restoring Minnesota=s Fish & Wildlife Habitat Corridors (Lakescaping for Wildlife and Water Quality-Phase I(2j)

Area 2. Mississippi Headwaters; Area 3. Border Prairie; Area 4. Central Lakes; Area 7. Alexandria Moraine; Area 8. Big Woods North and 10. Southern Lakes

Project Manager: Carrol Henderson

Affiliation: Division of Ecological Services, Department of Natural Resources **Mailing Address:** DNR, Box 25, 500 Lafayette Road, St. Paul, MN 55155

Telephone Number: 651-296-0700 Fax: 651-296-1811

E-Mail: <u>carrol.henderson@dnr.state.mn.us</u>
Web Page address <u>www.dnr.state.mn.us</u>

Total budget: \$325,000

This project provided continued guidance, cooperation, and leadership with lakeshore homeowners, natural resource land managers, landscapers, and the nursery industry to promote and restore native plant buffer zones on lakeshore property for the benefit of wildlife, fisheries, and water quality.

Twelve lakescaping demonstration sites were planned and installed in five project corridors, including Leech Lake, Little Jay Gould Lake, and Stump Lake in the Mississippi Headwaters (Corridor # 2), Stalker Lake, Clitherall lake, Elk lake, and Big Detroit Lake in the Border Prairie (Corridor # 3), Hardy Lake and Roosevelt Lake in the Central Lakes (Corridor # 4), Sauk Lake and Barsness Park Creek in theAlexandria Moraine (Corridor # 7), and Reeds Lake in the Southern Lakes (Corridor # 10).

Twelve training and professional development workshops were given for DNR employees and other professionals to teach the contents and applications for the CD-ROM called Restore Your Shore. Workshops were held in Bemidji, Detroit Lakes, Grand Rapids, Brainerd, Willmar, and Clearwater to 162 participants. Two additional workshops were carried out in the Twin Cities (outside of the project corridor area) for 20 additional participants at the expense of the Nongame Wildlife Program.

Four roundtable meetings were held with the Univ. of Minnesota Extension Service and representatives of nursery and landscaping businesses to define the goals and desired content of the workshops for the nursery and landscaping industries. Five workshops were subsequently carried out for nursery owners, landscapers, and industry professionals to promote the lakescaping buffer zone concept using native plants and the business opportunities associated with this concept. Workshops were held at St. Cloud, Detroit Lakes, Alexandria, Brainerd, and Willmar for 170 participants.

Work Program <u>Amendment</u> and Update. Final report for Phase I, Wildlife Corridors Project

Lakescaping for Wildlife and Water Quality

Date of Report: December 9, 2003

Date of Work Program Approval: July 25, 2001

Project Completion Date: June 30, 2004

FINAL REPORT

LCMR Work Program 2001

I. PROJECT TITLE: Restoring Minnesota=s Fish & Wildlife Habitat Corridors (Lakescaping for Wildlife and Water Quality-Phase I(2j))

Area 2. Mississippi Headwaters; Area 3. Border Prairie; Area 4. Central Lakes; Area 7. Alexandria Moraine; Area 8. Big Woods North and 10. Southern Lakes

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Total Biennial Project Budget: \$325,000

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Appropriation Language: Legal Citation: ML 2001, First Special Session, Chapt. 2, Sect. 14, Subd. 4e

f (e) Restoring Minnesota's Fish and Wildlife Habitat Corridors

\$5,873,000 the first year and \$5,872,000 the second year are from the trust fund to the commissioner of natural resources for acceleration of agency programs and cooperative agreements with Minnesota Waterfowl Association, Minnesota Deer Hunters Association, Ducks Unlimited, Inc., National Wild Turkey Federation, Pheasants Forever, The Nature Conservancy, Minnesota Land Trust, Trust for Public Land, U.S. Fish and Wildlife Service, Bureau of Indian Affairs, Natural Resources Conservation Service, and the U.S. Forest Service to restore and acquire fragmented landscape corridors that connect areas of

