



Environment and Natural Resources Trust Fund

2024 Request for Proposal

General Information

Proposal ID: 2024-039

Proposal Title: Minimizing Minnesota's Landfill Problem by Expanding Waste Diversion

Project Manager Information

Name: Jason Allen

Organization: Better Futures Minnesota

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Project Basic Information

Project Summary: Expanding waste diversion practices across the state this project will: create 16 jobs, reduce greenhouse gas emissions, provide data to measure the social, economic, and environmental benefits of waste diversion.

Funds Requested: \$2,596,000

Proposed Project Completion: July 31, 2026

LCCMR Funding Category: Air Quality, Climate Change, and Renewable Energy (E)

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?

During the Project and In the Future

Narrative

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

The preservation of Minnesota's air, water, and land depends on practices that reduce the harmful effects of simply discarding building materials that could be re-used.

Each year an estimated 200,000-300,000 structures are demolished in the U.S. The EPA estimates that an average of 600 million tons of C&D debris is generated from these projects, twice the amount generated from municipal solid waste. Construction debris makes up 10% of the C&D waste, with demolition accounting for the remaining 90%. Based on data from a previous LCCMR funded project, it was found that the demolition of a typical house emits approximately 250 million metric tons of greenhouse gases, the equivalent pollution level of five cars driving on Minnesota roads for a year.

If those 200,000-300,000 structures were deconstructed instead, the reclaimed lumber generated would be equivalent to the amount of lumber needed for 100,000 new homes. According to the Minnesota Pollution Control Agency of the 1.6 million tons of C&D waste generated in the State, wood is the largest portion at 23%. A collection and distribution model, focused on reuse of materials would yield significant environmental and economic benefits to Minnesota.

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.

The focus of this project will be to advance sustainable reclamation practices that improve environmental quality, address climate change, and reduce the impact on Minnesota's natural resources. Every piece of reclaimed building material from this project will lessen the need for a new piece to be manufactured, cutting down on the use of virgin resources and the energy required to process them.

We will seek to determine the viability of a collective network of businesses, organizations, and municipalities, for the accumulation of building materials diverted from Minnesota's waste stream, and distribution of those reclaimed building materials throughout the State. Extending the expansion of deconstruction statewide, and waste diversion at Minnesota's transfer stations will help increase the pipeline of reclaimed materials available in Minnesota.

Just as important as the environmental benefits, is the job creation and economic development that will benefit Minnesota citizens. The creation of jobs for local people, we help build a more stable environmental and economic future. This project will be an investment in Minnesota's present and future. By reducing harmful greenhouse gas emissions, we will help ensure the future quality of Minnesota's air, water, and land.

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 builds and expands on practices to establish reuse, and repurposing of building materials as a preferred practice statewide. This project will benefit Minnesotans and preserve our air, water, and land. Specific outcomes include:

1. Determine the viability of a statewide network for sourcing reclaimed building materials
2. A reporting tool that will allow users to input diverted material data and generate reports based on material type and the environmental impact of waste diversion
3. Deconstruction and waste diversion practices adopted and performed in more of Minnesota's 87 counties.
4. Create at least 16 FT sustainable jobs.

Activities and Milestones

Activity 1: Expand work in waste diversion through deconstruction, municipal collection, contractor collection, and donations.

Activity Budget: \$1,396,080

Activity Description:

- a) Perform up to 30 partial and full deconstruction projects on properties in various states of condition located throughout the State.
- b) Establish operating agreements for county partners; outline roles and responsibilities of all parties, performance metrics, budget, fee schedules, and staffing plans
- c) Meet with contractors and design build firms to educate them on the environmental and economic benefits deconstruction and material waste diversion
- d) Conduct briefing sessions with county staff statewide to introduce this project and present the multiple benefits of diverting materials transfer stations and landfills
- e) Meet with city staff in the Metro Area to discuss curbside collection service as a means to divert solid waste in their respective cities

Activity Milestones:

Description	Approximate Completion Date
Prepare report analyzing the value, quality, and quantity of materials harvested during deconstruction.	January 31, 2024
Deconstruct first 15 public or private properties statewide	January 31, 2024
Conduct at least 12 briefing sessions for county staff, and contractors statewide to introduce project	January 31, 2024
Deconstruct second 15 public or private properties statewide	July 31, 2026
Produce a final impact report outlining: emissions averted; waste diverted; jobs created	July 31, 2026

Activity 2: Determine the viability of creating a Building Materials Network.

