U.S. DEPARTMENT OF EDUCATION

GreenRibbonSchools

School Nominee Presentation Form

ELIGIBILITY CERTIFICATIONS

School and District's Certifications

The signatures of the school principal and district superintendent (or equivalents) on the next page certify that each of the statements below concerning the school's eligibility and compliance with the following requirements is true and correct to the best of their knowledge. *In no case is a private school required to make any certification with regard to the public school district in which it is located.*

1. The school has some configuration that includes grades early learning to 12.
2. The school has been evaluated and selected from among schools within the Nominating Authority's jurisdiction, based on high achievement in the three ED-GRS Pillars: 1) reduced environmental impact and costs; 2) improved health and wellness; and 3) effective environmental and sustainability education.
3. Neither the nominated public school nor its public school district is refusing the U.S. Department of Education Office of Civil Rights (OCR) access to information necessary to investigate a civil rights complaint or to conduct a district wide compliance review. The Department of Defense Education Activity (DoDEA) is not subject to the jurisdiction of OCR. The nominated DoDEA schools, however, are subject to and in compliance with statutory and regulatory requirements to comply with Federal civil rights laws.
4. OCR has not issued a violation letter of findings to the public school district concluding that the nominated public school or the public school district as a whole has violated one or more of the civil rights statutes. A violation letter of findings will not be considered outstanding if OCR has accepted a corrective action plan to remedy the violation.
5. The U.S. Department of Justice does not have a pending suit alleging that the public school or the public school district as a whole has violated one or more of the civil rights statutes or the Constitution's equal protection clause.
6. There are no findings of violations of the Individuals with Disabilities Education Act in a U.S. Department of Education monitoring report that apply to the public school or public school district in question; or if there are such findings, the state or public school district has corrected, or agreed to correct, the findings.
7. The school meets all applicable federal, state, local and tribal health, environmental and safety requirements in law, regulations and policy and is willing to undergo EPA on-site verification.

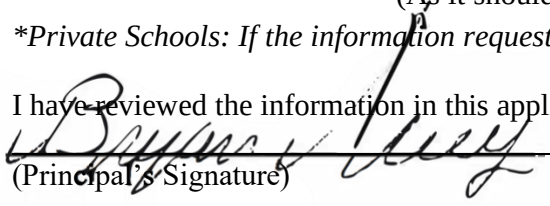
U.S. Department of Education Green Ribbon Schools

Name of Principal: **Mr. Bryan S. Terry**
(Specify: Ms., Miss, Mrs., Dr., Mr., etc.) (As it should appear in the official records)

Official School Name: **Starms Early Childhood**
(As it should appear on an award)

**Private Schools: If the information requested is not applicable, write N/A in the space*

I have reviewed the information in this application and certify that to the best of my knowledge all information is accurate.

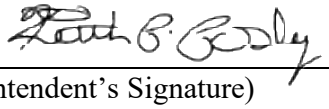


(Principal's Signature) Date: 2/17/2021

Name of Superintendent: **Dr. Keith P. Posley**
(Specify: Ms., Miss, Mrs., Dr., Mr., etc.) (As it should appear in official records)

District Name: **Milwaukee Public Schools**

I have reviewed the information in this application and certify that to the best of my knowledge all information is accurate.



(Superintendent's Signature) Date: February 23, 2021

U.S. DEPARTMENT OF EDUCATION

GreenRibbonSchools

Nominating Authority's Certifications

The signature by the Nominating Authority on this page certifies that each of the statements below concerning the school's eligibility and compliance with the following requirements is true and correct to the best of the Authority's knowledge.

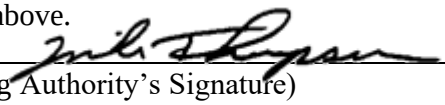
1. The school has some configuration that includes grades Pre-K-12.
2. The school is one of those overseen by the Nominating Authority which is highest achieving in the three ED-GRS Pillars: 1) reduced environmental impact and costs; 2) improved health and wellness; and 3) effective environmental and sustainability education.
3. The school meets all applicable federal civil rights and federal, state, local and tribal health, environmental and safety requirements in law, regulations and policy and is willing to undergo EPA on-site verification.

Name of Nominating Agency: **Wisconsin Department of Public Instruction**

Name of Nominating Authority: **Carolyn Stanford Taylor**

(Specify: Ms., Miss, Mrs., Dr., Mr., Other)

I have reviewed the information in this application and certify to the best of my knowledge that the school meets the provisions above.



_____Date: 2/25/2021

(Nominating Authority's Signature)

SUBMISSION

The nomination package, including the signed certifications, narrative summary, documentation of evaluation in the three Pillars, and photos should be submitted online according to the instructions in the Nominee Submission Procedure.

OMB Control Number: 1860-0509

Expiration Date: December 31, 2023

Public Burden Statement

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless such collection displays a valid OMB control number. The valid OMB control number for this information collection is 1860-0509. Public reporting burden for this collection of information is estimated to average 37 hours per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. The obligation to respond to this collection is required to obtain or retain benefit P.L. 107-110, Sec. 501, Innovative Programs and Parental Choice Provisions. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the U.S. Department of Education, 400 Maryland Ave., SW, Washington, DC 20202-4536 or email ICDocketMgr@ed.gov and reference the OMB Control Number 1860-0509. Note: Please do not return the completed ED-Green Ribbon Schools application to this address.

U.S. Department of Education Green Ribbon Schools
Summary of Achievements
for
Starms Early Childhood

Starms Early Childhood, part of Milwaukee Public Schools, has grown from implementing simple programs such as recycling in a classroom to embedding principles of the three pillars into our school curriculum and culture. Our school building is over 100 years old and located in the central urban city where we serve 278 three- through five-year-old kindergarten students, 88% who identify as Black, 6% as Hispanic, and 3% with two or more races/ethnicities. Ninety-five percent of students come from economically disadvantaged households. It has been well established that children of poverty live in food deserts and receive little or no exercise. The level of trauma and disproportionality that many of our children have encountered affect their health and well-being.

