



# Environment and Natural Resources Trust Fund

## 2021 Request for Proposal

### General Information

**Proposal ID:** 2021-094

**Proposal Title:** Pollinator Habitat Study for Closed Landfill Program

### Project Manager Information

**Name:** Eric Pederson

**Organization:** Minnesota Pollution Control Agency

**Office Telephone:** (651) 757-2645

**Email:** eric.pederson@state.mn.us

### Project Basic Information

**Project Summary:** The Closed Landfill Program will rank its 114 sites on potential for pollinator habitat, create vegetation reconstruction plans for the top five sites, and implement a plan at one site.

**Funds Requested:** \$300,000

**Proposed Project Completion:** 2024-06-30

**LCCMR Funding Category:** Methods to Protect, Restore, and Enhance Land, Water, and Habitat (F)

### 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

## Narrative

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

The Closed Landfill Program (CLP) seeks to advance the Interagency Pollinator Protection Team's Goal 1: Lands throughout Minnesota support healthy, diverse, and abundant pollinator populations. Pollinator species like bees and butterflies are in decline locally and globally. The decline in many pollinator species is due, in part, to a decline in habitat.

The CLP manages roughly 8,500 acres of land throughout Minnesota on 114 eligible closed landfills. These closed landfills are vegetated primarily with non-native grasses that are mowed once or twice a year and provide little pollinator habitat.

Constructing and improving pollinator habitat on closed landfills will not only help pollinators such as the Minnesota state bee, the rusty patched bumble bee, but a number of other species, including other insects, mammals, birds, and humans. The CLP seeks to improve the health, sustainability, resiliency, and usefulness of the land we manage for the state of Minnesota.

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

The Closed Landfill Program (CLP) will hire a consultant to assess and rank its 114 closed landfills on their potential to have successful pollinator habitat. The project will then create site-specific plans for the top five sites. Site plans will include recommendations for site preparation (for example: woody vegetation removal), current vegetation removal method, soil enhancement, seed mixtures and quantities, project timelines, planting process, long-term maintenance, and cost. One of the five site-specific reconstruction plans will be chosen and implemented within the project timeline. After the site preparation and seeding is complete, recommended site maintenance will occur according to the site-specific plan. This may include mowing two to three times a year for the first couple years to help native plants establish and prevent weeds from spreading as well as spot applications of herbicides.

This project follows the directive in Executive Order 19-28, signed in 2019, by Governor Tim Walz which states, "The MPCA will manage closed landfills under its supervision to create, protect, and enhance pollinator habitat."

### **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?**

Site rankings will help us prioritize which sites can be converted to pollinator habitat. One completed site reconstruction and the remaining four site-specific plans will give us the information we need to implement additional future projects and increase pollinator habitat at closed landfills in Minnesota. Once the deep-rooted, pollinator vegetation is established, it will increase erosion control and carbon sequestration, as well as allow for animal grazing rather than mowing, saving money and reducing our carbon emissions. This project will open the door to more possibilities for a sustainably minded future for the program and long-term care of CLP facilities.

## Activities and Milestones

### Activity 1: Rank Closed Landfill Program Sites for Pollinator Habitat

**Activity Budget:** \$60,000

**Activity Description:**

This project will rank all 114 Closed Landfill Program sites on which are best suited for pollinator habitat using site data and aerial imagery. Ranking criteria will include but not be limited to: location, current landfill vegetation, site topography, surrounding land use, proximity to agricultural fields and protected lands, percent of landfill property that is wooded, and land ownership.

**Activity Milestones:**

Description	Completion Date
Determine criteria for site ranking.	2022-01-31
Complete the ranking of 114 CLP sites.	2022-03-31

### Activity 2: Develop Site Specific Reconstruction Plans

**Activity Budget:** \$15,000

**Activity Description:**

The top-ranked five sites will be visited to view the current vegetation, soil type, and other relevant information. Individual site plans will be generated for the top five sites. Site plans may include recommendations for site preparation (for example: woody vegetation removal), current vegetation removal method (herbicide application, tilling), soil enhancement, seed mixtures and quantities, project timelines, planting process, long-term maintenance, and cost. One of the five site-specific reconstruction plans will be chosen for implementation.

