

**Environment and Natural Resources Trust Fund
2020 Request for Proposals (RFP)**

Project Title:

ENRTF ID: 134-C

Restoring Land, Reviving Heritage: Conservation Through Indigenous Culture

Category: C. Environmental Education

Sub-Category:

Total Project Budget: \$ 606.885

Proposed Project Time Period for the Funding Requested: June 30, 2023 (3 yrs)

Summary:

By linking natural resource management, cultural heritage, and environmental education, we aim to restore an ecologically significant area of land while fostering multi-generational environmental stewardship and restoration of Indigenous culture.

Name: Katie Bloome

Sponsoring Organization: Belwin Conservancy

Job Title: Executive Director

Department: _____

Address: 1553 Stagecoach Trail S
Afton MN 55001

Telephone Number: (651) 436-5189

Email katie.bloome@belwin.org

Web Address: http://www.belwin.org/

Location:

Region: Metro

County Name: Hennepin, Washington

City / Township: Afton, Minneapolis

Alternate Text for Visual:

Map 1 shows all of Belwins holdings (1,400 acres in Afton & West Lakeland). Map 2 shows specific restoration area (17 acres of forest and grassland with stream running through).

_____ Funding Priorities	_____ Multiple Benefits	_____ Outcomes	_____ Knowledge Base
_____ Extent of Impact	_____ Innovation	_____ Scientific/Tech Basis	_____ Urgency
_____ Capacity Readiness	_____ Leverage	_____ TOTAL	_____ %



PROJECT TITLE: Restoring Land, Reviving Heritage: Conservation Through Indigenous Culture

I. PROJECT STATEMENT

By linking natural resource management, cultural heritage, and environmental education, Belwin Conservancy and Anishinabe Academy aim to restore an ecologically significant area of land, while fostering multi-generational environmental stewardship and restoration of Indigenous culture. With this project, we seek to:

- Improve habitat quality in the Valley Creek watershed
• Foster a multi-generational and action-based conservation ethic in urban Indigenous families
• Create a deeper understanding of cultural heritage through a Native garden site

Belwin owns and protects 1,400 acres of land in the Valley Creek and St. Croix River watersheds. While Belwin has an abundance of land, many urban Native American communities have lost their connection to the environment and their food heritage. This project aims to deepen both organizations' knowledge of land restoration while recovering access to nature and a place to grow culturally significant food and medicine.

To accomplish these goals, we will bring together land restoration experts and the school community to design and implement our restoration project. These efforts will be paired with field trips where students and their families can take part in restoration, study ecology, and cultivate significant Indigenous foods and medicines. This partnership approach to land restoration and cultural revival will instill a multi-generational and action-based environmental stewardship ethic in a community that is seeking to recover their connection to the land.

II. PROJECT ACTIVITIES AND OUTCOMES

Activity 1 Title: Woodland and Prairie Restoration

Description: The 17-acre parcel of land we will restore is situated along a stretch of Valley Creek, a regionally important stream with spawning brown, rainbow, and brook trout. This land is severely degraded with a high density of buckthorn and other invasive species. Restoring the land to tallgrass prairie and floodplain forest will promote species diversity and reduce erosion and runoff into Valley Creek and the downstream St. Croix River.

We will begin by removing 100% of non-desirable species. Then, we will plant and seed native species and provide management to keep invasive species from returning. We will evaluate restoration areas with photo points, plant diversity and density measurements, and soil and water sampling. We will take a partnership approach to restoration that follows modern scientific standards as well as traditional ecological knowledge. We anticipate both Belwin and the school community will learn about and improve practices.

ENRTF BUDGET: \$303,525

Table with 2 columns: Outcome, Completion Date. Rows include: 1. 100% reduction in buckthorn/undesirable trees and woody shrubs (June 2021), 2. Prairie site prep and restoration (June 2021), 3. Reintroduce native species in the woodland area (250 plants per acre) and reduce invasive growth to maintain >25% woody and >10% herbaceous invasive cover (June of 2023), 4. Follow up prairie establishment and invasive species removal (June 2023), 5. Build a system of restoration supportive of traditional Indigenous ways (June 2023)

Activity 2 Title: Valley Creek Stream Restoration Assessment

Description: The stretch of Valley Creek that runs through the site is degraded, with consequences for



**Environment and Natural Resources Trust Fund (ENRTF)
2020 Main Proposal Template**

downstream water quality and flowage into the St. Croix River. Before embarking on larger stream restoration efforts, we will contract with an environmental engineering firm to do a full assessment of stream stability, agency requirements, permitting needs, and environmental review needs.

