Lessard-Sams Outdoor Heritage Council
Fiscal Year 2022 / ML 2021 Request for Funding

Date: May 27, 2020

Program or Project Title: Floodplain Forest Enhancement-Mississippi River, Phase 4 (FRE02)

Funds Requested: $3,506,200

Manager's Name: Andrew Beebe
Organization: Audubon Minnesota
Address: 1 West Water Street
City: St Paul, MN 55107
Office Number: (608)-881-9707
Email: abeebe@audubon.org

County Locations: Houston, Wabasha, and Winona.

Eco regions in which work will take place:

- Southeast Forest

Activity types:

- Enhance

Priority resources addressed by activity:

- Forest

Abstract:

Reed canary grass and other invasive plants are preventing natural tree regeneration and threatening floodplain forests, upland forests, and wildlife alike. The Upper Mississippi River and its tributaries provide a critical habitat corridor for hundreds of species of birds from waterfowl and other game birds to warblers of special concern. This proposal builds on three previous and successful projects and will expand Audubon's work on State and Federal Lands as well as introduce projects on permanently protected private lands. Project work will serve to conserve and maintain forest habitat within State Important Bird Areas and two Conservation Focus Areas.

Design and scope of work:

The forests of Southeast Minnesota are currently poised to experience a shift in species cover and composition. Oak dominated upland forests are slowly converting to shade tolerant maple and invasive species. Floodplain forests are shifting away from native tree cover and towards invasive grass. While forests are never stagnant, these forests require intervention to ensure they remain a healthy and sustainable resource for the state of Minnesota.

From Hastings, Minnesota to the Iowa border, the Mississippi River and its major tributaries contain some of the largest and most significant tracts of floodplain and river bluff forest along the entire Upper Mississippi River. These forests and mixed wetlands cover thousands of acres and are especially critical to many species of birds and other wildlife, including Wood Ducks, Bald Eagles and multiple songbird species of conservation concern which use these areas for nesting and feeding. The upland forest adjacent to the Mississippi River and its tributaries provide excellent wildlife habitat and help support the greater river corridor migratory pathway. Special concern species such as the Cerulean Warbler are well known to use both floodplain forest and upland forest, even preferring habitats where they have access to both.

While historically diverse in the number, age, and size of tree species, much of the floodplain forest now consists of silver maple aged 50 - 70+ years old. These trees are expected to live another 50-70 years, after which they will die naturally. Unfortunately, when trees are lost, 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 cases disappear completely. Adjacent upland forests are beginning to shift away from their historical oak dominance and are

becoming infested with invasive species. A lack of fire and increased maple dominance threatens wildlife and timber value within these upland forests. Without management both forest communities will continue to decline along with their ability to support wildlife.

Project locations and habitats were selected based on state level Conservation Focus Areas and Important Bird Areas. Project work will include selectively controlling invasive plants like buckthorn and reed canary grass across the habitat gradient. Forest stand improvements will be used to improve wildlife tree structure. Site preparations will create the appropriate conditions for natural and artificial tree regeneration. Trees will be planted underneath poor forest canopies and in open areas where forest previously existed. Understory treatments like mowing and fire will be used to control unwanted vegetation and release desirable trees. As a result of this management floodplain forest habitat will expand while the adjacent upland forests will offer more resources to wildlife.

Sites were collaboratively identified with MN DNR, US Fish and Wildlife Service, and the US Army Corps of Engineers. Projects will be accomplished using a variety of contractors, Conservation Corps Minnesota Crews and in house labor. In total 3,445 acres will be enhanced.

How does the proposal address habitats that have significant value for wildlife species of greatest conservation need, and/or threatened or endangered species, and list targeted species:

Floodplain forests are rare habitats with many having been converted to agricultural land. The floodplain/bluffland forest matrix is often found in relatively narrow ribbons along river corridors and provides important travel routes for wildlife. The Mississippi River, a critical migration corridor for birds, provides some of the most significant tracts of this forest system in the United States.