**Activity Milestones:**

Description	Completion Date
Consultant visits five sites to gather additional information.	2022-06-30
Consultant creates site-specific plans for top five sites.	2022-07-31
One site is selected from the top five for implementation.	2022-08-31

### Activity 3: Implement Reconstruction Plan at a CLP Facility

**Activity Budget:** \$225,000

**Activity Description:**

The selected site will be prepared for seeding, seeded, and maintained in accordance with the site-specific plan. Maintenance could include mowing two to three times a year, spot applications of herbicides, and additional seeding as described in the site-specific plan.

**Activity Milestones:**

Description	Completion Date
Prepare the site for seeding.	2022-10-31
Perform seed application.	2022-11-30
Maintain the reconstructed vegetation at the site.	2024-06-30



## Project Partners and Collaborators

Name	Organization	Role	Receiving Funds
Rebeca Gutierrez-Moreno	Environmental Quality Board (EQB)	Advisor to the project. Provides IPPT support and pollinator information.	No
Faith Krogstad	Environmental Quality Board (EQB)	Advisor to the project. Provide information on pollinator habitat on closed landfills.	No
Tara Kline	Board of Water and Soil Resources (BWSR)	Advisor to the project. Assist CLP in reviewing site specific plans provided by the consultant.	No
Dan Shaw	Board of Water and Soil Resources (BWSR)	Advisor to the project. Assist CLP in reviewing site specific plans provided by the consultant.	No

## Long-Term Implementation and Funding

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

After the project's completion, the CLP's operations and maintenance staff will continue the required long-term maintenance of the pollinator habitat on the reconstructed site. This funding will come from the CLP budget. The remaining four site-specific plans will require an additional funding source in order to be implemented. The plans will give the CLP valuable information needed to help accomplish future program goals relating to land management.

## Project Manager and Organization Qualifications

**Project Manager Name:** Eric Pederson

**Job Title:** Closed Landfill Program Supervisor

**Provide description of the project manager's qualifications to manage the proposed project.**

Mr. Pederson has led multiple projects as the Administrative Coordinator for the Minnesota Pollution Control Agencies Superfund Program. Projects include managing seven EPA grants totaling more than \$5,500,000 in funding, an annual operating budget of \$8,300,000 to be used at 65 sites or allocations, and long term and strategic Superfund goals and data.

Mr. Pederson currently supervises the Closed Landfill Programs 11 staff, 110 closed landfills, and an annual operating budget of over \$7,000,000.

**Organization:** Minnesota Pollution Control Agency

**Organization Description:**

The Minnesota Pollution Control Agency (MPCA) mission is to protect and improve the environment and human health. The MPCA monitors environmental quality, offers technical and financial assistance, and enforces environmental regulations. The agency finds and cleans up spills or leaks that can affect our health and environment. Staff develop statewide policy, and support environmental education.

## Budget Summary

Category / Name	Subcategory or Type	Description	Purpose	Gen. Ineligible	% Benefits	# FTE	Classified Staff?	\$ Amount
<b>Personnel</b>								
							<b>Sub Total</b>	-
<b>Contracts and Services</b>								
TBD	Professional or Technical Service Contract	The hired consultant will be doing the bulk of the project work. They will rank all closed landfill program sites, develop a site-specific plan for the top five, and implement one plan at a chosen site.				0		\$300,000
							<b>Sub Total</b>	<b>\$300,000</b>
<b>Equipment, Tools, and Supplies</b>								
							<b>Sub Total</b>	-
<b>Capital Expenditures</b>								
							<b>Sub Total</b>	-
<b>Acquisitions and Stewardship</b>								
							<b>Sub Total</b>	-
<b>Travel In Minnesota</b>								
							<b>Sub Total</b>	-
<b>Travel Outside Minnesota</b>								
							<b>Sub Total</b>	-
<b>Printing and Publication</b>								

							<b>Sub Total</b>	-
<b>Other Expenses</b>								
							<b>Sub Total</b>	-
							<b>Grand Total</b>	<b>\$300,000</b>

Classified Staff or Generally Ineligible Expenses

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

Category	Specific Source	Use	Status	Amount
State				
			State Sub Total	-
Non-State				
			Non State Sub Total	-
			Funds Total	-

## Attachments

### Required Attachments

#### *Visual Component*

File: [021f2c92-f9b.pdf](#)

#### *Alternate Text for Visual Component*

Statewide map of Closed Landfill Program landfill locations

## Administrative Use

**Does your project include restoration or acquisition of land rights?**

No

**Does your project have patent, royalties, or revenue potential?**

No

**Does your project include research?**

No

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

No

# Closed Landfill Program Sites



