

Schoolyard Habitat Grant Application

The U.S. Fish and Wildlife Service and Chippewa Nature Center with support from Saginaw Bay Watershed Initiative Network and Ducks Unlimited are offering Schoolyard Habitat Grants for up to 10 schools throughout the 22 county Saginaw Bay Watershed.

Schools participating in the program will receive:

- Habitat restoration services through the U.S. Fish and Wildlife Service's Partners for Fish and Wildlife Program for an area selected by the school. This will include the restoration of an area to wetland, grassland, or pollinator habitat and may include trails, interpretive signage, or structures allowing safe access to the area.
- Curriculum development in partnership with Chippewa Nature Center and materials for use in the restored habitat.
- Teacher training for utilizing curriculum in the restored habitat provided by Chippewa Nature Center.
- Signage designating the area as a Schoolyard Habitat.

Selected schools will:

- Develop a team (including teachers, administrators, and maintenance staff) to help plan, develop, use and maintain the schoolyard habitat.
- Sign a 10-year Habitat Development Agreement between the school and the U.S. Fish and Wildlife Service.
- Commit to making the Schoolyard Habitat an integral part of their students' learning.

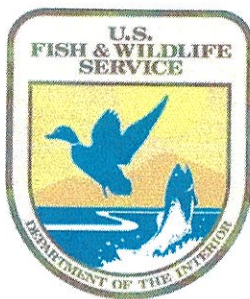
To Apply:

Complete the attached application and submit to Jenn Kirts, Director of Programs at Chippewa Nature Center, 400 S. Badour Road, Midland, MI 48640 or jkirts@chippewanaturecenter.org. Applications will be accepted on an on-going basis through 2020 or until funds are exhausted.

Questions

Regarding habitat development or the 10-year agreement contact Michelle Vander Haar at Michelle_Vanderhaar@fws.gov or 989-777-5930 x102.

Regarding grant applications or curriculum development contact Jenn Kirts at jkirts@chippewanaturecenter.org or 989-631-0830.



SPSD Building & Grounds Zilwaukee School Schoolyard Natural Area Proposal

Project: Zilwaukee School's Schoolyard Habitat Project and Outdoor Learning Lab
Contact: Greg Allington, Elementary Special Education Teacher, (989) 399-5227

Project Description

1. Description of Need

<https://docs.google.com/presentation/d/1Bkjm70zapmn0D4loiZtdo85DWnjYF3vuoRihnoV2NMI/edit?usp=sharing>

Zilwaukee School's Schoolyard Habitat Project will create an Outdoor Learning Lab for teachers and students in all grades pre-K through grades 8 to use for place-based, hands-on inquiry science, STEM, as well as potentially ELA, Social Studies, and Leader in Me Leadership Learning. The site is an underutilized grass field adjacent to the school, with four baseball diamonds and 40,000 square feet in the southwest section with a retention basin and drain tiles collecting rainwater from the school's main parking lot. This retention basin is a man-made wetland of vernal pools with great habitat for phytoplankton, zooplankton, macroinvertebrates, aquatic insects, and frogs. The surrounding grassland will be used to create native pollinator gardens, rain gardens, and native prairie grass wildflower gardens.

The US Fish & Wildlife Service partners will develop the wetland and gardens, invasive species removal, and educational signs. The Chippewa Nature Center will provide the outdoor environmental education curriculum, training, and consultation to help teachers become knowledgeable and comfortable taking students outdoors for core instruction. The CNC-USFWS Schoolyard Habitat Grant, has already been approved by the Chippewa Nature Center. All we need is the final approval and "green light" from the School District.

In addition, the SVSU MiSTEM Mini-Grant application was requested to provide scientific equipment for studying water quality, macroinvertebrates, along with aquatic plants and animals. This mini-grant of \$2000 will be used to purchase the most expensive equipment needed. The water quality kits and curriculum - one kit for Grades 5 and another kit for Grades 6-7, will be used for hands-on water chemistry and water quality analysis. The Enviroscope Model Kit will be used by Grades pre-K - 3 for hands-on classroom modeling of the water cycle, and exploration of the effects of point source and nonpoint source pollution on the environment. Explorations of the Enviroscope and Schoolyard wetlands area will teach the importance of wetlands for filtering water and controlling floods. Any additional scientific sampling equipment such as nets, trays, and magnifying glasses could be purchased with a \$300 mini-grant from an Inland Seas Summer Field Course or made in the STEM classes. The outdoor learning lab will also need to be made accessible and welcoming to students and classrooms with a walking path, benches and picnic tables for seating, however donations of materials and labor will be sought from the school's Parent Teacher Community Council (PTCC), Rotary Club, Boy Scouts, possibly the Saginaw Basin Land Conservancy, and area businesses such as Bell Landscaping.

