

## **Environment and Natural Resources Trust Fund**

2021 Request for Proposal

### **General Information**

Proposal ID: 2021-042

**Proposal Title:** Increasing Outdoor Learning For Young Minnesotans

## **Project Manager Information**

Name: Shannon Walz

Organization: Wolf Ridge Environmental Learning Center

Office Telephone: (218) 353-7414

Email: development@wolf-ridge.org

## **Project Basic Information**

**Project Summary:** Wolf Ridge seeks scholarships for equitable access to authentic, hands on learning experiences in the

outdoors that supports our Minnesota schools and achievement of the ENRTF strategic plan priority goals.

Funds Requested: \$450,000

**Proposed Project Completion: 2024-08-31** 

LCCMR Funding Category: Environmental Education (C)

## **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.

Wolf Ridge is seeking funds to provide scholarships that enable student learning outcomes that achieve the LCCMR's ENRTF Strategic Plan goals and support the environmental learning happening in classrooms throughout MN. Scholarship funds are necessary to sustain and enhance outdoor based teaching of thousands of Minnesotan school children from all economic backgrounds. Before the pandemic induced recession, WR was already seeing 40+% of our youth coming from low income homes. Even more children are now experiencing economic insecurity.

No public schools use operating budget funds for the Wolf Ridge tuition. The cost to attend Wolf Ridge is \$73 per day, with most schools attending for 3 -5 days, enabled through community based fundraising. Given that more than 1 in 10 Minnesotans applied for unemployment assistance due to COVID19, the ENRTF funds will ensure that students can attend on scholarships and Wolf Ridge can recover more strongly from COVID19 impacts.

In addition, online learning is increasing the achievement gap in our student population due to access to resources such as internet and computers as well as learning support at home. We will help close that gap by creating customized learning support that can be done online or in the school communities.

## 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.

Each year Wolf Ridge serves approximately 12,000 students, teachers and adult chaperones. Due to the 2020 COVID19 outbreak, Wolf Ridge had to close it campus from mid March through August 2020. This means that 1000's of Minnesota youth missed the chance for outdoor learning experiences, a highlight of their school career. We are seeking funds to ensure a minimum of 3000 students/year are provided scholarship that enables a minimum of 3 days of outdoor learning at the center. Every student learning experience will include content on ENRTF Strategic Plan goals. This grant will increase access to Wolf Ridge programming onsite for the 2021-2024 school years. Scholarships would ensure that schools are able to provide all students the ability to participate in our unique hands-on learning experiences. Research from Stanford University shows that experiences at residential EE centers increases classroom learning.

Scholarship funds would also provide tutoring naturalists who support students at most risk from falling behind. We will work closely with the teachers from the schools we serve to identify students in need of extra support. Our schools are our valued partners and this funding will help both Wolf Ridge and Minnesota schools as we recover from COVID19.

## 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?

Providing over 30,000 students over the course of the grant period, throughout Minnesota, with immersive outdoor learning experiences rooted in our mission, Wolf Ridge outcomes align perfectly with the goals of public protection, conservation, preservation and enhancement of the state's natural resources. A minimum of 9000 students will be provided scholarships for a 3 day learning experience at the center. Scholarships will only be provided to students who take coursework that directly aligns with LCCMR's ENRTF strategic goals for developing skills and knowledge in Outdoor Recreation and Open Space; Air and Energy, Water; or, Habitat, Fish, and Wildlife.

### **Activities and Milestones**

## Activity 1: Locate Schools with Highest Need

Activity Budget: \$450,000

### **Activity Description:**

Wolf Ridge has fantastic relationships with our more than 180 partnered schools, many whom have been attending Wolf Ridge for decades. Additionally, we are continuously communicating with new schools about how to access our programs. To locate schools in need of scholarships we will send an email to school administrators about scholarship opportunities, including a short application to apply. For tutoring support we will work closely with the teachers in the schools. The teachers will identify the students who need support and connect them with the Wolf Ridge tutoring support. Our schools are our invaluable partners. These scholarship funds are intended to strengthen our ability to work with them, close the learning achievement gaps they are experiencing and make sure the experience is accessible.

We give scholarships to schools based on need. 40+% of the students that attend Wolf Ridge programming qualify for free and reduced lunch and 18% identify as non-white.