ENRTF BUDGET: \$15,000

Outcome	Completion Date
<i>1. Stream restoration evaluation and assessment complete</i>	<i>Fall of 2020</i>

Activity 3 Title: Anishinabe Academy Education Partnership

Description: Students and families from Anishinabe Academy will participate in field trips to Belwin to learn about ecology, participate in land restoration, connect to the land through a Native cultural lens, and cultivate a Native garden site. During field trips, participants will learn about Native garden principles, astronomy, ecology, scientific measurements, Indigenous traditions, and land-management principles, all with the help of Ojibwe and Dakota language experts. One example of this is a lesson based on the herd of bison that grazes Belwin’s prairie each summer. Families will connect the cultural significance of the animals to the ecological benefits they give to the prairie ecosystem. Another example is the assessment of the health of the soil and water before establishing a Native garden site.

Curriculum experts and teachers at Anishinabe Academy will tie these lessons to MN state science standards and incorporate them into yearly curriculum in the classroom. We will measure outcomes through teacher assessment of students, tracking participation numbers in family field trips, and through talking circles that explore Tribal history, culture, values, and practices.

ENRTF BUDGET: \$288,360

Outcome	Completion Date
<i>1. Each 5th grade class will demonstrate understanding of land restoration principles, including concepts of native vs. invasive species, soil and water quality, and biodiversity</i>	<i>June 2021, 2022, and 2023</i>
<i>2. Anishinabe Academy families will show a commitment to environmental stewardship</i>	<i>June 2023</i>
<i>3. The Anishinabe Academy community will gain deeper insight of cultural heritage</i>	<i>June 2023</i>

III. PROJECT PARTNERS AND COLLABORATORS:

Anishinabe Academy is a Minneapolis Public School that serves primarily Dakota and Ojibwe students. They exist to engage urban Indigenous students by integrating and reclaiming Native American identities, cultures and languages through authentic academic experiences. Belwin’s partnership with Anishinabe Academy began in the fall of 2018 and we look forward to expanding the partnership further if granted funding.

IV. LONG-TERM IMPLEMENTATION AND FUNDING:

Together with Anishinabe Academy, Belwin will continue to manage the restored land to maintain appropriate plant diversity and low occurrence of invasive species. These costs will be absorbed into Belwin’s annual budget.

V. SEE ADDITIONAL PROPOSAL COMPONENTS:

A. Proposal Budget Spreadsheet; B. Visual Component or Map; C. Parcel List Spreadsheet; D. Acquisition, Easements, and Restoration Requirements; F. Project Manager Qualifications and Organization Description; G. Letter or Resolution; H. Financial Capacity

Attachment A: Project Budget Spreadsheet
 Environment and Natural Resources Trust Fund
 M.L. 2020 Budget Spreadsheet