2. Project Goals

The main goal of the Schoolyard Habitat Project is to increase student engagement and achievement in science, across grade levels, with hands-on, real-world, place-based and project-based inquiry science. The secondary goal is to provide support, encouragement, and tools for teachers to bring real-world inquiry science into their classrooms. The outdoor learning lab will expand the walls of their classrooms to include the schoolyard, which is less than a mile from the Saginaw River and part of the Saginaw Bay Watershed.

Saginaw Public Schools utilize the Mi-Star Unit Progression Model (UPM) Next Generation Science Standards (NGSS) grade-band bundles and units. Grades K-4 study organisms, adaptations, habitats and survival. Grades 2 and 3 have units on the Great Lakes, watersheds, weather, and climate. Grade 5 has similar focus on chemical and physical changes, as well as the Great Lakes. In the Fall, Grade 6 has a unit on protecting our community's water through land use, and then managing invasive species to protect ecosystems interactions in the Spring. The 7th graders have a Spring focus on water chemistry and quality, and maintaining ecosystem services. Grade 8, it is envisioned, will use the outdoor learning lab in Leader In Me Leadership Projects and interdisciplinary outdoor studies in the calm, relaxing, and safe natural environment.

3. Project Expected Outcomes

4. Benefits

The expected outcome of the MISTEM Mini-Grant will be an extension of the expectation of the Chippewa Nature Center-USFWS Schoolyard Habitat Grant. It is envisioned that the Schoolyard Habitat and Outdoor Learning Lab become an extension of every pre-K to Grade 8 Classroom. The Schoolyard Habitat and Outdoor Learning Lab will be developed in the first 1-2 years, and become a permanent and sustainable part of Zilwaukee School. The natural area will be used throughout the year, as a constant reminder that the natural world and scientific discoveries are found in their own backyards and communities. It will help students and teachers to realize their potential to become citizen scientists contributing to real-world science.

Zilwaukee School and the Saginaw Public Schools are in a very unique and special place on the planet Earth. Saginaw is in the heart of the Saginaw Bay Watershed, the United States' largest contiguous freshwater coastal wetland covering over 8,700 square miles with more than 7,000 miles of rivers and 175 inland lakes. Likewise, the Saginaw Bay Watershed is at the heart of the Great Lakes Watershed which makes up 84% of North America's surface freshwater, and 21% of the World's surface freshwater. It is important that students and teachers gain an understanding and appreciation for their community's freshwater natural resources to become more knowledgeable and caring stewards of their communities, and world.

5. Community Partners

Chippewa Nature Center, 400 S Badour Rd, Midland, MI 48640
Jenn Kirts, Director Programs, 989-631-0830, jkirts@chippewanaturecenter.org.

Michelle Vanderhaar, Fish and Wildlife Biologist, **US Fish & Wildlife Service
Shiawassee NWR**, 6975 Mower Road, Saginaw, MI 48601, (989) 777-5930

City of Zilwaukee, Department of Public Works and Parks and Recreation
Department, 319 Tittabawassee Saginaw, MI 48604, (989) 755-0931

Rotary Club of Saginaw Sunrise, P.O. Box 5724 Broadway Station, Saginaw,
MI 48603-0724