### **Activity Milestones:**

Description	Completion Date
Send scholarship information and application to schools that we serve and new audiences.	2021-07-31
Work with schools to identify students who need extra learning support to pair tutors	2021-12-31
Receive application materials from schools annually ending in 2023	2023-12-31
A minimum of 9000 students experience 3-5 days of outdoor learning at Wolf Ridge.	2024-07-31

## 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?

Over the course of our nearly 50 year history, Wolf Ridge has served over 700,000 students, teachers and parents from more than 120 communities in MN. Accessibility has always been a core value when providing our environmental education experiences. These grant funds will allow us to increase our accessibility over the course of our project and aligns well with our goal of increasing available scholarship dollars for the long term. Wolf Ridge will use the success and stories that arise from this grant to establish a scholarship endowment fund that secures long term, sustainable funding.

## **Project Manager and Organization Qualifications**

Project Manager Name: Shannon Walz

Job Title: Associate Director

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

Wolf Ridge Environmental Learning Center is the largest accredited residential environmental learning center in the nation. The Project Manager is also the center's Associate Director & Education Director who currently manages more than \$2 Million of annual programmatic funds used in operation of the center. They also manage up to 100 staff providing multi-day learning experiences for more than 12,000 participants annually, through seven different educational programs of the center.

**Organization:** Wolf Ridge Environmental Learning Center

#### **Organization Description:**

Founded in 1971, Wolf Ridge Environmental Learning Center is a 501(c)(3) and was the first environmental learning center in the nation to be accredited as a K-12 school. It is recognized nationally and internationally as a leader in environmental education.

The Wolf Ridge campus is located in Finland. MN and sits atop a high ridgeline overlooking Lake Superior It includes 2,000 acres of forests, inland lakes, and streams. Our overnight school program serves approximately 12,000 middle school students, their teachers and parent chaperones every year. Students come from all over the state of Minnesota to study environmental science for 3 to 5 days during the school year. During the summer, our camp programs run from 1 day to 4 weeks. 600+ young people and families experience outdoor adventure with components of environmental education woven into all of the activities.

## **Budget Summary**

Category / Name	Subcategory or Type	Description	Purpose	Gen. Ineli gible	% Bene fits	# FTE	Class ified Staff?	\$ Amount
Personnel								
Naturalists		Educating students			20%	36		\$250,000
Administrative Staff		Organizational oversight, management and office duties			20%	13.5		\$40,000
Custodians		Facility Cleaning			20%	12.75		\$55,000
Food Service		Meal service for participants			20%	13.5		\$70,000
Maintenance		Facility Maintenance			20%	10.5		\$35,000
							Sub Total	\$450,000
Contracts and Services								
							Sub Total	-
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					
Publication					
				Sub	-
				Total	
Other					
Expenses					
				Sub	
				Total	
				Grand	\$450,000
				Total	

## Classified Staff or Generally Ineligible Expenses

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

## Non ENRTF Funds

Category	Specific Source	Use	Status	Amount
State				
			State Sub	-
			Total	
Non-State				
Cash	Schulze Foundation	Scholarships for Catholic Schools to attend Wolf Ridge	Secured	\$24,000
Cash	Weesner Yellow Bus Funds	Scholarships for travel to Wolf Ridge	Secured	\$20,000
			Non State	\$44,000
			Sub Total	
			Funds	\$44,000
			Total	

## **Attachments**

## **Required Attachments**

### Visual Component

File: ec2379eb-be4.pdf

## Alternate Text for Visual Component

The visual we have provided includes highlights from our Wolf Ridge school brochure, including what does a day look like at Wolf Ridge, sample daily schedule & examples of focused curriculum tracks, including Science, Team Building & Personal Growth, Sustainability, & Outdoor Skills. Also included in this visual is Wolf Ridge by the Numbers, which are some interesting stats that represent the Wolf Ridge school program.

### Financial Capacity

File: a48b7516-621.pdf

### **Board Resolution or Letter**

Title	File
Wolf Ridge Board ByLaws	cf9b235f-c2a.pdf

## **Optional Attachments**

### Support Letter or Other

Title	File
2019 Financial Audit	c56f51c5-ed8.pdf

### 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





## LEARNING, INSPIRED...

Bring your class to Wolf Ridge, a place where minds open to the joy and wonder of discovering our natural world. Advance your students' understanding of classroom-taught concepts as they experience the real-world impact of those principles.

Our nationally-recognized curriculum stimulates a connection with and understanding of natural environments. Instructors involve students in direct observation, inquiry and exploration of wild forests, wetlands, lakes and streams. Your students will grow as individuals, as a community and as lifelong learners during this accredited school experience.

Why do teachers return to Wolf Ridge year after year?

