



# Environment and Natural Resources Trust Fund

M.L. 2021 Draft Work Plan

## General Information

**ID Number:** 2021-084

**Staff Lead:** Rory Anderson

**Date this document submitted to LCCMR:** February 2, 2021

**Project Title:** Restoring Upland Forests For Birds

**Project Budget:** \$193,000

## Project Manager Information

**Name:** Kevin Sheppard

**Organization:** American Bird Conservancy - Great Lakes Program

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## Project Reporting

**Date Work Plan Approved by LCCMR:**

**Reporting Schedule:** December 1 / June 1 of each year.

**Project Completion:** June 30, 2023

**Final Report Due Date:** August 14, 2023

## Legal Information

**Legal Citation:**

**Appropriation Language:**

**Appropriation End Date:** June 30, 2023

## Narrative

**Project Summary:** ABC will restore a minimum of 300 acres of deciduous forest in partnership with Aitkin, Beltrami and Cass Counties, utilizing science-based BMPs to rejuvenate non-commercial stands for focal wildlife species.

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

This pilot project supports ongoing efforts to restore and enhance breeding habitat for Golden-winged Warbler (GWWA), American Woodcock (AMWO) and Ruffed Grouse (RUGR) on publicly-protected lands in Minnesota, benefiting associated deciduous forest wildlife.

GWWA and AMWO are species of greatest conservation need (SGCN) in the Minnesota Wildlife Action Plan. Range-wide habitat loss from land use change and forest fragmentation led to GWWA population declines of approximately 68% over the past 50 years and, in 2011, considered for listing under the Endangered Species Act. Approximately half of the GWWA global population breeds in Minnesota forests. AMWO populations declined over the last quarter century by 1-2% per year. AMWO is on the 2016 North American Bird Conservation Initiative State of the Birds Watch List, which identifies species in danger of extinction without conservation action.

Partners at the Aitkin, Beltrami and Cass County Land Departments have begun identifying timber stands on county-administered lands that are on the verge of being classified as non-forests. In some cases, these stands are approaching <10% canopy cover with poor-quality (low density, wind-damaged, shrub-dominated), requiring non-commercial treatments to restore their biological, ecological and economic functions. We will address these problems, restoring these forests to support focal bird species.

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

This pilot project will restore and enhance habitat in deciduous forest stands through non-commercial management, using GWWA science-based best management practices (BMPs). Project operations will remove a component of woody vegetation with limited wildlife value to create high-quality early successional habitat (ESH) featuring denser, healthier young aspen and/or mixed hardwood regeneration, while retaining the component of internal stand structure required by ESH SGCN.

Target sites currently have limited wildlife benefits and timber potential. They contain low tree volume with an understory composed of dense shrubs, deadfall/blowdown and limited advanced regeneration. Left untreated, managers cannot mimic natural disturbance or promote healthy succession through commercial timber sale.

Primary project costs include hiring contractors to implement mechanical sheering and remove trees that are inhibiting regeneration and/or have little wildlife value, while retaining healthy trees as residual internal structure and promoting healthy stand regeneration. When necessary, contractors may also perform additional non-commercial treatments such as soil scarification or planting to promote tree regeneration and limit shrub competition in some stands. Additional funds would support ABC's project management and planning costs, including final site identification, project design, partner coordination, and contractor management, plus related in-state travel to execute activities and evaluate results.

**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?**

This pilot project will produce high-quality ESH habitat on a minimum of 300 acres for 10+ years. Previous monitoring of similar ABC forest projects observed a GWWA occupancy rate of 90%, with 0.32 pairs/acre and 1.5 juveniles/pair during each breeding season. Therefore, we estimate this project will support breeding habitat for approximately 86 GWWA breeding pairs, adding 129 juveniles/year to a globally imperiled population. Furthermore, ABC monitoring has also

shown habitat treated using GWW BMPS to benefit associated ESH SGCN including AMWO, Veery, Black-billed Cuckoo, White-throated Sparrow, Rose-breasted Grosbeak and Sedge Wren.