In Minnesota, the Mississippi River and lower ends of tributaries include large areas of high biodiversity significance as identified in the Minnesota County Biological Survey. Studies by the US Geological Survey along the Upper Mississippi River have documented that songbirds use these floodplain forests extensively, with some species benefiting from access to lowlands and uplands in close proximity. Species in greatest conservation need, including Cerulean Warbler require large contiguous habitat to successfully breed.

The Whitewater Wildlife Management Area lists Cerulean Warbler, Prothonotary Warbler, Acadian Flycatcher, Red-shouldered Hawk, and the Louisiana Waterthrush as priority forest interior birds. All of these species will benefit from access to quality floodplain and adjacent upland forests. By restoring forest cover to deforested floodplains and working in the adjacent uplands, these priority species will see a major increase in quality habitat. Threatened species of bats are currently limited in their ability to use formerly forested floodplains, with the reintroduction of forests there will be a boom in potential future bat roosting trees.

Among other benefits in the uplands, this project work will help conserve an oak resource in decline. Oak trees provide an important food source for game, nongame, and the insects whom provide food to many bird species. Working in the bluff forests will allow Audubon to address the LSOHC Priority action of stream to bluff habitat enhancement as well as increase the overall size of impacted travel corridors.

What is the degree of timing/opportunistic urgency and why it is necessary to spend public money for this work as soon as possible:

Throughout the project area trees are experiencing natural mortality without being naturally replaced by new trees. Without management we are seeing forest habitat lost to invasive species. Trees grow slowly and as a result some of the greatest impacts of this conservation work will be realized many years into the future. These projects need public funding to help prevent some of the last remaining floodplain/bluffland migratory corridors in the country from being lost to nonnative brush and grass.

Minnesota wildlife that depend on these unique forests are in rapid decline. Species like the Cerulean Warbler have lost approximately 70% of their entire population over the past 45 years. The survival of these species will depend on urgent action to reverse the loss of quality breeding habitat.

Describe how the proposal uses science-based targeting that leverages or expands corridors and complexes, reduces fragmentation or protects areas identified in the MN County Biological Survey:

Much of this project work will take place on lands recognized by the Minnesota County Biological Survey as natural communities containing rare species. Project sites have additionally been selected within areas recognized as being resistant to climate change, Conservation Focus Areas, and Important Bird Areas. Audubon has partnered with the Army Corps of Engineers to select project areas on the Upper Mississippi River within priority areas where management will be most effective and feasible.
The Upper Mississippi River Systemic Forest Stewardship plan prepared by the Corps of Engineers and other partners in 2012 is used to guide restoration and enhancement strategies along the Mississippi River while the Minnesota Wildlife Action Plan informs management within other river tributaries. Audubon has additionally engaged in re-forestation studies and regeneration surveys to determine the best species and planting methodologies for re-forestation projects.

Reed canary grass poses a major fragmentation threat to forests by preventing new trees from establishing within small openings. Over time reed canary grass can shift a forest environment to an open field type setting. Managing large reed canary dominated landscapes to encourage tree growth both reduces fragmentation and secures forest cover for the foreseeable future. This work greatly reduces fragmentation through reforesting areas that have been deforested during past logging practices, agricultural use, and subsequent invasive species infestation. The project further addresses fragmentation by bolstering forest health thus helping prevent their conversion to nonnative cover.

Which sections of the Minnesota Statewide Conservation and Preservation Plan are applicable to this project:

- H5 Restore land, wetlands and wetland-associated watersheds
- LU8 Protect large blocks of forest land

Which other plans are addressed in this proposal:

- Minnesota's Wildlife Action Plan 2015-2025
- Upper Mississippi Systemic Forest Stewardship Plan

Describe how your program will advance the indicators identified in the plans selected:

Forest vegetation and wildlife species benefit from invasive species reductions and tree regeneration treatments designed to increase quality forest cover while enhancing and expanding large blocks of connected native forest. Maintaining high quality forests within the floodplain/upland transition zone is important to special concern species, game species, and many high value forest products. Habitat within this transition zone also offers great opportunities for hunters, fisherman, birdwatchers and outdoor enthusiasts. This project area additionally covers two distinct and adjacent Conservation Focus Areas with projects being planned in high priority areas.

