# **Lessard-Sams Outdoor Heritage Council**

# **2012 Accomplishment Plan**

November 4, 2010

Program Title: Wetlands and Shallow Lakes (W-03)

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Funds Recommended: \$ 936,000

Legislative Citation: ML 2011, Ch. X, Art. X, Sec. X, Subd. X (x): (to be completed when signed

by Governor)

#### **Abstract:**

Dikes and water control structures will be upgraded on three wetland and two shallow lakes located within wildlife management areas in Lincoln, Morrison, Roseau, Todd, and Yellow Medicine Counties.

# **Program Narrative**

#### **Design and Scope of Work**

An estimated 90% of Minnesota's prairie wetlands have been lost, and those that remain are often larger basins that were more difficult to drain. Throughout the state, these shallow lakes and large wetlands provide critical habitat for wetland wildlife production and migration, especially for waterfowl and other wetland-dependent birds. 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 and over-water nesting habitat, while submerged plants provide food in the form of seeds and tubers and critical habitat for aquatic invertebrates. An abundance of aquatic invertebrates such as insects, amphipods, and snails are critical for breeding ducks and for duckling growth and survival. Protein and carbohydrates from seeds and tubers are critical foods during both spring and fall migration.

However, 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. Invasive fish, such as bullheads, carp, and fathead minnows reduce the invertebrates and aquatic plants necessary for quality habitat. Highly altered landscape hydrology now allows these invasive fish to access and sustain populations in most of our remaining wetlands.

The shallow lakes and wetlands identified in this proposal for enhancement were proposed 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 Consultant prior to inclusion in this proposal.

Construction will be completed for the upgrading of water control structures and dikes on two shallow lakes and three wetlands totaling 5,841 acres. All of these basins are within state owned wildlife management areas.

This proposal reflects the strategies of the 2006 Duck Recovery Plan. This plan underwent substantial review by nearly all the major wetland wildlife conservation groups in Minnesota. Stakeholders have been generally supportive of the strategies outlined in the plan, 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 wetland and 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 and associated wetlands 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.

This proposal is largely based on the Department of Natural Resources 2006 Duck Recovery Plan. This 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 are 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 \$2,360,000 out of a total Division budget of \$33,100,000. The total DNR annual budget approximates \$200,000,000. These figures do not include bonding.

#### **Sustainability and Maintenance**

The management and maintenance of basins with completed construction 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.

#### **Accomplishment Timeline**

| Activity     | Milestone           | Date completed |
|--------------|---------------------|----------------|
| Construction | Complete 5 projects | June 30,2013   |

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: Wetlands and Shallow Lakes

Date:

10/5/2010

**Legal Citation / Proposal Number:** 

W - 03

# Link Here to definitions of the budget items below.

**Total Amount of Request** 936,000 From page 1 on the funding form.

#### **Personnel**

|                         |     | Over # of |               | Anticipated Cash |                      |       |
|-------------------------|-----|-----------|---------------|------------------|----------------------|-------|
|                         | FTE | years     | LSOHC Request | Leverage         | Cash Leverage Source | Total |
| Position breakdown here |     |           |               |                  |                      |       |
| Manager of Programs     |     |           |               |                  |                      | \$ -  |
| Admin Asst              |     |           |               |                  |                      | \$ -  |
| position 3              |     |           |               |                  |                      | \$ -  |
| position 4              |     |           |               |                  |                      | \$ -  |
| position 5              |     |           |               |                  |                      | \$ -  |
| position 6              |     |           |               |                  |                      | \$ -  |
| position 7              |     |           |               |                  |                      | \$ -  |
| Tota                    | 0   |           | \$ -          | \$ -             | \$ -                 | \$ -  |

#### 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**

Personnel - auto entered from above

**Contracts** 

Fee Acquisition w/ PILT (breakout in table 6 & 7)

Fee Acquisition w/o PILT (breakout in table 6 & 7)

**Easement Acquisition** 

**Easement Stewardship** 

Travel (in-state)

**Professional Services** 

**DNR Direct Support Services (DNR programs only)** 

**DNR Land Acquisition Costs** 

Other

Capital Equipment (auto entered from below)

