

**Environment and Natural Resources Trust Fund**

# M.L. 2025 Final Work Plan

## **General Information**

**ID Number:** 2025-092

**Staff Lead:** Tom Dietrich

**Date this document submitted to LCCMR:** June 5, 2025

**Project Title:** Surveying Minnesota's Secretive Marsh Birds

**Project Budget:** $413,000

## **Project Manager Information**

**Name:** Dale Gentry

**Organization:** Audubon Upper Mississippi River

**Office Telephone:** (651) 739-9332

**Email:** dale.gentry@audubon.org

**Web Address:** https://mn.audubon.org/

## **Project Reporting**

**Reporting Schedule:** March 1 / September 1 of each year.

**Project Completion:** June 30, 2029

**Final Report Due Date:** August 14, 2029

## **Legal Information**

**Legal Citation:** M.L. 2025, First Special Session, Chp. 1, Art. 2, Sec. 2, Subd. 03g

**Appropriation Language:** $413,000 the first year is from the trust fund to the commissioner of natural resources for an agreement with the National Audubon Society, Upper Mississippi River office, to conduct a breeding marsh bird survey and provide state and federal agencies with an assessment of marsh bird population status and wetland habitat. This appropriation is available until June 30, 2029, by which time the project must be completed and final products delivered.

**Appropriation End Date:** June 30, 2029

## **Narrative**

**Project Summary:** Audubon will conduct a statewide secretive marsh bird survey to provide state and federal agencies with an assessment of marsh bird population status and useful information on wetland habitat health.

**Describe the opportunity or problem your proposal seeks to address. Include any relevant background information.**

Many marsh birds are designated as Species of Greatest Conservation Need, are declining, and difficult to survey due to their secretive, inconspicuous nature, and the difficulty of accessing their habitats. Effective conservation planning and habitat management for marsh birds is challenging because information regarding abundance, distribution, population trends, habitat relationships, and management needs for these species is limited due to monitoring challenges. Current avian surveys such as the Breeding Bird Survey and spring Waterfowl Surveys do not adequately monitor these species resulting in a lack of information upon which to base conservation and management actions. Systematic and coordinated marsh bird monitoring has been recognized as a high priority in state, regional and national conservation plans such as the 2016 Partners in Flight Landbird Conservation Plan due to the lack of current information and estimated population declines. Because marsh birds are dependent on wetlands, they can serve as valuable indicators of habitat quality and are useful indicators for wetland quality as well as restoration efforts. This project will continue an ongoing, long-term marsh bird monitoring survey to provide natural resource managers and conservation planners the information necessary to effectively plan and manage marsh birds and their habitats.

**What is your proposed solution to the problem or opportunity discussed above? Introduce us to the work you are seeking funding to do. You will be asked to expand on this proposed solution in Activities & Milestones.**

Despite the challenges, marsh birds can be monitored with targeted audio playback techniques. Marsh birds will be monitored by a combination of paid and volunteer surveyors. By using volunteers, we expect the long-term cost of this survey to be affordable to federal and state agencies, and NGOs with an interest in and obligation for these species and their habitats. This community science model is used effectively by Audubon for our Christmas Bird Count, now in its 115th year, the USGS in the Breeding Bird Survey, and by the MN DNR in its Common Loon and amphibian surveys.

This survey will collect baseline information on distribution, relative abundance, and specific habitat requirements of breeding marsh birds in Minnesota, including rails, bitterns, and other select waterbirds. Results from this statewide survey can be used on a local or regional scale because of efforts to standardize methodologies between management entities.

We will conduct a two-year project to survey secretive marsh birds and, with data from the 2016-17 effort, analyze long-term population and habitat trends. The results of this project will be shared with state and regional land managers and conservation groups to guide conservation planning.