## Project Location

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

Region(s): Central, NE, NW,

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

Region(s): NW, NE, Central,

**When will the work impact occur?**

In the Future

## Activities and Milestones

### Activity 1: Complete Habitat Restoration on a Minimum of 300 acres in Collaboration with Beltrami, Aitkin and Cass County Land Departments

**Activity Budget:** \$193,000

**Activity Description:**

Objective: Convert low-quality deciduous forest sites into high-quality ESH that serves the breeding-season needs of focal bird species.

**Task 1: Site Assessments**

In collaboration with County natural resource staff, the ABC project manager will evaluate prospective project sites using GWWA and AMWO BMPs to assess habitat suitability and restoration goals. GIS research and in-person site visits will be key phases in this process. We will update the parcel table within the work plan regularly as final site selections are made.

**Task 2: Management Plan Development and Engagement of Contractors**

ABC staff will develop stand-level management plans for implementing restoration activities and engage qualified, local forestry contractors to conduct treatments through a competitive bidding process.

**Task 3: Implementation of Restoration**

Selected contractors will execute non-commercial timber harvest, mechanical brush sheering activities and additional operations if necessary in accordance with site management plans, using focal species BMPs to produce breeding habitat, while implementing strategic silvicultural planning to promote future forest productivity.

**Task 4: Evaluation of Results**

We will visit sites within 14 days of treatments and again one year post-treatment to assess conditions and vegetative regeneration. Once complete, ABC will develop a summary of results to share with partners.

**Activity Milestones:**

Description	Completion Date
Site selection complete	September 30, 2021
Complete habitat restoration strategies, management plans and identify contractors for Year One projects	December 31, 2021
Complete first season of frozen-ground treatments	March 31, 2022
Conduct workshop to share results and promote effective management planning and implementation strategies with partners	July 31, 2022
Restoration treatments complete on all sites (300+ acres)	March 31, 2023
Complete initial surveys of stands to assess early regeneration results and compile results for reporting	June 30, 2023

## Project Partners and Collaborators

Name	Organization	Role	Receiving Funds
Dick Moore	Beltrami County Land Department	Collaboration on project planning and development. Execution of habitat improvements on County-held lands. Long-term management of project sites. In-kind support for implementation through staff time and equipment.	No
Kirk Titus	Cass County Land Department	Collaboration on project planning and development. Execution of habitat improvements on County-held lands. Long-term management of project sites. In-kind support for implementation through staff time and equipment.	No
Rich Courtemanche	Aitkin County Land Department	Collaboration on project planning and development. Execution of habitat improvements on County-held lands. Long-term management of project sites. In-kind support for implementation through staff time and equipment.	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.**

ABC will offer milestone reports as the proposal is accepted and as the work begins. This will be available on the ABC website, social media, E-news and other sources available to Minnesotans. The milestones will include photos, videos and interviews with partners and or contractors who are doing the work. ABC will periodically check the project sites and examine the habitat as it progresses to report on the successes. ENTRF will be acknowledged as each milestone is reported.

## 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 be funded?**

ABC has implemented a successful, landscape-scale GWWA/AMWO habitat management program in Minnesota since 2013, leveraging private, state and federal funding. Based on extensive experience restoring ESH, we anticipate little additional, ongoing management for restored project sites will be required.

Utilizing experience gained from this pilot project, ABC will continue to work with cooperation of Cass, Aitkin, and Beltrami counties and engage additional collaborative partners to identify sites that will benefit from similar restoration activities. We will pursue alternative funding sources to continue these restoration efforts in the future.

