Final Abstract

Final Report Approved on December 23, 2025

M.L. 2022 Project Abstract

For the Period Ending June 30, 2025

Project Title: Purple Loosestrife Biocontrol Citizen Science Program

Project Manager: Marc White

Affiliation: Wild Rivers Conservancy

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City/State/Zip: Osceola, WI 54020

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Website: www.wildriversconservancy.org

Funding Source:

Fiscal Year:

Legal Citation: M.L. 2022, Chp. 94, Sec. 2, Subd. 06b

Appropriation Amount: $174,000

Amount Spent: $120,197

Amount Remaining: $53,803

Sound bite of Project Outcomes and Results

The Purple Loosestrife Biocontrol Citizen Science Program included the recruitment, training and support of 58 purple loosestrife biocontrol volunteers. Volunteers raised over 13,403 adult Galerucella beetles, and released them at purple loosestrife infested wetlands in Minnesota State parks, forests and wildlife refuges.

Overall Project Outcome and Results

The Purple Loosestrife Biocontrol Citizen Science program addressed the problem of reduced biotic diversity and ecosystem services in Minnesota wetlands due to the establishment and spread of ecologically invasive Purple Loosestrife. The project succeeded in recruiting, training and supporting 58 purple loosestrife biocontrol volunteers. These volunteer citizen scientists successfully raised over 13,403 adult Galerucella beetles and released them at purple loosestrife infested wetlands in Minnesota State parks, forests and wildlife refuges within the St. Croix River watershed.

Wild Rivers Conservancy staff and purple loosestrife biocontrol volunteers also performed purple loosestrife surveys along 273 miles of the St. Croix River and its tributary streams including 155 miles of the St. Croix River, 60 miles of the Kettle River, 39.8 miles of the Snake River, and 18.5 miles of the Sunrise River. Staff and volunteers also monitored

purple loosestrife infested wetlands at 4 state parks (Banning State Park, William O'Brien State Park, St. Croix State Park, and Afton State Park), 2 state forests (St. Croix State Forest and Chengwatana State Forest), 2 wildlife refuges (Carlos Avery Wildlife Management Area and Bean Dam Wildlife Management Area), and 4 regional parks (Rice Creek Chain Regional Park, Lake Elmo Regional Park Preserve, Martin-Island Linwood Lakes Regional Park, and Ki-Chi-Saga County Park) for purple loosestrife.

This project established citizen-based purple loosestrife biocontrol as a cost effective management practice to reduce the ecological impacts of purple loosestrife infestations in Minnesota wetlands. Program materials were developed and are now available to support volunteer recruitment, training and data collection as well as public education and outreach. These materials include a Purple Loosestrife Biocontrol Project Manual, a Purple Loosestrife Biocontrol Pocket Guide, and a Beetle FAQS and Lifecycle Sticker Sheet with Postcard.

Project Results Use and Dissemination

Dissemination activities of the Purple Loosestrife Biocontrol Citizen Science Program included the production of materials to support volunteer recruitment and training; public education and outreach and data collection and management. These materials include the following:

Purple Loosestrife Biocontrol Citizen Science Program webpage
Final Monitoring Report
Biocontrol Instruction Manual
Biocontrol Beetle Release Form
Galerucella Beetle Release Monitoring Form
Biocontrol Pocket Guide
Sticker Sheet Template
Beetle FAQS and Lifecycle Sticker Sheet and Postcard

PDF versions of these purple loosestrife biocontrol program documents have been uploaded as attachments for dissemination and use by the public and other resource managers.

Environment and Natural Resources Trust Fund

M.L. 2022 Approved Final Report

General Information

Date: February 2, 2026

ID Number: 2022-089

Staff Lead: Noah Fribley

Project Title: Purple Loosestrife Biocontrol Citizen Science Program

Project Budget: $174,000

Project Manager Information

Name: Marc White

Organization: Wild Rivers Conservancy

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Email: mwhite@wildriversconservancy.org

Web Address: www.wildriversconservancy.org

Project Reporting

Final Report Approved: December 23, 2025

Reporting Status: Project Completed

Date of Last Action: December 23, 2025

Project Completion: June 30, 2025

Legal Information

Legal Citation: M.L. 2022, Chp. 94, Sec. 2, Subd. 06b

Appropriation Language: $174,000 the second year is from the trust fund to the commissioner of natural resources for an agreement with the Wild Rivers Conservancy to protect and restore native ecosystems by identifying purple loosestrife in priority management areas and engaging, educating, and empowering citizens to use an approved purple loosestrife biocontrol in Minnesota's St. Croix River watershed.

Appropriation End Date: June 30, 2025

Narrative

Project Summary: Purple Loosestrife Biocontrol Citizen Science Program aims to prevent and reduce purple loosestrife by engaging, educating and empowering citizens in using a biocontrol to protect and restore native ecosystems.

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

Purple loosestrife is an aquatic invasive plant that grows taller and faster than Minnesota's native wetland plants. These advantages and prolific seed production have allowed it to invade many wetlands, sometimes to the near-total exclusion of most other vegetation. In the St. Croix River watershed (MN side) there are approximately 365 recorded populations of purple loosestrife and currently no regional management strategies. According to MN DNR, the state has historically organized and led purple loosestrife efforts, but has not done so in the past 10 years. With purple loosestrife populations continuing to grow and the public's interest peaking, a biological control long-term solution for loosestrife is at the forefront. Galerucella beetles, a biocontrol beetle, can reduce the need for other costlier and disruptive controls, such as herbicides without disrupting native vegetation. Currently, there are no regional citizen science programming being done at the MN DNR, UMN-Extension or MAISRC level to raise biocontrol beetles for purple loosestrife management. These beetles have proven to decreased the vigor, size and seed output of purple loosestrife, allowing native plants to survive and outcompete smaller plants. Though loosestrife elimination is rare, this process offers effective and environmentally sound control of the plant without herbicides.

