

# Lessard-Sams Outdoor Heritage Council Laws of Minnesota 2014 Accomplishment Plan

**Date:** December 17, 2013

**Program or Project Title:** Floodplain Forest Enhancement - Mississippi River

**Funds Recommended:** \$ 300,000

**Manager's Name:** Tim Schlagenhaft

**Title:** Community Conservation Coordinator

**Organization:** The National Audubon Society, Inc. DBA Audubon Minnesota

**Street Address:** 2000 W. Main, Suite 333

**City:** Red Wing, MN 55066

**Telephone:** 651-764-4242

**E-Mail:** tschlagenhaft@audubon.org

**Organization Web Site:** mn.audubon.org

**Legislative Citation:**

**Appropriation Language:**

**County Locations:** Goodhue

**Ecological Planning Regions:**

- Southeast Forest

**Activity Type:**

- Enhance

**Priority Resources Addressed by Activity:**

- Forest

## Abstract:

Invasive species are preventing natural regeneration of trees and threatening floodplain forests and wildlife along the Mississippi River. This effort is part of long-term program to restore floodplain forest by controlling invasive species and planting floodplain forest trees.

## Design and Scope of Work:

The Mississippi River from Hastings to Lake Pepin, including the lower Vermillion and Cannon River Bottoms, contains some of the largest and most significant tracts of floodplain forest along the entire Upper Mississippi River. These forests and mixed wetlands cover several thousand acres and are especially critical to many species of birds and other wildlife, including wood ducks which use the area for nesting and feeding.

These forests are under threat. While historically diverse in the number, age, and size of tree species, much of the forest now consists of silver maple ranging from 50-70 years old. These trees are expected to live another 50-70 years, after which they will die-off and disappear. Unfortunately, when trees are removed through harvest or die naturally, reed canary grass and other invasive species move in and prevent natural regeneration. This is occurring at a number of locations within the project area, and without aggressive, long-term management these floodplain forests will be greatly reduced or in some locations disappear completely.

Floodplain forest regeneration is a slow process taking decades to accomplish. By selectively controlling invasive species following harvest, blowdown, or other events and planting larger size trees the forest can be maintained long-term. Restoring forest at small sites within larger tracts will ensure that a diversity of tree species, sizes, and ages will be present. This approach over time will maintain large contiguous blocks of forest and continue to provide habitat for many wildlife species, including rare species like cerulean warbler and red-shouldered hawk.

This proposal seeks funding to implement floodplain restoration and enhancement beginning with four sites within the overall project area. As the forest ages, additional sites will require similar work to maintain contiguous floodplain forest. The four initial sites are located within the Vermillion/Cannon Bottoms State Forest or within the Gores Wildlife Management Area and range from 5-65 acres. Each site is threatened by invasive species and natural regeneration of floodplain forest trees is not expected without aggressive management. Funding would be used to control invasive species using a combination of prescribed burns, mowing, and herbicide applications. Past efforts to plant seedlings have not been successful, so once invasive species are controlled larger-size trees suitable to each site will be planted. Deer protection will be provided as needed. This combination will allow the trees to establish and over time develop a canopy that limits or prevents invasive species and maintains the overall diversity of the forest.

Priority sites were determined in conjunction with MN DNR Foresters and Wildlife Managers and are locations under serious threat of losing the floodplain forest. All of the sites are on public lands open to hunting and fishing. Audubon Minnesota will serve as the project manager for each site and coordinate the work and associated contracts. Much of the work will be done through Conservation Corps Minnesota. Audubon will work closely with DNR managers to ensure these projects meet state standards and are part of the overall management goals for the landscape area. This work will be done in conjunction with other partners including the US Army Corps of Engineers, Prairie Island Indian Community, US Geological Survey, and private landowners in the project area that are interested in methods to successfully control invasive species and establish floodplain forest canopy.

## Planning:

### **MN State-wide Conservation Plan Priorities:**

- H5 Restore land, wetlands and wetland-associated watersheds
- LU8 Protect large blocks of forest land
- LU10 Support and expand sustainable practices on working forested lands

### **Plans Addressed:**

- Minnesota DNR Nongame Wildlife Plans
- Minnesota DNR Scientific and Natural Area's Long Range Plan
- Minnesota Forest Resource Council Landscape Plans
- National Audubon Society Top 20 Common Birds in Decline
- Outdoor Heritage Fund: A 25 Year Framework
- Tomorrow's Habitat for the Wild and Rare