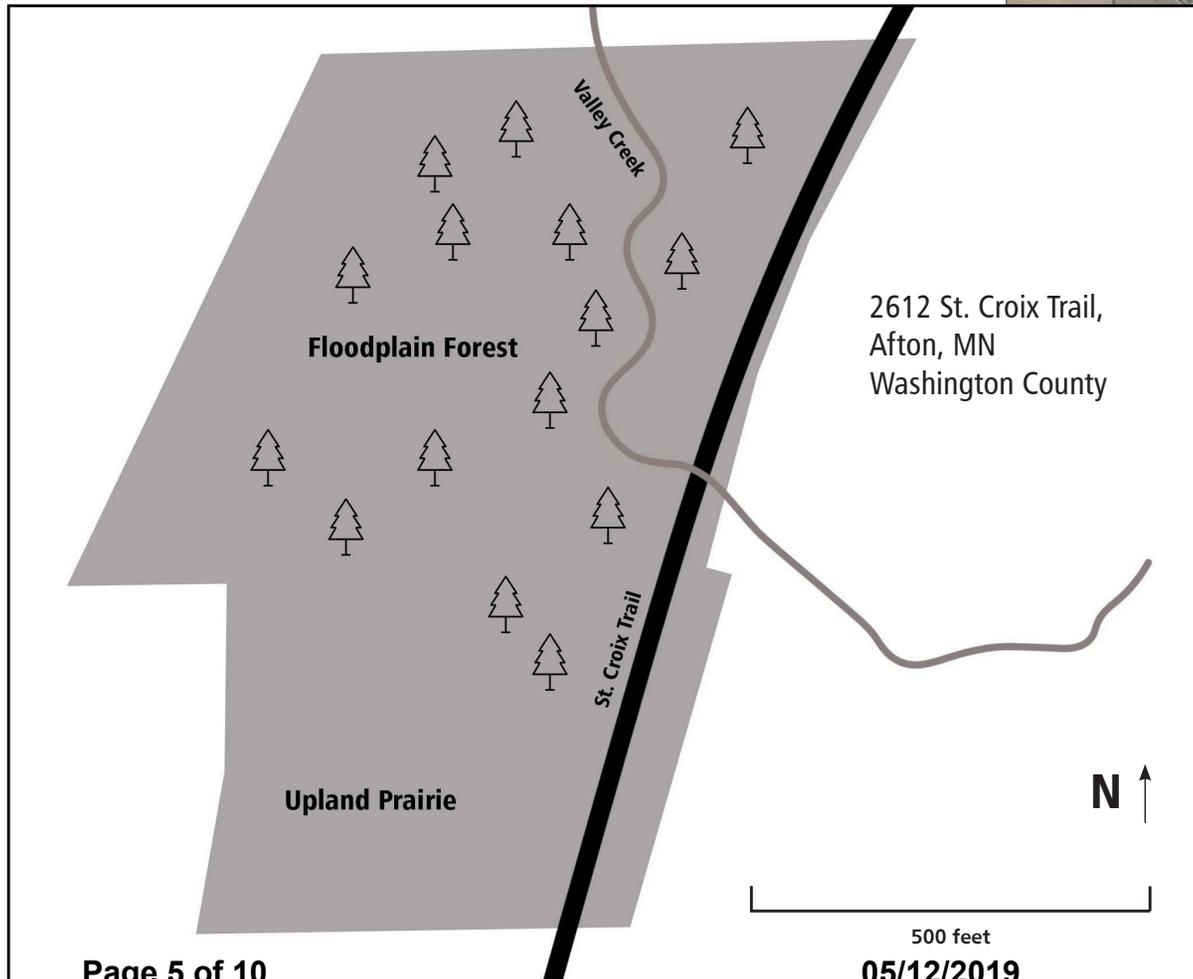
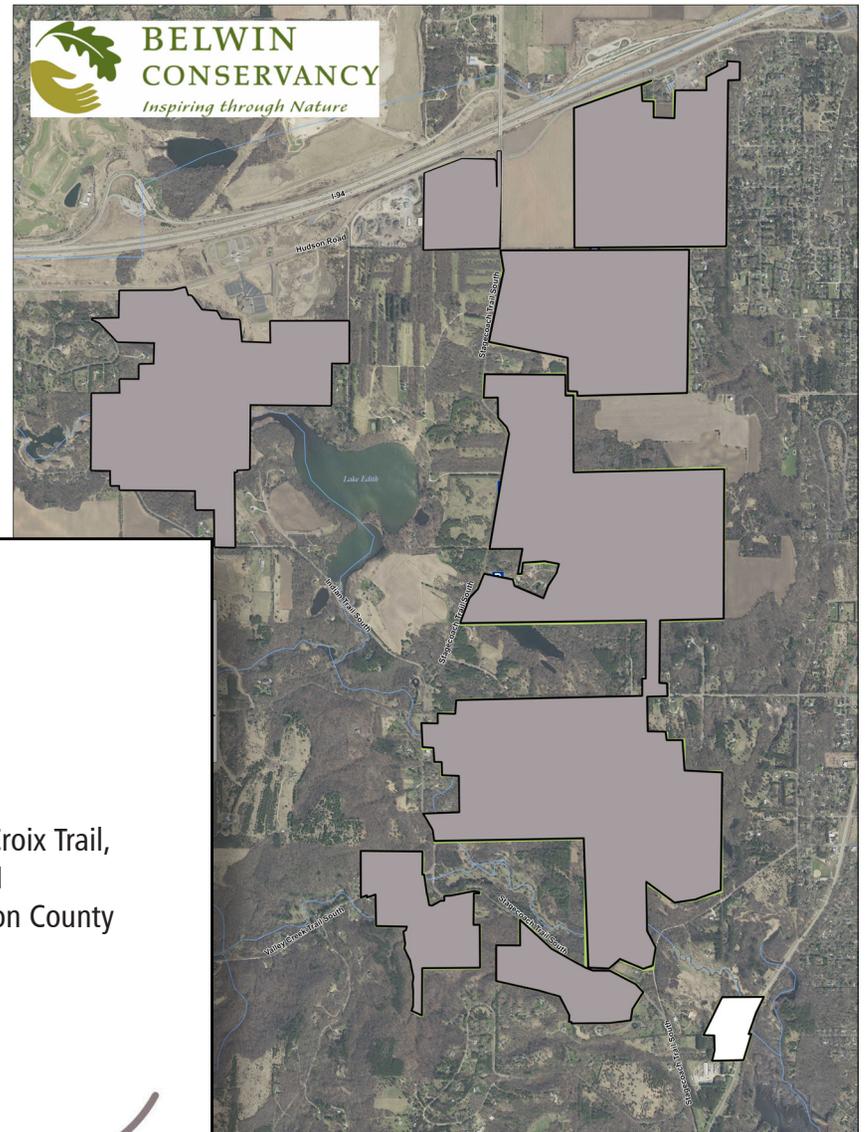
Legal Citation:
 Project Manager: Katie Bloome
 Project Title: Conservation Through Indigenous Culture
 Organization: Belwin Conservancy
 Project Budget: \$606,885
 Project Length and Completion Date: 3 years, June 30 2023
 Today's Date: April 15, 2019