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.

This citizen science program, led by the Wild Rivers Conservancy, aims to engage the public and recruit volunteers to help prevent the introduction and reduce the spread of purple loosestrife. There will be mapping efforts to locate purple loosestrife populations in identified priority areas throughout the St. Croix River watershed (MN side). The Galerucella beetles will be raised by volunteers in a citizen science effort. A purple loosestrife beetle program overview and instructional manual will be created to guide the program and provide protocols and standards of procedure for the project. Trainings will provide volunteers with invasive species knowledge, especially pertaining to purple loosestrife, confidence to rear the Galerucella beetles, and the support needed for a successful program. Citizen scientists will share in the fun of rearing the beetles and releasing them into local, infested wetlands in the highest priority areas identified in earlier mapping exercises. Purple loosestrife is here to stay in Minnesota, but citizen scientists can help protect their wetlands, lakes, or rivers from domination by this invader. As the biocontrol beetles reduces the loosestrife, it will aid in helping to restore any native plants the loosestrife may have eliminated locally, further ensuring diverse, healthy wetlands.

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 project will help prevent the spread of purple loosestrife populations that threaten ecological, economic, and recreational integrity of the St. Croix River watershed. By reducing the spread of purple loosestrife with a biocontrol, wetlands, streams, rivers, lake shores and other key natural areas can be protected for future generations. As purple loosestrife populations decrease, areas can be restored with native vegetation creating more biodiversity and natural habitats. The results of this project will also help in efforts to control and predict the future spread of purple loosestrife and can serve as a structure for future state citizen science programming.

Project Location

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

Region(s): NE, SE,

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

Region(s): SE, NE,

When will the work impact occur?

During the Project and In the Future

Activities and Milestones

Activity 1: Minnesota St. Croix River Watershed Purple Loosestrife Survey

Activity Budget: $53,000

Activity Description:
The Wild Rivers Conservancy will lead extensive mapping efforts in the St. Croix River watershed focusing on priority management areas identified by the Minnesota Department of Agriculture's purple loosestrife management prioritization map created by ENTRF funding in 2017 (Tactical Invasive Plant Management Plan Development). These prioritized management areas include state parks and state forests, national wildlife refuges, regional parks, the St. Croix National Scenic Riverway, and main feeder streams in the St. Croix River watershed like the Kettle, Snake, and Rock Creek. In order to prevent further larger infestations and loss of biodiversity in these key natural areas throughout the watershed, purple loosestrife populations need to be surveyed and reported. All data will be recorded and updated in EDDMapS and maps will be provided to MN DNR, MDA, and other county partners. Once EDDMapS is updated and accurate mapping can be presented of purple loosestrife populations throughout the watershed, areas will be determined by MN DNR, MDA staff and county partners for beetle releases.

Activity Milestones:

Description	Approximate Completion Date
Survey 4 prioritized state parks and 2 state forests for purple loosestrife and update EDDMapS	September 30, 2023
Survey 2 prioritized wildlife refuges, 4 regional parks and 155 miles of the StCroix River	September 30, 2023
40 miles of prioritized main feeder streams in the St. Croix watershed update EDDMapS	September 30, 2023
Develop and produce final report/map, update EDDMapS and provide to MN DNR & project partners	December 31, 2023

Activity 2: Purple Loosestrife Biocontrol Citizen Science Framework Development

Activity Budget: $62,000

Activity Description:
The Wild Rivers Conservancy will collaborate with the MN DNR, MDA, and watershed partners in creating a Purple loosestrife biocontrol overview and instructional manual to help guide the program and provide protocols and standard procedures for the project. Other resources such as purple loosestrife beetle release forms, beetle presence and activity report forms, and biocontrol kit informational forms will be available to participants to ensure volunteers are confident and successful in the beetle rearing process. These resources can also serve as a framework for future statewide citizen science programs. The Conservancy will also work in partnership with MN DNR, MDA, and private landowners to receive approval to dig purple loosestrife and release biocontrol beetles on priority areas identified.

Activity Milestones:

Description	Approximate Completion Date
Coordinate approval from appropriate land managers to dig for purple loosestrife and release biocontrol beetles	February 28, 2024
Develop a Purple Loosestrife Biocontrol Program Overview and Instruction manual to help guide the program	April 30, 2024
Develop purple loosestrife beetle release forms, beetle presence/ activity forms, and biocontrol kit informational forms	April 30, 2024
Collect and organize 50 Purple loosestrife beetle rearing kits to citizen science volunteers	April 30, 2024

Activity 3: Public Outreach and Recruitment for Citizen Scientists to Rear Biocontrol Beetles

Activity Budget: $59,000

Activity Description:

The Wild Rivers Conservancy will reach out to friend's groups, land managers, master gardeners, and schools groups, as well as the general public to recruit volunteers for the program. Participants involved in the program will be provided with all resources necessary to rear purple loosestrife biocontrol beetles (netting, aspirators, Galerucella beetles, structural frames) as well as a timeline and schedule so they know what to expect. This process will empower citizen scientists to raise, rear, and release these biocontrol beetles in areas of heavy purple loosestrife populations and be rewarded by helping to restore healthy native habitats. These efforts will result in increased AIS awareness, detection, prevention, and control by citizen scientists in priority areas across the watershed.