MISTEM East Central Michigan Region

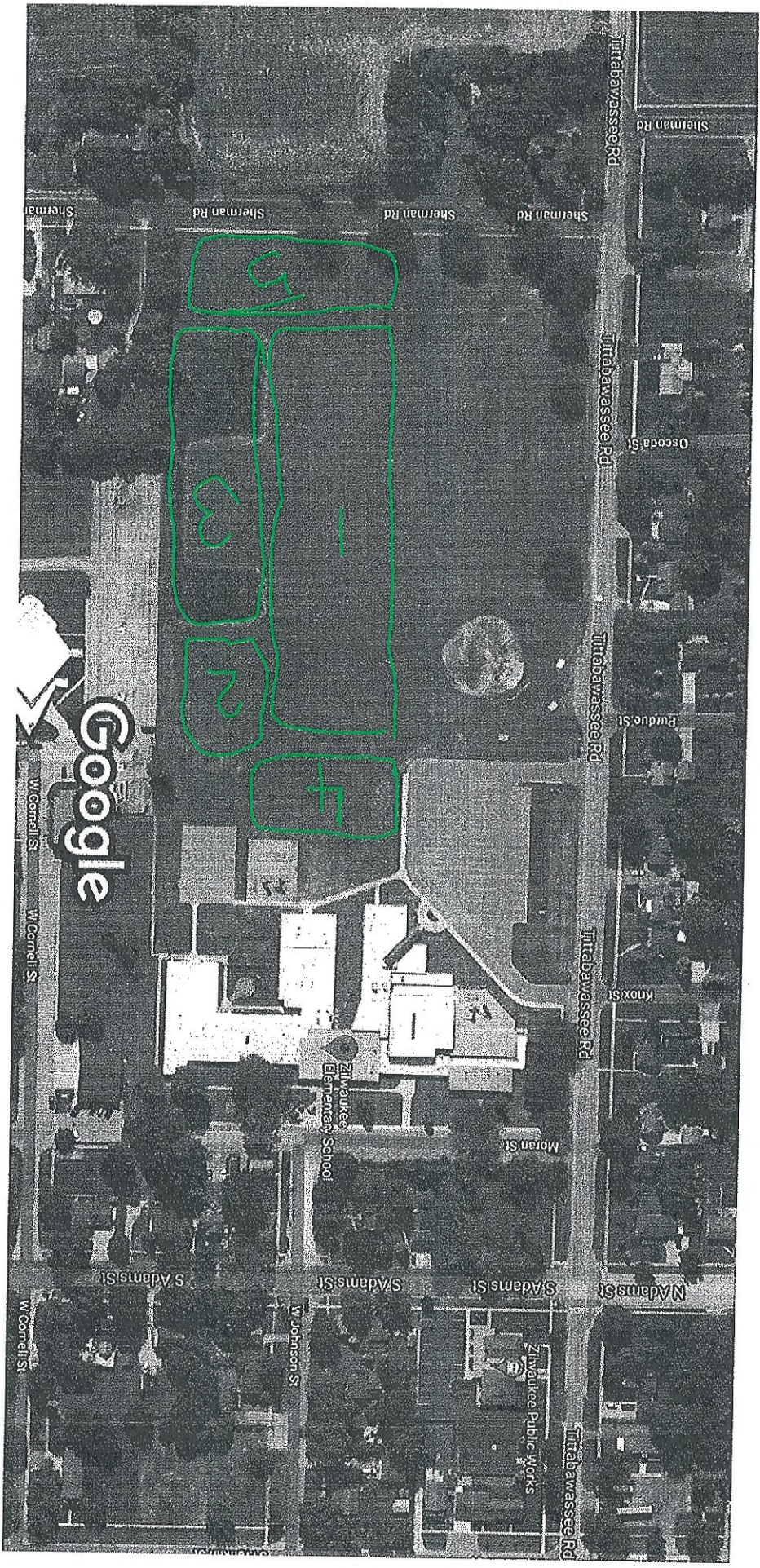
Mini-Grant Budget Worksheet

Please fill out this worksheet and upload it with your application or email the worksheet to Claire Bunker cbunker@svsu.edu

Name of Grant: Zilwaukee School Schoolyard Habitat Project and Outdoor Learning Lab
 Name of person: Gregory Allington, Elementary Special Education Teacher
 Email of person: GAllington@spsd.net