## Budget Summary

Category / Name	Subcategory or Type	Description	Purpose	Gen. Ineligible	% Benefits	# FTE	Classified Staff?	\$ Amount
<b>Personnel</b>								
Chad Carroll -- Grants and Finance Manager		Financial management, contracts and reporting			21%	0.06		\$4,886
Kevin Sheppard -- Habitat Restoration Coordinator		Project Manager			21%	0.5		\$43,339
							<b>Sub Total</b>	<b>\$48,225</b>
<b>Contracts and Services</b>								
TBD	Professional or Technical Service Contract	Contractors will execute forestry treatments including brush sheering, non-commercial timber harvest and other stand improvements to restore parcels to benefit birds and other wildlife. Contract costs are estimated at a rate of \$475 per acre to complete improvements on 300 acres. Costs savings would be applied to complete additional acres.				1.44		\$142,500
							<b>Sub Total</b>	<b>\$142,500</b>
<b>Equipment, Tools, and Supplies</b>								
							<b>Sub Total</b>	<b>-</b>
<b>Capital Expenditures</b>								
							<b>Sub Total</b>	<b>-</b>
<b>Acquisitions and Stewardship</b>								

							<b>Sub Total</b>	-
<b>Travel In Minnesota</b>								
	Miles/ Meals/ Lodging	1848 miles annually at \$.575 per mile for two years	For ABC project manager travel to assess sites, meet with partners, manage contractors and evaluate results					\$2,125
							<b>Sub Total</b>	<b>\$2,125</b>
<b>Travel Outside Minnesota</b>								
							<b>Sub Total</b>	-
<b>Printing and Publication</b>								
	Printing	750 pages annually at \$.10 per page for two years	Printing and copying expenses for contract administration and reports					\$150
							<b>Sub Total</b>	<b>\$150</b>
<b>Other Expenses</b>								
							<b>Sub Total</b>	-
							<b>Grand Total</b>	<b>\$193,000</b>

Classified Staff or Generally Ineligible Expenses

Category/Name	Subcategory or Type	Description	Justification Ineligible Expense or Classified Staff Request
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## Non ENRTF Funds

Category	Specific Source	Use	Status	Amount
<b>State</b>				
			<b>State Sub Total</b>	-
<b>Non-State</b>				
Cash	Aitkin County Land Dept. revenues	To support contractor costs for forest restoration activities.	Secured	\$10,000
In-Kind	Aitkin County Land Department	Aitkin County will provide staff time in the amount of \$15,000 to support forest management treatments producing high-quality breeding habitat for Golden-winged Warbler, American Woodcock and Ruffed Grouse on other lands owned by the county during the project period. An additional \$5,000 will support direct administration of this project over a two-year period.	Secured	\$20,000
In-Kind	Beltrami County Land Department	Beltrami County will provide staff time in the amount of \$14,000 to support forest management treatments producing high-quality breeding habitat for Golden-winged Warbler, American Woodcock and Ruffed Grouse on other lands owned by the county during the project period. An additional \$6,000 will support direct administration of this project over a two-year period.	Secured	\$20,000
In-Kind	ABC revenues generated through fundraising and non-state grant support.	For partner engagement, staff supervision and oversight of project activities by ABC Great Lakes Regional Vice President. Match calculated based on 2% overall effort per year for two years (\$4,400) plus \$600 in travel expenses.	Secured	\$5,000
Cash	Cass County Land Dept.	Cass County will provide \$10,000 in matching funds to support forest management treatments producing high-quality breeding habitat for Golden-winged Warbler, American Woodcock and Ruffed Grouse on other lands owned by the county during the project period. Cash contributions to facilitate implementation of project activities.	Secured	\$10,000
			<b>Non State Sub Total</b>	<b>\$65,000</b>
			<b>Funds Total</b>	<b>\$65,000</b>