Audubon will continue to utilize a strategic approach where assumption driven research informs project implementation. Enhancement efforts here will create more sustainable forests that will benefit the citizens of Minnesota both ecologically and economically. Water quality will also benefit as forest cover slows overland flow and helps water infiltrate into soils.

Which LSOHC section priorities are addressed in this proposal:

Southeast Forest:

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

Describe how your program will produce and demonstrate a significant and permanent conservation legacy and/or outcomes for fish, game, and wildlife as indicated in the LSOHC priorities:

Strategically managing invasive species allows for more natural forest regeneration to take place. Audubon is focused on growing new trees where appropriate and improving tree quality that directly benefits wildlife.

In the bottom land many different species of wildlife will benefit from this work. Reed canary grass not only out competes native forest cover but it provides almost no benefit to wildlife. Special concern species such as the Willow Flycatcher will benefit from large blocks of young forest while Cerulean Warblers will benefit as the young trees age and become mature old growth forest. Game species such as wood duck will benefit from increased forest cover and acorn production. New Audubon research supported through match funding, will document the long-term benefits to these song birds of conservation concern. Managing reed canary grass populations allows for a native plant response that greatly increases pollinator and insect habitat, which in turn supplies more forage potential for game and non-game birds alike. Converting reed canary grass to a forest community will secure native habitat for at least 100 years.

Improvement and diversification treatments in the uplands will favor mast producing species and conditions conducive to long term forest health and longevity. Invasive species, a lack of oak regeneration, aggressive maple regeneration and a lack of fire all present increased stressors on wildlife. Our work in the uplands will increase wildlife forage and native habitat connectivity by decreasing invasive plant populations and managing for high quality wildlife trees.

Relationship to other funds:

- Environmental and Natural Resource Trust Fund

Describe the relationship of the funds:

Environment and Natural Resource Trust funds were secured in 2016 to study the most effective methods to control reed canary grass and regenerate trees. This study concluded in June 2019 and results have been used to develop a decision support tool to guide

enhancement decisions for individual project sites. The results of the study will help select the most effective enhancement tools for projects included in this proposal.

U.S. Fish and Wildlife Service supports 50% of the Forester's salary and research work. Additionally U.S. Fish and Wildlife Service provides a vehicle, fuel, office space and some supplies for program work.

Does this program include leverage in funds:

Yes

Audubon has a long-standing partnership with the Upper Mississippi River National Wildlife and Fish Refuge to cost share an Audubon Forester position. 50% of that position will be funded by U.S. Fish and Wildlife Service. Furthermore Audubon has recently launched a new research initiative aimed at identifying the most critical bottomland forest areas for species of conservation concern supported by Upper Mississippi Joint Venture and private donor funds. These supporting funds allow us to focus LSOHC funding on implementing projects (contractors, tree purchase, etc.). Also, partners including U.S. Fish and Wildlife Service, The Army Corps of Engineers, Conservation Corps Minnesota and volunteers provide technical expertise and/or labor to assist with project design and implementation.

Per MS 97A.056, Subd. 24, Any state agency or organization requesting a direct appropriation from the OHF must inform the LSOHC at the time of the request for funding is made, whether the request is supplanting or is a substitution for any previous funding that was not from a legacy fund and was used for the same purpose:

LSOHC funding is in addition to other funding sources, and does not supplant that work. Without LSOHC funding, Audubon MN would not have resources to implement enhancement projects, and would have greater challenges in funding personnel salaries associated with this work.