quality habitat to sustain fish, wildlife, and plants. \$352,000 is for program coordination, corridor identification, and mapping. \$3,343,000 is for restoration and management activities in wildlife management areas, wetland habitat, lakes, wild rice beds, grasslands, and fisheries habitat. \$2,650,000 is for conservation easement programs on riparian areas, big woods forests, native prairies, and wetlands. \$5,400,000 is for habitat acquisition activities on prairies, riparian areas, and other fish and wildlife habitat corridors. As part of the required work program, criteria and priorities for planned acquisition and restoration activities must be submitted to the legislative commission on Minnesota resources for review and approval. Land acquired with this appropriation must be sufficiently improved to meet at least minimum management standards as determined by the commissioner of natural resources. Any land acquired in fee title by the commissioner of natural resources with money from this appropriation must be designated: (1) as an outdoor recreation unit under Minnesota Statutes, section 86A.07; or (2) as provided in Minnesota Statutes, sections 89.018, subdivision 2, paragraph (a); 97A.101; 97A.125; 97C.001; and 97C.011. The commissioner may so designate any lands acquired in less than fee title. This appropriation is available until June 30, 2004, at which time the project must be completed and final products delivered, unless an earlier date is specified in the work program.

II. PROJECT SUMMARY AND RESULTS:

This project will provide continued guidance and increased cooperation with homeowners, landscapers, lake associations and the nursery industry to promote and restore native plant buffer zones on lakeshore property. This project involved planning and carrying out a total of 14 Restore Your Shore CD-Rom workshops, four roundtable meetings, five lakescaping workshops for the nursery and landscaping industry, and development of twelve lakescaping demonstration areas totaling 6 acres of shoreline buffer zone. Projects under this segment were in the following corridors: 2. Mississippi Headwaters, 3. Border Prairie, 4. Central Lakes, 7. Alexandria Moraine 8. Big Woods North and 10. Southern Lakes.

FINAL PROGRESS SUMMARY OF ACCOMPLISHMENTS:

The lakescaping component of Phase I of the Wildlife Corridors project is successfully completed. A total of eight lakescaping demonstration sites were proposed originally, and twelve were successfully planned and installed in five different project corridors. This included demonstration sites on Leech Lake, Little Jay Gould Lake, and Stump Lake in the Mississippi Headwaters (Corridor # 2), Stalker Lake, Clitherall lake, Elk lake, and Big Detroit Lake in the Border Prairie (Corridor # 3), Hardy Lake and Roosevelt Lake in the Central Lakes (Corridor # 4), Sauk Lake and Barsness Park Creek in theAlexandria Moraine (Corridor # 7), and Reeds Lake in the Southern Lakes (Corridor # 10).

Six training and professional development workshops were proposed for DNR employees and other professionals to teach the contents and applications for the newly produced CD-ROM called Restore Your Shore. Because of high demand for this information, a total of 12 workshops were presented in Bemidji, Detroit Lakes, Grand Rapids, Brainerd, Willmar, and Clearwater to a total of 162 participants. Two additional CD-ROM workshops were

carried out in the Twin Cities (outside of the project corridor area) for 20 additional Natural Resource professionals at the expense of the Nongame Wildlife Program because of additional demands for this new information.

Four roundtable meetings were proposed and subsequently held with representatives of the University of Minnesota Extension Service, representatives of the nursery industry and landscaping businesses to define the goals and desired content of the proposed workshops for members of the nursery industry and landscaping companies.

Six workshops were proposed for nursery owners, landscapers, and industry professionals to promote the lakescaping buffer zone concept using native plants. One workshop was cancelled due to an inadequate number of registrants (Grand Rapids), but five successful workshops were carried out at St. Cloud, Detroit Lakes, Alexandria, Brainerd, and Willmar. A total of 170 persons participated in the workshops. The objective was to 1. Explain a new opportunity area for marketing (propagation and sale of local origin native plants) and services (design and installation of buffer zones, 2. Provide participants with an ecological view of natural lakeshore settings and why they are important to them and their profits, 3. Explain the latest techniques and practices for lakescaping, and 4. Provide marketing and merchandising ideas to increase business.