Activity Milestones:

Description	Approximate Completion Date
Recruit 50 volunteers to take part in the purple loosestrife biocontrol citizen science program	June 30, 2024
Host five trainings educating participants about AIS, purple loosestrife, and the biocontrol beetle rearing program	June 30, 2025
Distribute 5 plants per volunteer, 10 beetles per plant, resulting in 125,000 beetles released	June 30, 2025
Hold biocontrol release dates two times a year to release beetles on priority management areas	June 30, 2025
Develop, print, and provide outreach and education materials to support the program	June 30, 2025

Project Partners and Collaborators

Name	Organization	Role	Receiving Funds
Monika Chandler	Minnesota Department of Agriculture	Noxious and Invasive Weeds and Biological Control Programs	No
Keegan Lund	Minnesota Department of Natural Resources	Aquatic Biologist	No
Susanna Wilson-Witkowski	Chisago County Environmental Services	Water Resource Manager	No
Caleb Anderson	Pine County Planning, Zoning, and Solid Waste Dept.	Land & Resources Manager	No
Matt Downing	Washington Conservation District	AIS Program Coordinator	No
Caitlin Nagorka	St. Croix National Scenic Riverway NPS	Natural Resources Program Manager	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.
Partner collaboration and communication will be essential when disseminating information pertaining to the Purple Loosestrife Biocontrol Citizen Science Program. When priority areas throughout the Minnesota side of the St. Croix River watershed are surveyed, all data will be recorded and updated in EDDMapS and maps will be provided to MN DNR, MDA, and other county partners following the ENTRF acknowledgment guidelines. The Wild Rivers Conservancy will also collaborate with the MN DNR, MDA, and watershed partners in creating a Purple loosestrife biocontrol overview and instruction manual to help guide the program and provide protocols and standard procedures for the project following the ENTRF acknowledgement guidelines. Trainings and workshops will be held to train and educate MN natural resource professionals and volunteers to encourage participation in this biocontrol program. A final report, maps, volunteer engagement report, biocontrol beetle area and number distribution will be distributed to project partners such as the MN DNR, MDA, watershed partners and LCCMR staff. All development of resources pertaining to this project will follow ENTRF acknowledgement guidelines and be made public and shared with partners and can serve as a structure for future state citizen science programming.

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?
In the long term, this purple loosestrife biocontrol citizen science program will protect, improve, and restore native ecosystems in the St. Croix River watershed. Developing a citizen science program will empower groups, landowners,

and participants to take action in the long-term protection of public and private lands. These efforts will all either integrate into existing funded programs, or aim to establish community commitment to ensure longevity beyond the funding period. This project has potential to be highly visible to the public, and if successful, could be duplicated in other Minnesota landscapes.

Other ENRTF Appropriations Awarded in the Last Six Years

Name	Appropriation	Amount Awarded
Shoreland Protection for the Lower St. Croix River	M.L. 2015, Chp. 76, Sec. 2, Subd. 08j	$190,000

Budget Summary

Category / Name	Subcategory or Type	Description	Purpose	Gen. Ineligible	% Benefits	# FTE	Classified Staff?	$ Amount	$ Amount Spent	$ Amount Remaining
Personnel										
Invasive Species Technician		Project implementation and volunteer coordination			25%	2.25		$110,000	-	-
Invasive Species Coordinator		Project oversight and administration			25%	0.75		$47,000	-	-
							Sub Total	**$157,000**	**$106,099**	**$50,901**
Contracts and Services										
							Sub Total	**-**	**-**	**-**
Equipment, Tools, and Supplies										
	Tools and Supplies	50 purple loosestrife biocontrol beetle rearing kits will provided to participating citizen scientists. Each kit includes netting, pots, cage framework, aspirator and a kiddie pool to hold the plants that serve host to the beetles until they get released.	These kits will be distributed to each volunteer to raise and grow the purple loosestrife, then later rear the Galerucella biocontrol beetle to be released on priority management areas within the St. Croix River watershed.					$8,000	$7,971	$29
							Sub Total	**$8,000**	**$7,971**	**$29**
Capital Expenditures										
							Sub Total	**-**	**-**	**-**
Acquisitions and Stewardship										
							Sub Total	**-**	**-**	**-**
Travel In Minnesota										

	Miles/ Meals/ Lodging	Purple Loosestrife survey's at high priority management areas determined by the Minnesota Department of Agriculture. Survey's will take place at priority areas such as Banning State Park, St. Croix State Park, St. Croix State Forest, Rice Lake Wildlife Refuge, Afton St. Park, Lake Elmo Regional Park, Rice Creek Chain of Lakes Preserve, William O'Brien State Park, Kettle River, Snake River, Sunrise River and the St. Croix River resulting in approximately 8,923 miles at $0.56/mile or current federal rate.	These priority management areas in the Minnesota St. Croix River watershed need to be surveyed for purple loosestrife to update EDDMapS records and data to then asses populations and start long-term management strategies using the purple loosestrife biocontrol beetle.					$5,000	$2,219	$2,781
							Sub Total	**$5,000**	**$2,219**	**$2,781**
Travel Outside Minnesota										
							Sub Total	**-**	**-**	**-**
Printing and Publication										
	Printing	A purple loosestrife biocontrol program overview and instruction manual will be made to help guide the program, this will include protocols, standard of procedure and purple loosestrife biocontrol beetle 'how-to' rearing instructions. 100 manuals will be printed and made available to volunteers, partners and those interested.	A standard of procedures/ instructional manual needs to be developed and made available to citizen scientist volunteers to guide them in their biocontrol beetle rearing. MN DNR, MAISRC and UMN-Extension have stated that there is no current available document to lead a purple loosestrife biocontrol program so once this is developed and printed for volunteers, it can be used and duplicated in other Minnesota landscapes.					$1,500	$1,500	-
	Printing	Public outreach and education materials about the purple loosestrife biocontrol program will be printed and distributed	These different public outreach and education materials will aid in program					$2,500	$2,408	$92

		participants, partners and the general public. 2,000 resource materials will be developed, printed and provided in different outreach forms such as brochures, flyers, and rack cards.	awareness and general education of both purple loosestrife, the biocontrol Galerucella beetle and the purple loosestrife biocontrol citizen science opportunity to rear and release purple loosestrife beetles to help prevent and reduce the spread of loosestrife and protect and restore native aquatic habitats.							
							Sub Total	**$4,000**	**$3,908**	**$92**
Other Expenses										
							Sub Total	**-**	**-**	**-**
							Grand Total	**$174,000**	**$120,197**	**$53,803**