Describe the source and amount of non-OHF money spent for this work in the past:

Appropriation Year	Source	Amount
2014	US Fish and Wildlife Service	$80,000
2016	US Fish and Wildlife Service	$35,000
2016	McKnight	$40,000
2018	US Fish and Wildlife Service	$84,000
2020	Minnesota DNR	$15,000

How will you sustain and/or maintain this work after the Outdoor Heritage Funds are expended:

Audubon is committed to monitoring project sites after OHF funds are expended. Audubon's Forester is responsible for managing these project sites and will work with our State and Federal partners to ensure management recommendations are understood and implemented as best possible. Audubon receives funding from the USFWS to monitor projects and maintain a presence on the ground. Audubon has a strong working relationship with the Army Corps of Engineers, US Fish and Wildlife Service and the MN DNR. Through this partnership Audubon has enhanced over 2000 acres of floodplain forest in the last 5 years. Additionally Audubon is actively collaborating with Federal partners to secure additional funding for floodplain forest work.

Forest management is a long term process and follow up management will likely be necessary once OHF funds have been expended. Much of this work is however intended to mimic natural processes and restore tree cover that once established should require little intervention.

Explain the things you will do in the future to maintain project outcomes:

Year	Source of Funds	Step 1	Step 2	Step 3
2022-2026	USFWS, LSOHC, MN DNR	Site recon, Prescription Development and planning	Conduct Site Management	Maintenance
2027-2030	USFWS, MN DNR	Planning Amendments	Maintenance/Management	

Identify indicator species and associated quantities this habitat will typically support:

By enhancing 3445 acres of stream to bluff habitat the Red-shouldered Hawk will see an increase in habitat capable of supporting 14 breeding pairs while the Cerulean Warbler will increase by 4 breeding pairs. Both birds are indicator species requiring large,

contiguous tracts of floodplain forest including large trees. While not abundant, this habitat will support their continued survival,recovery, and longevity in these areas. Other species, like Wood Duck and Prothonotary Warbler, which also require floodplain forest habitats, will benefit from this work. Audubon has been working with the U.S. Fish and Wildlife Service and U.S. Army Corps of Engineers and the ACOE to identify and enhance the largest available tracts of floodplain forest in order to have the greatest impact on these species. Additionally we have begun to utilize bird point count data in order to better understand the specific habitat requirements of these species within the refuge.

The most effective measure of success can be conducted by regeneration surveys within re-forestation sites. A measure of 800 or more floodplain forest tree species per acre above 4.5 feet in height will be considered successful. Native floodplain forest tree species will be considered indicator species. This proposal is expected to deliver around 1000 acres of completely re-forested land that is currently dominated by reed canary grass.

Activity Details

Requirements:

If funded, this proposal will meet all applicable criteria set forth in MS 97A.056 - **Yes**

Will restoration and enhancement work follow best management practices including MS 84.973 Pollinator Habitat Program - **Yes**

Is the restoration and enhancement activity on permanently protected land per 97A.056, subd 13(f), tribal lands, and/or public waters per MS 103G.005, Subd. 15 - **Yes (WMA, Permanently Protected Conservation EasementsRefuge Lands, State Forests)**

Do you anticipate federal funds as a match for this program - **Yes**

Are the funds confirmed - **No**

What is the approximate date you anticipate receiving confirmation of the federal funds - **12/31/2020**

Land Use:

Will there be planting of corn or any crop on OHF land purchased or restored in this program - **No**

Land Use:

Have you received OHF dollars in the past through LSOHC? - **Yes**

Past appropriations and spending to date:

Apprp Year	Approp Amount Received	Approp Amount Spent to Date	Leverage as Reported in AP/th>	Leverage Realized to Date	Total Acres Affected in AP	Total Acres Affected to Date	Program Complete and Final Report Approved?
2014	300000	300000	18000	19000	125	292	yes
2016	412000	313800	86000	50000	390	450	no
2019	1357000	108600	200000	0	1290	1000	no

Accomplishment Timeline

Activity	Approximate Date Completed
Compete Site Presecriptions	2024
Complete Site Preparations	2025
Planting and Maintenance	2026