ENVIRONMENT AND NATURAL RESOURCES TRUST FUND BUDGET	Budget	Amount Spent	Balance
BUDGET ITEM			
Personnel (Wages and Benefits)	\$ 238,500	\$ -	\$ 238,500
Program Director, 1 person, \$14,400 (76%salary 24%benefits), 5% FTE each year for 3 years			
Operations Director, 1 person, \$13,300 (85%salary 15%benefits), 5% FTE each year for 3 years			
Partnership Coordinator (new position), 1 person, \$195,000 (77%salary 23%benefits), 100% FTE each year for 3 years			
Land Restoration Assistants, 2 people, \$15,800 (76%salary 24%benefits), 5% FTE per person, each year for 3 years			
Professional/Technical/Service Contracts			
Contract with TBD to survey borders of land will be selected through a competitive bid process	\$ 10,000	\$ -	\$ 10,000
Contract with TBD for woodland restoration activities (12 acres) will be selected through a competitive bid process	\$ 110,625	\$ -	\$ 110,625
Contract with TBD for woodland planting activities (250 stems/acre for 12 acres) will be selected through a competitive bid process	\$ 104,500		\$ 104,500
Contract with TBD for prairie restoration activities (5 acres) will be selected through a competitive bid process	\$ 39,000	\$ -	\$ 39,000
Contract with TBD to assess restoration needs of stream will be selected through a competitive bid process	\$ 15,000	\$ -	\$ 15,000
Contract with TBD to create design and print interpretive signs for restoration and garden areas will be selected through a competitive bid process	\$ 6,000	\$ -	\$ 6,000
Contract with Anishinabe Academy teaching staff to facilitate summer field trips: single source contract because these teaching staff will be tied to the project in the school year so involvement in summer activities will provide better quality programs year-round.	\$ 30,000	\$ -	\$ 30,000
Contract with Native American elders, cultural experts, and Native garden/land management experts for educational programming and consultation will be selected through a competitive bid process.	\$ 25,000	\$ -	\$ 25,000
Equipment/Tools/Supplies			
Field supplies for teaching and measuring soil quality, water quality, and plant density/diversity (DO tests, turbidity tubes, conductivity kit, guide books, soil sampling kits, measuring tapes, etc)	\$ 5,000	\$ -	\$ 5,000
Tools for restoration and garden work (rakes, shovels, wheelbarrows, rain barrels, pruners, etc)	\$ 2,000	\$ -	\$ 2,000
Fencing to mark borders of property and protect from trespassing	\$ 5,000	\$ -	\$ 5,000
Signage to mark borders of property and protect from trespassing	\$ 500	\$ -	\$ 500
Tribal varieties of seeds and plants for Native garden	\$ 6,000	\$ -	\$ 6,000
Security Cameras, 4, \$125/camera with SD card and batteries	\$ 500	\$ -	\$ 500
Rental Equipment for garden, tiller at \$300 per day for one day each year	\$ 900	\$ -	\$ 900
Site cleanup (2 dumpsters at \$700)	\$ 1,400	\$ -	\$ 1,400
Other			
Field trip transportation from Anishinabe Academy to Belwin (8 trips per year for 3 years, 2 buses per trip, \$300 per bus)	\$ 4,800	\$ -	\$ 4,800
Soil tests sent to soil testing lab, 8 samples per year (different areas of the site) for 3 years	\$ 2,160	\$ -	\$ 2,160
COLUMN TOTAL	\$ 606,885	\$ -	\$ 606,885

