2003 Project abstract

November 30, 2005

TITLE: Restoring Minnesota's Fish & Wildlife Habitat Corridors - MNDNR/Wildlife, Shallow Lakes Management (2d). Work under this segment will occur in Project Areas 3 (Border Prairie), 6 (Upper Minnesota River), 7 (Alexandria Moraine), and 10 (Southern Lakes).

PROJECT MANAGER: Ray Norrgard

ORGANIZATION: Division of Fish and Wildlife, Department of Natural Resources

ADDRESS: DNR, Box 07, 500 Lafayette Road, St. Paul, MN 55155

TELEPHONE: 651 259-5227

EMAIL: ray.norrgard@dnr.state.mn.us

FUND: Minnesota Environment and Natural Resources Trust Fund

LEGAL CITATION: ML 2001, 1st Special Session, Chapter 2, Section 14, Subdivision 04(e)

\$11,745,000. Carry forward Language: ML 2004, Ch. 255, Sec. 47.

APPROPRIATION AMOUNT: \$350,000

Overall Project Outcome and Results

This effort involved the hiring and training of four field biologists to improve wetland wildlife habitat through accelerated management of 15 shallow lakes and their adjacent surroundings including their contributing watersheds. These lakes were to be within Habitat Corridors Project Areas 3 (Border Prairie), 6 (Upper Minnesota River), 7 (Alexandria Moraine), and 10 (Southern Lakes).

Despite difficulties encountered in hiring and maintaining the prescribed number of field biologists, this portion of the Habitat Corridors Project exceeded its target with field investigation of 130 shallow lakes leading to the accelerated management of 17 lakes in 12 counties. Prior to conducting the field investigations, public information meetings were held at four locations within the project areas to publicize the effort and engage local stakeholders in identifying potential projects. The 171 people attending these meetings identified over 100 potential projects. The field investigations included habitat evaluations on 116 lakes, depth only surveys on 14 lakes, midwinter oxygen surveys on 33 lakes, and 15 project proposals to support Ducks Unlimited's efforts under HCP Wildlife Lakes Initiative (2f). The 17 lakes with accelerated management included Schultz (Becker Co.), Perch, (Blue Earth Co.), Christina (Douglas Co.), Minnesota and Rice (Faribault Co.), Bear and Geneva (Freeborn Co.), Towner (Grant Co.), Hefta (Kandiyohi Co.), Marsh (Lac qui Parle Co.), Swan (Nicollet Co.), Anderson and Cyrus (Pope Co.), Hassel (Swift Co.), and Buffalo, Goose, and Willis (Waseca Co.)

Project use and Dissemination

Information collected by the field investigations funded through this effort was provided to the Department of Natural Resources shallow lakes database and Ducks Unlimited. The Division of Fish and Wildlife wildlife lake specialists in Brainerd manage the database. Information concerning this data or the status of other shallow lakes in Minnesota is available upon request.

November 30, 2005

LCMR Final Work Program Report

PROJECT MANAGER: Ray Norrgard

ORGANIZATION: Division of Fish and Wildlife, Department of Natural Resources

ADDRESS: DNR, Box 07, 500 Lafayette Road, St. Paul, MN 55155

TELEPHONE: 651 259-5227

EMAIL: ray.norrgard@dnr.state.mn.us

Total Biennial Budget: \$350,000

\$ LCMR Appropriation

- \$ Amount Spent:

= \$ Balance

\$ 350,000.00

\$ 350,000

\$0

Legal Citation: ML 2001, 1st Special Session, Chapter 2, Section 14, Subdivision 04(e) \$11,745,000

Appropriation Language: 4 (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.

Carryforward Language: The availability of the appropriations for the following project is extended to June 30, 2005: ML 2004, Ch. 255, Sec. 47, Subd.

The availability of the appropriation for the following project is extended to June 30, 2006: Laws 2001, First Special Session chapter 2, section 14, subdivision 4, paragraph (e), restoring Minnesota's fish and wildlife habitat corridors, and after June 30, 2004, the appropriation may be spent as provided in Laws 2003, chapter 128, article 1, section 9, subdivision 5, paragraph (a), restoring Minnesota's fish and wildlife habitat corridors-phase II. This section is effective the day following final enactment.