IV. OUTLINE OF FINAL PROJECT RESULTS:

Result 1. Project Corridor # 2.(Mississippi Headwaters):Estimated budget: \$69,190. Spent: \$74,052.

Lakescaping demonstration sites were selected, planned and installed at Leech Lake in Cass County, Little Jay Gould Lake in Itasca County, and Stump lake in Beltrami County.

Four CD-ROM workshops were held for DNR employees and other natural resource professionals to teach the contents and applications of this tool as an aid in promoting the lakescaping concept. These workshops were held at Grand Rapids and Bemidji and were presented to a total of 60 participants. One roundtable meeting was held with the Univ. of MN Extension Service, members of the nursery industry, and landscaping company representatives to plan the content and design of the subsequent workshops for nursery and landscaping professionals. The lakescaping workshop scheduled for Grand Rapids was cancelled due to a lack of registrants, and interested citizens were referred to other sites for subsequent workshops.

		Estimated	Spent
Budget:	Personnel*:	69,000	52,524
	Equipment/materials:	12,000	4,324

Supplies: : Other:	2,000 13,000	11,604 5,600
Total	96,800	74,052
Other funds spent:	\$9,133	11,080

Result 2. Project Corridor # 3. (Border Prairie): Estimated budget: \$96,000. Spent: \$98,487.

Four lakescaping demonstration sites were selected, planned and installed: Clitherall Lake and Stalker Lake in Ottertail County, Elk Lake in Grant County, and Big Detroit Lake in Becker County. Two CD-ROM workshops were held for DNR employees and other natural resource professionals to teach the contents and applications of this tool as an aid in promoting the lakescaping concept. These workshops were held at Detroit Lakes and were presented to a total of 20 participants. One roundtable meeting was held with the Univ. of MN Extension Service, members of the nursery industry, and landscaping company representatives to plan the content and design of the subsequent workshops for nursery and landscaping professionals. Two lakescaping workshops were held for nursery and landscaping professionals at Detroit Lakes and Alexandria.

	<u>Estimated</u>	<u>Spent</u>
Personnel*	\$55,500	63,205
Equipment/materials:	6,000	6,785
Supplies:	1,000	18,212
Other:	13,900	10,285
Total	\$ 76,400	98,487
Other funds spent:	\$ 7,466	18,765

Result 3. Project Corridor # 4. (Central Lakes): Estimated budget: \$63,400. Spent: \$60,340.

Two lakescaping demonstration sites were selected, planned, and installed, including Roosevelt Lake in Cass County and Hardy Lake in Cass County. Two CD-ROM workshops were held for DNR employees and other natural resource professionals to teach the contents and applications of this tool as an aid in promoting the lakescaping concept. These workshops were held at Brainerd and were presented to a total of 20 participants. One roundtable meeting was held with the Univ. of MN Extension Service, members of the nursery industry, and landscaping company representatives to plan the content and design of the subsequent workshop for nursery and landscaping professionals. One lakescaping workshop was held for nursery and landscaping professionals at Brainerd.

		<u>Estimated</u>	<u>Spent</u>
\$ Budget:	Personnel*	45,500	37,747
	Equipment/materials:	6,000	4,013
	Supplies:	1,000	10,772
	Other:	10,900	7,808
	Total	\$ 63,400	60,340
	Other funds spent:	\$ 7,133	8,495

Result 4. Project Corridor # 7 (Alexandria Moraine): Estimated budget: \$ 64,410. Spent: 58,287.

Two lakescaping demonstration sites were selected, planned and installed, at Barsness Park in Glenwood and Sauk Lake in Stearns County. Two CD-ROM workshops were held for DNR employees and other natural resource professionals to teach the contents and applications of this tool as an aid in promoting the lakescaping concept. These workshops were held at Willmar and were presented to a total of 20 participants. One roundtable meeting was held with the Univ. of MN Extension Service, members of the nursery industry, and landscaping company representatives to plan the content and design of the subsequent workshop for nursery and landscaping professionals. One lakescaping workshop was held for nursery and landscaping professionals at Willmar.