Activity Budget: \$778,800

Activity Description:

- a) NRRI will review current materials exchange businesses in the United States that are successful at marketing reusable building products and related goods
- b) Identify current Minnesota businesses focused on using reclaimed materials and determine willingness to partner to create a network with inventory of reclaimed materials across the State. NRRI will assist Better Futures in identifying and meeting with these existing businesses.
- c) Based on feedback from partner businesses and NRRI research, explore ways to expand uses and markets for materials diverted from the waste stream; share ideas and findings with partner businesses.
- d) Using statewide connections NRRI will identify difficult to reuse items and explore opportunities for reuse and exchange ideas between partnering businesses.

Activity Milestones:

Description	Approximate Completion Date
NRRI will complete research on Activities A&B	January 31, 2025
Conduct 8 briefing sessions to share NRRI research related Activities A&B	July 31, 2025
Secure commitment from 8 partners for the creation of a Building Materials Network	January 31, 2026

Activity 3: Expand the functionality and reporting capabilities of waste diversion data collection tool for a broader audience of users

Activity Budget: \$78,261

Activity Description:

a) To further the development of the impact assessment reporting tool that was created with support from a previous LCCMR grant, NRRI and Better Futures Minnesota will co-host learning sessions for counties, municipalities, and other organizations to understand the environmental reporting needs for current or future construction and demolition waste diversion practices.

b) Better Futures Minnesota will contract Software for Good the developer of the reporting tool to expand the functionality of the application to include multiple locations, material categories, projects, and users which will allow for the greater collection of data to measure the social, economic and environment impact/benefits of diverting and reusing the materials that would normally be inserted into the waste stream.

c) Better Futures Minnesota and NRRI will identify stakeholder needs, expand the assessment tool to accommodate a broader audience with environmental impact reporting requirements. Investigate known and emerging methods for restoration, reuse and repurposing of materials diverted from the waste stream, with a focus on building materials and furniture.

Activity Milestones:

Description	Approximate Completion Date
Software for Good begins development 2.0 of mobile web application	July 31, 2024
Conduct beta testing with stakeholders to evaluate ease of use	October 31, 2024
Conduct 4 stakeholder learning sessions	December 31, 2024
Software for Good completes development 2.0 of mobile web application	December 31, 2024
Conduct second round of testing with stakeholders to evaluate functionality	June 30, 2025

Activity 4: Sustainably manufacture finished goods using materials diverted from the waste stream

Activity Budget: \$342,859

Activity Description:

a) Based on NRRI research, identify end markets for products and materials manufactured by Better Futures Minnesota

b) Implement emerging reuse, and re-purposing methods using materials diverted from the waste stream; led by NRRI

c) NRRI will work with Better Futures Minnesota to identify potential mentors for production of unfinished interior woodwork created from reclaimed building materials.

d) Work with Wood from The Hood on the design and production of a table, and a bench using surplus material sourced from trees located in Minneapolis

Activity Milestones:

Description	Approximate Completion Date
Better Futures Minnesota begins production on three products prototyped by NRRI	August 31, 2024
Products to be designed and produced in collaboration with Wood from The Hood are identified	November 30, 2024
Better Futures Minnesota and Wood from The Hood begins production products	December 31, 2024

Project Partners and Collaborators

Name	Organization	Role	Receiving Funds
Victor Krause	Natural Resources Research Council (NRRRI)	NRRRI will review current materials exchange businesses in the United States that are successful at marketing reusable building products and related goods. Identify companies and groups in Minnesota who generate reusable building materials and goods that might benefit from listing and exchanging materials on a common network.	Yes
Brett Feldman	Parks & Trails Council of Minnesota (P&TC)	Parks & Trails Council of Minnesota acquires land for Minnesota's state park and trail system. When land acquired contains structures that need to be removed before being conveyed to the State. Together with P&TC we can reduce the waste impact of the structure through deconstruction and reuse of the materials.	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 work be funded?

The grant period will enable the partners to ascertain the level of commitment from potential contractors, and design firms for the creation of a statewide network for sourcing materials slated for removal that can be collected and repurposed or reused. Based on two years of further experience, the partners expect increased sustainable diversion, collection, and repurposing activities in more counties throughout the State. In addition, there will be increased volume and demand for used and repurposed products and materials, generating increased fee income and revenue generated from the sale of those products and materials statewide.

Other ENRTF Appropriations Awarded in the Last Six Years

Name	Appropriation	Amount Awarded
Create Jobs Statewide By Diverting Materials From Landfills	M.L. 2021, First Special Session, Chp. 6, Art. 6, Sec. 2, Subd. 07e	\$2,244,000

Project Manager and Organization Qualifications

Project Manager Name: Jason Allen

Job Title: Waste Diversion Project Manager

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

Jason Allen is the Waste Diversion Project Manager for Better Futures Minnesota and is currently the project manager for our ENRTF funded (2021) Create Jobs Statewide By Diverting Materials From Landfills project.