Classified Staff or Generally Ineligible Expenses

Category/Name	Subcategory or Type	Description	Justification Ineligible Expense or Classified Staff Request

Non ENRTF Funds

Category	Specific Source	Use	Status	$ Amount	$ Amount Spent	$ Amount Remaining
State						
			State Sub Total	**-**	**-**	**-**
Non-State						
Cash	Minnesota County contributions First year secured, additional years funding pending	These funds will aid in purple loosestrife monitoring and management throughout participating counties in the Minnesota St. Croix River watershed.	Secured	$10,000	$10,000	-
Cash	National Park Service	These funds aid in the monitoring and management of purple loosestrife along the St. Croix River. Future support and funding will also aid in the purple loosestrife biocontrol program along the St. Croix National Scenic Riverway land.	Secured	$15,000	$15,000	-
In-Kind	Volunteer Match	This funding will be from volunteers helping with digging the purple loosestrife root stock in the spring to then raise the Galerucella biocontrol beetle. This will also support rearing cage maintenance and time put forth to rear and release the beetles at projected priority sites.	Secured	$10,000	$10,000	-
			Non State Sub Total	**$35,000**	**$35,000**	**-**
			Funds Total	**$35,000**	**$35,000**	**-**

Attachments

Required Attachments

Visual Component

File: 8ce7617b-ae1.pdf

Alternate Text for Visual Component

This map shows the Minnesota portion of the St. Croix River watershed that encompasses Carlton, Aitkin, Kenabac, Isanti, Mille Lacs, Pine, Chisago, Washington, Anoka, and Ramsey Counties. Minnesota Department of Agriculture provided their purple loosestrife management priority map which shows different priority areas of the watershed....

Financial Capacity

File: 08beecad-f9c.pdf

Board Resolution or Letter

Title	File
SCRA Board Resolution for PLB Citizen Science Biocontrol Program LCCMR Grant	eab02ea8-282.pdf

Supplemental Attachments

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

Title	File
Pine County Letter of Support	82a442b7-df3.pdf
Background Check Certification Form	0ddde242-d7c.pdf
2024 Purple Loosestrife Biocontrol Project Flier	db04acb5-506.pdf
2024 Purple Loosestrife Biocontrol Project Brochure	acd182ab-e9c.pdf
2024 Updated purple loosestrife biocontrol program overview and instruction manual	e0dffa16-02f.pdf
2024 Prohibited Invasive Species Permit	499ab875-a20.pdf
Final Monitoring Report	a3a2160e-1f4.pdf
Biocontrol Beetle Release Form	00928de1-ff6.pdf
Biocontrol Instruction Manual	4e5455f2-e7e.pdf
Galerucella Beetle Release Monitoring Form	95023af5-cf7.pdf
Biocontrol Pocket Guide	ca6f5c58-b65.pdf
Sticker Sheet Template	45f1a82b-6b3.pdf
Beetle FAQS and Lifecycle Postcard	543e3cee-c99.pdf

Media Links

Title	Link
Purple Loosestrife Biocontrol Project Website	https://wildriversconservancy.org/get-involved/biocontrolproject/

Difference between Proposal and Work Plan

Describe changes from Proposal to Work Plan Stage

Organization updates were made due to a name change from St. Croix River Association to Wild Rivers Conservancy that happened in 2021 as well as an address update due to a change in office locations. Katie Sickmann's title was changed from Invasive Species Coordinator to Natural Resources Coordinator. Project Collaborators and partners were added to the work plan as well as adding a milestone in Activity 3 to address development of resources, printing, etc of Purple loosestrife materials.

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

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

N/A

Work Plan Amendments

Amendment ID	Request Type	Changes made on the following pages	Explanation & justification for Amendment Request (word limit 75)	Date Submitted	Approved	Date of LCCMR Action
1	Project Manager	Previous Manager: Katie Sickmann (ksickmann@wildriversconservancy.org) New Manager: Marc White (mwhite@wildriversconservancy.org)	Marc White has replaced Katie Sickmann at Wild Rivers Conservancy.	May 10, 2024	Yes	May 10, 2024

Status Update Reporting

Final Status Update August 14, 2025

Date Submitted: August 14, 2025

Date Approved: November 14, 2025

Overall Update
Outcomes of the Purple Loosestrife Biocontrol Citizen Science Program include purple loosestrife population monitoring along 155 miles of the St. Croix River, 60 miles of the Kettle River, 39.8 miles of the Snake River, and 18.5 miles of the Kettle River. Purple loosestrife population monitoring was also completed at 4 state parks (Banning State Park, William O'Brien State Park, St. Croix State Park, and Afton State Park), 2 state forests (St. Croix State Forest and Chengwatana State Forest), 2 wildlife refuges (Carlos Avery Wildlife Management Area and Bean Dam Wildlife Management Area), and 4 regional parks (Rice Creek Chain Regional Park, Lake Elmo Regional Park Preserve, Martin-Island Linwood Lakes Regional Park, and Ki-Chi-Saga County Park). A final monitoring report was produced that includes all the purple loosestrife populations observed with corresponding EDDMapS report numbers. Five volunteer training sessions were held and 58 volunteers reared and released over 13,403 Galerucella beetles at high priority purple loosestrife population sites in Minnesota's portion of the St. Croix River watershed. Training materials produced include a purple loosestrife biocontrol program overview and instruction manual, beetle release forms, beetle presence/activity forms, and a biocontrol pocket guide.