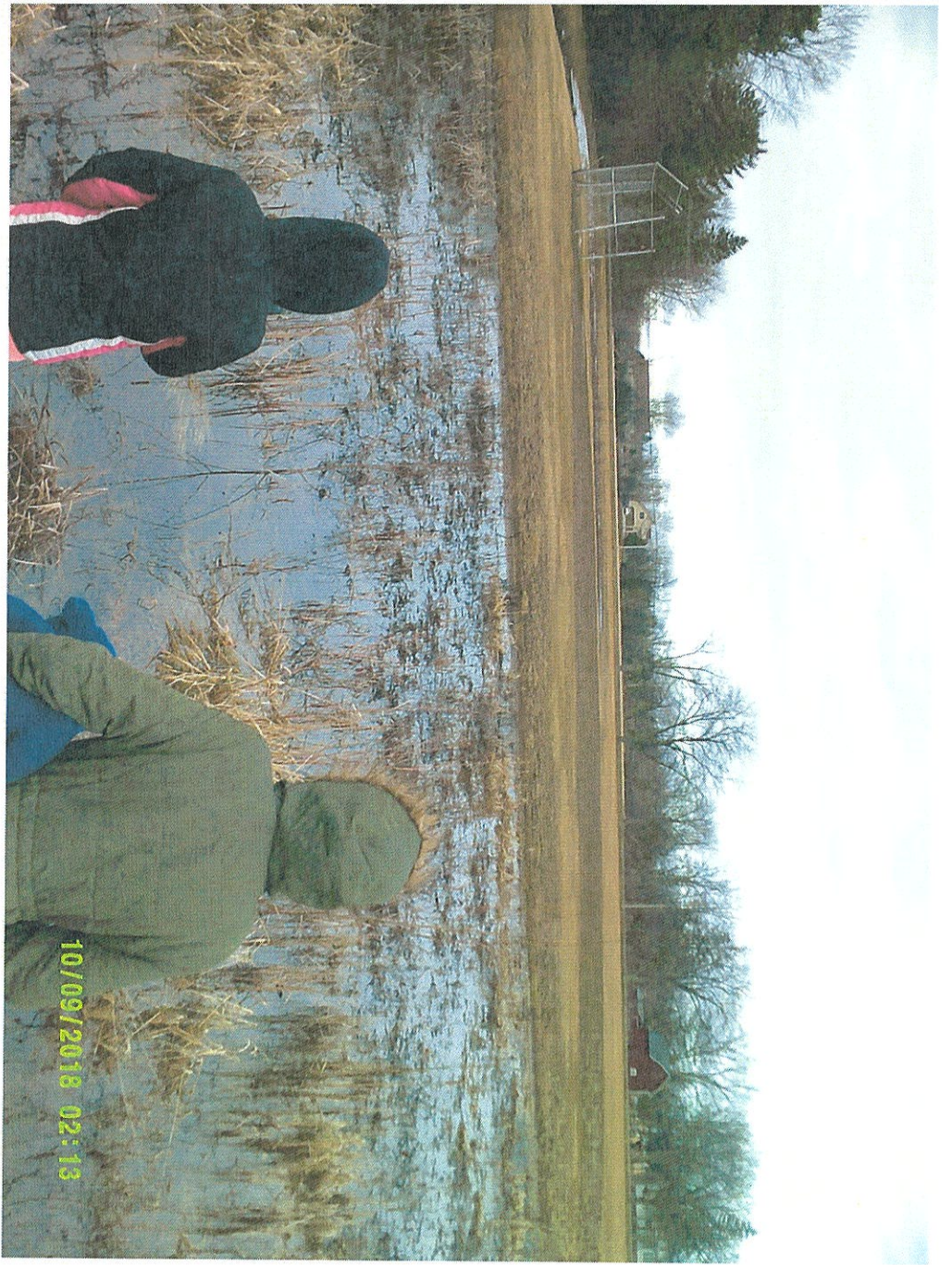
Item	Description	Person(s)	Quantity	Amount
Motte SKU: 5845	AP Env. Sci. Water C	G.Allington	1	\$204.00
Motte SKU:	Water Quality Educ	G.Allington	1	\$459.00
Microscope	Interactive	G.Allington	1	\$1,184.90
Sampling	Dick's sporting	G.Allington	2	\$29.98
Sampling	BioQuip Products	G.Allington	2	\$26.62
Sampling	Nature Watch Bug	G.Allington	10	\$38.50
Shipping Costs		G.Allington	1	\$57.00
Total Requested				\$2,000.00