In 2019, we completed a multi-year holistic schoolyard redevelopment project. The new schoolyard allows us to teach environmental themes, conservation, and cross-curricular lessons that emphasize careers. Through the project, we removed 12,200 square feet of asphalt and installed green infrastructure features that manage 42,430 gallons of stormwater per rain event.

At Starms Early Childhood, we are committed to saving water, learning about the environment, and reducing our carbon footprint. With the help of Neighborhood House, our staff has aligned our district assigned curriculum, Frog Street, and on- and off-site environmental education programs into our daily teaching and learning. Children are taught to reduce, reuse, and recycle with many school wide initiatives that encourage the reduction of waste not only in school but also in students' homes.

We teach students to reduce and reuse by accepting gently used donations from families and staff. These donations are given to others in need and used in a size exchange program for families with growing children. Our school created a recyclable room where children/staff can put their recyclables they collect. These materials are then reused for art projects and as learning materials. Students practice recycling through the Crayola Markers Recycling and Trex Plex Recycling programs. Children are taught which products and supplies are recyclable and how to sort them. The children are shown that what they collect is made into new products. Due to the hard work of the children and staff, we have been rewarded with a garden box, planter box, and a full-sized bench from the Trex Plex Recycling program.

We are strengthening our water quality and conservation through many efforts. These include the reduction to the flow of all sinks that could be adjusted by our school engineer and the future addition of water filling stations at our water fountains. Outside on our school grounds, a bioswale has been installed to collect and filter water from our permeable surface and runoff from our staff parking lot. We are also working with the school district and our community partner, Reflo, to install an above ground cistern to harvest rainwater and add an additional rain garden to catch rain from our new outdoor classroom. The

rainwater collected in the cistern will be used as a teachable tool for watering the raised-bed gardens and native planting areas.

We are incredibly proud of our flower and vegetable gardens on our grounds. These gardens consist of native plants, perennials, annuals, and different varieties of bulbs, which are tended to and explored by the children. The plants include sensory pleasing touches and smells. They also include different heights, colors, and textures. The raised vegetable beds are cultivated, planted, tended to and harvested with the help of students, staff, family members and volunteers. There are toadstools, planter pots with a beach, and a student sized picnic bench embedded into the garden so the children can be immersed in the beauty of the garden and feel the zen moments while they are reading, writing and exploring in them. We are excited to add more learning opportunities in our outdoor classroom, the small group bench seating and the moveable tree trunk small group stations. This will enhance our nature time education as well as cooperative learning and teaching outdoors in nature.

Starms Early Childhood is a city wide school with many students bussed to our location. Milwaukee Public Schools have established a No Idling Policy for cars and busses. Signs have been posted and busses are required to turn off their engines, cars are encouraged as well. Community field trips within walking distance are taken as much as possible, public transportation is utilized, and bus-sharing is highly encouraged when classes are going to the same place to ensure we are conserving our resources and cutting down on pollution and setting a good example for our families and students to follow.

We are working to be energy efficient. During an energy audit we were found to be 91% efficient. To reduce energy leaking from the building, double doors in the lobby are used when people are entering or leaving. The lights throughout the school are labeled with reminders to turn off the lights when leaving and partial lights or alternating lights are used to conserve energy and create calm. We have decreased our fluorescent bulbs which used to be gas station bulbs to the correct bulbs but even those are too much light. We also use light filters to cover the fluorescent lights in alternate patterns throughout the room to reduce eye strain.

Starms ECC supports the health and wellness of its students, staff, and families through well-maintained indoor environments, transforming outdoor spaces, and ensuring proper nutrition and exercise. The students and staff work closely with the building engineer and district to ensure the school building is cleaned and cared for. Outside, fifteen trees border the playground with grass beneath them providing safety from the sun and opportunity to learn. Two additional trees have been planted in the middle of the newly designed playground which features a permeable rendition of Lake Michigan and the surrounding cities.

There are an additional two trees in the bioswale: a river birch and a tamarack tree which are both quick drinkers and a great addition to the school site. Throughout our grounds, front of school, parking lot, and along the vacant lots, we have an additional 20 trees. We received trees from the City of Milwaukee Forestry Department to establish less runoff. We worked with the department head to receive different varieties of trees so the staff and students could study about the different varieties of trees without having to leave our community. It is also another way of supporting the community in the 53205 zip code, providing beautification and help with their flooding basements as well!

Our school also promotes and supports physical and emotional wellness. Our Frog Street and Second Step curriculum include opportunities to identify emotions and feelings while students learn to manage them. Children are taught self-regulation and calming strategies though practice and adult examples. Strategies included self-talk, teaching empathy, breathing techniques, meditation, and yoga. Staff are given the opportunity to practice self-care skills such as yoga, wellness and healthy cooking classes, exercise challenges, and monthly mindfulness training.

Our physical wellness is supported by a full time nurse, the Fresh Fruit and Veggie Program, and increased movement opportunities. Extended outside time and brain breaks are encouraged. Students are provided classes on healthy eating, germs, hand washing, exercise, and dental health. Fresh fruits and vegetables are introduced to children that they may not try at home and have taken field trips to Cream City Farms to learn about urban agriculture and fresh foods right in our community. We have even received a food share from the farm. Winter weather gear including boots, coats, mittens, hats, and scarves are provided on-site so children can experience outdoor winter activities with the proper materials.