## Acquisition and Restoration

### Parcel List

Name	County	Site Significance	Activity	Acres	Miles	Estimated Cost	Type of Landowner	Easement or Title Holder	Status of Work
Aitkin County Land Dept.	Aitkin	Forest sites present potential for high quality breeding habitat for ESH SGCN focal species after restoration.	Restoration	100	-	\$47,500	Public		Has not begun
Beltami County Land Dept.	Beltrami	Forest sites present potential for high quality breeding habitat for ESH SGCN focal species after restoration.	Restoration	100	-	\$47,500	Public		Has not begun
Cass County Land Dept.	Cass	Forest sites present potential for high quality breeding habitat for ESH SGCN focal species after restoration.	Restoration	100	-	\$47,500	Public		Has not begun
				-	-	-			
				-	-	-			
				-	-	-			
				-	-	-			
				-	-	-			
<b>Totals</b>				<b>300</b>	<b>0</b>	<b>\$142,500</b>			

## Restoration

### **1. Provide a statement confirming that all restoration activities completed with these funds will occur on land permanently protected by a conservation easement or public ownership.**

All restoration activities associated with this project will take place on permanently protected, publically-owned lands managed by the Aitkin, Beltrami and Cass County Land Departments.

### **2. Summarize the components and expected outcomes of restoration and management plans for the parcels to be restored by your organization, how these plans are kept on file by your organization, and overall strategies for long-term plan implementation.**

Each individual project plan will feature a description of current stand conditions detailing tree species, size class and density, while identifying site productivity limitations and desired future stand condition after project implementation. This plan will include the forest management prescriptions that contractors will use to complete the project. Aerial photo maps, and digital maps will be created and given to the contractor to be used with GPS technology to delineate sites. On-site boundary marking and tree marking will also be completed in advance of bid solicitation. ABC and County partners will keep and share planning materials for each project before and after implementation. ABC will save and maintain these files on its secure electronic file server for permanent future access. It is our belief that completion of this project to restore a minimum of 300 acres of degraded forest stands in Aitkin, Beltrami and Cass Counties will create a management template and generate interest from additional county, state, non-profit and tribal partners in the region to implement similar activities in their managed forests. ABC or its collaborative partners may then seek future alternative funding to implement similar restoration after the present project is completed.

This forest restoration pilot project would be an additional component to a landscape-level effort on the part of ABC and numerous private and public collaborative partners in Minnesota and throughout the Great Lakes Region to restore and enhance high quality early successional breeding habitat for GWWA, AMWO and other priority forest bird species. Since 2013, ABC has partnered with private landowners and public agency partners throughout northern Minnesota to complete 11,388 acres of high quality early successional habitat projects to restore and enhance breeding habitat for GWWA, AMWO, and associated early successional habitat species. This initiative includes two phases of grant funding via the Minnesota Outdoor Heritage Fund (MN OHF), as well as funding through the Natural Resources Conservation Service (NRCS) Regional Conservation Partners Program (RCPP), National Fish and Wildlife Foundation, and numerous private donations. To date, ABC has completed ESH projects in partnership with 11 Minnesota DNR Offices, seven Minnesota Counties, two USFWS National Wildlife Refuges, Chippewa National Forest, and the Red Lake Band of Chippewa. Furthermore, ABC is engaged in an ongoing, full-life cycle conservation initiative spanning North, Central and South America to complete habitat conservation for GWWA and associated migratory bird species.

ABC is currently in the final phases of leading a five-year RCPP project in the Great Lakes funded by the NRCS that assists early successional project planning on private lands. Finally, our efforts to enhance ESH on public lands in Minnesota received a third phase of funding from the MN OHF. This will extend our successful, existing public and private lands programs through 2025, sustaining our complimentary programs in the region and providing ongoing capacity to develop new projects that meet our goals for bird habitat conservation.

### **3. Describe how restoration efforts will utilize and follow the Board of Soil and Water Resources “Native Vegetation Establishment and Enhancement Guidelines” in order to ensure ecological integrity and pollinator enhancement.**

Minnesota DNR Ecological Classification System and Native Plant Community database will be used to prescribe and support stand-level management. Included in these interpretations are soil surveys, natural disturbance regimes, stand dynamics, growth states, tree behaviors, seasonal operability and general species-specific forest health information. ABC lead project manager Kevin Sheppard is trained in the use of these resources through the Sustainable Forest Education Cooperative.