Activity 1
In 2025, Conservancy staff monitored 18.5 miles of the Sunrise River and 14.3 miles of the Snake River for purple loosestrife. This work brought the three year total for St. Croix River main feeder stream monitoring to 118.3 miles This total is short of the project goal of monitoring 140 miles of main feeder streams. This shortfall is largely due to unsafe weather and river conditions that prevented our teams from safely accessing and navigating challenging tributary segments. In 2025, teams completed purple loosestrife monitoring at Matthew Loury State Trail in Chengwatana State Forest, St. Croix State Forest, Carlos Avery State Wildlife Management Area, Bean Dam Wildlife Management Area/Snake River State Forest, Martin-Island-Linwood Lakes Regional Park, and Ki-Chi-Saga County Park. For each park monitored, trails located near water or wetland habitat were prioritized for purple loosestrife monitoring. GPS coordinates were collected and photos were taken of all purple loosestrife populations observed. The GPS coordinates and corresponding EDDMapS report numbers for all purple loosestrife populations observed are included in the attached purple loosestrife monitoring report.
(This activity marked as complete as of this status update)

Activity 2
The purple loosestrife biocontrol project manual was updated in 2025 to be more visually appealing. A purple loosestrife biocontrol pocket guide was also produced to provide a quick overview of biocontrol in invasive species management. Finally, a sticker sheet and accompanying postcard were developed as an educational activity for students to learn about the project. The concept is to have students remove the stickers from the sticker sheet and place them on the corresponding circles in the beetle life cycle illustration on the postcard.

Since our last update, Conservancy staff coordinated with the city of Oak Park Heights, MN to obtain permission to dig 100 purple loosestrife plants at Valley View Park for our beetle raising kits. We also worked with the Minnesota Department of Natural Resources to obtain a prohibited invasive species permit to legally collect, possess, and transport the purple loosestrife plants for use in our biocontrol efforts. We partnered with Chisago County and Washington County to host two beetle release days for our volunteers, with one beetle release day being held at Lake McKusick in

Stillwater, MN and the second being held at the North Center Lake boat launch in Center City, MN.
(This activity marked as complete as of this status update)

Activity 3
In 2025, a total of 18 volunteers were recruited to raise and release Galerucella beetles on high priority populations of purple loosestrife in the St. Croix River watershed.
We held one volunteer training in May 2025 at the Washington County Heritage Center, located in Oak Park Heights, MN. At these trainings, volunteers learned about biological control of purple loosestrife and how to set up their beetle rearing kits. Each volunteer also received their kit at these training sessions, and they received their 10 beetles per plant a few weeks after setting up their kits.

In July 2025, we held two biocontrol release dates to release the beetles, with one located at Lake McKusick in Stillwater, MN on July 1st and one located at North Center Lake boat launch in Center City, MN on July 8th. Volunteers who were unable to make it to these events were able to drop their beetles off ahead of time for release by staff. In total, volunteers released 4,500 beetles in 2025. Staff time to organize and host these release events was supported by Chisago County and Pine County funding, since these events were held after the LCCMR grant period for the project.
(This activity marked as complete as of this status update)

Dissemination
All resources that have been created to support this project, including the Purple Loosestrife Biocontrol Citizen Science Program webpage, the purple loosestrife program overview and instructional manual, the project flier and brochure, the purple loosestrife biocontrol pocket guide, the sticker sheet/postcard, and all the volunteer forms have followed the ENTRF acknowledgement guidelines and have been made public and have received partner approval. MN DNR, MDA, UMN-Extension, Pine County, Chisago County, Washington County, Washington Conservation District, Comfort Lake-Forest Lake Watershed District and Big Carnelian Marine Watershed District have all been made aware of this program and have assisted in the recruitment of volunteers and have expressed support. Additionally, the final purple loosestrife monitoring report is available to the public and partners, and all purple loosestrife populations that were discovered over the course of the project have been uploaded and documented in EDDMapS.

Status Update Reporting

Status Update March 1, 2025

Date Submitted: March 18, 2025

Date Approved: May 28, 2025

Overall Update
To date, the Conservancy has used the LCCMR funds to hire a full-time invasive species coordinator to lead this project. In 2024, we trained and coordinated the activities of 15 volunteers to prepare beetle raising kits. This included tasks such as supply inventory, kit making, net sewing, purple loosestrife digging, and beetle collecting. We also worked to update our promotional materials for the project, including the website, brochure, flier, and instruction manual. In summer 2024, we recruited 20 volunteer beetle raisers, who raised and released 7,000 Galerucella beetles, larvae and eggs into locations on the MN side of the St. Croix River watershed to combat purple loosestrife. And, to better understand where purple loosestrife is throughout the St. Croix River watershed, we also continued monitoring for purple loosestrife via kayak and on foot.

Activity 1
Minnesota St. Croix River Watershed Purple Loosestrife Survey: During the 2024 survey season, 17.1 river miles were surveyed for purple loosestrife. 23 new populations of purple loosestrife were documented for future management efforts. 2024 survey efforts were expanded to include Afton State Park, St. Croix State Park, Lake Elmo Regional Park Preserve and Rice Creek Chain Regional Park. 5.3 St. Croix River miles remain to be monitored for purple loosestrife in 2025. Rapids and high waters have made these short stretches inaccessible in previous monitoring attempts.

Activity 2
Purple Loosestrife Biocontrol Citizen Science Framework Development: In 2024, the purple loosestrife biocontrol program overview and instruction manual was updated, as well as the purple loosestrife beetle release forms, beetle presence/activity forms, and biocontrol kit informational forms. In 2024 Conservancy staff worked to update promotional materials for the project, including the website, brochure, flier, and instruction manual. A full report of 2024 purple loosestrife monitoring data along with maps are currently being created and all population data will be uploaded to EDDMapS for verification.