Families and community members have opportunities to learn and contribute to our health and wellness. These opportunities include a monthly School Engagement Council Meeting and positive parenting seminars led by the Parenting Network. Partnerships have been established with Aurora Health Care, Social Development Commission, MPD, Bell Ambulance, MFD, Marquette HS, DSHA HS, St. Sebastian's classes and Hilton Corporation. Volunteers have read to the students, support learning opportunities, lead school-wide projects, maintain and assist with gardens, and attend school-wide events. Our K5 children have started to work in the garden as well as create projects to beautify the garden, however, without these volunteers, we would not be able to maintain our gardens successfully! The children are great at learning from the gardens, however, having them dig out weeds at this age wasn’t helpful as they would pull out more plants than weeds.

From creating classroom museums focused on conservation or environmental justice themes to exploring daily water use to learning on the schoolyard with the tools provided in the Outdoor Discovery Cart, environmental education is embedded in our everyday lives and curriculum. Starms ECC has designed and implemented an environmental curriculum for K3, K4, and K5 that scaffolds from the previous year. This ensures that our children are learning outdoors using developmentally appropriate practices, guided in the Wisconsin Model Early Learning Standards and Common Core standards, incorporating imaginative play, conversation, and environmental exploration. An ongoing partnership with the Neighborhood House of Milwaukee supported our transition to virtual learning with Virtual Nature Time programming.

About the Summary and Scoring:
Green & Healthy Schools Wisconsin collects annual survey information from schools and compiles this data long-term. The most recent survey data has been included in the application summary that follows along with additional supporting information provided by the applicant. Each application was ranked by teams of external reviewers and internal reviewers, each with different areas of expertise, using a common ranking tool. In addition, the slate of nominees was forwarded to related state and federal agencies to ensure there were no compliance or regulatory issues.

Green & Healthy Schools Annual Survey
The following policies exist in our school or district:
● School board approved sustainability policy or resolution, or similar. ● Environmentally-responsible products purchasing policy. (Durable, low off-gassing, recycled content, reusable or recyclable, third party certified, local, chemical-free) ● Well-publicized no-idling policy that applies to all motorized vehicles (including school buses and parent drop-off/pick-up). ● Providing healthy classroom snacks.

Pillar I: Reduced Environmental Impacts and Costs

- ➢ Reduced or eliminated greenhouse gas emissions, using an energy audit or emissions inventory and reduction plan, cost-effective energy efficiency improvements, conservation measures, and/or on-site renewable energy and/or purchase of green power
- ➢ Improved water quality, efficiency, and conservation
- ➢ Reduced solid and hazardous waste production through increased recycling and composting, reduced consumption, and improved management, reduction, or elimination of hazardous waste
- ➢ Expanded use of alternative transportation, through active promotion of locally available, energy-efficient options and implementation of alternative transportation supportive projects and policies

Conservation practices used in our school include:
● Computer power management settings ● Thermostat temperature setback for unoccupied building times. ● Hot water temperature set points. ● Removed personal appliances such as portable space heaters or mini-fridges.
Our school composts:
● Classroom food waste
What type of composting system does your school use?
● Vermicompost (worm bin)
Our school implements water conservation measures:

• Meters water-use to identify substantial changes. • Faucets with properly timed automatic shut-off. • Efficient dishwashing equipment.
Our school practices "ecologically-friendly" landscaping methods on school grounds:
• Water efficient, or native plant landscaping. • Do not use fertilizers OR Careful application of fertilizers to reduce runoff impact
Our school has green infrastructure on our school site.
Our school practices "ecologically responsible" methods for snow and ice removal:
• Snow and ice removed before salt is applied. • Salt application charts are used and equipment is calibrated. • Anti-icing brine is used before storm event.
Our school has an integrated pest management (IPM) program.
Brief narrative describing how the people in your school community reduce environmental impact. • ENERGY: We were audited from Energy Star in 2018, received a rating of 91%. • TRANSPORTATION: Include descriptions of low-emissions buses, optimized bus routes, public transportation, carpooling and non-motorized transportation. During fieldtrips we always fill the busses with multiple classrooms to ensure we don't waste energy. • WATER: All schoolyard rain water is absorbed in permeable surfaces and it all empties into our bioswale stormwater management infrastructure. • WASTE: We have decreased our solid waste pick-ups from 3 to two times a week. We enlarged our recycling bin from 4 cubic feet to 6 and increased the number pick up times per week to two times.
Please upload one photo that represents your school's efforts to reduce environmental impact. https://s3.us-east-2.amazonaws.com/resources.refloh2o.com/Website/Conceptual+Schoolyard+Redevelopment+Plan+-+Starms+ECC+-+2-13-18.pdf

Schoolyard Redevelopment Project Background & Funding Considerations

During the 2017-2019 school years, school fundraising and grant writing efforts were focused on supporting the Schoolyard Redevelopment Project which transformed our playground and outdoor learning spaces. The redevelopment project removed 12,200 sq. ft. of asphalt and replaced it with new green space and mixed-use recreation and educational areas. With estimated project costs of $455,000, this holistic project was constructed in summer 2019 and manages 42,430 gallons of water per rain event.

NOTE: See the Cohort 1 Summary (pdf) or (video: https://youtu.be/Vqg6vH4S6LM) to learn more about the overall Schoolyard Redevelopment Process.

Today, fundraising continues to support amenities and final details needed to complete a second phase of the schoolyard project. We are working to install an above ground cistern for rainwater harvesting and an additional rain garden to collect runoff next to the outdoor classroom. We are also securing funding to

purchase outdoor tables, water sensory tables, additional music stations, art installations of different vocabulary throughout the schoolyard, and a natural fence to keep balls out of our bioswale. As these outdoor upgrades come to a close, Starms will be able to shift its focus toward continued improvement of its indoor environment.

