



Environment and Natural Resources Trust Fund

M.L. 2024 Work Plan and Reporting

General Information

Date: June 25, 2024

ID Number: 2024-089

Staff Lead: Mike Campana

Project Title: Minnesota Invasive Terrestrial Plants and Pests Center - Phase 7

Project Budget: \$7,000,000

Project Manager Information

Name: Heather Koop

Organization: U of MN - MITPPC

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Project Reporting

Reporting Status: Update Due

Date of Last Action: June 25, 2024

Next Due Date: August 1, 2024

Reporting Schedule: February 1 / August 1 of each year.

Project Completion: June 30, 2030

Legal Information

Legal Citation: M.L. 2024, Chp. 83, Sec. 2, Subd. 06a

Appropriation Language: \$7,000,000 the second year is from the trust fund to the Board of Regents of the University of Minnesota, Minnesota Invasive Terrestrial Plants and Pests Center, for high-priority research projects to better manage invasive plants, pathogens, and pests on Minnesota's natural and agricultural lands. This appropriation is subject to Minnesota Statutes, section 116P.10, and is available until June 30, 2030, by which time the project must be completed and final products delivered.

Appropriation End Date: June 30, 2030

Narrative

Project Summary: The Minnesota Invasive Terrestrial Plants and Pests Center (MITPPC) requests \$7 million to fund up to 20 new, high-priority applied TIS research projects to improve Minnesota's natural and agricultural resources.

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

Terrestrial invasive species (TIS) affect nearly every Minnesotan and terrestrial landscape. Invasive weeds, pathogens, insects, and arthropods threaten to lower the biodiversity and aesthetic value of prairies and wetlands, increase damage to urban and rural forests, and increase economic damage to grain and fruit producers. In total, terrestrial invasive plants and pests cost Minnesotans at least \$3 billion annually. They threaten our food systems, wildlife, recreation spaces, food security, economy and occasionally our health.

For example: Dutch elm disease, emerald ash borer, buckthorn, oak wilt, mountain pine beetle and other pests have dramatically changed the way American forests look, feel, and function. Terrestrial invasive species threaten the diversity of native plants, pollinators and wildlife across all ecosystems. Controlling them often carries both an environmental and economic cost due to the use of pesticides and the investment of human labor. New invasive threats will continue to emerge as climate, global trade, land use and human behaviors shift over time.

MITPPC is the go-to entity for transformative solutions to the greatest TIS threats to the state. MITPPC is a formal partner in Minnesota's statewide invasive species management plan (see: mninvasives.org).

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.

Invasive plants, pests, and pathogens threaten Minnesota's prairies, wetlands, forests, and agricultural resources. Efficiently protecting Minnesota's lands requires new tools and techniques that can only be developed through applied research and implemented by engaged partners. The MITPPC relies on a dynamic, strategic prioritization process to identify the invasive species that pose the greatest threats to Minnesota's natural and agricultural resources and focuses investments on these high-rated threats. MITPPC manages a competitive grant program; each proposal is extensively vetted by internal and external reviewers with expertise in TIS research. Proposals are carefully considered and evaluated on a number of criteria, including urgency, extent of impact, contribution to the field, and innovation. The value-added benefits of the center approach extends to (i) leveraging previous/ongoing research efforts, (ii) facilitating new research team development, (iii) convening stakeholders on a terrestrial invasive species topics, particularly on issues that affect both the agricultural and natural resource sectors, and (iv) providing administrative and communications support. MITPPC works beyond traditional communication outlets so that diverse communities learn about, engage in, and benefit from research results. Interdisciplinary teams and partnerships with key stakeholders are an integral component of our research approach and assist with research result dissemination to wide

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?

MITPPC will fund up to 20 research sub-projects to protect and preserve the state's natural resources from some of the most threatening terrestrial invasive species. Research will provide techniques and technologies to prevent the arrival of invasive species that are not yet in Minnesota, to detect and respond quickly to new species arrivals, or to mitigate the effects of invasive species that are established in the state. Towards these ends, the Center will work on advancements pest risk assessment/mapping, environmental DNA, remote sensing, biological control, integrated pest management, among others. More detailed outcomes will be specified with sub-project approval.

Project Location

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

Statewide

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

Statewide

When will the work impact occur?

In the Future

Activities and Milestones

Activity 1: Accelerate research on high priority, terrestrial invasive species

Activity Budget: \$984,897

Activity Description:

MITPPC will complete Activity 1 through the coordinated work of Center staff. Our staff Researcher oversees the prioritization process that determines which terrestrial invasive species are eligible for research. The staff researcher annually makes public requests for 6-10 new species to be evaluated. In addition, the researcher annually consults local experts and peer-reviewed literature to update existing assessments. The Researcher also conducts ad hoc studies to improve aspects of the prioritization process. All of that information feeds into an updated, prioritized list of TIS to be released in 2026 and 2028. The Researcher communicates findings broadly.