Budget Spreadsheet

Total Amount of Request: $3,506,200

Budget and Cash Leverage

Budget Name	LSOHC Request	Anticipated Leverage	Leverage Source	Total
Personnel	$411,000	$161,000	Audubon and Private Donations, USFWS, Audubon and Private Donations, N/A	$572,000
Contracts	$2,831,600	$0		$2,831,600
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	$63,600	$93,300	Indirect Rate	$156,900
DNR Land Acquisition Costs	$0	$0		$0
Capital Equipment	$0	$0		$0
Other Equipment/Tools	$0	$0		$0
Supplies/Materials	$200,000	$0		$200,000
DNR IDP	$0	$0		$0
Total	$3,506,200	$254,300	-	$3,760,500

Personnel

Position	FTE	Over # of years	LSOHC Request	Anticipated Leverage	Leverage Source	Total
Conservation Manager	0.50	4.00	$139,000	$30,000	Audubon and Private Donations	$169,000
Forest Ecologist	0.75	4.00	$106,000	$101,000	USFWS	$207,000
Forest Ecologist	0.75	4.00	$156,000	$30,000	Audubon and Private Donations	$186,000
Grant Administrator	0.03	4.00	$10,000	$0	N/A	$10,000
Total	2.03	16.00	$411,000	$161,000	-	$572,000

Amount of Request:	$3,506,200
Amount of Leverage:	$254,300
Leverage as a percent of the Request:	7.25%
DSS + Personnel:	$474,600
As a % of the total request:	13.54%
Easement Stewardship:	$0
As a % of the Easement Acquisition:	-%

How did you determine which portions of the Direct Support Services of your shared support services is direct to this program:

Audubon has a federally-negotiated indirect rate of 24.66%. We're are requesting 10% from LSOHC and matching 14.66%. Indirect only applies to the first $25,000 of contracts.

What is included in the contracts line?

Contract work will include tree planting, invasive species control, tree cutting, seeding, timber sales and general stewardship

Describe and explain leverage source and confirmation of funds:

Audubon receives funding from the US Fish and Wildlife Service, Private foundations, and individuals

Does this proposal have the ability to be scalable? - Yes

Tell us how this project would be scaled and how administrative costs are affected, describe the "economy of scale" and how outputs would change with reduced funding, if applicable:

The project can be scaled by reducing project acres. This would primarily reduce contract and supply costs. Based on our

experiences with the first three LSOHC grants, dedicated support staff are important to project success and more difficult to scale down, though possible.

Has funding for these positions been requested in the past? - Yes

Please explain the overlap of past and future staffing and position levels previously received and how that is coordinated over multiple years?

Phases are billed in order as they are completed, including staff salaries. The Forest Ecologist(s) and the Project Manager work together to design and implement projects and bill their time to the associated Phase of work.

Output Tables

Table 1a. 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	3,445	0	3,445
Total	0	0	3,445	0	3,445

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	$3,506,200	$0	$3,506,200
Total	$0	$0	$3,506,200	$0	$3,506,200

Table 3. Acres within each Ecological Section

Type	Metro/Urban	Forest/Prairie	SE Forest	Prairie	Northern 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	3,445	0	0	3,445
Total	0	0	3,445	0	0	3,445

Table 4. Total Requested Funding within each Ecological Section

Type	Metro/Urban	Forest/Prairie	SE Forest	Prairie	Northern 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	$3,506,200	$0	$0	$3,506,200
Total	$0	$0	$3,506,200	$0	$0	$3,506,200

Table 5. Average Cost per Acre by Resource Type

Type	Wetlands	Prairies	Forest	Habitats
Restore	$0	$0	$0	$0
Protect in Fee with State PILT Liability	$0	$0	$0	$0
Protect in Fee W/O State PILT Liability	$0	$0	$0	$0
Protect in Easement	$0	$0	$0	$0
Enhance	$0	$0	$1,018	$0

Table 6. Average Cost per Acre by Ecological Section

Type	Metro/Urban	Forest/Prairie	SE Forest	Prairie	Northern Forest
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	$1,018	$0	$0

Automatic system calculation / not entered by managers

Target Lake/Stream/River Feet or Miles

0

I have read and understand Section 15 of the Constitution of the State of Minnesota, Minnesota Statute 97A.056, and the Call for Funding Request. I certify I am authorized to submit this proposal and to the best of my knowledge the information provided is true and accurate.