SOURCE AND USE OF OTHER FUNDS CONTRIBUTED TO THE PROJECT	Status (secured or pending)	Budget	Spent	Balance
Non-State: none		\$ -	\$ -	\$ -
State: none		\$ -	\$ -	\$ -
In kind:		\$ -	\$ -	\$ -
Belwin Admin, 2 people, 3% FTE each year for 3 years	secured	\$ 17,248	\$ -	\$ 17,248
Anishinabe Academy Admin, 2 people, 2% FTE each year for 3 years	secured	\$ 15,235	\$ -	\$ 15,235
Anishinabe Academy Curriculum Development, 1 person, 3% FTE each year for 3 years	secured	\$ 9,598	\$ -	\$ 9,598
Anishinabe Academy Licensed Teachers, 2 people, 5% FTE each year for 3 years	secured	\$ 31,992	\$ -	\$ 31,992
Food provided by Anishinabe Academy for field trips and meetings (this is a cultural norm for the Native American community)	secured	\$ 2,700	\$ -	\$ 2,700
Other ENRTF APPROPRIATIONS AWARDED IN THE LAST SIX YEARS	Amount legally obligated but not yet spent	Budget	Spent	Balance
<i>None</i>		\$ -	\$ -	\$ -

ATTACHMENT B
Visual Component or Map

PROJECT TITLE
**Restoring Land, Reviving Heritage:
Conservation Through Indigenous Culture**



Attachment C:
Environment and Natural Resources Trust Fund
M.L. 2020 Acquisition/Restoration Parcel List Spreadsheet

Project Title: *Conservation Through Indigenous Culture*

Legal Citation: *Staff will update the legal citation upon work plan approval by the LCCMR following the MN Legislative Session.*

Project Manager: Katie Bloome

Organization: Belwin Conservancy

College/Department/Division: N/A

M.L. 2020 ENRTF Appropriation: \$606,885

Project Length and Completion Date: 3 Years, June 30, 2013

Today's Date: April 15, 2019



Instructions: Please include on the following list all targeted parcels that you are currently considering for acquisition (fee title or easement) or restoration (all phases) using the appropriation. The list may include more parcels than you will ultimately acquire or conduct restoration work on with the funds. To be eligible as part of your project, however, a parcel must be included on the list. Changes may be requested through the amendment process. Please update the status column and submit with your periodic workplan updates. Include any significant issues related to any particular parcel in your activity and project status sections of your Main Workplan Document.

#	Acquisition or Restoration Parcel Name	Geographic Coordinates (preferably from the center of the parcel) Format: [Deg.]° [Min.]' [Sec.]" [Hemis.]		Estimated Cost	Estimated Annual PILT Liabilities	County	Site Significance (please include what ecosystem (e.g., prairie, forest, wetland, savanna) is represented as well as the ecological significance, site importance, conservation value, and public benefits)	Activity Description (e.g. fee title acquisition, conservation easement acquisition, site preparation, restoration)	# of Acres	# of Shoreline Miles	Type of Landowner (private individual or trust, non-profit organization, for-profit entity)	Proposed Fee Title or Easement Holder (if applicable)	Status of work (e.g. engaged in landowner negotiations, no longer in consideration, restoration activities underway)
		Latitude	Longitude										
1	Valley Creek (VC) 9 and 10	45° 54' 38.17" North	92° 46' 53.56" West	N/A	N/A	Washington County	Floodplain forest, upland forest, prairie, and trout stream. Land is situated on a stretch of Valley Creek, a regionally significant trout stream with spawning brown, rainbow, and brook trout.	Restoration	17	0.22 miles of stream	Non-profit	N/A	Ready for restoration.
2													
3													
4													
5													
6													
7													
8													
9													
10													

NOTES:

Attachment D. Additional Work Plan Information for Acquisition, Easements, and Restoration

Project Manager: Katie Bloome

Project Title: Restoring Land, Reviving Heritage: Conservation Through Indigenous Culture

Organization: Belwin Conservancy

Restoration

- 1. Provide a statement confirming that all restoration activities completed with these funds will occur on land permanently protected by a conservation easement or public ownership.**

All restoration activities completed with these funds will occur on land permanently protected by a conservation easement. Belwin has many permanently protected areas. The area we are proposing to restore is protected under a conservation easement with the Minnesota Land Trust.