**4. Describe how the long-term maintenance and management needs of the parcel being restored with these funds will be met and financed into the future.**

Parcels restored through this project will serve as high-quality early successional habitat benefitting focal species and related species for a period of approximately 10 years. Beyond that point, forest parcels will begin to succeed and be managed to maturity with maintenance supported in part by timber harvest revenue from other county-managed land. The BMPs utilized to benefit wildlife through this project also will improve the structure and composition of forested sites to restore commercial value, supporting the management of these and other county forests in the future. Sites restored through similar techniques in North Central Minnesota in the 1970s, for example, are now fully functioning forest ecosystems providing habitat for a broad array of wildlife.

**5. Describe how consideration will be given to contracting with Conservation Corps of Minnesota for any restoration activities.**

The Conservation Corps of Minnesota (CCM) will be contacted and this correspondence catalogued according to established LCCMR protocols. Due to the heavy equipment operation required to implement this project, it is ABC's experience that CCM may not have the personnel or equipment necessary to complete the work identified in this proposal. However, CCM will be given appropriate consideration on projects for which they demonstrate the required technical expertise, equipment and capacity.

**6. Provide a statement indicating that evaluations will be completed on parcels where activities were implemented both 1) initially after activity completion and 2) three years later as a follow-up. Evaluations should analyze improvements to the parcel and whether goals have been met, identify any problems with the implementation, and identify any findings that can be used to improve implementation of future restoration efforts at the site or elsewhere.**

ABC and partners will complete evaluations on parcels where restoration activities have been implemented 1) initially after completion and 2) three years after implementation to assess longer-term results. Evaluations will analyze improvements to the parcel and assess progress in achieving project goals, as well as identifying any problems with implementation, and highlighting findings that can be used to improve implementation of future restoration efforts at the site or on similar sites.

## Attachments

### Required Attachments

#### *Map*

File: [888dbffb-305.pdf](#)

#### *Alternate Text for Map*

The map shows a selection of proposed publicly-held parcels in Aitkin, Beltrami and Cass Counties that would specifically benefit from forest restoration activities to produce priority habitat for GWWA, AMWO, RUGR, and other focal wildlife species. A subset of targeted parcels have been identified and maps will be available to the Council at time of a potential hearing. We presently have limited access to county parcel shapefiles due to COVID-19....

#### *Financial Capacity*

File: [c41afb3f-bd3.pdf](#)

#### *Board Resolution or Letter*

Title	File
ABC Draft Board Resolution	<a href="#">9f3b5e34-743.pdf</a>

### Optional Attachments

#### *Support Letter or Other*

Title	File
Natural Resources Research Institute Letter of Support	<a href="#">22fb40ef-46e.pdf</a>
Cass County Letter of Support	<a href="#">94693ff8-f89.pdf</a>
Aitkin County Letter of Support and Match Commitment	<a href="#">07cae74b-822.pdf</a>
Beltrami County Letter of Support and Match Commitment	<a href="#">3cba6c3c-d69.pdf</a>
Cass County Match Commitment	<a href="#">280be644-8a2.pdf</a>

## Difference between Proposal and Work Plan

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

Added one sentence to description of Activity #1 about update of parcel table following completion of site selection.

## 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 agree travel expenses must 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 agree to the Commissioner's Plan.