Activity 3
Public Outreach and Recruitment for Citizen Scientists to Rear Biocontrol Beetles: In 2024, 20 volunteers were recruited and trained to raise and release Galerucella beetles as a biocontrol for purple loosestrife. Purple loosestrife biocontrol volunteers raised and released 7,048 beetles in high priority purple loosestrife management areas within the St. Croix Watershed in Minnesota. Volunteers contributed 208 hours to the purple loosestrife biocontrol project in 2024.

Dissemination
All resources that have been created to support this project such as the Purple Loosestrife Biocontrol Citizen Science Program webpage, the purple loosestrife program overview and instructional manual, the project flier and brochure to help with volunteer recruitment and all the volunteer forms have followed the ENTRF acknowledgement guidelines and have been made public and have received partner approval. MN DNR, MDA, UMN-Extension, Pine County, Chisago County, Washington County, Washington Conservation District, Comfort Lake-Forest Lake Watershed District and Big Carnelian Marine Watershed District have all been made aware of this program and have assisted in the recruitment of volunteers and have expressed support. Once monitoring efforts have been completed, a full report will be available to the public and partners along with all populations being uploaded and documented in EDDMapS.

Status Update Reporting

Status Update September 1, 2024

Date Submitted: August 30, 2024

Date Approved: January 6, 2025

Overall Update

To date, the Conservancy has used the LCCMR funds to hire a full-time invasive species coordinator to lead this project. In spring 2024, we worked with 15 volunteers to prepare beetle raising kits for this year's group of beetle raisers. This included tasks such as supply inventory, kit making, net sewing, purple loosestrife digging, and beetle collecting. We also worked to update our promotional materials for the project, including the website, brochure, flier, and instruction manual. In summer 2024, we recruited 20 volunteer beetle raisers, who raised and released 7,000 Galerucella beetles, larvae and eggs into locations on the MN side of the St. Croix River watershed to combat purple loosestrife. And, to better understand where purple loosestrife is throughout the St. Croix River watershed, we also continued monitoring for purple loosestrife via kayak and on foot.

Activity 1

In summer 2024, an additional 17.1 miles of the St. Croix River were monitored for purple loosestrife. This only leaves 2 small stretches of the St. Croix river left to monitor, which total 5.3 miles.
In 2023, Banning State Park and William O'Brien State park were monitored on foot for purple loosestrife. Parks that were monitored on foot for purple loosestrife in 2024 included St. Croix State Park, Afton State Park, Rice Creek Regional Park, and Lake Elmo Regional Park Preserve.
A full report of 2024 purple loosestrife monitoring data along with maps are currently being created and all population data will be uploaded to EDDMapS for verification.

Activity 2

In spring 2024, the purple loosestrife biocontrol program overview and instruction manual was updated, as well as the purple loosestrife beetle release forms, beetle presence/activity forms, and biocontrol kit informational forms. These materials were provided to the 20 volunteers who raised beetles in 2024 to guide them throughout the project. These materials were also uploaded to the purple loosestrife biocontrol program webpage on the Conservancy's website, which can be found in the attachments in Tab 7.
We worked with the city of Oak Park Heights, MN to obtain permission to dig 100 purple loosestrife plants for our beetle raising kits at Valley View Park. We also worked with the Minnesota Department of Natural Resources to obtain a prohibited invasive species permit to legally collect, possess, and transport the purple loosestrife plants for use in our biocontrol efforts (found in Tab 7). And, we worked with the city of Stillwater, MN to host a group beetle release at Lake McKusick, where we released 5,314 beetles.

Activity 3

In spring 2024, the project website was updated, as well as the project's informational flier. A new informational brochure was developed and printed to disperse to partners and to interested volunteers (found in Tab 7). These materials were also used at events throughout the summer to promote the program and recruit volunteers for next year.
In 2024, a total of 24 volunteers were accepted to raise beetles from a pool of 45 applicants. We held two volunteer trainings held in May 2024, one at the North Branch Public Library and one at the Belwin Conservancy in Afton, MN. At these trainings, volunteers learned about biological control of purple loosestrife and how to set up their beetle rearing kits. Each volunteer also received their kit at these training sessions, and they received their 10 beetles per plant a few weeks after setting up their kits.
In June 2024, we held two biocontrol release dates to release the beetles, with one located at Colby Lake in Shafer, MN

and one located at Lake McKusick in Stillwater, MN. Volunteers who were unable to make it to these events were able to drop their beetles off ahead of time for release by staff.

Dissemination

All resources that have been created to support this project such as the Purple Loosestrife Biocontrol Citizen Science Program webpage, the purple loosestrife program overview and instructional manual, the project flier and brochure to help with volunteer recruitment and all the volunteer forms have followed the ENTRF acknowledgement guidelines and have been made public and have received partner approval. MN DNR, MDA, UMN-Extension, Pine County, Chisago County, Washington County, Washington Conservation District, Comfort Lake-Forest Lake Watershed District and Big Carnelian Marine Watershed District have all been made aware of this program and have assisted in the recruitment of volunteers and have expressed support. Once monitoring efforts have been completed, a full report will be available to the public and partners along with all populations being uploaded and documented in EDDMapS.

Status Update Reporting

Status Update March 1, 2024

Date Submitted: February 28, 2024

Date Approved: April 26, 2024

Overall Update

To date, the Conservancy has used the LCCMR funds to hire a full-time invasive species coordinator to lead this project. In 2023, purple loosestrife monitoring continued throughout the watershed to develop a better idea of areas where large populations of purple loosestrife are present, and therefore where management priority is highest. Resources and materials were developed and distributed to a total of 30 volunteers, who raised and released 8,000 Galerucella beetles, larvae and eggs into locations on the MN side of the St. Croix River watershed to combat purple loosestrife. An abundance of effort this winter has been put towards updating the resources and materials for the 2024 beetle-raising season, including an informational flier, brochure, training manual, and webpage. Efforts are currently underway to recruit volunteers for beetle raising in 2024, and beetle-raising materials are being inventoried and ordered to provide to 2024 volunteers.