Better Buildings Challenge Report (linked here) Results and Recommendations

We completed the Better Buildings Challenge on October 26, 2017. Starms received an Energy Star rating of 91/100 and Building Energy Asset score of 6.5/10. Compared to other similar education buildings within our region, it was determined that Starms used less energy than 84% of the comparable facilities in the data set. The MPS Department of Facilities and Maintenance monitors and tracks Starms' monthly energy consumption and costs. Data is provided by the district's energy management service provider, WE Energies.

Since receiving our Better Building Challenge results in May 2018, Starms has worked to address several of the nine (9) recommendations provided in the report and taken additional actions to reduce energy use within the building and promote a green and healthy school culture. Recommendations 1, 2, 3, 5, and 6 (listed below) have been implemented in some capacity. Starms continues to address other recommendations and improvements as time and budget allows.

It is important to note that there are limitations to our actions based on the age of the building, over 100 years old, controls or policies in place with the larger school district, and the cost of implementing some of the suggested upgrades.

ENERGY SAVING RECOMMENDATIONS

Summary of Energy Efficiency Recommendations (EER)

Please refer to the EER Analysis Section following this table for a detailed description.

EER #	Recommendations	Qty	Units	Demand Savings (kW)	Electric Savings (kWh/yr)	Natural Gas Savings (therms/yr)	Electric Savings ($/yr)	Gas Savings ($/yr)	Annual Savings	Project Cost Estimate	Potential Incentive	Payback
1	Install vending machine controls	1	Machine		1633		$208		$208	$169	$100	0.3
2	Install VFDs on HVAC system motors	10	HP	0.860	4106		$522		$522	$2,500	$400	4.0
3	Add linkageless controls and O2 trim sensors to the boiler	30	BHP			1088.89		$470	$470	$2,257	$159	4.5
4	Consider exterior lighting upgrades	10	Fixture		4533.3		$576		$576	$3,000	$400	4.5
5	Upgrade to ENERGY STAR® Refrigerators and Recycle the existing units	3	Refrigerator	0.602	5253		$668		$668	$2,400		3.6
	Quickest Return						$1,974	$470	$2,444	$10,326	$1,059	3.8
9	Increase Data Closet Temp	11	Degrees Reduced		1321.509		$168		$168	$0	$0	0.0
1	Install vending machine controls	1	Machine		1633		$208		$208	$169	$100	0.3
	Low Cost/No Cost						$2,350	$470	$2,820	$10,495	$1,159	3.3
6	Upgrade T12 or T8 2x2 and 2x4 troffer fixtures to DLC listed LED troffers	268	per fixture	8.924	25521.5		$3,246		$3,246	$40,200	$2,144	11.7
7	Convert from HID to LED fixtures with lighting controls	15	Fixture	2.145	892.32		$113		$113	$3,000	$450	22.5
8	Transformer No-Load Losses	1	Transformer	0.120	1054.63		$134		$134	$4,000	$0	29.8
	Other Opportunities						$5,843	$470	$6,313	$57,695	$3,753	8.5

Recommendation 1: Vending Machine Controls

The vending machine is not in use during virtual learning. It is unplugged and we are currently working on removing the vending machine from the school building.

Recommendation 2: VFDs and HVAC System
Prior to 2014, half of the school building was updated with air conditioning systems with VFDs on HVAC system motors.

Recommendation 3: Boilers and Linkages
MPS Department of Facilities and Maintenance (located in downtown Milwaukee) has linkageless controls and O2 trim sensors to the boiler system for our site. Facilities notifies our engineer when there is a problem with the system and he fixes it or alerts them what needs to be done and someone comes to fix the problem. The boilers are controlled at MPS Facilities, we have no control of these changes.

Recommendation 5: Energy Star Appliances, Upgrades and Materials Recycling
In Summer of 2020, we replaced three cafeteria coolers with Energy Star rated appliances and recycled 3 old ones. The school's washer, dryer, and main office copy machine are also Energy Star rated. We use recycled copy paper, and recycle all of our ink cartridges. We also use Trex Plex recycling for all the plastic bags and other plastic we accumulate throughout the school and our families bring their plastic as well to be recycled.

Recommendation 6: Lighting Upgrades
In 2017, all T12 lighting has upgraded throughout the building to T8 lighting as recommended.

Additional Actions to Reduce Energy Consumption

Daylighting & Other Lighting Considerations
We use daylighting/natural light instead of turning on the building lights whenever possible. We use alternative lighting to reduce the use of harsh overhead lighting as well. We unplug all electronics when not in use, turn off lights when not in use, and small fridges, heating units, and microwaves are not used in individual classrooms.

Half of the lighting systems in the building's new addition have occupancy sensors with optimized programming. We are unable to upgrade the rest of the age of the building (over 100 years old) and the extensive cost to convert these systems.

Building Envelope Considerations
We are addressing building envelope deficiencies by modifying doorway thresholds throughout the building. This effort will reduce the amount of energy (heat/cooling) lost going out the bottom of the door with a proper seal, making the doors and Starms as a whole, more energy efficient. To date, we have replaced 3 of 6 thresholds. The next 3 thresholds will be upgraded this summer 2021 as district staff are available to support the project upgrades. To further reduce energy consumption and increase overall efficiencies, the school has installed double-paned windows throughout, retiled basement walls due to water leakages, and replaced the roof in 2018.

Water Conservation and Decreased Plastics Consumption

We have purchased three (3) bottle filling stations through our Before/After school CAMP CLC funding to reduce the purchasing of one use water bottles. We believe that this will encourage staff to reduce our one use consumption of bottles and motivate staff/students to purchase and use reusable water bottles to help reduce our wasting of water.