Jason is a strong believer in the power of relationships and teamwork and is a powerful force in the workplace utilizing his positive attitude and energy to encourage employees to create favorable outcomes. In his current role Jason has been able to build strong relationships with other stakeholders in Minnesota's Reuse and Built Environment community that will be valuable to our proposed project.

Jason formerly managed the Better Futures Minnesota ReUse Retail Warehouse. In that role he helped reclaimed building materials harvested from deconstruction projects find new homes and uses and understands the responsibility of environmental stewardship. That experience will help shape our work around trying to create a collaborative network for the accumulation and distribution of reclaimed building materials.

Organization: Better Futures Minnesota

Organization Description:

Better Futures Minnesota embraces a population of men who are locked out of society, living in chronic poverty, persistent unemployment, untreated mental illness, addiction, and homelessness. The men that we serve are justice system involved with criminal records and are currently on probation or parole.

Better Futures Minnesota is focused on breaking down barriers to employment for the men we serve, helping them build a foundation for success so that they can provide for their families and community. Most of our men have little to no work experience, and for some, employment with Better Futures Minnesota represents their first full-time job. For our men employment with Better Futures Minnesota is about personal redemption, because for some, they alone have been their own biggest stumbling blocks. We want to provide them with the structure and tools to help them realize that they can succeed.

Fundamentally, Better Futures Minnesota is a more cost-effective way to address a long-standing challenge: proven inefficiencies and limited effectiveness of systems dealing with only one aspect of people's lives. Our model combines the benefits of jobs with supports and training to help the men succeed in our workplace and beyond.

Budget Summary

Category / Name	Subcategory or Type	Description	Purpose	Gen. Ineligible	% Benefits	# FTE	Classified Staff?	\$ Amount
Personnel								
Crew Members		Work at transfer stations diverting and packaging reclaimed materials; picking up used materials at curb or job sites; working on deconstruction projects, working on reuse, restoration and repurposing projects			21%	20		\$906,048
Field Supervisors		Daily supervision of workers at transfer stations, deconstruction sites, and pick up services; supervision of workers assigned to reuse, restoration and repurposing projects. Prepare reporting of activities			21%	8		\$483,226
Business Support & Communications Manager		Coordinate and disseminate stories, results and impact statements of this project and provide administrative support for the project			13%	2		\$141,763
Project Development Manager		Work with app developer on further development of mobile web application. Assist with the coordination of hosted web application focus group and learning sessions. Conduct beta testing of web tool, develop materials network partnerships. Coordinate production of repurposed products			23%	2		\$154,308
Waste Diversion Manager		Respond to all inquiries, assist with all reporting as related to LCCMR project, assist with the coordination of hosted briefing sessions, develop waste diversion partnerships.			23%	2		\$180,026
Project Manager for LCCMR Grant		Oversee the activities and partnerships required to meet the goals and outcomes for this project. Prepare reporting of project outcomes			20%	2		\$238,728
Product Development Manager		Oversee and coordinate the design and production of products made from reclaimed material. Manage partner and contract relationships as it relates to product manufacturing			23%	2		\$154,308
							Sub Total	\$2,258,407
Contracts and Services								

University of Minnesota Duluth, Natural Resources Research Institute	Sub award	NRRI will: research emerging techniques for repurposing used goods such as building materials, furniture, textiles, and mattresses. Assist with identifying businesses focused on repurposing such materials. Collect data and with Ecotone Partners prepare economic, social, and environmental impact reports for this project's activities.				1.62		\$149,780
Software for Good	Professional or Technical Service Contract	Software for Good was previously contracted to develop a mobile web application to collect waste diversion data at transfer stations. They will further develop the tool to provide greater functionality and use by a wider audience.				1		\$42,800
Wood from The Hood	Professional or Technical Service Contract	Wood from The Hood will supply lumber sourced from Minneapolis trees, provide training, and technical assistance to our men for the manufacturing of two items, a table, and a bench.				0.5		\$14,000
							Sub Total	\$206,580
Equipment, Tools, and Supplies								
	Tools and Supplies	PPP safety gear, fall protection gear, trailers, power saws, tool boxes, power drills and denailers, generators	These tools and equipment will be used to transport, restore, repurpose or dismantle materials diverted					\$45,748
	Equipment	Purchase and/or Rental of steel Shipping Containers, storage units, and warehouse space	For storing materials diverted at transfer stations; for storing materials picked up from customers; and for storing tools and equipment at job sites	X				\$48,000
							Sub Total	\$93,748
Capital Expenditures								
							Sub Total	-
Acquisitions and Stewardship								
							Sub Total	-
Travel In Minnesota								