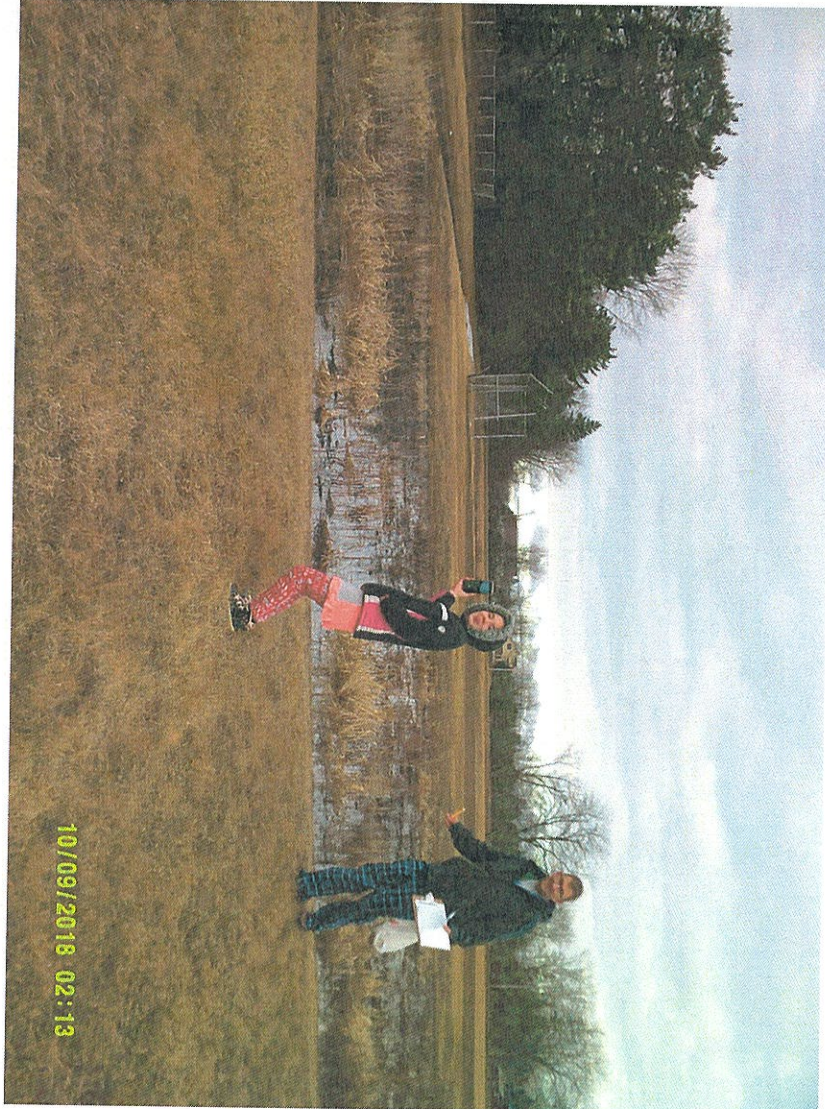
Google Maps Zilwaukee Elementary School



Imagery ©2020 Maxar Technologies, USDA Farm Service Agency, Map data ©2020

100 ft





Earthforce School Yard Survey and Inventories



The Grant includes **FREE** consultation, habitat development, **educational signs** from The USFWS! Plus, **outdoor science & environmental education curriculum** and **teacher training** from Chippewa Nature Center Educators!





Zilwaukee School

500 Johnson Street Saginaw, MI 48604 Phone:(989) 399-5200 Fax:(989) 399-5205

February 11, 2021

Members of the Saginaw Board of Education,

First and foremost, on behalf of my staff, I would like to commend Mr. Greg Allington, Elementary Special Education Teacher, for his research, organization, and passion for Zilwaukee School's Schoolyard Habitat Project. I would also like to commend the community partners, Chippewa Nature Center and the US Fish and Wildlife Service; both partners have approved the grant, as well as committed to providing up to two years of service, labor, curriculum, teacher workshops, and consultation at no expense to the school district. This project showcases an investment into the educational well-being of current and future Zilwaukee School students, as well as students of all Saginaw Public Schools.