Fossil Fuels, Transportation, and No Idling Considerations

Starms Early Childhood is a city wide school with many students bussed to our location. Milwaukee Public Schools have established a No Idling Policy for cars and busses. Signs have been posted and busses are required to turn off their engines, cars are encouraged as well. Community field trips within walking distance are taken as much as possible, public transportation is utilized, and bus-sharing is highly encouraged when classes are going to the same place to ensure we are conserving our resources and cutting down on pollution and setting a good example for our families and students to follow. Here we lead by example!

In addition, as part of the Milwaukee Public Schools district, Starms has been in a virtual learning environment since March 2020. We are not consuming any fossil fuels related to school commuting at this time.

Extending Our Impact at Home and with Families

It is important to our school culture that we share the sustainability practices we promote at school with students's families. We work to encourage our students and families to reduce their carbon footprint at school, home, and share strategies in newsletters and at family involvement meetings to increase engagement from our families.

At Starms, children are taught to reduce, reuse, and recycle with many school wide initiatives that encourage the reduction of waste not only in school but also in students' homes. We teach students to reduce and reuse by accepting gently used donations from families and staff. These donations are given to others in need and used in a size exchange program for families with growing children. Our school created a recyclable room where children/staff can put their recyclables they collect. These materials are then reused for art projects and as learning materials. Students practice recycling through the Crayola Markers Recycling and Trex Plex Recycling programs. Children are taught which products and supplies are recyclable and how to sort them. The children are shown that what they collect is made into new products. Due to the hard work of the children and staff, we have been rewarded with a garden box, planter box, and a full-sized bench from the Trex Plex Recycling program. When children see the rewards of our efforts it is easier to motivate them to a new thinking.

Children take these skills and teach their families about what goes into our green garbage containers and blue recycling bins. This helps the city and the community where we live.

We have become a school who reduces, reuses, and recycles on a daily basis. These programs have saved us so much money. Our recycle bin has been increased to 8 cubic feet and is picked up twice a week while our garbage is picked only once a week. After our energy star audit, teachers, the building engineer, and principal all met to discuss ways we could become more efficient and prioritized them from no cost to

cost. We have completed all the upgrades and programs that we are in control of within our school, and continue to seek opportunities for cost and energy savings.

As a school we have many challenges: Our first one is how to conserve water. Children must investigate how long they brush their teeth? How long do they shower? Is the water always on? Is it better to shower or take a bath? Do they run the water when they wash the dishes or use a tub to wash in? Do they use a dishwasher? Do they do laundry on the full cycle with a full load of laundry? The students do research on how much water is used for each item. Then we try to cut down the time we use water that goes down the drain. BRUSH Your Teeth Challenge: Children must record for the month of February that they brushed their teeth every am/pm and that they remembered to turn off the water while they were brushing. This saves about 2 gallons of water per tooth brushing session. Same goes for washing hands. We have a Wash Your Hands challenge at the beginning of the year to teach healthy hygiene as well as conserving water (turn off while signing your abc's twice) while washing. This forces the children to actually use the soap and bubbles to scrub their hands instead of just rinsing it all down the drain and wasting valuable water at the same time. Shower challenge: can you take a 2-3 minute shower? Children report data back to us.

An electrical example is we have Turn Off Your Electronics Week. We encourage family time such as: Play games, card games, bake, cook, go on walks, exercise together. Children need to record daily what they did and many report this is the best week so they continue with limited screen time and more family time.

Another example of reduce, reuse and recycle is that we have a breakfast program that gives us plastic spoons everyday. We reuse those spoons in our Art projects and are exploring ideas to start using real spoons and maintaining a cleaning and sanitizing program instead. Our recycle room is used weekly by all staff to reuse and give repurpose to these materials into our weekly lessons in person or virtually teaching. With so much screen time going on we found it imperative that children were creating in their at home learning stations. We provided recycled materials, a roll of tape, glue, and paint for them to make their creations. Every year, our downtown holiday lights tree is one of those projects where we use those recycled materials. We use spoons for shovels painted, dipped in glue, and soil was attached, cereal bowls were painted and labed for hard hats, and sticks were painted and marked for rulers. This community engagement event is a family friendly environment that is free for our community to visit.

Many of our staff actively participate in the Green Schools Consortium of Milwaukee (GSCM), connecting with other educators, funders, nonprofits, and governmental agencies to further green and healthy initiatives in schools. We attend GSCM meetings, provide feedback on projects, and attend the annual Green Schools Conference to further our professional development and inspire our work.

Pillar II: Improved Health and Wellness

- ➢ High standards of Whole School Whole Community, Whole Child health, including health, nutrition, and outdoor physical education; health, counseling, and psychological services for both students and staff; family community involvement; and
- ➢ an integrated school environmental health program that considers occupant health and safety in all design, construction, renovation, operations, and maintenance of facilities and grounds,

including cleaning and maintenance; mold and moisture; chemical and environmental contaminants; ventilation; and pests and pesticide.