- Ecologically-diverse 2000-acre campus overlooking and private access to the North Shore of Lake Superior.
- The lasting power and educational value of the experience.
- Curriculum aligned to Minnesota Academic Standards, Common Core and Next Generation Science Standards.
- Teaching staff of licensed MN teachers, college faculty, and instructors with advanced degrees.

We invite you to explore the potential of a Wolf Ridge experience for your students.

## ... JUST AS NATURE INTENDED.



Our teaching philosophy is simple: learning happens best when a person experiences it. Lives it. Breaths it. Hands-on activities combined with an unbelievably beautiful campus make our living laboratory the kind of educational adventure you can't get anywhere else.



#### WHAT DOES A DAY LOOK LIKE?

You have unique goals for your students. Our time-tested curriculum has options that will help you get there. Whether you want to connect kids to nature and science, to each other, to our cultural past, or to a potentially sustainable future, a trip to Wolf Ridge includes experiences both during formal classes and "off time" throughout your visit.



#### SAMPLE DAILY SCHEDULE

7:30 Breakfast
8:30-11:30 Morning class
12:15 Lunch
1:30-4:30 Afternoon class
5:15 Dinner (and optional store time)
6:30-7:15 Naturalist group presentation

**Evening** activity

#### **ALL-DAY CLASS OPTIONS**

Several of our classes can be taken, paired together, at our Forest Ecology or Organic Farm classrooms. This is a chance to be away from the main campus all day in a smaller group environment. Common combinations include Forest Ecology and Animal Signs, Skiing and Beaver Ecology, and Food and Farming and Forest Ecology. A special lunch is always served. All day classes begin at 8:30 and return to the main campus by 4:30.

7:30 - 9:00

### All classes are aligned with MN Standards

A complete list can be found on our website. For example, *Energy in my Home* meets the following 6th grade Minnesota Science Standards: 6.1.2.1.1, 6.1.2.1.4, 6.1.1.1.1

#### FOCUSED CURRICULUM OR A VARIETY?

Most groups chose a well-rounded mix of classes and activities. This is easiest to accomplish during a 5-day visit – the most powerful way to experience Wolf Ridge. Others focus on particular goals, such as team building, sustainability, or hands-on experiences in nature.

Please see additional sheets for curriculum sequences that focus on specific goals.

























#### **SCIENCE-FOCUSED VISIT**

Textbooks and traditional classrooms place limits on what we can learn about the environment. Our relationship to the earth is complex and requires all of us to make choices. How can the next generation make informed choices without learning directly from what nature can teach us?

"This program is a vital piece of our district's science curriculum. Of the thirty elementary science standards required by the state, eleven can be met through Wolf Ridge activities." - Prior Lake teachers

#### **EXAMPLES OF AVAILABLE HANDS-ON, SCIENCE CLASSES**

**Northwoods Mammals** Through explorations, interactive demonstrations and field surveys, students will learn about component of habitat, carrying capacity, limiting factors and biodiversity.

**Birds** Use binoculars, paper and electronic field guides, visit feeding stations and play a migration game. Close-up looks at the birds are possible at the bird banding station and "Chickadee Landing." Participants might also visit the raptors during class.

**Food and Farming** Spend all or part of a day on the Wolf Ridge Organic Farm. Learn how food and seeds are cultivated, and the important role pollinators play in our food systems.

**Frozen Lake Study** Explore Wolf Lake under the ice from inside dark houses, spying on fish using a solar-powered video camera, and by ice fishing.

**Renewable Energy** Students experiment with various renewable energy technologies such as photovoltaics, wind turbine engineering, and solar water heating. The concepts of electrical power come to life through experiments with a bicycle generator.

**Geology** Gain an overview of earth processes, various kinds of rocks and how they were formed and the changes that occur due to erosion.

**Stream Study** Students wade into Sawmill Creek to collect data and aquatic inhabitants. Findings are logged into IPad field stations, where they evaluate the health of the stream.

**Wetland Ecology** Students head out in boots to gather data regarding the vegetation, hydrology, and soil composition of several wetland types including swamps, marshes and peat-lands.

#### SAMPLE CLASS SCHEDULE

Day 1	1:30-4:30	Stream or Lake Study
	6:30-7:30	Live Raptor Presentation
	7:45-9:15	Owl Pellet Dissection
Day 2	8:30-11:30	Changing Climates
	1:30-4:30	Wetland Ecology
	6:30-9:15	Adventure Ropes
Day 3	8:30-11:30	Trees and Keys
	1:30-4:30	Northwoods Mammals
	6:30-9:15	Indoor Rock Climbing
Day 4	8:30-11:30	Pollinators

#### ROUNDING OUT THE EXPERIENCE

Most groups chose to mix their science curriculum focus with a bit of outdoor skill-building, cultural history, or adventure. Orienteering, GPS, voyageur life, and Ojibwe, are popular options, as are adventure ropes, team games, and rock climbing.



























