



Environment and Natural Resources Trust Fund

M.L. 2021 Draft Work Plan

General Information

ID Number: 2021-042

Staff Lead: Corrie Layfield

Date this document submitted to LCCMR: April 23, 2021

Project Title: Increasing Outdoor Learning For Young Minnesotans

Project Budget: \$383,000

Project Manager Information

Name: Peter Smerud

Organization: Wolf Ridge Environmental Learning Center

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Project Reporting

Date Work Plan Approved by LCCMR:

Reporting Schedule: January 1 / July 1 of each year.

Project Completion: August 31, 2024

Final Report Due Date: October 15, 2024

Legal Information

Legal Citation:

Appropriation Language:

Appropriation End Date: June 30, 2025

Narrative

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.

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 its campus from mid March through December 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 2300 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 may 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 6900 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.

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

Activities and Milestones

Activity 1: Locate Schools, Award Scholarships

Activity Budget: \$383,000

Activity Description:

We will communicate to school representatives via email, website, and phone to announce the ENRTF funded scholarship opportunities. For tutoring support we will work closely with the lead teachers to identify the students in need and connect them with Wolf Ridge tutoring support.

We maintain a database of dozens of schools that have interest in such experiences but lack the funding to enable such a trip. Wolf Ridge maintains a relationship with 180+ schools and will reach out to those districts to reach underserved populations.

Wolf Ridge will provide scholarships to school students based on need, as determined by Free/Reduced % of the attending students, identified through an application process. An average of \$55/student will be awarded yet the exact amount will vary dependent upon need and other sources of financial support held by the school. Provision of scholarships will leverage an entire group of students to attend, not just those of financial means.

The award, both the quantity of scholarship students and financial amounts, will be documented with the invoicing of the school. This documentation will also note the leveraged number of total attending students, thereby the equity provided in the accessibility for all.

Activity Milestones:

Description	Completion Date
Send scholarship information and application to schools that we serve and new audiences.	October 31, 2021
Work with schools to identify students who need extra learning support to pair tutors	December 31, 2023
Receive application materials from schools annually ending in 2023	December 31, 2023
A minimum of 6900 students experience 3-5 days of outdoor learning at Wolf Ridge.	July 31, 2024

Dissemination

Describe your plans for dissemination, presentation, documentation, or sharing of data, results, samples, physical collections, and other products and how they will follow ENTRF Acknowledgement Requirements and Guidelines.

Wolf Ridge ELC will acknowledge the support provided by the ENTRF for outdoor learning in achievement of ENTRF Strategic Plan Goals to the more than 150 Minnesota schools that attend Wolf Ridge ELC each year. This school attendance represents attendance from approximately 100 Minnesota communities. Each school will learn of the ENTRF goals and the coursework opportunities at Wolf Ridge ELC that will address the goals.

Wolf Ridge ELC will publicize the award of the ENTRF funds on our social media channels and in our newsletter. Wolf Ridge ELC will publish two stories in our newsletter, the Almanac.

All such acknowledgements will be per the ENTRF Guidelines and with use of the Trust Fund logo and language attributed in publications, signage, print and electronic media.

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.

Budget Summary

Category / Name	Subcategory or Type	Description	Purpose	Gen. Ineligible	% Benefits	# FTE	Classified Staff?	\$ Amount
Personnel								
							Sub Total	-
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								
							Sub Total	-
Other Expenses								

5/25/2021

		Educational Program Scholarships for 6900 students	Provision of scholarship funding, averaging \$55/student, to underserved youth for a multi-day environmental learning experience.					\$383,000
							Sub Total	\$383,000
							Grand Total	\$383,000

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
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 Sub Total	\$44,000
			Funds Total	\$44,000

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
Authorization Letter	3ecc5b7e-626.pdf

Optional Attachments

Support Letter or Other

Title	File
2019 Financial Audit	c56f51c5-ed8.pdf

Difference between Proposal and Work Plan

Describe changes from Proposal to Work Plan Stage

Adjustments were made to the amount of students served as the funding award recommendation was lower than the application amount. Clarity was provided to Activity 1 as to how scholarships would be funded and distributed.

Adjustments were made to the budget in reflection of the lower amount recommended for funding. Dates of completion for some tasks were edited. The Board Authorization Letter was added as an attachment. Dissemination language and outcomes were 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, or sale of products and assets?

No

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

N/A

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

N/A

Does your project include original, hypothesis-driven research?

No

Does the organization have a fiscal agent for this project?

No

SCHOOLS & GROUPS



WOLF RIDGESM
ENVIRONMENTAL LEARNING CENTER

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
7:30 - 9:00	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.

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 peatlands.

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. Seasonally 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.





WOLF RIDGESM

ENVIRONMENTAL LEARNING CENTER

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 Geocaching

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 beginner and advanced level for students interested in exploring bird banding and related research techniques.



CONNECT.

DISCOVER.



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 RIDGESM
ENVIRONMENTAL LEARNING CENTER

6282 Cranberry Road | Finland, MN 55603 | 218-800-2733 | wolf-ridge.org

Wolf Ridge ELC does not discriminate on the basis of race, color, national origin, sex, age, or disability.



**LEARNING,
THE WAY
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
22	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
38	Number of years as an accredited school by North Central Association of Colleges and Schools, the first in the nation!
100	Percent of curricula aligned with Minnesota academic standards
100	Tuition expense can qualify for Minnesota State tax education credit
50+	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