Other Equipment/Tools

Supplies/Materials

|               | Anticipated Cash |                      |            |
|---------------|------------------|----------------------|------------|
| LSOHC Request | Leverage         | Cash Leverage Source | Total      |
| \$<br>-       | \$ -             | \$ -                 | \$ -       |
| \$<br>924,000 |                  |                      | \$ 924,000 |
|               |                  |                      | \$ -       |
|               |                  |                      | \$ -       |
|               |                  |                      | \$ -       |
|               |                  |                      | \$ -       |
|               |                  |                      | \$ -       |
|               |                  |                      | \$ -       |
| \$<br>12,000  |                  |                      | \$ 12,000  |
|               |                  |                      | \$ -       |
|               |                  |                      | \$ -       |
| \$<br>-       | \$ -             |                      | \$ -       |
|               |                  |                      | \$ -       |
|               |                  |                      | \$ -       |
| \$<br>936,000 | \$ -             | \$ -                 | \$ 936,000 |

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

| Item Name         | LSOHC Request | Leverage |
|-------------------|---------------|----------|
| Item 1 enter here |               |          |
| 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             | 0             | 0        |

#### **Attachment B. Outcome Tables**

Name of Proposal: Wetlands and Shallow lakes

Date: 10/5/2010

Legal Citation / Proposal Number: W-03

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 |          |          |        |          | 0     |
| Enhance | 5,841    |          |        |          | 5841  |
| Total   | 5841     | . 0      | 0      | 0        |       |

Total Acres (sum of Total column)
Total Acres (sum of Total row)

5841 These two cells should be the same figure.

# **Table 2. Total Requested Funding by Resource Type**

|         | Wetlands |         | Prairies |   | Forest |   | Habitats |   | Total |         |
|---------|----------|---------|----------|---|--------|---|----------|---|-------|---------|
| Restore |          |         |          |   |        |   |          |   | \$    | -       |
| Protect |          |         |          |   |        |   |          |   | \$    | -       |
| Enhance | \$       | 936,000 |          |   |        |   |          |   | \$    | 936,000 |
| Total   | \$       | 936,000 | \$       | - | \$     | - | \$       | - |       |         |

Total Dollars (sum of Total column)
Total Dollars (sum of Total row)

\$ 936,000 These two cells should be the same figure.

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 |             |                |           |         |                 | 0     |
| Enhance |             | 5,634          |           | 47      | 160             | 5841  |
| Total   | 0           | 5634           | 0         | 47      | 160             |       |

Total Acres (sum of Total column)
Total Acres (sum of Total row)
Total Acres from Table 1.

5841 These three cells 5841 should be the same 5841 figure.

#### **Attachment B. Outcome Tables**

# **Table 4. Total Requested Funding within each Ecological Section**

|         | Metro/Urban |   | Forest | /Prairie | SE Fores | st | Prair | ie     | No | rthern Forest | Total |         |
|---------|-------------|---|--------|----------|----------|----|-------|--------|----|---------------|-------|---------|
| Restore |             |   |        |          |          |    |       |        |    |               | \$    | -       |
| Protect |             |   |        |          |          |    |       |        |    |               | \$    | -       |
| Enhance |             |   | \$     | 351,000  |          |    | \$    | 70,000 | \$ | 515,000       | \$    | 936,000 |
| Total   | \$          | - | \$     | 351,000  | \$       | -  | \$    | 70,000 | \$ | 515,000       |       |         |

Total Dollars (sum of Total column)
Total Dollars (sum of Total row)

\$ 936,000 These two cells should be the same figure.

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)

Acquired in Fee with State PILT Liability
Acquired in Fee w/o State PILT Liability
Permanent Easement
NO State PILT Liability

| Wetlands | Prairies | Forests | Habitats | Total |
|----------|----------|---------|----------|-------|
|          |          |         |          | 0     |
|          |          |         |          | 0     |
|          |          |         |          | 0     |
| 0        | 0        | 0       | 0        | U     |

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

Acquired in Fee with State PILT Liability
Acquired in Fee w/o State PILT Liability
Permanent Easement
NO State PILT Liability

| Wetlands | Prairies | Forests | Habitats | Total |
|----------|----------|---------|----------|-------|
|          |          |         |          | \$ -  |
|          |          |         |          | \$ -  |
|          |          |         |          | \$ -  |
| \$ -     | \$ -     | \$ -    | \$ -     |       |

# Attachment C. Parcel List

Name of Proposal: Wetlands and Shallow lakes

Date:

10/5/2010

**Legal Citation / Proposal Number:** 

W-03

|                          | County             | Township       | Range         | Direction       | Section       | TRDS                | # of<br>acres  | Estimate admini restoratio related cost include mat contributed | e (includes<br>strative,<br>on or other<br>is and do not<br>ching money<br>or earned by<br>insaction) | Description                    | Activity<br>R=Restore<br>P=Protect<br>E=Enhance | Any existing protection? (yes/no) | Open to<br>hunting and<br>fishing?<br>(yes/no) |
|--------------------------|--------------------|----------------|---------------|-----------------|---------------|---------------------|----------------|---|---|--------------------------------|---|-----------------------------------|--|
| Parcel Name              |                    |                |               |                 |               |                     |                |   |   |                                |   |                                   |  |
| Graham WMA               | Benton             | <del>38</del>  | <del>30</del> | west            | 2             | <del>383022</del>   |                |   | <del>12,000</del>   | Design Dike Repair             |   | <del>yes</del>                    | <del>yes</del>                                 |
| Hartford WMA             | <del>Todd</del>    | <del>130</del> | <del>33</del> | west            | <del>24</del> | <del>13033224</del> |                |   | <del> 12,000</del>  | Design Dike/WCS Replacement    |   | <del>yes</del>                    | <del>yes</del>                                 |
| Lamprey Pass WMA         | <del>Anoka</del>   | <del>32</del>  | <del>22</del> | west            | <del>13</del> | <del>3222213</del>  |                |   | <del>5,000</del>  | Design WCS Replacement         |   | <del>yes</del>                    | <del>yes</del>                                 |
| South Rothwell Lake      | Big Stone          | <del>123</del> | <del>46</del> | <del>west</del> | 4             | <del>1234624</del>  |                |   | <del>30,000</del>   | Design WCS Upgrade             |   | <del>yes</del>                    | <del>yes</del>                                 |
| Blue Wing Marsh WMA      | <del>Lincoln</del> | 112            | 46            | west            | <del>23</del> | <del>11246236</del> |                |   | <del>12,000</del>   | Design WCS and easement        |   | <del>yes</del>                    | <del>yes</del>                                 |
| High Lake                | Martin             | <del>103</del> | <del>30</del> | west            | 7             | <del>1033027</del>  |                |   | <del>12,000</del>   | Design Fish Barrier            |   | <del>yes</del>                    | <del>yes</del>                                 |
| 5 Sites to be determined | <del>Various</del> |                |               |                 |               | <del>Various</del>  |                | -   | — <del>60,000</del>   | Design for enhancement         |   | <del>yes</del>                    | <del>yes</del>                                 |
| Sauk Rapids Area WMAs    | Stearns, Sherb     | 34             | <del>29</del> | west            | <del>28</del> | 3429228             | 20             | -   | <del>6,000</del>  | Wild rice planting             | E   | <del>yes</del>                    | <del>yes</del>                                 |
| Crooked Road WMA         | <del>Isanti</del>  | <del>35</del>  | <del>25</del> | west            | <del>28</del> | <del>3525228</del>  | <del>25</del>  |   | <del>6,500</del>  | Wild rice planting             | E   | <del>yes</del>                    | <del>yes</del>                                 |
| Roseau River WMA         | Roseau             | 163            | 42            | west            | 1             | 1634221             | 4,932          | <del>175000</del>   | 166000  | Construction Dike Repair       | E   | yes                               | yes  |
| Staples WMA              | Todd               | 133            | 33            | west            | 25            | 13333225            | 702            |   | 185,000   | Construction WCS Upgrade       | E   | yes                               | yes  |
| Ereaux WMA               | Morrison           | 41             | 31            | west            | 19            | 4131219             | 160            |   | 515,000   | Construction WCS Replacement   | E   | yes                               | yes  |
| Tyler WMA                | <del>Lincoln</del> | <del>109</del> | 44            | west            | 4             | <del>1094424</del>  | <del>320</del> |   | 290,000   | Construction Outlet Replacemen | E   | <del>yes</del>                    | <del>yes</del>                                 |
| Thostenson WMA           | Lincoln            | 111            | 44            | west            | 20            | 11144220            | 14             |   | 35,000  | Construction WCS Upgrade       | E   | yes                               | yes  |
| Teardrop WMA             | Yellow Medicir     | 115            | 44            | west            | 1             | 1154421             | 33             |   | 35,000  | Construction WCS Replacement   | E   | yes                               | yes  |