Outcomes

Programs in southeast forest region:

- Large corridors and complexes of biologically diverse wildlife habitat typical of the unglaciated region are restored and protected
  Existing forests within the Mississippi River floodplain have been mapped, including location and tract size. Over time, forested land cover can be re-mapped to determine if forested locations and/or tract size has changed. In addition, forest inventory is being completed by Minnesota DNR, US Fish and Wildlife Service, and US Army Corps of Engineers to document forest cover, tree species, and size, regeneration, etc. These can be re-surveyed over time to document changes in these parameters.

Parcel List

Explain the process used to select, rank and prioritize the parcels:

Audubon collaborates with the MN DNR, US Fish and Wildlife Service and US Army Corps of Engineers to identify priority parcels for enhancement projects. LiDar imagery is used to identify areas that can be enhanced and are not excessively wet. Forests with major threats of loss are prioritized first.

Section 1 - Restore / Enhance Parcel List

Houston

Name	TRDS	Acres	Est Cost	Existing Protection?
Root River Acquisition #1	10404232	100	$88,000	Yes
Root River Acquisition #2	10404227	280	$246,400	yes
Root River Easement	10304220	25	$22,000	Yes
USFWS Root River	10404236	400	$352,000	Yes

Wabasha

Name	TRDS	Acres	Est Cost	Existing Protection?
Red Wing Wildlife League	11315215	300	$264,000	Yes
Wabasha Bottoms	11009220	390	$343,000	Yes

Winona

Name	TRDS	Acres	Est Cost	Existing Protection?
Bronk State Forest	10708223	800	$704,000	Yes
Horseshoe Bend	10808221	137	$120,600	Yes
Whitewater WMA	10810235	1,000	$880,000	Yes

Section 2 - Protect Parcel List

No parcels with an activity type protect.