II. and III. Final Project Summary

This effort involved the hiring and training of four field biologists to improve wetland wildlife habitat through accelerated management of 15 shallow lakes and their adjacent surroundings including their contributing watersheds. These lakes were to be within Habitat Corridors Project Areas 3 (Border Prairie), 6 (Upper Minnesota River), 7 (Alexandria Moraine), and 10 (Southern Lakes).

Despite difficulties encountered in hiring and maintaining the prescribed number of field biologists, this portion of the Habitat Corridors Project exceeded its target with field investigation of 130 shallow lakes leading to the accelerated management of 17 lakes in 12 counties. Prior to conducting the field

investigations, public information meetings were held at four locations within the project areas to publicize the effort and engage local stakeholders in identifying potential projects. The 171 people attending these meetings identified over 100 potential projects. The field investigations included habitat evaluations on 116 lakes, depth only surveys on 14 lakes, midwinter oxygen surveys on 33 lakes, and 15 project proposals to support Ducks Unlimited's efforts under HCP Wildlife Lakes Initiative (2f), The 17 lakes with accelerated management included Schultz (Becker Co.), Perch. (Blue Earth Co.), Christina (Douglas Co.), Minnesota and Rice (Faribault Co.), Bear and Geneva (Freeborn Co.), Towner (Grant Co.), Hefta (Kandiyohi Co.), Marsh (Lac qui Parle Co.), Swan (Nicollet Co.), Anderson and Cyrus (Pope Co.), Hassel (Swift Co.), and Buffalo, Goose, and Willis (Waseca Co.)

IV. OUTLINE OF PROJECT RESULTS:

Result 1 (Project Area 3 - Border Prairie) Amount Spent: \$ 131,663,30

Accelerated management occurred took place on three lakes (Schultz, Becker Co.; Christina, Douglas Co.; and Towner (Grant Co.) although project proposals were submitted as a result of the completed fieldwork on three additional lakes (Upper Lightning/Kube-Swift, Otter Tail and Grant Co.; Big and Ohlsrud, Grant Co.). The largest single project involved support for the treatment of Lake Christina with rotenone to remove undesirable fish. Habitat evaluations were conducted on 57 lakes, depth only surveys on 7 lakes and midwinter oxygen surveys on 8 lakes. In addition, Towner Lake was formally designated for wildlife management following a public hearing. It is expected that a designation hearing will be held on Upper Lightning Lake eventually as well. Accomplishments fell somewhat below expectations due to the loss of two field biologists prior to the completion of the project.

Result 2 (Project Areas 6 - Upper Minnesota River, 7 - Alexandria Moraine and 10 - Southern Lakes) Amount Spent: \$ 218,336.70

Accelerated management occurred on 14 lakes including 2 in area 6 (Hassel, Swift Co.; and Marsh, Lac qui Parle Co.), 3 in area 7 (Anderson and Cyrus, Pope Co; Hefta, Kandiyohi Co.), and 9 in area 10 (Perch, Blue Earth Co.; Minnesota and Rice, Faribault Co.; Bear and Geneva, Freeborn Co.; Marsh, Lac qui Parle Co.; Swan, Nicollet Co.; and Buffalo, Goose, and Willis, Waseca Co.). The purchase of a high velocity pump to intensively manage seasonal wetlands adjacent to Marsh Lake deserves special mention. Habitat evaluations were conducted on 59 lakes, depth only surveys on 7 lakes and midwinter oxygen surveys on 25 lakes. Project proposals were submitted as a result of the completed fieldwork on 12 additional lakes

(Frank Lake, Swift Co.; Stony Run Creek, Big Stone Co.; Larson Lake, Nelson Lake, Simon Lake, Pope Co.; Little Rice Lake, Mystery Lake, Robinson Refuge, Williams Lake, and Trace Lake, Todd Co.; West Solomon Lake, Kandiyohi Co.). Accomplishments fell somewhat below expectations due to the loss of a field biologist prior to the completion of the project.