Activity 1

In 2023, 86.7 miles of the St. Croix River were monitored for Purple loosestrife populations. Banning State Park, William O'Brien State Park and portions of St. Croix State Park and Forest were also surveyed for Purple loosestrife populations in 2023. A full report of monitoring data along with maps are being created and all population data will be uploaded to EDDMapS for verification. Planning has begun for 2024 purple loosestrife monitoring, including the remaining sections of the St. Croix River and main feeder tributaries, as well as the the remaining prioritized state parks, state forests, regional parks, and wildlife refuges.

Activity 2

In 2023, a purple loosestrife biocontrol program overview and instruction manual was developed to disperse to the 30 volunteers who participated in the project. This winter, the volunteer training manual was updated to add clarification and to add additional information and photos. This updated manual was also uploaded to the purple loosestrife biocontrol program webpage on the Conservancy's website, which can be found in the attachments in Tab 7. Purple loosestrife beetle release forms, beetle presence/activity forms, and biocontrol kit informational forms that were developed in 2023 were reviewed this winter in order to add necessary changes/updates. In preparation for this year's beetle raising, volunteers came in on February 23rd and took inventory of the kit materials from 2023 to determine what materials need to be ordered for the kits for 2024 volunteers. We are currently working with the MN DNR to acquire a permit to dig, transfer, transport and raise purple loosestrife in MN.

Activity 3

In 2023, a flier was developed with information on the project and on how to volunteer. This winter, the informational flier was updated and a new informational brochure was developed and printed to disperse to MN partners and to interested volunteers to increase engagement in the project. These new materials can be found in the attachments on Tab 7. The purple loosestrife biocontrol project website that was developed in 2023 was also updated this winter to reflect the successes of the project in 2023 and to promote volunteer recruitment in 2024. Volunteer recruitment opened on Sunday, February 18th and will remain open until Monday, March 18th. Information on the project and the link to apply to be a 2024 volunteer was sent to past volunteers, federal partners, MN DNR, MDA, and local counties and watershed districts to spread the word about the project. Dates for kit assembly, purple loosestrife rootstock digging, and volunteer training days have been established as well.

Dissemination

All resources that have been created to support this project such as the Purple Loosestrife Biocontrol Citizen Science Program webpage, the purple loosestrife program overview and instructional manual, the project flier and brochure to help with volunteer recruitment and all the volunteer forms have followed the ENTRF acknowledgement guidelines and have been made public and have received partner approval. MN DNR, MDA, UMN-Extension, Pine County, Chisago County, Washington County, Washington Conservation District, Comfort Lake-Forest Lake Watershed District and Big Carnelian Marine Watershed District have all been made aware of this program and have assisted in the recruitment of volunteers and have expressed support. Once monitoring efforts have been completed, a full report will be available to the public and partners along with all populations being uploaded and documented in EDDMapS.

Status Update Reporting

Status Update September 1, 2023

Date Submitted: September 1, 2023

Date Approved: September 27, 2023

Overall Update

To date, the Conservancy has utilized LCCMR funds to hire a now full time Invasive Species Coordinator to spearhead efforts for this project. Monitoring efforts have continued to better gauge infestation throughout the watershed, along with extensive mapping efforts. By monitoring priority areas throughout the watershed, we can better assess biocontrol beetle releases to maximize management efforts. In 2023, resources materials were developed and finalized, volunteers recruited and trained to raise and release beetles on the landscape. Steps have been taken in reducing the spread and impact of purple loosestrife, leading to protected natural areas throughout wetlands, streams, lake and along river shores. Resources and materials have also been created to assist and help guide the Purple Loosestrife Biocontrol Citizen Science Program, these materials have been made public on the Purple Loosestrife Biocontrol webpage on the Wild Rivers Conservancy's website and can serve as guiding resources and structure for organizations that would like to mimic this program in the future.

Activity 1

86.7 miles of the St. Croix River were monitored in 2023 for Purple loosestrife populations. Banning State Park, William O'Brien State Park and portions of St. Croix State Park and Forest were surveyed for Purple loosestrife populations in 2023 as well. A full report of monitoring data along with maps are being created and all population data will be uploaded to EDDMapS for verification. All populations were also relayed to relevant federal, state or county contacts for their awareness. Monitoring efforts throughout prioritized state parks, state forests, wildlife refuges, regional parks, main feeder tributaries and the St. Croix River will continue in 2024.

Activity 2

A Purple Loosestrife Biocontrol Program overview and instructional manual was created and was dispersed to volunteers. The manual and other resources will help guide the program and give insight to program expectations, why this work is important and how volunteers can play a vital role in preventing and managing further spread of purple loosestrife. Purple loosestrife beetle release forms, beetle presence/absence forms, and biocontrol kit informational forms were also created and dispersed to volunteers. Supplies for 30 kits were purchased for the biocontrol kits that each volunteer will receive in order to raise purple loosestrife plants and Galerucella biocontrol beetles throughout the summer. Coordination and communication between Conservancy staff, federal partners, MN DNR, MDA and local counties and watershed districts took place to get approval of digging sites and release site. The Conservancy staff has obtained a permit from MN DNR to dig, transfer, transport and raise purple loosestrife in MN as well as getting approval from MN DNR for upcoming biocontrol beetle releases.