**What are the specific project outcomes as they relate to the public purpose of protection, conservation, preservation, and enhancement of the state’s natural resources?**

The overall goal of this project is to re-sample the long-term wetland bird monitoring survey in Minnesota. This will provide natural resource managers information they need to effectively manage these birds and their wetland habitats. Our long-term goals are:
• To confirm and implement a standardized protocol for marsh bird surveys on public and private lands in Minnesota.
• To estimate population status and trends of secretive marsh birds.
• To better inform management of wetland and marsh habitats.
• Provide a baseline for potential management activities in surveyed sites.
• To create a public marsh bird data hub to share information with partners.

## **Project Location**

**What is the best scale for describing where your work will take place?** Statewide

**What is the best scale to describe the area impacted by your work?** Statewide

**When will the work impact occur?** During the Project and In the Future

## **Activities and Milestones**

### **Activity 1: Finalize Study Design**

**Activity Budget:** $50,000

**Activity Description:**Since marsh bird monitoring was done in 2016 and 2017, we will review those protocols to determine if changes are needed to align with current guidelines from the Upper Mississippi/Great Lakes Joint Venture and standardized North American Marsh Bird Monitoring Protocol (Conway 2011). We will adapt or adjust these protocols using the most current knowledge. We will work with the MN DNR and other land management agencies to review and confirm which wetlands will be included in this survey.

**Activity Milestones:**

|  |  |
| --- | --- |
| **Description** | **Approximate Completion Date** |
| Review and confirm monitoring protocols for marsh bird surveys | November 30, 2025 |
| Review previous sites and identify future sites for marsh bird surveys | February 28, 2026 |
| Develop protocols and training materials for volunteer and staff surveyors | March 31, 2026 |

### **Activity 2: Data Collection**

**Activity Budget:** $283,000

**Activity Description:**Recruit volunteers and hire contracted surveyors for marsh bird monitoring. We will provide mandatory training in our data collection and recording protocols for all volunteer and paid surveyors. Data collection will occur from April – July in 2026 and 2027. Following the field season we will analyze data and modify our protocols if needed for future surveys. We will develop an online GIS based data hub to share the outcomes of the project and information about that status of secretive marsh birds.

**Activity Milestones:**

|  |  |
| --- | --- |
| **Description** | **Approximate Completion Date** |
| Recruit volunteers and contractors for marsh bird surveys | March 31, 2026 |
| Hold year one training events for staff and volunteers | April 30, 2026 |
| Complete year one marsh bird surveys | August 31, 2026 |
| Hold year two training events for staff and volunteers | April 30, 2027 |
| Complete year two marsh bird surveys | August 31, 2027 |
| Develop public online GIS-based marsh bird data hub | December 31, 2027 |

### **Activity 3: Analysis and Implementation**

**Activity Budget:** $80,000

**Activity Description:**We will review methodology and data from field work and develop a complete data set from the surveys. We will analyze the data by
developing occupancy and abundance models, accounting for imperfect detection, for 9 wetland bird species breeding
in Minnesota. We will develop an online data hub that includes species accounts including the status and trends for each species, information about the status of Minnesota's marsh bird habitats, and resources for land manager. Finally, we will develop plan to implement the standardized waterbird survey statewide on a 5-year cycle.

**Activity Milestones:**

|  |  |
| --- | --- |
| **Description** | **Approximate Completion Date** |
| Complete preliminary analysis of year one surveys | March 31, 2027 |
| Complete the analysis of both years of surveys | April 30, 2028 |
| Publish data hub and share trends in marsh bird populations and wetland habitat with partners | May 31, 2028 |

## **Project Partners and Collaborators**

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Organization** | **Role** | **Receiving Funds** |
| MN DNR Nongame Wildlife Program | MN DNR | Provide technical assistance and assist with volunteer recruitment and coordination | No |
| Mississippi Headwaters Audubon Society | Bemidji, MN based chapter of the National Audubon Society | Assist with volunteer recruitment for the marsh bird surveys | No |
| Zumbro Valley Audubon Society | Rochester, MN based chapter of the National Audubon Society | Assist with volunteer recruitment for the marsh bird surveys | No |
| St. Paul Audubon Society | St. Paul, MN based chapter of the National Audubon Society | Assist with volunteer recruitment for the marsh bird surveys | No |
| Austin Audubon Society | Austin, MN based chapter of the National Audubon Society | Assist with volunteer recruitment for the marsh bird surveys | No |
| Brainerd Lakes Area Audubon Society | Brainerd, MN based chapter of the National Audubon Society | Assist with volunteer recruitment for the marsh bird surveys | No |
| Duluth Audubon | Duluth, MN based chapter of the National Audubon Society | Assist with volunteer recruitment for the marsh bird surveys | No |
| Minnesota River Valley Audubon Society | Southern Twin Cities Metro area chapter of the National Audubon Society | Assist with volunteer recruitment for the marsh bird surveys | No |