V. TOTAL PROJECT BREAKDOWN:

All Results: Personnel \$256,064.51(Includes 4 temporary specialists and interns)

All Results: Vehicle Rental 35.824.24 All Results: Travel Expenses 3.048.72 All Results: Office Supplies 6.250.82

All Results: Equipment 48,811.71 (computers, boats, water pump, water pipes, power

converter, sampling gear and reverse aeration equipment)

Total Budget: \$350,00.00

VI. PAST, PRESENT AND FUTURE SPENDING:

- **A. Past Spending:** The Minnesota Department of Natural Resources Division of Wildlife has supported shallow lake management on a statewide basis for many years. The actual amount of expenditures is difficult to capture because much of the effort is in staff time that cannot be broken down specifically to shallow lake management. Only one staff position was assigned to work full time on shallow lakes.
- **B. Current and Future Spending:** The Minnesota Department of Natural Resources Division of Wildlife assigned three full time positions to statewide shallow lake management beginning August, 2001. These positions worked closely with the temporary positions supported by this grant. In addition, it is estimated that Area Wildlife Managers within the identified project areas devoted up to 5% of their time to shallow lake management.
- **C. Project Partners:** Although there are no specific partners within this LCMR project, Ducks Unlimited completed a separate yet closely related project report (2f) within the overall work program for Project CH-01, Restoring Minnesota's Fish and Wildlife Habitat Corridors.
- VII. DISSEMINATION: Dissemination of project accomplishments will be through the LCMR reporting process and normal DNR budgeting and accomplishment reporting. Data collected concerning the habitat quality of shallow lakes will be available as part of the DNR shallow lake database managed by Division of Fish and Wildlife staff in Brainerd.
- VIII. LOCATION: See attached map for applicable project areas.
- **IX. REPORTING REQUIREMENTS:** Periodic work program progress reports were submitted to LCMR May 31, 2002; November 30, 2002; May 1, 2003, November 20, 2003, and June 30, 2004. The final work program report and associated products was submitted November 30, 2005.

Attachment A: b. Jet Detail for 2001 Projects

Update 6/30/05

Proposal Title: Restoring Minnesota's Fish and Wildlife Habitat Corridors Phase I – MNDNR/Wildlife Shallow Lakes Management 2(d)

Project Manager Name: Ray Norrgard

LCMR Requested Dollars: \$350,000.00

| | Result 1 Budget | Amount Spent | Balance | Result 2 Budget | Amount Spent | Balance | | | | | | |
|--|-----------------|--------------|---------|-----------------|--------------|---------|-----------------------------|--|--|--|--|--|
| 2001 LCMR Proposal Budget | · | | | | | | | | | | | |
| MNDNR/Wildlife Shallow Lakes Management 2(d) | | | | | | | | | | | | |
| BUDGET ITEM | | | | | | ì | TOTAL FOR BUDGET BALANCE | | | | | |
| PERSONNEL: Staff Expenses, wages, salaries – Four temporary Natural Resource Specialists and interns | 110,417.29 | 110,417.29 | 0.00 | 145,647.22 | 145,647.22 | 0.00 | 0.00 | | | | | |
| Equipment / Pumps and culverts, Tools: Lake survey and management equipment | 6,493.17 | 6,493.17 | 0.00 | 42,318.54 | 42,318.54 | 0.00 | 0.00 | | | | | |
| Office Supplies: Telephone, mail, computers, software, misc. | 991.34 | 991.34 | 0.00 | 5,259.48 | 5,259.48 | 0.00 | 0.00 | | | | | |
| Travel expenses in Minnesota | 1,154.09 | 1,154.09 | 0.00 | 1,894.63 | 1,894.63 | 0.00 | 0.00 | | | | | |
| Other: Vehicle rental | 12,607.41 | 12,607.41 | 0.00 | 23,216.83 | 23,216.83 | 0.00 | 0.00 | | | | | |
| COLUMN TOTAL | 131,663.30 | 131,663.30 | 0.00 | 218,336.70 | 218,336.70 | 0.00 | 0.00 | | | | | |