### **LSOHC Statewide Priorities:**

- Address Minnesota landscapes that have historical value to fish and wildlife, wildlife species of greatest conservation need, Minnesota County Biological Survey data, and rare, threatened and endangered species inventories in land and water decisions, as well as long-term or permanent solutions to aquatic invasive species
- Are ongoing, successful, transparent and accountable programs addressing actions and targets of one or more of the ecological sections
- Ensures activities for "protecting, restoring and enhancing" are coordinated among agencies, non profits and others while doing this important work; provides the most cost-effective use of financial resources; and where possible takes into consideration the value of local outreach, education, and community

- engagement to sustain project outcomes
- Leverage effort and/or other funds to supplement any OHF appropriation
- Produce multiple enduring conservation benefits
- Restore or enhance habitat on permanently protected land
- 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 Southeast Forest Section Priorities:**

- Restore forest-based wildlife habitat that has experienced substantial decline in area in recent decades

**Relationship to Other Constitutional Funds:**

- No Relationships Listed

**Accelerates or Supplements Current Efforts:**

Audubon is part of a broad partnership including state and federal agencies, local and tribal governments, and NGO's that has been working to protect and enhance floodplain forests in the Vermillion and Cannon River Bottoms area of the Mississippi River for over a decade. A 2005 report by Minnesota DNR and other partners outlined long-term management goals for the project area. Controlling invasive species and regenerating native floodplain forest tree species was identified as a critical need.

Since the 2005 report, there has been limited funding for aggressive forest restoration work. This proposal will result in active management to meet long-term goals by implementing invasive species control and reestablishing native tree species. This effort will sustain larger blocks of floodplain forest providing critical habitat for rare birds and other wildlife, and for game species such as wood duck.

Audubon has established a full-time position based out of Red Wing focused on implementing habitat projects. This area includes two designated Important Bird Areas (IBA's) and is one of Audubon Minnesota's top priorities for restoration work. In addition to Outdoor Heritage funding, Audubon has received and is seeking additional funding to assist private landowners with similar restoration projects to ensure the area is managed on a landscape level.

**Sustainability and Maintenance:**

Successful floodplain forest restoration will result in forested canopy consisting of a variety of tree species, sizes, and ages. Additional maintenance work at these specific sites would not be anticipated for over a century. However, similar work would need to be done at other sites not included in this proposal and without a long-term management approach it is unlikely floodplain forest will be sustained.

**Permanent Protection:**

*Is the activity on permanently protected land and/or public waters per MS 103G.005, Subd. 15? - **Yes (WMA, State Forests)***

**Accomplishment Timeline**

| Activity | Approximate Date Completed |
|----------|----------------------------|
|----------|----------------------------|

## Outcomes

### Programs in southeast forest region:

- Healthier populations of endangered, threatened, and special concern species as well as more common species *Rare birds or indicator birds will be monitored to measure habitat use following enhancement.*
- Large corridors and complexes of biologically diverse wildlife habitat typical of the unglaciated region are restored and protected *Percent of forested areas will be evaluated.*

# Budget Spreadsheet

*Budget reallocations up to 10% do not require an amendment to the Accomplishment Plan*

**Total Amount of Request: \$ 300000**

## Budget and Cash Leverage

| Budget Name                | LSOHC Request | Anticipated Leverage | Leverage Source | Total     |
|----------------------------|---------------|----------------------|-----------------|-----------|
| Personnel                  | \$33,000      | \$12,000             |                 | \$45,000  |
| Contracts                  | \$157,000     | \$0                  |                 | \$157,000 |
| Fee Acquisition w/ PILT    | \$0           | \$0                  |                 | \$0       |
| Fee Acquisition w/o PILT   | \$0           | \$0                  |                 | \$0       |
| Easement Acquisition       | \$0           | \$0                  |                 | \$0       |
| Easement Stewardship       | \$0           | \$0                  |                 | \$0       |
| Travel                     | \$0           | \$0                  |                 | \$0       |
| Professional Services      | \$0           | \$0                  |                 | \$0       |
| Direct Support Services    | \$0           | \$0                  |                 | \$0       |
| DNR Land Acquisition Costs | \$0           | \$0                  |                 | \$0       |
| Capital Equipment          | \$0           | \$0                  |                 | \$0       |
| Other Equipment/Tools      | \$0           | \$0                  |                 | \$0       |
| Supplies/Materials         | \$110,000     | \$0                  |                 | \$110,000 |
| DNR IDP                    | \$0           | \$0                  |                 | \$0       |
| Total                      | \$300,000     | \$12,000             |                 | \$312,000 |