## **Dissemination**

**Describe your plans for dissemination, presentation, documentation, or sharing of data, results, samples, physical collections, and other products and how they will follow ENRTF Acknowledgement Requirements and Guidelines.**Audubon Upper Mississippi River will work with the National Audubon Society science division to analyze the results of the surveys and prepare a final report of findings that will be disseminated to internal and external partners on our regional marsh bird data hub, and future regional meetings and conferences of conservation professionals and agencies that work on marsh and marsh bird conservation.

The Minnesota Environment and Natural Resources Trust Fund will be acknowledged through use of the trust fund logo or attribution language on project print and electronic media, publications, signage, and other communications per the ENTRF Acknowledgment Guidelines.

## **Long-Term Implementation and Funding**

**Describe how the results will be implemented and how any ongoing effort will be funded. If not already addressed as part of the project, how will findings, results, and products developed be implemented after project completion? If additional work is needed, how will this work be funded?**This project will inform marsh bird habitat conservation efforts across Minnesota. It will produce a finished assessment of the current bird populations that will not require future funding to complete. The outcomes will be shared with interested agencies through out public data hub on Audubon’s website. We will host information-sharing meetings with our partners in the region to discuss new conservation opportunities that will arise from our work. This project will increase the impact that Outdoor Heritage, and other funds, have already invested in restoring and enhancing Minnesota’s most critical wetland habitats.

## **Other ENRTF Appropriations Awarded in the Last Six Years**

|  |  |  |
| --- | --- | --- |
| **Name** | **Appropriation** | **Amount Awarded** |
| Implementing Conservation Plans for Avian Species of Concern | M.L. 2019, First Special Session, Chp. 4, Art. 2, Sec. 2, Subd. 03k | $124,000 |
| Habitat Associations of Mississippi Bottomland Forest Marsh Birds | M.L. 2021, First Special Session, Chp. 6, Art. 5, Sec. 2, Subd. 08g | $275,000 |
| Mapping Migratory Pitstops in Minnesota | M.L. 2023, , Chp. 60, Art. 2, Sec. 2, Subd. 03c | $340,000 |