			<u>Estimated</u>	<u>Spent</u>
\$ Budget:	Personnel*		45,500	37,747
•	Equipment/ma	terials:	6,000	3,538
	Supplies:	:	1,000	9,494
	Other:		10,900	7,508
		Total:	\$ 63,400	58,287
	Other funds sp	ent:	\$ 7,133	8,495

Result 5. Project Corridor # 8 (Big Woods North): Estimated budget: \$ 25,000 Spent: \$14,757.

Two CD-ROM workshops were held for DNR employees and other natural resource professionals to teach the contents and applications of this tool as an aid in promoting the lakescaping concept. These workshops were held at St. Cloud and were presented to a total of 20 participants. One lakescaping workshop was held for nursery and landscaping professionals at St. Cloud.

		<u>Estimated</u>	<u>Spent</u>
Budget	Personnel*: Other: Supplies:	\$19,000 6,000 -0-	12,289 2,468
	Total:	\$25,000	14,757
	Other funds spent:	\$ 5,135	0

Result 6. Project Corridor # 10. (Southern Lakes) Estimated budget: \$7,000. Spent: \$ 19,077.

A lakescaping demonstration site was selected, planned, and installed at Reeds Lake in Waseca County.

		<u>Estimated</u>	<u>Spent</u>
\$ Budget	Personnel*: Other:	\$19,000 6,000	10,745 437
	Supplies: Total:	-0- \$ 7,000	7,895 19,077
	Other funds spent:	\$ 5,135	4,996

V. Total Project Request Budget

Budget status as of November 14, 2003: Allocation for FY 02-03: \$325,000. Expended: \$325,000. Balance: \$0.

	Biennial Budget Estimate	Spent
All Results: Personnel*: All Results: Equipment/supplies: All Results: Development:	\$ 235,000 30,000	\$214,258 \$ 76,636*
All Results: Acquisition: All Results: Other:	0 \$ 60,000	\$ 34,106*

^{*} I request a program amendment that \$46,636 be shifted from "other" to "supplies and equipment" for a total of \$76,636 in that budget category. Of this amount, \$35,826 was due to the cost coding system in the DNR which lumped various expenses initially budgeted as "other" were actually coded to "supplies and equipment." An additional \$10,810 was necessary in this category to cover use of additional plant materials and bioengineering supplies for installation of additional demonstration site materials, including additional materials

for installation of the new site at Reed's Lake in Waseca County. In order to accommodate this change, a total of \$20,742 was shifted from "Personnel" category savings and \$25,894 in savings in the "Other" category. This still resulted in a balanced budget with accomplishment of four more demonstration sites than were originally proposed. Further budget details on these items are portrayed in Attachment D.

upplies t D)	\$34,106
\$ 8,000	\$ 6,858
5,000	582
22,500	19,100
12,000	4,350
6,000	2,024
6,500	1,192
\$325,000	\$ 325,000
	\$ 8,000 5,000 22,500 12,000 6,000 6,500

Balance: 0

Total other funds proposed: \$41,133. Total other funds spent: \$50,117

VI. PAST, PRESENT AND FUTURE FUNDING

Additional matching funds were provided by private homeowners on a 3.5:1.5 matching basis for installing lakescaping demonstration sites (12 sites at \$1000 per site), \$11,289 was provided through the Nongame Wildlife Program for purchase of supplies and plant materials, and an additional \$26,828 was provided in staff time from the Nongame Wildlife Program for project management and coordination. Staff for planning, administering and supervising the project were provided by the Ecosystem Education and Nongame Wildlife Programs in the Division of Ecological Services and the Aquatic Plant Restoration Program in the Division of Fisheries.

A. Past funding: A total of \$140,000 was provided by the LCMR for the biennium of 1999 - 2000 to conduct14 lakescaping workshops for the general public and create lakescaping 14 habitat demonstration sites.