The Director and Associate Director use the prioritization for engagements with University researchers and external partners. The engagements build awareness of untapped talents at the University and pressing needs among interested communities. The Director and Associate Director build multi-disciplinary research teams and the refine research ideas to align with MITPPC goals. They subject pre-proposals to peer review and oversee the pace of research. They communicate results.

The Communications Specialist supports the implementation of MITPPC's Communication Plan and Digital Content Strategy. This person curates digital materials that summarize ongoing research or results from previous work. Communications are directed towards internal (University) or external audiences.

Activity Milestones:

Description	Approximate Completion Date
Issue of annual RFP, research project application review, determination of projects	December 31, 2024
Prepare up to 10 sub-project webpages	February 28, 2025
Complete 6-10 species assessments, update existing assessments and distribute updated prioritization	December 31, 2025
Issue of annual RFP, research project application review, determination of projects	December 31, 2025
Prepare up to 10 new sub-project webpages	February 28, 2026
Ongoing implementation and management of communication strategies to maximize dissemination of research results	June 30, 2026
Complete 6-10 new species assessments for prioritization	December 31, 2026
Ongoing implementation and management of communication strategies to maximize dissemination of research results	June 30, 2027
Complete 6-10 species assessments, update existing assessments and distribute updated prioritization	December 31, 2027
Ongoing implementation and management of communication strategies to maximize dissemination of research results	June 30, 2028

Activity 2: Awarding Sub-projects

Activity Budget: \$6,015,103

Activity Description:

Research projects will focus on the prediction and prevention of threats that are not yet in Minnesota, the early detection and rapid response of threats that are newly arrived, and solutions to terrestrial invasive species that are well established in the state. Research must address one or more invasive species that pose the greatest threats to Minnesota's forests, prairies, wetlands, or agricultural resources, as identified by MITPPC's prioritization process. The prioritization is revisited and updated regularly.

Proposals will be solicited annually for the first three years of the appropriation. Applicants first submit a preproposal which is reviewed and scored by a panel of up to five researchers in Minnesota. Research teams with the highest scoring preproposals are invited to submit a full proposals which are reviewed by relevant national and international experts. Project selection is based on the outcome of the peer review. Each proposal recommended for funding will be added as its own activity to this work plan for LCCMR review and approval. Budget lines are listed as "to be awarded to sub-projects" and "awarded to sub-projects" in Professional and Technical Contracts.

Activity Milestones:

Description	Approximate Completion Date
Internal and external review of 2024 RFP proposals	September 30, 2024
Award subproject funding to 6-10 proposals from 2024 RFP, subprojects begin January 1	January 31, 2025
Issue 2025 RFP on high priority research needs	March 31, 2025
Internal and external review of 2025 RFP proposals	September 30, 2025
Award subproject funding to 6-10 proposals from 2025 RFP, subprojects begin on January 1	January 31, 2026

Project Partners and Collaborators

Name	Organization	Role	Receiving Funds
TBD	TBD	Each project is strongly encouraged to partner with an external partner. Current examples include the Minnesota Departments of Agriculture, Natural Resources, and Transportation, the US Forest Service, Minnesota Soybean Research and Promotion Council, Fond du Lac Band of Lake Superior Chippewa, and Friends of the Mississippi, among others.	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.

MITPPC relies on multiple avenues to disseminate research findings. MITPPC helps connect research teams with implementation partners who may actively engage in all phases of the the research effort, including the sharing of results. Research findings are often presented at informal meetings, symposia, and conferences, intended for lay and professional audiences. Final project results regularly appear in peer-reviewed publications to ensure research meets the highest professional standards. Research findings are further shared through media reports, MITPPC's website, social media, newsletters, and other outlets. MITPPC amplifies awareness of research findings beyond what individual research teams can accomplish. In all cases, MITPPC and inividual researchers acknowledges ENRTF per LCCMR guidelines.

Long-Term Implementation and Funding

Describe how the results will be implemented and how any ongoing effort will be funded. If not already addressed as part of the project, how will findings, results, and products developed be implemented after project completion? If additional work is needed, how will this work be funded?