## **Budget Summary**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Category / Name** | **Subcategory or Type** | **Description** | **Purpose** | **Gen. Ineli gible** | **% Bene fits** | **# FTE** | **Class ified Staff?** | **$ Amount** |
| **Personnel** |  |  |  |  |  |  |  |  |
| Project Director |  | Manage all aspects of the project including directing staff and coordinating data collection and managmenet |  |  | 27% | 0.69 |  | $95,000 |
| Volunteer Coordinator |  | Recruitment and management of vounteer surveyors |  |  | 27% | 0.75 |  | $67,000 |
| Conservation Manager |  | Assist with study design and implementation, volunteer training, and management of survey data |  |  | 27% | 0.3 |  | $36,000 |
| Prairie Project Manager |  | Conduct marsh bird surveys and assist with regional volunteers in NW Minnesota |  |  | 27% | 0.15 |  | $12,000 |
| Grant Management |  | Manage financial aspects of grants and contracts |  |  | 27% | 0.06 |  | $6,000 |
| Quantitative Science Director |  | Supervise data analysis |  |  | 27% | 0.15 |  | $22,000 |
| Sr. Manager Quantitative Science |  | Conduct analysis of all survey data |  |  | 27% | 0.45 |  | $56,000 |
| Communications Manager |  | Assist with volunteer recruitment and develop materials to share outcomes of the project. |  |  | 27% | 0.45 |  | $33,000 |
| GIS Specialist |  | Develop the public MN Marsh Bird Data Hub |  |  | 27% | 0.45 |  | $39,000 |
|  |  |  |  |  |  |  | **Sub Total** | **$366,000** |
| **Contracts and Services** |  |  |  |  |  |  |  |  |
| TBD | Service Contract | Bird surveyors to complete sites were volunteers are not available |  |  |  | 0.3 |  | $15,000 |
| TBD | Service Contract | Bird surveyors to complete sites were volunteers are not available |  |  |  | 0.3 |  | $15,000 |
|  |  |  |  |  |  |  | **Sub Total** | **$30,000** |
| **Equipment, Tools, and Supplies** |  |  |  |  |  |  |  |  |
|  | Tools and Supplies | Printed materials for volunteer and contractor trainings, field safety equipment, and Survey 123 software subscriptions | We will provide required equipment, safety, and training materials for volunteers who as assisting with the surveys |  |  |  |  | $3,000 |
|  |  |  |  |  |  |  | **Sub Total** | **$3,000** |
| **Capital Expenditures** |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  | **Sub Total** | **-** |
| **Acquisitions and Stewardship** |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  | **Sub Total** | **-** |
| **Travel In Minnesota** |  |  |  |  |  |  |  |  |
|  | Miles/ Meals/ Lodging | 20 trips averaging 200 miles per trip for one individual plus meals and lodging | Staff travel to training and partners meetings and to survey sites |  |  |  |  | $8,500 |
|  | Conference Registration Miles/ Meals/ Lodging | Two persons attending one in state conference each year. | Conference attendance to coordinate with partners how how marsh birds can guide wetland management |  |  |  |  | $3,500 |
|  |  |  |  |  |  |  | **Sub Total** | **$12,000** |
| **Travel Outside Minnesota** |  |  |  |  |  |  |  |  |
|  | Conference Registration Miles/ Meals/ Lodging | One person attending one out of state conference | Attending meetings of the Upper Mississippi River/Great Lakes Joint Venture regional marsh bird monitoring network | X |  |  |  | $1,000 |
|  |  |  |  |  |  |  | **Sub Total** | **$1,000** |
| **Printing and Publication** |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  | **Sub Total** | **-** |
| **Other Expenses** |  |  |  |  |  |  |  |  |
|  |  | Lunch food for all day volunteer training events. | Provide lunch and coffee at all day volunteer training events. | X |  |  |  | $1,000 |
|  |  |  |  |  |  |  | **Sub Total** | **$1,000** |
|  |  |  |  |  |  |  | **Grand Total** | **$413,000** |

### **Classified Staff or Generally Ineligible Expenses**

|  |  |  |  |
| --- | --- | --- | --- |
| **Category/Name** | **Subcategory or Type** | **Description** | **Justification Ineligible Expense or Classified Staff Request** |
| **Travel Outside Minnesota** | Conference Registration Miles/Meals/Lodging | One person attending one out of state conference | We will align our work with what is recommended by the UMR/GL Joint Venture team which sometimes meets in Minnesota but is often in Wisconsin, Michigan or other Great Lakes state. |
| **Other Expenses** |  | Lunch food for all day volunteer training events. | To confirm that all the data are of the highest quality, we will hold all day (roughly 7 hour) training events. We want to offer coffee and lunch for the volunteers at these training events. We will hold 2 events per year for a total of four events ($500/event). |

### **Non ENRTF Funds**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Category** | **Specific Source** | **Use** | **Status** | **$ Amount** |
| **State** |  |  |  |  |
|  |  |  | **State Sub Total** | **-** |
| **Non-State** |  |  |  |  |
| In-Kind | Volunteer hours | Marsh bird surveys completed by volunteers | Pending | $25,000 |
|  |  |  | **Non State Sub Total** | **$25,000** |
|  |  |  | **Funds Total** | **$25,000** |

**Total Project Cost: $438,000**

**This amount accurately reflects total project cost?**
 Yes

## **Attachments**

### **Required Attachments**

#### ***Visual Component***

File: [729a0b94-218.pdf](https://lccmrprojectmgmt.leg.mn/media/map/729a0b94-218.pdf)

#### ***Alternate Text for Visual Component***

A one-page front and back summary of the project including a map of the study sites, a summary of the project needs and goals, project partners, and photos of the focal species....