B. Funding from private sources was 1/2 cash and 1/2 in-kind.

^{*(}Includes one unclassified rule 10 NR fisheries specialist, one part-time (70%) unclassified planner intermediate and two seasonal technicians who will work in the various project regions. The fisheries specialist worked out of the DNR Glenwood office and the planner intermediate worked out of the St. Paul office.

- C. Project Partners: Project partners included the Division of Ecological Services working in cooperation with the DNR Division of Fisheries. Additional participation included the Minnesota Nurseryman's Association and Ramsey County Corrections and the cities of Glenwood and Outing.
- VII. DISSEMINATION: Dissemination of project accomplishments will be through the LCMR reporting process and normal DNR budgeting and accomplishment reporting. Accomplishments at demonstration sites will be documented by photography and included in lakescaping information on the DNR web site.
- VIII. LOCATION: Demonstration sites were developed in the Mississippi Headwaters (3), Border Prairie (4), Central Lakes (2), Alexandria Moraine (2) and Southern Lakes (1). Lakescaping workshops for nursery and landscaping professionals were carried out in the Border Prairie (2), Central Lakes (1), Alexandria Moraine (1), and Big Woods North (1). Roundtable meetings for lakescaping/landscaping professionals were held in the Mississippi Headwaters (1), Border Prairie (1), Central Lakes (1), and Alexandria Moraine (1). Workshops for natural resource professionals featuring the new DNR CD-Rom on Lakescaping were held in the Mississippi Headwaters (4), Border Prairie (2), Central Lakes (2), Alexandria Moraine (2), and Big Woods North (2) and two additional CD-Rom workshops were presented in St. Paul for natural resource staff (outside of the project corridor) at the expense of the Nongame Wildlife Program.
- **IX. REPORTING REQUIREMENTS:** This is the final work program for this portion of the Phase I Wildlife Corridors project.
- X. RESEARCH PROJECTS: Not applicable.

Attachment A, Lakescaping, 02-03			AMOUNT S				
2003 LCMR Proposal Budget	Result 1	Result 2	Result 3	Result 4	Result 5	Result 6	TOTAL
BUDGET ITEM	Corridor 2	Corridor 3	Corridor 4	Corridor 7	Corridor 8	Corridor 10	
RSONNEL:		A					
Leilani Peterson/Lindy Ekola	23,392			 		10,745	
Bruce Lenning	8650 0	4758 0			0	0	13,408
Kevin Woizewchke Michelle Bratager	20,482		·			0	16,747 70,737
Subtotal, all personnel	52,524	63,205	37,748	37,747	12,289	10,745	214,258
EQUIPMENT AND SUPPLIES							
Equipment-computer	500	500	F00	F00		440	0.440
	500	500	500	500	0	418	2,418
Fleet costs	3454	4138	3,360	2,668	0	741	14,361
Photography documentation of							
demo sites	150	200	200	200	0	151	901
Printing demo site signs	4070	4070	970	070	0	074	F 7F4
Other Supplies: Plant materials	1870	1870	870	870	0	274	5,754
for lakeshore plantings							
	4266	8866	4310	4317	0	4901	26,660
Bioengineering materials for						,	
lakeshore plantings	3103	3143	2837	1665	0	984	11,732
Supplies: Laptop rental for CD							
ROM workshops	2585	2589	1290	1290	0	0	7,754
Supplies: Develop & copy		4500	700	570			0.004
os for use at workshops	0	1522	769	573	0	0	2,864
Supplies, meals at workshops	0	1489	500	500	0	0	2 490
Workshop speaker fees	U	1409	500	500	<u>U</u>	U	2,489
Workshop speaker rees	0	680	574	449	0	0	1,703
Subtotal, equipment & supplies	15,928	24,997	15,210	13,032	0	7,469	76,636
				CHEMICAL STREET, AND THE STREET, STREE			and the second s
OTHER EXPENSES							
Printing costs	1343	1490	1385	1390	1250	0	6,858
Communications, telephone,	118	116	286	42	20	0	582
Contracts for workshops/							
workshop planning; with Univ. of							
MN Extension Service	3183	6674	4183	4660	400	0	19,100
In-state travel	636	1165	1065	925	122	437	4,350
Workshop accommodations	320	610	509	435	150	0	2,024
Miscellaneous expenditures	0	230	380	56	526	0	1,192
Subtotal, Other Expenses	5,600	10,285	7,808	7,508	2,468	437	34,106
COLUMN TOTAL	74,052	98,487	60,766	58,287	14,757	18,651	325,000