The faculty and staff of Zilwaukee School strive to empower our students with leadership principles, practices, and life-skills they need to thrive in the 21st century, including:

- Critical Thinking
- Creativity
- Self-Discipline
- Vision
- Initiative
- Communication
- Relationship Building
- Goal Achievement
- Public Speaking
- Global Awareness
- Social-Emotional Learning
- Teamwork
- Listening Skills
- Time Management
- Leading Projects
- Self-Directed Learning
- Valuing Diversity
- Problem Solving

The end in mind for the Schoolyard Habitat Project, as outlined in the grant proposal, is to increase student engagement and achievement in science, across grade levels, with hands-on, real-world, place-based and project-based inquiry science. The secondary goal is to provide support, encouragement, and tools for teachers to bring real-world inquiry science into their classrooms. We envision the staff and students will use the outdoor learning lab for leadership projects and interdisciplinary outdoor studies in the calm, relaxing, and safe natural environment.

At Zilwaukee School, faculty and staff focus on developing the whole-child by: teaching LEADERSHIP to every student, creating a CULTURE of student empowerment, and aligning systems to drive results in ACADEMICS. Zilwaukee School's Schoolyard Habitat Project will create an outdoor learning lab for teachers and students in all grades, prekindergarten thru 8th grade, to utilize for place-based, hands-on inquiry science, STEM, as well as cross-curricular connections with ELA, Social Studies, as well as opportunity for application of the 7 Habits, leadership principles, and practices.

The Schoolyard Habitat and Outdoor Learning Lab would also pave the way for integrated approaches for science application and ascend the levels of the Bloom's Taxonomy, shifting from a focus on memorization to an increased capacity for transferring science knowledge to real-world challenges. Students will be able to share connections between prior learning and highly effective practices, and then transfer highly effective practices to real life situations. The deeper the understanding, the more significant the impact in academic achievement of our students.

"Shoeless" Joe Jackson said it best in the movie Field of Dreams: *"If you build it, they will come."* Upon development, the Schoolyard Habitat and Outdoor Learning Lab will become a permanent and sustainable part of Zilwaukee School, as well as Saginaw City School District, and our local communities. It is envisioned that it will become an extension of every PreK-8th grade classroom at Zilwaukee School, as well as provide field trip opportunities for all other SPSD schools.

I appreciate your thoughtful consideration of the Schoolyard Habitat Project, as well as the Outdoor Learning Lab at Zilwaukee School.

Respectfully,



Tina L. Muñoz, Principal
Zilwaukee School, PreK-8 Grades
tmunoz@spsd.net
989.399.5201

Dear Board Members,

My name is Paige Yanna, I am a teacher at Zilwaukee School. I have been teaching at this school for the past two years. I am in agreement with the proposal of the Schoolyard Habitat Grant. I believe that this grant would be extremely beneficial to all of our students at Zilwaukee School. I currently teach students in a self-contained classroom and know how beneficial it is for my students to experience hands-on activities. Creating an outside environment for my students to learn about our environment and learn how to take care of our garden would be a way for them to learn about our environment in a fun way! Having this grant would be so beneficial to all of our students and teach them experiences they may not otherwise have in their homes. I find this to be especially important this year because our students have not been able to collaborate in a hands-on way this school year.

I hope you as board members truly understand how it is our duty to teach our students how to take care of their environment. This would be a great grant for our school and would make students feel they were able to be a special part of change!

Sincerely,
Paige Yanna
Special Education Teacher (CI 2-6th Grade)
Zilwaukee School

Thursday, February 11, 2021

Dear Saginaw Board of Education Members,

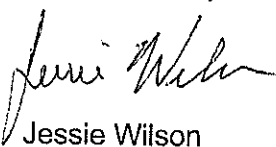
I'm privileged and honored to write a letter of support for the Schoolyard Habitat Grant. I've witnessed the hard work and diligence on behalf of Zilwaukee staff and the Chippewa Nature Center. The processes and logistics it took to get to this moment has been tedious, but worthwhile. This will be a great example of something so simple that will have a great impact on all stakeholders.

As an educator at Zilwaukee, the addition of the nature center will extend education beyond the four walls of the building and the reach of the internet and monitors students are utilizing during remote learning. It will provide a piece of mind to students and the surrounding community when learning outside or going for walks while enjoying the ambiance that it is intended to give. Providing the community with a close haven to relax and enjoy something Zilwaukee School provides. Also, it will allow for an extension of the district's curriculum. Providing hands-on instruction during science at all grade levels, which will also be beneficial for cross curricular instruction.