Our school, or district, has a wellness committee.
Our school hosts bike or and walk to school events in non-pandemic years.
Students and staff spend a minimum of 2 hours, beyond recess and organized sports, learning outside. ● Yes in some rooms.
Briefly describe the types of outdoor education, physical activity, and nature-based recreation opportunities available for your staff and students. ● Nature time is an everyday component of our school day. ● Brain Breaks are used every hour to get the children up and moving ● Due to pandemic, children are encouraged to go outside with specific objectives of things like finding leaves, shape hunt etc. ● Neighborhood clean up daily ● All levels K3, K4, and K5 have Neighborhood House Nature Program come in 4 times a year to each us all about Nature in all different ways for each grade level. Once they leave Starms they have had all their programing! ● K3 has huge time constraints with being half day so they spend a great deal of Nature time in our gardens. ● K4 goes out into the community on the following nature field trips ● Fondy's Farmers market to learn about water conservation and how farmers bring their food to the market for city people to buy. ● Downtown MKE to explore the river ● Schlitz Audubon to explore native things from Lake Michigan and garbage ● Hawthorne Glen to explore animal tracking in winter and sledding. ● Milwaukee Public Museum to explore the life cycle of a butterfly…we raise them in our classrooms as well. ● Oakridge farm to explore Country life to city life ● Domes experience Spring flowers ● Washington Park Library/Park explore the pond and wildlife in the park ● Grant park Clean up day Keep Greater Milwaukee Beautiful ● Explore the differences between a creek, pond, and lake ● Maple Sugaring out at the Farm in Ixonia with Neighborhood house. Tap the trees, collect sap, and take it to the sugar shake to boil down. ● K5 works with farm to table with Cream City Farms multiple times a year ● Oakridge farm ● In-depth science experiments and research on our property using the forest planted by the City of Milwaukee forestry department.

Our school implemented, or continued, improved environmental health practices and procedures to improve indoor air quality:
● Utilization of green cleaning products. ● Ground contact classrooms tested for radon. ● Monthly inspection of school structures for mold, moisture, and water leakage. ● Installed energy recovery ventilation systems to bring in fresh air for use in the HVAC system. ● Improved indoor air quality to prevent exposure to asthma triggers.
Drinking water in our school was tested for lead and other contaminants in the last 12 months.

Everything at our school is MPS approved. Everything we use is biodegradable and they all come from 3M. We monitor mold by keeping everything dry, the filters are cleaned every 2 months and the cold air comes from the air duct shaft and mixes with the boiler and then it is transferred to the rooms, our pests are controlled by our own service assigned by the district, we minimize chemical and environmental contaminants from spilling by keeping them up high and in a clean and dry space so they do not spill, we use glue boards, traps and sprays to reduce the bugs, no fertilizers are used on the property, or herbicides or cleaners.

If pesticides are needed, a team comes in after the children have left for the day and spray for bed bugs and cockroaches.

Use of Whole School Whole Community Whole Child model.
We have a full time nurse on site, lunch nutrition has been improved to include a variety of free fruits and vegetables. We have counseling, and psychological services for students on site and we have a family community involvement position that holds monthly meetings and brings in multiple agencies to educate our families.

We implemented the fresh vegetables and fruit and educate our children about the different nutritious food they receive twice a week for snack. During the pandemic the district has been providing fresh fruit and vegetable pick ups for families

Our renovated green school yard (see last two pages) is utilized during outdoor physical education, during nature time, during recess, and plan-do-review, and most importantly during classroom instructional time! The health and well being of our children is key here at Starms. Most children live in the 53205 which is a food dessert! They don't have access to quality food and outdoor space therefore, we make our school grounds and community a place where some of these needs can be met.

Children are taught to clean and wipe personal areas with child-safe chemicals. Building surfaces and floors are thoroughly cleaned using safe and biodegradable cleaning supplies approved by the district daily. Deep cleaning and other maintenance is performed on a rotating basis. In the summer, all materials are removed from rooms, surfaces and walls are cleaned; floors are washed, stripped, and resealed throughout the building.

General maintenance of lights, vents, univents, filters, and plumbing pipes also occurs during summer months. Our building's ventilation system is a tower that siphons in cold air from the roof and is heated by the boiler univents. The air is then distributed throughout the school, recycling air throughout the building on a daily basis. Mold and moisture are controlled by the air handling univent system. All air comes down through the vents and goes through the filters catching environmental contaminants. Filters for the classroom air systems are changed every two months.

The District hires professionals for pest and insect control. Child-safe products are used and applied after school hours to reduce exposure. Glue boards are used for additional control when necessary.

We noticed lots of staff having headaches, so we put light shades throughout the room over the fluorescent lights to lessen the burden as we want to protect all our eye health. There was a huge decrease of headaches with all staff that implemented the change.

Pillar III: Increased Environmental Literacy

- ➢ Interdisciplinary learning about the key relationships between dynamic environmental, energy, and human systems; mold and moisture; chemical and environmental contaminants; ventilation; and pests and pesticide.
- ➢ Use of the environment and sustainability to develop STEM content knowledge and thinking skills to prepare graduates for the 21st-century technology-driven economyance; mold and moisture; chemical and environmental contaminants; ventilation; and pests and pesticide.
- ➢ Development of civic engagement knowledge and skills and students' application of such knowledge and skills to address sustainability issues in their communityance; mold and moisture; chemical and environmental contaminants; ventilation; and pests and pesticide.

Our school has a green team or equivalent.
Students have opportunities to participate in organizations or clubs related to nature, the environment, or the outdoors.
What green and healthy student clubs or organizations are offered, and how many students participate? ● Weeding Wednesdays ● Observation Thursdays ● Watering weekly ● Litter patrol ● The Recycling Program Keep Greater Milwaukee Beautiful ● Trex plex recycling plastic bags ● Bring us your recycles...we have a recycle room where everything is stored so we can REUSE our recycles to make many different projects, including our recycle holiday tree.
How have students provided leadership in advancing green and healthy practices in your school: ● Recycle team takes out the recycle bins each day. ● Plastic is collected daily to be recycled with Trex Plex.
A staff position exists in our school dedicated to sustainability efforts.

- Yes - Angeline Koch - MPS Sustainability Project Specialist

In the last 12 months, staff (teaching or non-teaching) participated in professional development or training related to green & healthy concepts:

- Incorporating the School yard into our daily lesson plans and increasing our outdoor teaching time in the gardens, and raised garden beds as well.