Attachment B Habitat Corridors Partnership PHASE I Individual Work Program Summary																
November 2003 Progress Report (For all completed activities thru 10/31/03)																
						Proposed		Cu	irrent LCM	R						
					Acc	omplishme	nts	Acc	omplishme	nts ·						
		LCMR	LCMR	LCMR		LCMR Miles/	LCMR Lakes		LCMR Miles/	LCMR Lakes	Other Funds	Other Funds	Other Funds	Other Funds		
Activity (Eg; 2(a) Hides For Habitat)	Partner (Eg; MDHA)	Allocation	Expenditure	Balance	LCMR Acres	Shoreline	Restored	LCMR Acres	Shoreline	Restored	Committed	Expenditure	Balance	Acres	# Demo sites	# workshops
Lakescaping 2(i)	Nongame, Eco. DNR	325,000	325,000	0	6			6			41,133	50.117			12	2:

Attachment C -- Habitat Corridors Partnership PHASE I -- Individual Work Program Summary by Project Area
November 2003 Progress Report (For all completed activities thru 10/31/03)

Work Program:	LCMR Funds						Other Funds					
Partner:	LCMR Dollars Expended	Acquisition Acres	Easement Acres	Restoration Acres	Shore Miles	Misc.	Other Funds Expended	Acquisition Acres	Easement Acres	Restoration Acres	Shore Miles	Misc.
PROJECT AREA 1						1						
Aspen Parklands												
PROJECT AREA 2												<u> </u>
Mississippi Headwaters	74,052			1.5		3 sites	11,080					
					7	5 worksho	ps					
PROJECT AREA 3												
Border Prairie	98,487			2		4 sites	18,765					
						5 worksho	ps					
PROJECT AREA 4												
Central Lakes	60,340			1		2 sites	6,793					
						4 worksho	ps					
PROJECT AREA 5												
Lower St. Louis River												
PROJECT AREA 6						 					-	
Upper Minnesota River												
PROJECT AREA 7												
Alexandria Moraine	58,287			1		2 sites	8,495				72	
						4 worksho						
PROJECT AREA 8						1	1					
Big Woods - North	14,757											
						2 worksho	ps					
PROJECT AREA 9												
Des Moines River Valley												
PROJECT AREA 10	222											
Southern Lakes	19,077			0.5		1 site	4,996					
PROJECT AREA 11					4							
Mississippi Bluff Lands				 		1	 					†

ATTACHMENT D FOR LAKESCAPING, 02-03, CORRIDORS PROCESSION CATEGORY PERSONNEL Rectifying the change in coding from other to Equip. & Supplies	EST. BUDGET 235,000	SPENT 214,258
EQUIPMENT AND SUPPLIES Equipment		
Computer	2,500	2,418
Supplies		
Plant materials Bioengineering materials	17,500 10,000	26,660 11,732
	·	·
Subtotal, true equip & supplies as budgeted	30,000	40,810
Other expenses coded by DNR as "equipment and supplies" Fleet Workshop speaker fees Meals at sites/workshops Workshops Photography Printing signs Develop video on plant propagation for workshops Subtotal Subtotal for DNR coded equipment and supplies Other expenses Printing Communications Contracts for workshops In-state travel Space rental/facility rental Miscellaneous expenditures	8,000 5,000 22,500 12,000 6,000 6,500	\$14,361 1,703 2,489 7,754 901 5,754 2,864 35,826 \$76,636 6,858 582 19,100 4,350 2,024 1,192
Subtotal for other expenses	60,000	34,106
TOTAL PROJECT COST	325,000	325,000
Other project costs covered by DNR funds	41,133	\$50,117

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