Importantly, the maintenance and upkeep of the educational wetlands preserve will create accountability and ownership for the community, staff, and students. Students will assist with the upkeep and take on leadership roles to make sure that it is well-kept and maintained. Students will help organize events surrounding the wetland and will be given daily access. This will provide students with the opportunity to get outside and enjoy nature.

This is a great opportunity to set Zilwaukee School and Saginaw School's on par with other districts in providing STEM education, and meeting NGSS. The overall goal is to increase student engagement and academic achievement.

Best,



Jessie Wilson
5th Grade Teacher
Zilwaukee School

February 11, 2021

Dear Saginaw Board of Education Members,

It is with great excitement and enthusiasm that I write this letter of support for the Zilwaukee School's Schoolyard Habitat Project and Outdoor Learning Lab. The reasons of support are numerous, but here is some of them:

- Zilwaukee has an amazing resource of diverse land available for use to the school and this would provide a method for teachers, students, and the community to use this resource.
- Expanding learning opportunities to the outside world, rather than confining students within walls is a win-win for everyone. Students who are introduced to new experiences safely, are more likely to continue exploring these experiences on their own.
- Engagement! Engaging students in a variety of ways keeps them active and interested in learning!
- By bringing together various agencies on this project (Mi-STEM, U.S. Fish & Wildlife Service, Chippewa Nature Center, and CNC-USFWS Schoolyard Habitat Grant), it creates opportunities for community engagement and teachers to utilize new resources that they may not have otherwise tapped into. The success of this project also opens the doors for other organizations to get involved for the betterment of our school and students.
- This project preserves a natural wetland and allows students to explore and learn about wetland habitats. The topic of wetlands are covered in many levels of the science curriculum and what better way to learn about it than to experience it.
- The value of being able to take meaningful field trips in our own backyard and relate it back to classroom content cannot be emphasized enough.
- Zilwaukee teachers are teaming together to coordinate plans that scaffolds throughout the grade levels.

Zilwaukee is in a unique situation (where it is located and the land resources available) with an equally unique opportunity to utilize and benefit from it. As a STEM teacher, the prospects of engaging students in activities that more fully utilizes the assets afforded to this amazing school community brings a rejuvenated excitement and enthusiasm to carry on to the students.

Yours in Teaching,



Lori Hall
STEM Teacher

February 11, 2021

Distinguished Members of the Saginaw Board of Education,

On behalf of Mr. Greg Allington and the students, staff, families, and community of Zilwaukee School, I pledge my support for the Schoolyard Habitat Project and Outdoor Learning Lab.

We have a tremendous opportunity to provide educational experiences for our current and future students, through the lens of environmental awareness. How truly exciting it will be to literally say that “learning takes place in our own backyard.” We will be able to showcase pride, not only in our school, but in our environment, as well. With that being said, Zilwaukee School is at the forefront of “Keeping Kids First.”

As educators, we are tasked with developing ways to differentiate, motivate, and promote engagement, amongst our students and families. This project will allow every grade level student a unique chance to make the real world real and to develop an appreciation for nature. In addition, new partnerships will be formed, as we join the collective forces of the U.S. Fish and Wildlife Service and the Chippewa Nature Center. This is an excellent example of Leaders helping Leaders.

In closing, I believe that Mr. Allington said it best when he stated, “It is important that students and teachers gain an understanding and appreciation for their community’s natural resources, in order to become more knowledgeable and caring stewards of their communities.”

I thank you for your time, attention, and consideration of the Schoolyard Habitat Project and Outdoor Learning Lab at Zilwaukee School.

Respectfully Submitted,



Mr. Sean A. LeRoux
PreKindergarten
Zilwaukee School
(989) 399-5245
sleroux@spsd.net

To whom it may concern:

Greg Allington has been hard at work on beautifying the property at Zilwaukee School. The Schoolyard Habitat Grant Greg has written is another great step towards the beautification process. The students here at Zilwaukee School will be able to enjoy many great activities. I believe the students will be truly excited about outdoor activities when Face to Face learning returns after being isolated and cooped up for so long in their homes.

It is my hope that Greg Allington's request be approved for many generations of students to enjoy and learn from.