#### ***Financial Capacity***

|  |  |
| --- | --- |
| **Title** | **File** |
| National Audubon Society Audit | [6df62cbe-792.pdf](https://lccmrprojectmgmt.leg.mn/media/attachments/6df62cbe-792.pdf) |
| National Audubon Society 990 | [032a5da5-830.pdf](https://lccmrprojectmgmt.leg.mn/media/attachments/032a5da5-830.pdf) |

#### ***Board Resolution or Letter***

|  |  |
| --- | --- |
| **Title** | **File** |
| Marsh bird 2024 advisory board support letter | [e926bf51-2c0.docx](https://lccmrprojectmgmt.leg.mn/media/attachments/e926bf51-2c0.docx) |
| Revised Audubon Board letter of support | [713602af-b37.pdf](https://lccmrprojectmgmt.leg.mn/media/attachments/713602af-b37.pdf) |

### **Supplemental Attachments**

#### ***Capital Project Questionnaire, Budget Supplements, Support Letter, Photos, Media, Other***

|  |  |
| --- | --- |
| **Title** | **File** |
| MN DNR Letter of Support | [4e3e7d97-9fd.pdf](https://lccmrprojectmgmt.leg.mn/media/attachments/4e3e7d97-9fd.pdf) |

## **Difference between Proposal and Work Plan**

#### ***Describe changes from Proposal to Work Plan Stage***

We eliminated the $6000 for volunteer travel. We added travel to one out of state conference, increased our travel budget to account for more staff travel to replace some volunteer travel, and adjusted the supplies budget because ipads are not an eligible expense. We also requested $2000 to pay for lunch catering for volunteer training days. We also changed the out of state travel budget from one per year to just one and shifted the rest of that budget into travel and in-state conference attendance.

## **Additional Acknowledgements and Conditions:**

The following are acknowledgements and conditions beyond those already included in the above workplan:

**Do you understand and acknowledge the ENRTF repayment requirements if the use of capital equipment changes?**
 N/A

**Do you understand that travel expenses are only approved if they follow the "Commissioner's Plan" promulgated by the Commissioner of Management of Budget or, for University of Minnesota projects, the University of Minnesota plan?**
 Yes, I understand the Commissioner's Plan applies.

**Does your project have potential for royalties, copyrights, patents, sale of products and assets, or revenue generation?**
 No

**Do you understand and acknowledge IP and revenue-return and sharing requirements in 116P.10?**
 N/A

**Do you wish to request reinvestment of any revenues into your project instead of returning revenue to the ENRTF?**
 N/A

**Does your project include original, hypothesis-driven research?**
 No

**Does the organization have a fiscal agent for this project?**
 No

**Does your project include the pre-design, design, construction, or renovation of a building, trail, campground, or other fixed capital asset costing $10,000 or more or large-scale stream or wetland restoration?**
 No

**Do you propose using an appropriation from the Environment and Natural Resources Trust Fund to conduct a project that provides children's services (as defined in Minnesota Statutes section 299C.61 Subd.7 as "the provision of care, treatment, education, training, instruction, or recreation to children")?**
 No

**Provide the name(s) and organization(s) of additional individuals assisting in the completion of this project:**

 Jen Degen, Grant Manager, National Audubon Society, Sarah Hewitt, Conservation Manager, Audubon Upper Mississippi River

**Do you understand that a named service contract does not constitute a funder-designated subrecipient or approval of a sole-source contract? In other words, a service contract entity is only approved if it has been selected according to the contracting rules identified in state law and policy for organizations that receive ENRTF funds through direct appropriations, or in the DNR’s reimbursement manual for non-state organizations. These rules may include competitive bidding and prevailing wage requirements**
 Yes, I understand