Findings will be shared with agencies and citizen groups so that public information and decision making is based on the best available science as described in the dissemination section of the work plan. The long-term funding for the MITPPC is dependent upon the ENRTF and other state and federal sources. There is significant cost share provided by UMN through its contributions of physical space, finance, IT, HR, and communications support for the Center. The federal government contributes funding for the director's salary, as well as a significant amount of lab space for scientists.

Other ENRTF Appropriations Awarded in the Last Six Years

Name	Appropriation	Amount Awarded
Minnesota Invasive Terrestrial Plants and Pests Center	M.L. 2014, Chp. 312, Sec. 8	\$1,460,000
Minnesota Invasive Terrestrial Plants and Pests Center	M.L. 2015, Chp. 76, Sec. 2, Subd. 06a	\$5,000,000
Minnesota Invasive Terrestrial Plants and Pests Center - Phase III	M.L. 2016, Chp. 186, Sec. 2, Subd. 06a	\$3,750,000
Minnesota Invasive Terrestrial Plants and Pests Center - Phase 4	M.L. 2018, Chp. 214, Art. 4, Sec. 2, Subd. 06a	\$3,500,000
Minnesota Invasive Terrestrial Plants And Pests Center, Phase5	M.L. 2021, First Special Session, Chp. 6, Art. 5, Sec. 2, Subd. 06a	\$5,000,000
Minnesota Invasive Terrestrial Plants and Pests Center	M.L. 2022, , Chp. 94, Art. , Sec. 2, Subd. 06a	\$6,230,000

Budget Summary

Category / Name	Subcategory or Type	Description	Purpose	Gen. Ineligible	% Benefits	# FTE	Classified Staff?	\$ Amount	\$ Amount Spent	\$ Amount Remaining
Personnel										
Researcher		Provides technical and intellectual support for prioritization process. Prepares and updates species assessments. Conducts research to improve the prioritization process. Communicates findings.			27%	3		\$327,198	-	-
Associate director		Admin and program support for research projects			27%	3		\$425,667	-	-
Communications specialist		Communication support for research project's result dissemination			33%	2.25		\$232,032	-	-
							Sub Total	\$984,897	-	\$984,897
Contracts and Services										
To be awarded to sub-projects	Sub award	Budget reserve for awarding to sub-projects upon approval by LCCMR				0		\$6,015,103	-	\$6,015,103
Awarded to sub-projects	Sub award	This is the cumulative budget, spent, and balance for all sub-projects combined. Detailed budgets for subprojects will be managed and submitted in an Excel workbook via the attachments page under "Optional Attachments/ Support Letter or Other" with the file name as the date of submission (for example, YYYY-MM-DD Budget Update)				0		-	-	-
							Sub Total	\$6,015,103	-	\$6,015,103
Equipment, Tools, and Supplies										
							Sub Total	-	-	-
Capital Expenditures										

							Sub Total	-	-	-
Acquisitions and Stewardship										
							Sub Total	-	-	-
Travel In Minnesota										
							Sub Total	-	-	-
Travel Outside Minnesota										
							Sub Total	-	-	-
Printing and Publication										
							Sub Total	-	-	-
Other Expenses										
							Sub Total	-	-	-
							Grand Total	\$7,000,000	-	\$7,000,000

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	\$ Amount Spent	\$ Amount Remaining
State						
			State Sub Total	-	-	-
Non-State						
In-Kind	US Department of Agriculture, Forest Service	Salary for Director Venette	Secured	\$184,600	-	\$184,600
			Non State Sub Total	\$184,600	-	\$184,600
			Funds Total	\$184,600	-	\$184,600

Attachments

Required Attachments

Visual Component

File: [210b360e-d7e.pdf](#)

Alternate Text for Visual Component

The document describes the MITPPC and provides an overview of funded research projects....

Supplemental Attachments

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

Title	File
UMN Regents support letter for MITPPC proposal	dd5b77a0-3cf.pdf

Difference between Proposal and Work Plan

Describe changes from Proposal to Work Plan Stage

Text was modified to indicate that up to 20 projects could be funded through this appropriation. A description of dissemination activities was added.

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?

N/A

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

Yes

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

Yes

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

No

Does your project include original, hypothesis-driven research?

Yes

Does the organization have a fiscal agent for this project?

No

Does your project include the pre-design, design, construction, or renovation of a building, trail, campground, or other fixed capital asset costing \$10,000 or more or large-scale stream or wetland restoration?

No

Do you propose using an appropriation from the Environment and Natural Resources Trust Fund to conduct a project that provides children's services (as defined in Minnesota Statutes section 299C.61 Subd.7 as "the provision of care, treatment, education, training, instruction, or recreation to children")?

No

Work Plan Amendments

No Amendments Entered

Status Update Reporting

No Previous Status Updates