| Attachment B Habitat Corridors Partnership PHASE I Individual Work Program Summary | | | | | | | | | | | | | | | | |
|--|-----------------|------------|--------------|---------|-----------------|-------------|-----------------|------------|-------------|---------------|-------------|-------------|-------------|-------------|-------------|----------------|
| May 5, 2004 Progress Report for All Completed Activities thru 4/30/04 | | | | | | | | | | | | | | | | |
| | | | | | Proposed | | | Cı | urrent LCM | R | | | | | | |
| | | | | | Accomplishments | | Accomplishments | | | | | | | | | |
| | | LCMR | LCMR | LCMR | | LCMR Miles/ | LCMR Lakes | | LCMR Miles/ | LCMR Lakes | Other Funds |
| Activity | Partner | Allocation | Expenditure | Balance | LCMR Acres | Shoreline | Restored | LCMR Acres | Shoreline | Restored | Committed | Expenditure | Balance | Acres (fee) | Easement | Lakes Restored |
| Shallow Lakes 2(d) | MN DNR Wildlife | \$350,000 | \$350,000.00 | \$0.00 | | | | | | | | l l | | | | |

| Attachment C Habitat Corridors Partnership PHASE I Individual Work Program Summary by Project Area May 5, 2004 Progress Report for All Completed Activities thru 4/30/04 | | | | | | | | | | | | | |
|---|--------------------------|-------------------|-------------------|----------------------|----------------|------------------|-------------------------|----------------------|-------------------|----------------------|----------------|----------|--|
| | | May 5, 20 | 004 Progi | ress Repo | rt for Al | l Comple | ted Activities th | ru 4/30/04 | | | | | |
| Work Program:Shallow Lakes | | | R Funds | | Other Funds | | | | | | | | |
| 2(d) | | | | | | | | | | | | | |
| 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 | Expended | Acres | Adica | 710100 | WINCO | 141100. | Experied | 7,0103 | 7.0.00 | 1 | Williou | Wilde | |
| Aspen Parklands | | | | | | | | | | | | | |
| PROJECT AREA 2 | | | | | | - | | | | | | | |
| Mississippi Headwaters | | | | | | | | | | | | | |
| PROJECT AREA 3 | \$ 131,663 | 30 | ļ . | | | <u> </u> * 1 | | | | | | | |
| Border Prairie | φ 131,003 | .50 | <u> </u> | | | | | | | | | | |
| | · | | | | | | | | | | | | |
| PROJECT AREA 4 | | | ļ | | | | | | | | | | |
| Central Lakes | <u> </u> | | <u> </u> | | | - | - | | | | | | |
| PROJECT AREA 5 | 1 | | | | | | | | | | | | |
| Lower St. Louis River | | | | | | | | | | | | | |
| PROJECT AREA 6 | \$ 40,000 | .00 | | | | * 2 | | | | | • | | |
| Upper Minnesota River | | | | | | | | | | | | | |
| PROJECT AREA 7 | \$ 91,399 | 55 | <u> </u> | | | * 3 | | | | | | | |
| Alexandria Moraine | ψ 91,399 | .55 | | | | 3 | | | <u> </u> | | | | |
| | | | | | | | | | | | | | |
| PROJECT AREA 8 | | | | | | <u> </u> | | | ļ | | | | |
| Big Woods - North | L | | | | | ļ | | | | | | <u> </u> | |
| PROJECT AREA 9 | I | | | | | | | | | | | 1 | |
| Des Moines River Valley | | | | | | | | | | | | | |
| DDO IFOT ADEA 40 | I ¢ 00.007 | 45 | <u> </u> | | | * 4 | | | | | | | |
| PROJECT AREA 10 Southern Lakes | \$ 86,937 | .15 | | | | | | | | ļ | | | |
| Southern Lakes | l | | | | | - | | | | | | | |
| PROJECT AREA 11 | | | | | | | | | | | | | |
| Mississippi Bluff Lands | | | | | | | | | | | | | |
| | \$ 350,000 | 00 0 | | | | | \$ - | 0 | 0 | | | \$ | |

^{* 1.} Field investigations were conducted on 64 lakes (habitat evaluations - 57, depth only -7, oxygen -8) leading to accelerated management on 3 lakes.

^{2.} Accelerated management was conducted on 2 lakes.

^{3.} Habitat evaluations were conducted on 31 lakes leading to the accelerated management of 9 lakes.

^{4.} Field investigations were conducted on 35 lakes (habitat evaluations - 28, depth only - 7, oxygen - 25) leading to the accelerated of three lakes. All of this work supported the lake habitat restorations completed by Ducks Unlimited under HCP Wildlife Lakes Initiative (2f).