- 2. Summarize the components and expected outcomes of restoration and management plans for the parcels to be restored by your organization, how these plans are kept on file by your organization, and overall strategies for long-term plan implementation.**

This restoration parcel is divided into three main categories, the streambed, the floodplain forest, and the upland prairie site.

The streambed is in need of a full engineering and regulatory evaluation to determine if there is a need for restoration. The evaluation will include a review of the regulatory floodplain in the area and a field assessment of stream stability. It will take into account how the proposed upland restoration may affect overall stream stability, as well as agency requirements, permitting needs, and environmental review needs. This evaluation will give us planning level costs and a timeline and a summary of how stream restoration could achieve our goals of improving the overall stream habitat.

The woodland area has been heavily invaded by buckthorn. We will begin restoration with the removal of all unwanted and invasive species. We will follow the initial removal with planting of native and desirable species at a density of 250 plants per acre. After the initial invasive populations are under control, the long-term management of the woodland area will be accomplished primarily through spot-treating or hand-removing invasive species.

Expected outcomes for restoration of the woodland area are:

- Maintain and promote canopy trees such as tamarack, red maple, hackberry, basswood, silver maple, black ash and cottonwood
- Maintain less than 25% cover of woody invasive species and 10% herbaceous invasive species
- Promote an understory composed of appropriate southern terrace forest shrubs, grasses, sedges and forbs

The proposed prairie area currently consists of mowed turf and planted evergreen trees. To establish and maintain the upland prairie, we will first clear unwanted woody and herbaceous vegetation. We will use mechanical removal methods where possible to reduce the amount of herbicide treatment needed. After the initial site preparation in the summer/fall, we will seed and plant in the spring. For the first growing season, we will mow the vegetation to keep it at a height of three inches. During the second and third growing seasons, we will mow, hand pull, and spot treat as needed to remove invasive species. As the native plants are more established in year four of five (outside of the timeline of this grant), we will also incorporate prescribed burning into our management plan.

Expected outcomes for the restoration of the prairie area are:

- Maintain cover of warm season grasses such as big bluestem, Indian grass, little bluestem, switchgrass and side oats grama
- Promote at least 10% cover of appropriate southern mesic prairie forbs to enhance species richness

- Maintain less than 10% cover of woody invasive species and less than 25% cover herbaceous invasive species

Belwin Conservancy has land management plans for all of our 1,400 acres. These plans are based on the needs of each parcel and are kept both electronically and in physical binders. Restoration projects are prioritized based on ecological significance, public use, and funding. After we complete initial restoration on an area, we update the management plan for continued maintenance and any additional needs.

3. Describe how restoration efforts will utilize and follow the Board of Soil and Water Resources “Native Vegetation Establishment and Enhancement Guidelines” in order to ensure ecological integrity and pollinator enhancement.

- Belwin staff have read and follow the guidelines in all restoration projects.
- We will complete major cutting on frozen ground to limit soil disturbance.
- We will make every effort to reduce or avoid the use of chemicals in this restoration project and will only use herbicides when other methods would not be effective.
- When needed, we will time herbicide treatments to limit the non-target damage to native plants and pollinators.
- We will include the highest level of diversity in species appropriate for the site when planting and seeding.
- For all plant material used in the restoration processes, we will use yellow tag seed and plants sourced as close to the site as possible.

4. Describe how the long-term maintenance and management needs of the parcel being restored with these funds will be met and financed into the future.

Belwin employs a staff with over 50 combined years of experience caring for natural resources. The long-term maintenance and management of our land is an established and funded part of our organization, with a 48-year track record of managing our lands back to health.

After the initial restoration on this parcel is complete, Belwin staff, the school community, and volunteers will monitor the land to evaluate the success and inform long-term management needs. We rely on a community of people to help us monitor and assess our land for restoration success. Belwin staff will monitor the area several times each year and Anishinabe Academy students and families will be visiting the land often, taking measurements, and assessing restoration objectives (see section 6 below). We also often have volunteers, other educational groups, and scientists do projects on our land, walk trails, conduct bird counts, and generally use the area. All of these parties are asked to report back to Belwin what they see or measure so we can adjust our management plan to address any continuing restoration needs.