#### **TEAM-BUILDING AND PERSONAL GROWTH FOCUS**

Teachers and parents rave about the change they see in students after a trip to Wolf Ridge. They are kinder to one another, more confident, and truer to themselves. If coming of age and interpersonal skills are some of your main goals, you will be interested in these class options.



It wasn't until I went there myself that I realized that Wolf Ridge is the single greatest tool we have to teach and experience character development.

> - Sheila Ross Orono parent chaperone

**Adventure Ropes** Many past students tell us this was one of the defining experiences of their youth. Traverse obstacles 25 feet in the air while attached to safety lines.

**Indoor Rock Climbing** Classmates learn to rely on each other as they belay and set personal goals on the Mystical Mountain and Taylor's Falls indoor walls.

**Orienteering** Learn how to work well with a team-mate as you navigate the world with a map and compass.

**Team Games** Build the life skills of trust, communication, cooperation and logical thinking while playing games, solving problems and working through challenges.

**Winter Survival** Students are challenged to build a fire, make a shelter, and melt snow for hot cocoa in small teams.

**GPS and Geocaching** Students travel the campus in pairs, finding a series of GPS way-points that lead to our geocache.

#### MADE MORE MEMORABLE BY EXPERIENCES IN NATURE

Most groups chose to mix their team-building curriculum focus with a bit of field science or cultural history. Animal tracking, voyageur life, Ojibwe, geology, and plant classes are popular options.

See our blog for personal stories about team-building personal growth.

























#### SUSTAINABILITY-FOCUSED VISIT

Students both live and learn in our new Margaret A. Cargill Lodge. It is the northern-most building to seek certification by *Living Building Challenge*. LBC is the highest international standard for sustainability, taking into account not only non-toxic building materials, but also equity, water use, waste reduction, energy use, connection to nature, and even the day-to-day habits of residents as they live in the building.

This new dorm is not only a living space, but also a teaching tool. Everyday decisions have enduring impacts on the health and vitality of our planet. A Wolf Ridge trip that focuses on sustainability prepares students to make more informed choices now and in the future.

**Energy in My Home** Students conduct experiments and explore options that demonstrate how choices they make at home impact energy production needs.

**Renewable Energy** Students use activities and games to study wind, solar or biomass renewable energy.

**Changing Climate** Through photography and with a focus on phenology, students learn about the earth's changing atmosphere and its effects. Mid-Apr.-Oct.

**Seeds of Change** Grinding grains, baking cornbread and playing games will give the students a perspective on different methods of farming and seed development.

**Food and Farming** A hands-on exploration of growing nutrient-dense food, from the science of soils to the plate. Seaonally appropriate learning activities focus on pollinators, planting, plant care, and harvesting food for meals in the Wolf Ridge dining hall. April-October.

#### ALL DAY OPTION: FOOD AND FARMING

Farming 101 and Plants & Pollinators classes can be combined into an all-day experience down on our organic farm.

Classes are aligned with MN Standards
For example, Energy in my Home meets the following
6th grade Minnesota Science Standards: 6.1.2.1.1,
6.1.2.1.4, 6.1.1.1.1

#### **ADD AN ADVENTURE TWIST**

Most groups chose to mix their sustainability curriculum focus with a bit of adventure. Adventure ropes, rock climbing, hiking, skiing, snowshoeing, and canoeing are popular choices to compliment other classes.



























#### **OUTDOOR SKILLS-FOCUSED VISIT**

Outdoor skill classes help students discover ways to be comfortable and safe outdoors. Skills that give them the confidence to keep connecting to and learning about their environments for a lifetime.

**GPS and Geocaching** Students travel the campus in pairs, finding a series of GPS waypoints that lead to our geocache.

**Skiing** Beginning lessons are offered before setting out to explore Wolf Ridge's ski trails.

**Snowshoeing** Learn various types of snowshoes, their history and uses before heading off-trail to either the Ojibwe site or Wolf Lake.

**Indoor Rock Climbing** Climbing at either the Mystical Mountain or the Taylor's Falls indoor wall. Learn about equipment, belaying, and climbing techniques used by climbers

**Canoeing** Explore Wolf or Raven Lake after learning a bit of canoeing history, equipment, and paddling techniques.

**Superior View Hike** Three-mile hike along the Wolf Ridge and the Superior Hiking Trail trail systems to a spectacular view of Lake Superior

**Frozen Lake Study** Explore Wolf Lake under the ice from inside dark houses, spying on fish using a solar-powered video camera, and by ice fishing.