Green and healthy concepts are included in the curriculum at every grade level:

- Environmental health Early Childhood has Litter patrol where we take care of our school grounds and the community.
- Energy Conservation and Power Sources -We turn off the light switches to save energy. At every light switch there is a sticker to promote saving energy by turning off the lights as well.
- Health, nutrition, wellness, and physical activity: Students now have gym twice a week. We are continuing to provide physical activity every few hours
- Waste minimization reuse and recycling behaviors: Students participated in a class through the neighborhood house on recycling and vermiculture composting
- Transportation Issues (such as safety and use of fossil fuels): Many classroom are using public transportation or walking to visit neighborhood and city destinations.
- Water Conservation and Protection: Last year work was begun, but not exhibited for a program about Lake Michigan. Part of the exhibit was about water pollution and protections
- Civic Engagement and Environmental Issues: Last year two of our museums were about the Great Lakes and Keeping them Clean. The work was done and kids were getting ready to exhibit their museums when Covid hit.

In the last 12 months, have students and staff utilized the school building and outdoor spaces as extensions of classroom learning?

- Yes

Please provide examples of ways in which the school building and outdoor spaces were used for learning this year.

- Due to the opening of our new playground, we had started to use the playground building and construction as a community helper unit. We watched and asked questions about the process that was happening before our eyes. In our redevelopment plan, we aligned many content area standards to our classroom curriculum. We were not able to implement it this year due to the pandemic, but we will have this for the future.

Types of areas your school has available for outdoor learning:

- Food, herb, or vegetable garden
- Habitat, pollinator, or native plants garden space
- Perennial gardens
- Outdoor classroom
- Arboretum City of Milwaukee Forestry planted 30 different varieties of trees so we could watch our arboretum without leaving our city block.

● Bird houses 25 were built and now we have birds nesting all over the property. On the bottoms we put shapes, letters, and numbers so kids can go on observation hunts throughout the schoolyard ● Sitting areas and benches eagle scout made for us and we use for small groups as well as observation areas
In the last 12 months, students participated in farm-to-school programming. ● Yes
In the last 12 months, what building or outdoor spaces upgrades, renovations, or new construction were completed? In what ways were staff and students connected to these projects? ● As stated above our students were very involved in the planning, construction and opening of our new playground. The students that are our K5 children were with us when we broke ground and have seen the whole cycle. ● Our school has devoted all our Arts at Large learning museums to learning about different ways water affects us. The water cycle, the 3 rivers and do not pollute, water conservation, Lake Michigan, and construction workers that built our school yard. ● The mobile Outdoor Discovery Cart was designed and constructed in partnership with Reflo, Arts @ Large, and Bradley Tech High School Foremen students to further support outdoor education opportunities.
Our school provides regular communication to staff, students, and families about green & healthy practices and accomplishments. ● Yes
How does your school communicate your green & healthy practices and accomplishments to staff, students, and families? ● Monthly parent meetings, Weekly newsletters, fliers, ground breaking, ribbon cutting,
In the last 12 months, our school hosted a school-wide environmental or wellness event. ● Ribbon Cutting of our school yard redevelopment project
Brief narrative describing how environmental literacy has increased among the people in your school community: ● This has been a process over many years. We started with simple little changes learning about and starting a recycling program, developing home recycling programs for parents, integrating environmental literacy and including families in our learning. Finally we started the planning of our outdoor play space. We met with environmental experts, created a team of teachers who brought their curriculum knowledge and finally worked with contractors to bring our ideas to a reality.

Additional Information Environmental Literacy:

Each classroom chooses a theme that has an environmental component such as conservation and/or environmental justice. Students and teachers research the topic, plan, and "create" a museum that is opened for anyone to visit. Past projects include Monarch Butterflies, Feelings and Self-Care, Water

Cycle, Weather, Lake Michigan, Life Cycle of Frogs, and Forces and Motion. Currently, a classroom is virtually studying the ocean with plans to present. The museums are assessed using staff-created developmentally appropriate rubrics as followed by our state standards. Children are given multiple opportunities and methods (hands on, verbal, written/art) to achieve proficiency.

As excited as we are about learning indoors we are even more excited to learn our core curriculum and environmental curriculum in our new outdoor classroom. An Outdoor Discovery Cart supports schoolyard maintenance, beautification tasks, and outdoor curricular activities and includes gardening tools, whiteboards, clipboards, and science tool kits with a variety of observational tools.

We have an annual relationship with the Neighborhood House of Milwaukee. At Starms ECC, each grade level participates in four guided and hands on classes each year, led by a naturalist. Our K3 students study Forest Critters and Birding. They use our student, staff, and volunteer managed gardens and playground to observe the world around them using these programs as a guide. Our K4 participates in the Treemendous and Let it Grow programs, and study and tap maple trees for maple sugaring activities. These programs are also extended to our gardens and newly renovated playground. Two beautiful maple trees have been planted in the center in hopes of tapping them and creating maple syrup ourselves. Our students in K5 learn about Vermiculture and create their own classroom worm box for composting. The children are able to see how compost can be used in the gardens and reap the benefits of our labor.

We are pleased to have Neighborhood House also supported our transition to virtual learning with Virtual Nature Time programming. We have studied the seasons of summer and autumn as we lived it, Life of a Turkey, Life Cycle of a Pine Tree, and the Life of a Deer with more programs planned for the remainder of the school year. We have extended these lessons and encouraged students to go outdoors, complete an activity, and take a photo of their nature creation that is submitted to our learning platform, Seesaw. An example of this is students collected, sorted, and created self-portraits using nature items. They used nature materials found outside (mostly sticks due to urban living) and used them for Math as natural manipulatives.

We continue to add the environmental standards to our planning and unpack them, establishing what each standard means at a K3, K4 and K5 level. As a district we are working on integrating the “Core” standards with Sciences. We will continue to do this integration with a focus on environmental standards and are eager to implement lessons that are being developed in response to the District’s Climate Justice resolution, passed in early 2020.