Section 2a - Protect Parcel with Bldgs

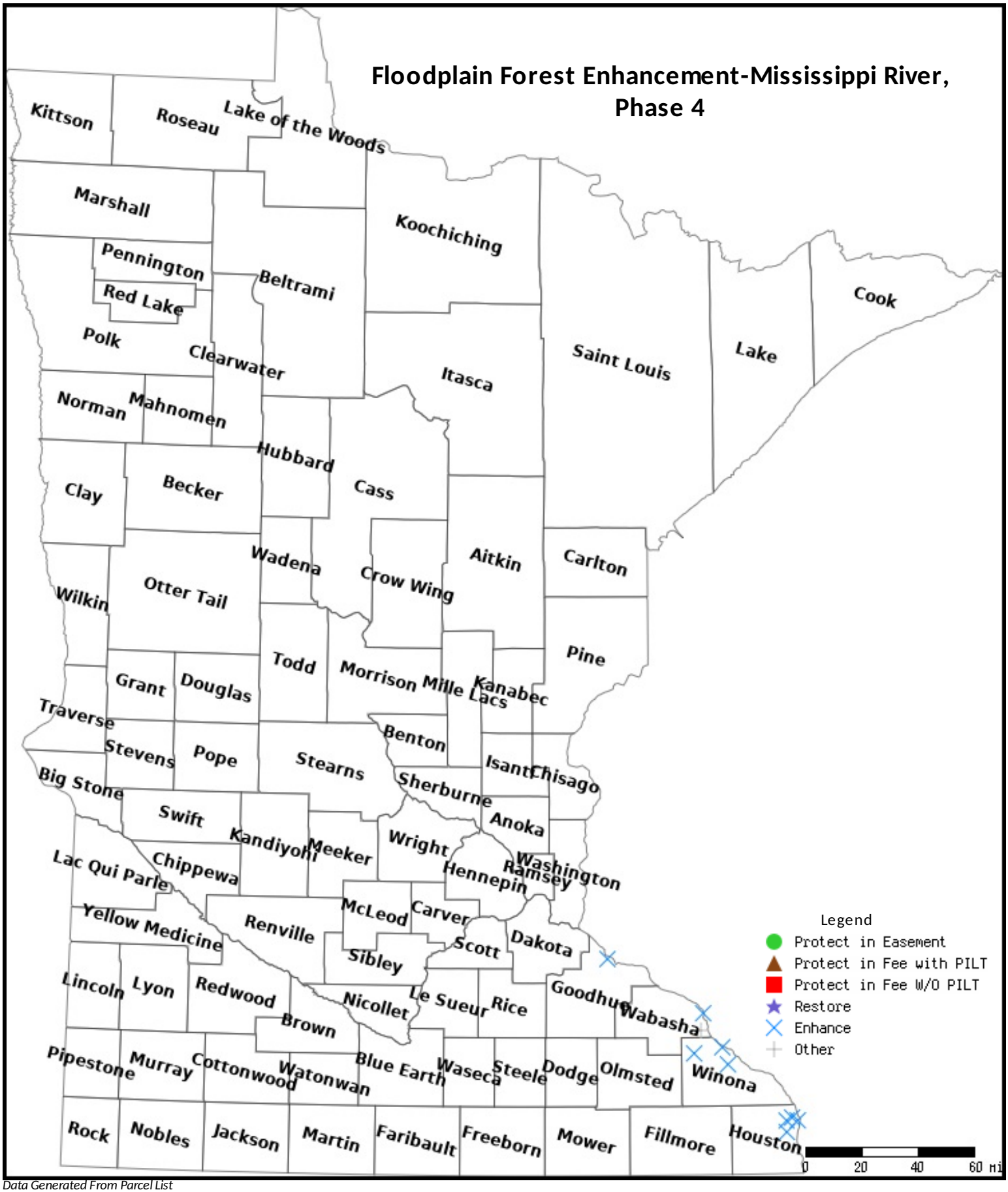
No parcels with an activity type protect and has buildings.

Section 3 - Other Parcel Activity

Winona

Name	TRDS	Acres	Est Cost	Existing Protection?	Hunting?	Fishing?
East Indian Creek	10909219	13	$11,400	Yes	Full	Full

Parcel Map



Data Generated From Parcel List

Audubon MINNESOTA

A Fighting Chance for Floodplain Forests

Many species of birds including the beautiful Wood Duck, the secretive Red-shouldered Hawk, and the sweet-melodied Cerulean Warbler make their nests in floodplain forests.

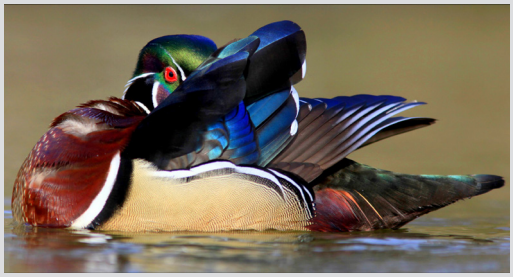
Along the Upper Mississippi River, these forests are under threat. Invasive species like aggressive reed canary grass prevent the natural regeneration of trees.

Audubon has been working hard to save the existing forest from being converted to reed canary grass, an aggressive invasive plant that provides no habitat for forest-dependent birds.

Audubon's accomplishments to date:

- More than 97,000 trees planted across 2,100 acres
- Implemented forestry management strategies including site preparation, invasive species control, tree planting, direct seeding, timber stand improvement, and regenerative timber harvesting
- Advanced the science around floodplain forest restoration and its effects on birds by working with University of Minnesota and agency partners to evaluate restoration methods

A Conservation Corps Minnesota crews will be utilized to complete various aspects of this projects.



Wood Ducks feed and nest within floodplain forests. As a result, floodplain forests help support local sportsmen and women as well as local economies.

Red-shouldered Hawks (above) and Cerulean Warblers (below) are classified as Species of Greatest Conservation Need by the MN DNR.