Although we need outside funding to complete the initial restoration of this property, Belwin is able to fund the long-term maintenance with our general operating budget. Our annual budget is funded through a combination of grants, individual donations, earned income, and a draw from our endowment. A healthy native landscape requires less care than a non-native landscape, and that stability in turn helps our organizational budget and goals.

5. Describe how consideration will be given to contracting with Conservation Corps of Minnesota for any restoration activities.

Upon execution of the grant contract, we will notify the Conservation Corps. We will also notify them of any RFPs we put out for restoration activities. Belwin has done this regularly in the past and will carefully consider proposals by the Conservation Corps among any other proposals we receive.

6. Provide a statement indicating that evaluations will be completed on parcels where activities were implemented both 1) initially after activity completion and 2) three years later as a follow-up. Evaluations should analyze improvements to the parcel and whether goals have been met, identify any problems with the implementation,

and identify any findings that can be used to improve implementation of future restoration efforts at the site or elsewhere.

We will evaluate restoration success by establishing photo points and transect areas, and testing water and soil quality. Students and staff at Anishinabe Academy will complete transect surveys of plant density and diversity, basic water quality testing, and basic soil quality testing in the same locations each year as part of their science curriculum. Belwin will keep this data year after year and document how it is collected so we can assume responsibility for the data collection if needed.

The photo monitoring will be done by Belwin staff. We will develop a photo monitoring program on this parcel similar to the monitoring that we do on many other points of our land. We will select 1-3 photo points within the management unit, mark them with a wooden post and record the GIS coordinates. We will take photos from those points in the same direction with the same camera (if possible) at the same time each year. Because spotted knapweed and European buckthorn are two of the most problematic species at the site, we plan to take the photos in June when the spotted knapweed is in flower, and again in October when the density of buckthorn in the understory is readily apparent. Belwin has an inventory of annual photo points and these points will be added to that list to complete annually into the future.

Attachment F: Project Manager Qualifications and Organization Description

Project Manager: Katie Bloome

Project Title: Restoring Land, Reviving Heritage: Conservation Through Indigenous Culture

Organization: Belwin Conservancy

Project Manager Qualifications:

Katie Bloome joined Belwin Conservancy as Executive Director in July, 2018. In her 14-year career in nonprofit management, she has focused her work on developing environmental programs, and fundraising. Katie's career includes time spent managing programs for the Audubon Center of the North Woods, YMCA Camp St. Croix, and Minnesota Public Radio. Katie has successfully managed grant projects funded by private foundations, individuals, and State agencies. Along with project partners, she has created and grown programs that focus on incorporating state standards into environmental education curriculum, growing outdoor education programs for specific communities, and growing mid-level donor funding. She will manage this project in close collaboration with Belwin's Operations Director, an experienced land and restoration manager, Belwin's Program Director, and in close partnership with Anishinabe Academy. Katie has a B.A. in Biology from Grinnell College and a Master's Certificate in Environmental Education from Hamline University.

Organizational Description:

Belwin Conservancy's mission is to inspire a connection to the natural world. We have a 48-year history of conservation and restoration of native habitats, youth and adult environmental education, and partnerships with community organizations. We own nearly 1,400 acres of land with a variety of habitats and hiking trails open to the public year-round.

Belwin models best practices in the restoration of oak savanna and prairie, and conservation of land in the watershed of the Valley Creek trout stream. Belwin has worked to protect the area in the watershed through restoration on its holdings and permanent easements, encouraging private landowners to create easements, and educating private landowners about best practices in managing land.

Belwin's long-term organizational partners include the Minnesota Land Trust, Minnesota Astronomical Society, NorthStar Bison, St. Croix Valley Athletic Association, St. Croix Soccer Club, and our most long-standing, St. Paul Public Schools (SPPS). Together with SPPS, Belwin serves approximately 10,000 3rd and 5th grade students each year for hands-on science outdoor science studies. Belwin also offers public community programs focused on natural history, ecology, and the integration of nature and art.

Belwin Conservancy is a 501 (c)3 funded through a combination of grants, individual donations, earned income, and a draw from our endowment. Belwin is located in Washington County in the towns of West Lakeland and Afton, MN.