Activity 3

30 volunteers throughout the MN side of the St. Croix River watershed signed up for the Purple Loosestrife Biocontrol Citizen Science program in 2023. Two workshop trainings were held on May 13th and May 20th, each volunteer that signed up to partake in the program was required to join at least one training to go over the overview of the project, expectations and receive their kits. Each volunteer received at least 5 purple loosestrife plants to raise the biocontrol beetles on throughout the summer at these trainings. Additionally, a Purple Loosestrife Biocontrol Citizen Science Program webpage was created on the Wild Rivers Conservancy website to help with volunteer recruitment, to serve as a resource for current volunteers and to provide an overview of the program and why it is so important. Three biocontrol beetle release days were held on July 20th, July 25th, and August 3rd at Lindstrom City Hall, Lake McKusick and Oakdale Nature Preserve. Beetles were also released at Colby Lake Marsh in Taylors Falls. In total, approximately 8,000 beetles,

larvae and eggs were released. A Purple loosestrife volunteer appreciation event was held on August 24th to celebrate the successes of the year and gain valuable feedback.

Dissemination

All resources that have been created to support this project such as the Purple Loosestrife Biocontrol Citizen Science Program webpage, the purple loosestrife program overview and instructional manual, the project flyer to help with volunteer recruitment and all the volunteer forms have followed the ENTRF acknowledgement guidelines and have been made public and have received partner approval. MN DNR, MDA, UMN-Extension, Pine County, Chisago County, Washington County, Washington Conservation District, Comfort Lake-Forest Lake Watershed District and Big Carnelian Marine Watershed District have all been made aware of this program and have assisted in the recruitment of volunteers and have expressed support. There has been a lot of coordination and communication thus far to make this project a reality and there has been a lot of positive feedback and momentum expressed from partners about this program. Once monitoring efforts have been completed, a full report will be available to the public and partners along with all populations being uploaded and documented in EDDMapS.

Status Update Reporting

Status Update March 1, 2023

Date Submitted: March 1, 2023

Date Approved: April 14, 2023

Overall Update

Since funding became available, the Conservancy has hired a full-time Invasive Species Technician to help lead efforts for this project. Monitoring of this highly invasive plant started in 2022 to better gauge the invasion throughout the watershed. By monitoring priority areas throughout the watershed, we can better assess biocontrol beetle releases to maximize management efforts. When beetle releases start with volunteer assistance in 2023, steps will be taken in reducing the spread and impact of purple loosestrife, leading to protected natural areas throughout wetlands, streams, lake and along river shores. Resources and materials have also been created to assist and help guide the Purple Loosestrife Biocontrol Citizen Science Program, these materials will be made public and can serve as guiding resources and structure for organizations that would like to mimic this program in the future.

Activity 1

57 miles of the St. Croix River was monitored in 2022 for Purple Loosestrife populations. 85.5 miles between both the Snake River and Kettle River in Pine County, main tributaries to the St. Croix, were also monitored for purple loosestrife populations, reports for all monitoring were created. Data points from all populations will be submitted to EDDMapS upon completion of all monitoring efforts. All populations were also relayed to relevant federal, state or county contacts for their awareness. Monitoring efforts throughout prioritized state parks, state forests, wildlife refuges, regional parks, main feeder tributaries and the St. Croix River will continue in 2023.

Activity 2

A Purple Loosestrife Biocontrol Program overview and instructional manual was created and is ready for dispersal to volunteers. These resources will help guide the program and give insight to program expectations, why this work is important and how volunteers can play a vital role in preventing and managing further spread of purple loosestrife. Purple loosestrife beetle release forms, beetle presence/absence forms, and biocontrol kit informational forms were also created and ready for dispersal upon volunteer recruitment. Supplies for 50 kits are in the process of being purchased for the biocontrol kits that each volunteer will receive in order to raise purple loosestrife plants and Galerucella biocontrol beetles throughout the summer. Coordination and communication between Conservancy staff, federal partners, MN DNR, MDA and local counties and watershed districts have taken place to get approval of digging sites and release site. The Conservancy staff has obtained a permit from MN DNR to dig, transfer, transport and raise purple loosestrife in MN as well as getting approval from MN DNR for upcoming biocontrol beetle releases.

Activity 3

Thus far, 11 volunteers throughout the MN side of the St. Croix River watershed have signed up for the Purple Loosestrife Biocontrol Citizen Science program in 2023. Applications for 2023 will close March 17th. Two workshops have been schedule for May 13th and May 20th, each volunteer that signs up to partake in the program is required to join at least one training to go over the overview of the project, expectations and receive their kits. Each volunteer will receive at least 5 purple loosestrife plants to raise the biocontrol beetles on throughout the summer at these trainings. Additionally, a Purple Loosestrife Biocontrol Citizen Science Program webpage was created on the Wild Rivers Conservancy website to help with volunteer recruitment, to serve as a resource for current volunteers and to provide an overview of the program and why it is so important. You can also apply directly on the website to become a volunteer! A project flyer was also created to send to watershed partners to help in the recruiting process, this flyer can also be found on the program webpage.

Dissemination

All resources that have been created to support this project such as the Purple Loosestrife Biocontrol Citizen Science Program webpage, the purple loosestrife program overview and instructional manual, the project flyer to help with volunteer recruitment and all the volunteer forms have followed the ENTRF acknowledgement guidelines and have been made public and have received partner approval. MN DNR, MDA, UMN-Extension, Pine County, Chisago County, Washington County, Washington Conservation District, Comfort Lake-Forest Lake Watershed District and Big Carnelian Marine Watershed District have all been made aware of this program and have assisted in the recruitment of volunteers and have expressed support. There has been a lot of coordination and communication thus far to make this project a reality and there has been a lot of positive feedback and momentum expressed from partners about this program. Once monitoring efforts have been completed, a full report will be available to the public and partners along with all populations being uploaded and documented in EDDMapS.