Project Title:
Floodplain Forest Enhancements
Mississippi River - Phase IV

Project Manager:
Forest Ecologist
Andrew Beebe
andrew.beebe@audubon.org

Executive Director
Rob Schultz
rob.schultz@audubon.org

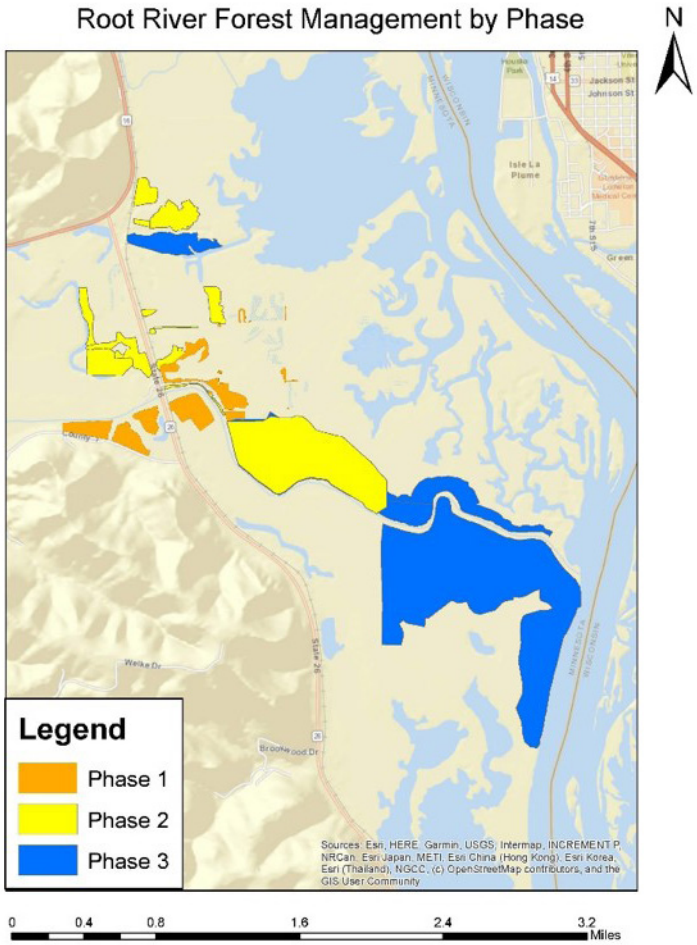
Audubon Minnesota
1 W Water Street, Suite 200
St. Paul, MN 55107
651.739.9332
mn.audubon.org

A Fighting Chance for Floodplain Forests

Over time, this project ensures the long-term sustainability of floodplain forests and continues to provide quality habitat for fish and wildlife. If we do nothing, these forests and the birds and wildlife they support, will continue to be lost.

We have implemented projects at 20 sites covering 2,142 acres along the Mississippi River, all on public lands. We fully executed the funding provided for Phase 1 while exceeding our acre goals and expect to utilize all Phase 2 funds by year-end 2020.

Photo: Bald Eagles also rely on floodplain forests for nesting habitat and hunting grounds



We work closely with partners to determine the best methods to control reed canary grass and successfully regenerate trees. The LCCMR research study has been completed and evaluated these methods. The results from that study have improved project implementation, resulting in more effective projects.

Phases 1, 2, and 3 have set the stage for a greatly expanded program that will improve habitat on 3,445 acres over the next 5 years. We will continue to work closely with partners during Phase 4, with projects on the USFWS Refuge, ACOE, state forests, and other state lands. A full-time program manager is included in the proposal to handle all contracts, reporting, and monitoring needed to accomplish floodplain enhancement.

The science around floodplain forest restoration is relatively new, and is especially challenging because these forests are often flooded. Audubon is working cooperatively with partners including U.S. Army Corps of Engineers, U.S. Fish and Wildlife Service, U.S. Geological Survey, University of MN, and MN DNR to develop methods for controlling reed canary grass, successfully regenerating trees, and increasing the diversity of tree species within these forests.