**Does your project have potential for royalties, copyrights, patents, or sale of products and assets?**

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

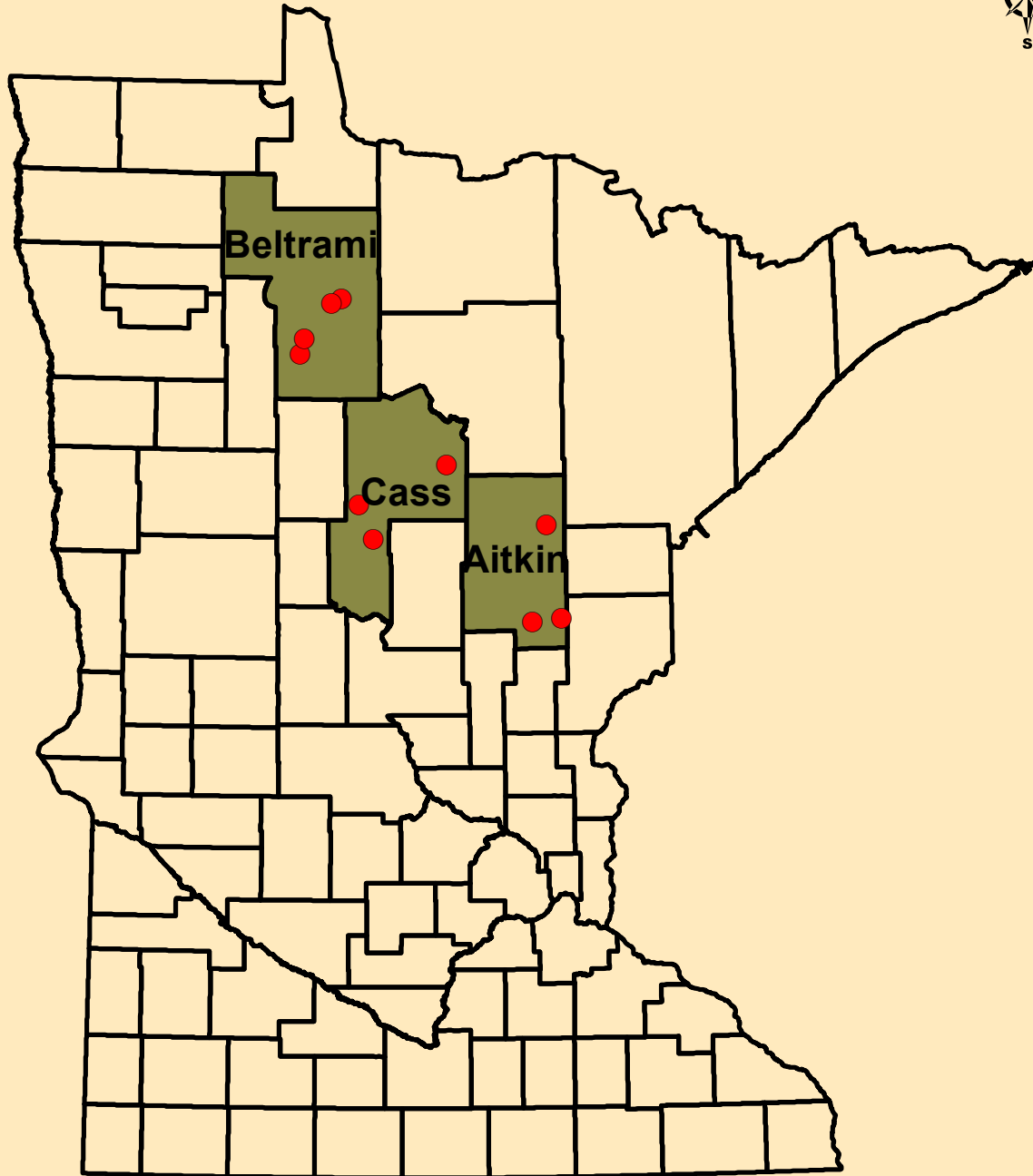
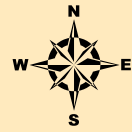
**Does your project include original, hypothesis-driven research?**

No

**Does the organization have a fiscal agent for this project?**

No

# Restoring Upland Forests for Birds



## Legend

- LCCMR Draft Project Locations
- Partner Counties
- Minnesota Counties