	Miles/ Meals/ Lodging	Estimated 24,700 miles x \$.665 per mile for waste diversion activities including curbside collection, deconstruction projects, and material transport	Mileage for transport of materials among collection sites statewide to Minneapolis warehouse					\$16,425
	Miles/ Meals/ Lodging	Estimated 25 day visits/workshops, 4 people per trip x 400 miles per trip x .655 per mile + \$1200 for food = \$7750	Day Trips: Mileage and meals for in-state travel for up to 25 workshops, meetings with public agency staff, and business development support					\$7,750
	Miles/ Meals/ Lodging	Estimated 25 trips x 0.655 per mile x 400 miles per trip \$6,650; Lodging 25 nights x \$200 = \$5000; 120 meals x \$12 a meal = \$1,440	Overnight Travel: 25 overnight trips with meals in State for workshops and agency staff meetings, trainings and business development support in Greater Minnesota					\$13,090
							Sub Total	\$37,265
Travel Outside Minnesota								
							Sub Total	-
Printing and Publication								
							Sub Total	-
Other Expenses								
							Sub Total	-
							Grand Total	\$2,596,000

Classified Staff or Generally Ineligible Expenses

Category/Name	Subcategory or Type	Description	Justification Ineligible Expense or Classified Staff Request
Equipment, Tools, and Supplies		Purchase and/or Rental of steel Shipping Containers, storage units, and warehouse space	The renting of storage units and or warehouse space is in direct connection to the work being done on the project. In order to expand the collection and processing of diverted materials we will need a place to house this material. In some instances it may not be prudent nor feasible to rent or buy a storage container. This space would be offsite from the warehouse that Better Futures conducts business. This space would be specific to the work being done on the project. It would be a temporary arrangement that would not exceed the life of the project.

Non ENRTF Funds

Category	Specific Source	Use	Status	Amount
State				
			State Sub Total	-
Non-State				
In-Kind	Better Futures Minnesota and partners, not yet identified	The cumulative value of county/Better Futures staff time, work space and utility costs, equipment, insurance, and other operating and administrative costs NOT covered by the LCCMR funds	Pending	\$2,225,000
Cash	Foundations and Revenue from Reuse Activities	These revenue sources will be used to cover costs not funded by the LCCMR grant. Please see the partners' request to reinvest revenue.	Potential	\$302,000
			Non State Sub Total	\$2,527,000
			Funds Total	\$2,527,000

Attachments

Required Attachments

Visual Component

File: [1e733a00-1ca.pdf](#)

Alternate Text for Visual Component

The attached slide highlights Better Futures Minnesota's waste diversion activities....

Financial Capacity

File: [9975eb8a-873.pdf](#)

Board Resolution or Letter

Title	File
Proposal Submission Authorization Letter	f406f791-1d5.pdf

Optional Attachments

Support Letter, Photos, Media, Other

Title	File
45% of GHG Emissions Generated by Production and Consumption	d20757c3-bb4.pdf
Background Check Certification Form	f91f5a76-6c7.pdf
2021 Form 990	f9e8713c-eaf.pdf
Hennepin County Letter of Support	030360ee-a6c.pdf
UMD NRRI/BFM LCCMR Letter of Support	0f417431-7c2.pdf

Administrative Use

Does your project include restoration or acquisition of land rights?

No

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

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? If so, describe here:

Yes, We are requesting to reinvest revenue now and, in the future, as described here. This project is expected to generate a modest level of earned income over its first two years. The earned income is expected from three core activities: 1) the sale of used goods and materials diverted from transfer stations and collected from curb side pickups; 2) collection fees paid by customers for curbside pickup services; and 3) proceeds from selling products made from reclaimed materials. No net revenue is expected to be realized during this project. Typically, it takes 5 to 7 years for a project of this size and scope to breakeven financially. This LCCMR grant is a valuable source of funding. The LCCMR grant combined with other grant funds, earned revenue, and a substantial investment of in-kind support from Better Futures Minnesota and its partners will help bring desired project outcomes.

As noted in the Non-ENRTF funds section of this work plan, a substantial amount of in-kind support is expected to be

committed by Better Futures Minnesota and project partners. Any earned income will be reinvested directly into this project and be used to offset a portion of project costs (not covered by the LCCMR grant). These types of costs include front line staff time (who will work with employees funded with the LCCMR funds), workspace and utility costs, equipment and maintenance of equipment, fees for disposal of materials not reused or recycled, life coaching, counseling, and housing supports for workers, insurance, and general administrative expenses related to management, fund development, supervision, training, and payroll and accounting expenses.

Does your project include original, hypothesis-driven research?

No

Does the organization have a fiscal agent for this project?

No

Does your project include the design, construction, or renovation of a building, trail, campground, or other capital asset costing \$10,000 or more?

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?

No