Thank you for your time and consideration,
Caitlin Miller

February 11, 2021

Dear Saginaw Board of Education Members,

It is with great excitement and enthusiasm that I write this letter of support for the Zilwaukee School's Schoolyard Habitat Project and Outdoor Learning Lab. The reasons of support are numerous, but here is some of them:

- Zilwaukee has an amazing resource of diverse land available for use to the school and this would provide a method for teachers, students, and the community to use this resource.
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- Zilwaukee teachers are teaming together to coordinate plans that scaffolds throughout the grade levels.

Zilwaukee is in a unique situation (where it is located and the land resources available) with an equally unique opportunity to utilize and benefit from it. As a STEM teacher, the prospects of engaging students in activities that more fully utilizes the assets afforded to this amazing school community brings a rejuvenated excitement and enthusiasm to carry on to the students.

Yours in Teaching,



Lori Hall
STEM Teacher

Saginaw Public Schools Board of Education
550 Millard St.
Saginaw, MI 48607-1140

Dear Distinguished Board of Education Members;

I am writing today to express my support for the Schoolyard Habit Grant. As a new co-teacher to the Zilwaukee School, as part of the SVSU ACR program, as well as a former Recreation Professional I feel that the partnership with the Chippewa Nature Center and US Fish & Wildlife would be very beneficial to our students.

As a former outdoor recreation professional, I feel that one of the most important things children can appreciate is their local geography and ecology. This program will allow student to experience the natural world in the Great Lakes Bay Region while also providing valuable habitat for local plants and animals.

As President Theodore Roosevelt said "The conservation of natural resources is the fundamental problem." We as educators, have the opportunity, to teach our students about the natural world which will inform their overall education and make them better citizens and people.

With a 10-year partnership we will be able to truly affect the natural world and provide a quality naturalist and science education to the Zilwaukee School students and the surrounding community. In closing, I strongly feel that a program like this will help with social emotional support development of the students and welcome the indigenous natural world to the school's grounds.

Sincerely,

Chris Wakeman

Mr. Christopher J. Wakeman M.A.
6th-8th Grade Social Studies and ELA Student Co-Teacher
Zilwaukee School
Room 310
Saginaw Public Schools

Brian Geiss
1515 Elizabeth St
Bay City, MI 48708
(440)865-6342
bgeiss@spsd.net

Building and Grounds Committee
Saginaw Public Schools
550 Millard Street
Saginaw, MI 48607

Dear School Board Members,

As you consider the proposal for the Outdoor Habitat Grant for Zilwaukee School, I urge you to fully support this initiative to build a space that will develop a wealth of learning opportunities for the community. This outdoor space will be an excellent opportunity for students to engage with hands-on, real-world applications of the concepts they discover in the classroom. The area will provide space for science experiments, STEM activities, and cross-curricular activities that will improve student learning and appreciation of the world around them.

I hope to have your support for this proposal to bring this engaging project to our students.

Sincerely,

Brian Geiss
6th-8th Science Teacher
Zilwaukee School

Amanda Koch

4320 Garfield Road
Auburn, MI 48611
(989)492-4663
AKoch@spsd.net

February 11, 2021

Building and Grounds Committee

Saginaw Public Schools
550 Millard Street
Saginaw, MI 48607

Dear School Board Members,

As you consider the proposal for an Outdoor Schoolyard Habitat Grant at Zilwaukee School, I urge you to fully support this endeavor that has been meticulously thought and planned for the benefit for all students. Supporting school ground improvements and programs for effective outdoor classrooms, safe play, and project based learning could make a significant difference in a child's education experience. An outdoor educational area can provide hands-on experiences, natural Science investigations, authentic STEM projects, and more; all which enhance the academic success of students and teachers.

The Habitat Grant will provide opportunities for community based environmental partners who can increase a school's capacity to engage students in outdoor learning and also serve as advisors for additional effective usages of the school grounds for learning.

Supporting the outdoor education proposal for Zilwaukee School will also allow staff members to provide students with activities on their own school grounds that some students may not have access to. The outdoor area has the potential to grow and expand to allow more diverse cross curricular lessons. Zilwaukee will be able to showcase and highlight that students will have outdoor learning opportunities in their own school yard- something not many schools in the area can offer.

In closing, this grant proposal is truly an investment in students. The creative, hands on learning approach for Science, STEM, and beyond will not only benefit student achievement, it will also increase the understanding of the natural resources around them.

Sincerely,

Amanda Koch
Secondary Science Instructional Coach