## Personnel

| Position                           | FTE  | Over # of years | LSOHC Request | Anticipated Leverage | Leverage Source | Total    |
|------------------------------------|------|-----------------|---------------|----------------------|-----------------|----------|
| Community Conservation Coordinator | 0.15 | 3.00            | \$25,000      | \$10,000             |                 | \$35,000 |
| Director of Bird Conservation      | 0.00 | 3.00            | \$5,000       | \$2,000              |                 | \$7,000  |
| Administrative Assistant           | 0.00 | 3.00            | \$3,000       | \$0                  |                 | \$3,000  |
| Total                              | 0.15 | 9.00            | \$33,000      | \$12,000             |                 | \$45,000 |

## Capital Equipment

| Item Name | LSOHC Request | Anticipated Leverage | Leverage Source | Total |
|-----------|---------------|----------------------|-----------------|-------|
|           | \$0           | \$0                  |                 | \$0   |
| Total     | \$0           | \$0                  |                 | \$0   |

## Output Tables

**Table 1. Acres by Resource Type**

| Type                                     | Wetlands | Prairies | Forest | Habitats | Total |
|--|----------|----------|--------|----------|-------|
| Restore                                  | 0        | 0        | 0      | 0        | 0     |
| Protect in Fee with State PILT Liability | 0        | 0        | 0      | 0        | 0     |
| Protect in Fee W/O State PILT Liability  | 0        | 0        | 0      | 0        | 0     |
| Protect in Easement                      | 0        | 0        | 0      | 0        | 0     |
| Enhance                                  | 0        | 0        | 90     | 0        | 90    |
| Total                                    | 0        | 0        | 90     | 0        | 90    |

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

| Type                                     | Wetlands | Prairies | Forest    | Habitats | Total     |
|--|----------|----------|-----------|----------|-----------|
| Restore                                  | \$0      | \$0      | \$0       | \$0      | \$0       |
| Protect in Fee with State PILT Liability | \$0      | \$0      | \$0       | \$0      | \$0       |
| Protect in Fee W/O State PILT Liability  | \$0      | \$0      | \$0       | \$0      | \$0       |
| Protect in Easement                      | \$0      | \$0      | \$0       | \$0      | \$0       |
| Enhance                                  | \$0      | \$0      | \$300,000 | \$0      | \$300,000 |
| Total                                    | \$0      | \$0      | \$300,000 | \$0      | \$300,000 |

**Table 3. Acres within each Ecological Section**

| Type                                     | Metro Urban | Forest Prairie | SE Forest | Prairie | N Forest | Total |
|--|-------------|----------------|-----------|---------|----------|-------|
| Restore                                  | 0           | 0              | 0         | 0       | 0        | 0     |
| Protect in Fee with State PILT Liability | 0           | 0              | 0         | 0       | 0        | 0     |
| Protect in Fee W/O State PILT Liability  | 0           | 0              | 0         | 0       | 0        | 0     |
| Protect in Easement                      | 0           | 0              | 0         | 0       | 0        | 0     |
| Enhance                                  | 0           | 0              | 90        | 0       | 0        | 90    |
| Total                                    | 0           | 0              | 90        | 0       | 0        | 90    |

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

| Type                                     | Metro Urban | Forest Prairie | SE Forest | Prairie | N Forest | Total     |
|--|-------------|----------------|-----------|---------|----------|-----------|
| Restore                                  | \$0         | \$0            | \$0       | \$0     | \$0      | \$0       |
| Protect in Fee with State PILT Liability | \$0         | \$0            | \$0       | \$0     | \$0      | \$0       |
| Protect in Fee W/O State PILT Liability  | \$0         | \$0            | \$0       | \$0     | \$0      | \$0       |
| Protect in Easement                      | \$0         | \$0            | \$0       | \$0     | \$0      | \$0       |
| Enhance                                  | \$0         | \$0            | \$300,000 | \$0     | \$0      | \$300,000 |
| Total                                    | \$0         | \$0            | \$300,000 | \$0     | \$0      | \$300,000 |

**Table 5. Target Lake/Stream/River Miles**

0 miles

## Parcel List

*For restoration and enhancement programs ONLY: Managers may add, delete, and substitute projects on this 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.*

### Section 1 - Restore / Enhance Parcel List

Goodhue

| Name                                 | TRDS     | Acres | Est Cost  | Existing Protection? |
|--------------------------------------|----------|-------|-----------|----------------------|
| Cannon River Bottoms - state forest  | 11313216 | 25    | \$83,000  | Yes                  |
| Cannon River - Collischan Road       | 11313216 | 5     | \$17,000  | Yes                  |
| Gores WMA - North Lake               | 114162   | 40    | \$133,000 | Yes                  |
| Vermillion River Bottoms - county 19 | 11315206 | 20    | \$67,000  | Yes                  |

### Section 2 - Protect Parcel List

No parcels with an activity type protect.

#### 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.