**Orienteering** Learn how to navigate the world with a map and compass. Chose beginning or competitive skill level.

#### **SAMPLE CLASS SCHEDULE**

Day 1	1:30-4:30	Frozen Lake Study
	6:30-7:30	Live Raptor Presentation
	7:45-9:15	Night Hike
Day 2	8:30-11:30	Superior Snowshoe
,	1:30-4:30	Adventure Ropes
	6:30-9:15	Canoeing
Day 3	8:30-11:30	Cross Country Skiing
,	1:30-4:30	Animal Signs
	6:30-9:15	Indoor Rock Climbing
Day 4	8:30-11:30	GPS and Geocachina

#### **ROUNDING OUT THE EXPERIENCE**

Most groups chose to mix their outdoor skill curriculum focus with a bit of field science, cultural history, or adventure. Animal ecology, voyageur life, Ojibwe heritage, geology, and plant classes are popular options, as are adventure ropes, rock climbing, and team games.



























## PARTNER WITH US TO PROVIDE FIELD SCIENCE EXPERIENCES AND CREDIT TO YOUR STUDENTS



Let's face it, the planet needs dedicated scientists studying how ecosystems function and change. Most schools have great resources in the classroom, but might be lacking opportunity to connect motivated young people with real science outdoors. Take a look at how these creative partnerships between schools and Wolf Ridge are advancing and inspiring tomorrow's ecologists.

"That summer inspired me to think strongly on pursuing a future career in environmental science. I switched my schooling focus to more science based and soaked in as much knowledge pertaining to the outdoors as I could."

-Aimee. 2014

#### **CREDIT PARTNERSHIPS**

**Murray E2** is a year-round, academically rigorous class is offered at Murray Jr. High School in St. Paul during the school day. Successful completion enables students to jump from a general to a pre-AP biology course upon entering high school. The class includes two weekends and a two-week summer field science experience at Wolf Ridge.

**S.E.A.K.** is a year round weekly after school program at Patrick Henry High School in Minneapolis and Denfeld High School in Duluth, that culminates with a 3 week field research program at Wolf Ridge in the summer. Students earn both high school and college credits for participating in and passing this class.

Contact luciana.ranelli@wolf-ridge.org to explore setting up a partnership with Wolf Ridge for your school's students.

#### SUMMER CREDIT ACADEMIES FOR INDIVIDUAL STUDENTS

Our **Credit Academies** take place during the summer. Students attend as individuals, and choose to study freshwater ecology (three weeks) and/or environmental ethics (two weeks) in the field. Students create and present their own scientific research. College credit is available for these rigorous summer science courses, which are taught by certified science teachers who are employed by Wolf Ridge for the summer. We also offer Ornithology Field Camps at the begginer and advanced level for students interested in exploring bird banding and related research techniques.

























Founded in 1971, Wolf Ridge Environmental Learning Center was the first environmental learning center in the nation to be accredited as a K-12 school. The center, which attracts 13,000 participants from 165 communities annually, is recognized nationally and internationally as a leader in environmental education.

Located on 2000 ecologically-diverse acres of forest, lakes, streams and wetlands, our campus provides spectacular views of Lake Superior, the hills leading north toward the Boundary Waters, and access to Lake Superior's shoreline.

This is the "living laboratory" in which students explore, discover, grow and learn – as nature intended.





# **WOLF RIDGE, BY THE NUMBERS**

170	Number of schools scheduled to bring students to Wolf Ridge in 2019-20
2000	Acres of wetlands, forests, lakes, streams, and Lake Superior shoreline to explore
18	Miles of hiking, snowshoeing, and ski trails

1405 Feet high while standing on Marshall Mountain viewing Lake Superior

Number of canoes on Wolf and Raven Lakes

8 Dark houses to peer through the winter ice to see the fish below

12 Educational animals, including Hunter, the Great-Horned Owl and more

**29.5** Height of the Skyview adventure ropes zipline platform

Number of years as an accredited school by North Central Association of Colleges and

Schools, the first in the nation!

Percent of curricula aligned with Minnesota academic standards

Tuition expense can qualify for Minnesota State tax education credit

Class choices, focusing on science, personal growth and team-building,

cultural history, and outdoor skills

**INFINITE!** Special needs accommodation possibilities including

ADA dorm rooms and buildings, adventure/trail equipment, meals, and instructional methods

**12–360** Number of people our facilities can accommodate