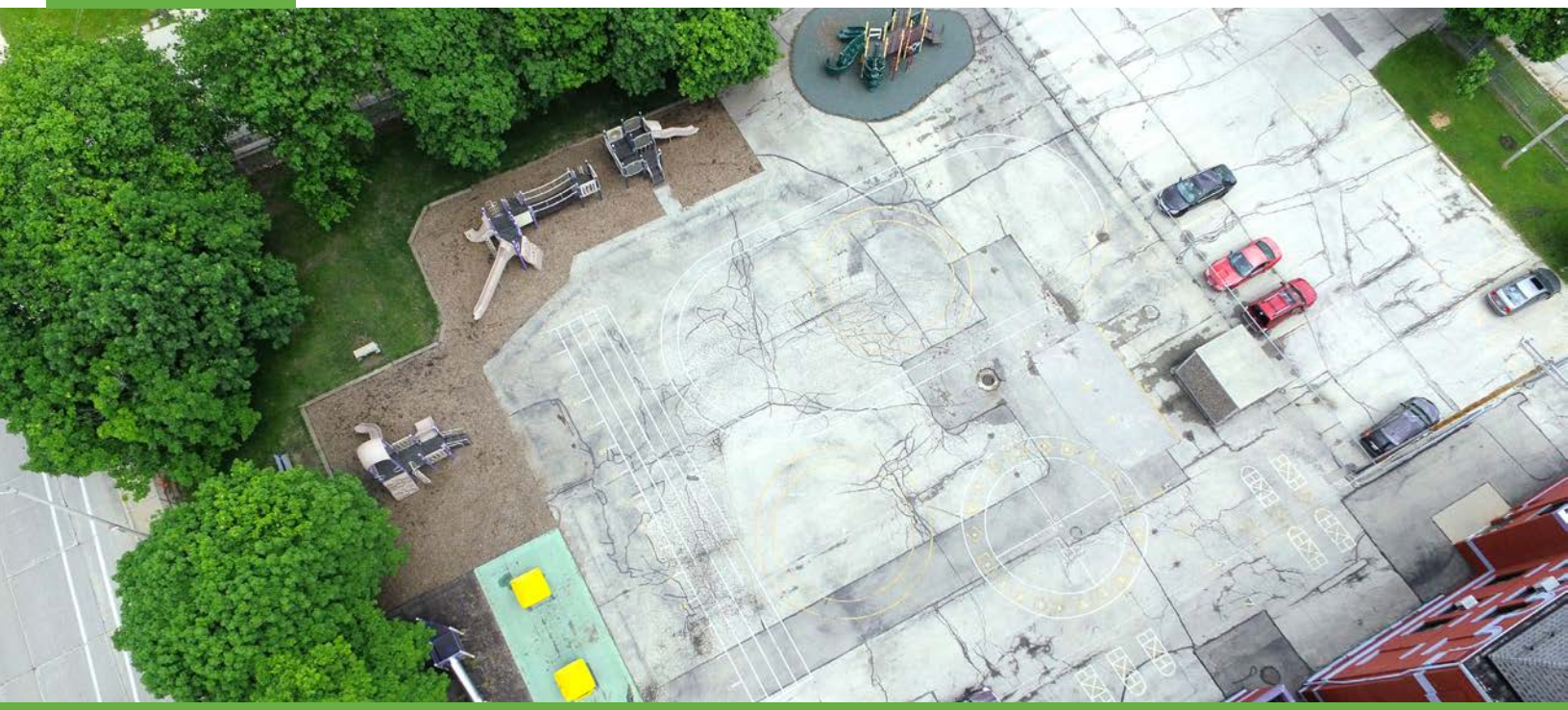
Future plans and goals related to school sustainability

What green and healthy goals, ideas or plans does your school have for next year?

- We would like to fully implement our Playground curriculum connections. We would like to extend our raised garden beds and farm to table with our Sister School’s Culinary Arts Club.
- With everything virtual right now…this is hard to say.
- We will plant in our raised garden beds.
- We will maintain our gardens and learn from them.
- We will learn more about our new bioswale and permeable surfaces.

- We would like to extend our mindfulness training, include yoga as an outdoor activity, and do more cooking classes with our sister school, children, and even our parents.

BEFORE



STARMS EARLY CHILDHOOD CENTER 2616 W. GARFIELD AVE., MILWAUKEE

In 2019, Starms Early Childhood Center (MPS) replaced 80% of its asphalt with porous pavement and a permeable rubberized play surface designed as Lake Michigan, connecting students to local geography and watersheds.

DEMOGRAPHICS

- Milwaukee Public School
- Grades: K3 - K5
- 304 students
- 93% economically disadvantaged
- 0% English language learners
- 10% special education students
- Separated sewer area

IMPACTS

- 12,200 square feet of asphalt removed
- 4 stormwater trees planted
- 42,430 gallons of stormwater managed/rain event
- Estimated project costs: $455,000

Mrs. Misky teaches her K4 students about the importance of freshwater and encourages them to care for the lake and environment.

> *I am not going to litter because water carries trash down hills into the river or lake.*
>
> K4 STARMS STUDENT

AFTER

Celebrating the new schoolyard redevelopment projects at the Cohort 1 Ribbon Cutting Ceremony in October 2019.

> *Fish need to breathe in the water. People want to catch and eat them so we need to keep our freshwater clean.*
>
> K5 STARMS STUDENT

Kindergarteners learned about natural and unnatural beach debris during a field trip to Schlitz Audubon Nature Center.

Children at Starms Early Childhood love to imagine, climb, and explore in their newly redeveloped schoolyard!