U.S. DEPARTMENT OF EDUCATION

GreenRibbonSchools

2013-2014 District Nominee Presentation Form

PART I - ELIGIBILITY CERTIFICATION

District's Certifications

The signatures of the district superintendent (or equivalent) on the next page certifies that each of the statements below concerning the district's eligibility and compliance with the following requirements is true and correct to the best of the superintendent's knowledge.

1. The district has been evaluated and selected from among districts 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.

2. The district is providing 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.

3. OCR has not issued a violation letter of findings to the school district concluding that the nominated 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.

4. The U.S. Department of Justice does not have a pending suit alleging that the school district has violated one or more of the civil rights statutes or the Constitution's equal protection clause.

5. 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 school district in question; or if there are such findings, the state or school district has corrected, or agreed to correct, the findings.

6. The district 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

GreenRibbonSchools

U.S. Department of Education Green Ribbon Schools 2014 – District Award

Name of Superintendent* Dr. John Tharp
(Specify: Ms., Miss, Mrs., **Dr.**, Mr., Other)

District Name* Greendale School District Tel.(414) 423-2700
(As it should appear on an award)

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 1/13/17

PART II – SUMMARY OF ACHIEVEMENTS

Instructions to District Superintendent

Provide a concise and coherent "snapshot" that describes how your district is representative of your jurisdiction's highest achieving green school efforts in approximately 800 words. Summarize your strengths and accomplishments. Focus on what makes your district worthy of the U.S. Department of Education Green Ribbon School District Sustainability Award.

PART III – DOCUMENTATION OF STATE EVALUATION OF DISTRICT NOMINEE

Instructions to Nominating Authority

The Nominating Authority must document the district's high achievement in each of the three ED-GRS Pillars and nine Elements. Please attach documentation in each Pillar and Element. This may be the Authority's application based on the Framework and sample application or a committee's written evaluation of a school in each Pillar and Element.

Nominating Authority's Certifications

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

1. The district 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.

2. The district 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: State Superintendent Tony Evers, PhD
(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 district meets the provisions above.

_____ Date 1/24/2014
(Nominating Authority's Signature)

The nomination package, including the signed certifications and documentation of evaluation in the three Pillars should be converted to a PDF file and emailed to green.ribbon.schools@ed.gov according to the instructions in the Nominee Submission Procedure.

OMB Control Number: 1860-0509
Expiration Date: February 28, 2015

Public Burden Statement

U.S. Department of Education Green Ribbon Schools
Summary of Achievements
for
Greendale School District

Greendale School District (GSD) has focused on operating green, healthy, and sustainable schools for almost a decade. With five buildings located in suburban Greendale, Wisconsin, GSD has documented significant achievement in all three pillars of U.S. Department of Education Green Ribbon Schools with the leadership of a visionary business manager and the work of a diverse "Green Team."

Pillar I: Reduced Environmental Impact
Ten years ago, GSD energy scores were dismal and a deliberate focus to correct that trend began in 2004. After becoming an ENERGY STAR Partner, the district reduced its energy bills by $200,000 from 2006 to 2011. Efforts included replacing all school heating plants with energy-efficient systems and retrofitting all lighting in district buildings to T-8 energy efficient lighting (with occupancy sensors in most places), Additionally, the district added digital systems for controlling the environment in the high school, a solar energy hot water system to heat the pool and for domestic hot water, and new fixtures and fountains to save water. Turf athletic field was installed to save water and maintenance and eco-friendly floors eliminate the use of chemicals for cleaning and reduce maintenance. GSD also made operational changes to reduce energy use. Classrooms and offices were de-cluttered using a professional organizer and an initiative to reduce copying costs resulted in a $20,000 cost savings per year. For these efforts the district received the Tools for Schools, Great Start, and Leadership Awards in 2009 and the Excellence Award in 2011 from the EPA for IEQ in Washington, D.C. The district's building energy scores are now some of the highest in Wisconsin.

Pillar II: Improved Health & Wellness
GSD promotes healthy schools by supporting wellness, good nutrition, and regular physical activity as a part of the total environment where children learn and participate in positive dietary and lifestyle practices. By supporting and promoting good nutrition and physical activity, schools contribute to the basic health status of children to optimize student performance potential and promote success in the classroom. The district sponsors free access to health care services provided by a nurse practitioner at a school-based clinic for students, staff, their dependents, and retirees. A Student & Family Assistance Program gives free confidential access to a variety of professionals for consultation on issues that commonly affect students and their families. It is available to all household members, whether the problem is related to a student, an adult, or the whole family. To promote good nutrition, food service offers healthier choices to students and staff through the school lunch program to meet the requirements of the Healthy Hunger Free Kids Act. Menus meet all program requirements and have earned "Six Cent Certification" from the program. The district is launching its "Get Moving and Stay Active 60 Minutes a Day" initiative for families with an introduction to a variety of work-outs and physical activities offered to students and families at the annual Parents as Partners conference.

Pillar III: Effective Environmental and Sustainability Education
Greendale curriculum at all grade levels includes environmental and sustainable instruction. A culmination of these efforts is the *School Garden*, at the high school. Students from all schools contribute to its success -- planting and tending the garden; teachers utilize the outdoor classroom for science instruction at all levels. The youngest learners in 4K planted pumpkins and were invited with parents to harvest the vegetables. Elementary and middle school students planted seeds in classrooms and walked with their seedlings to the garden to plant them. Other students are raising worms to help nourish the soil and create compost.

The outdoor classroom offers a practical location for high school science experiments and instruction. GHS Science Essentials students work with elementary students in the garden. High school special ed/job training students are involved in planning, planting, and harvesting produce as well as preparing a variety of foods with it for *Free Sample Fridays* to introduce students and staff to new, healthy foods as well! The Garden Club, with 18 core members, works in planning, planting, growing, harvesting, and general education of the garden. District's "Green Team," facilitated by a sustainability specialist from CESA 10, with faculty members, staff, students and community

members, continues to drive concepts into the curriculum and provide resources to teachers for incorporating into the curriculum. *Eco Literate*, by Daniel Goleman, Lisa Bennett, and Zenobia Barlow, is one such resource that the group uses to join education with the environment.

Cross-Cutting Questions
Greendale Schools has created a 'green, healthy, sustainable' brand in our community's mind with its efforts showcased in events and spotlighted stories. The district is one of the highest achieving districts in Wisconsin. GSD presented at the National Green Schools Conference in 2012 and will again in 2014. Erin Green, Business Manager, is on the Advisory Board for the National Green Schools organization. Its Strategic Plan includes a goal to focus on sustainability.

Scoring and Highlights:
The complete state application is too long to include in this nomination submission, so the applicant's information has been summarized in the following pages, aligned with the pillars and elements. 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.

Greendale School District serves 2,658 students and has 300 staff across 5 buildings.

The summary of the nominee's achievements as reported in their application is presented in each pillar and element below. The focus area is in reference to Wisconsin's application structure.

Pillar I: Reduced Environmental Impact
Element 1A: reduced or eliminated green house gas (GHG) emissions

Focus Area: Energy

The school has had multiple formal energy audits conducted:

- ✓ Focus on Energy, 2006: District wide audits conducted in 2006
- ✓ Local Provider, 2007; 2013: High School audit prior to renovation in 2007; Middle School audit prior to digital controls upgrade in 2013

From 2005 to 2013, the school has reduced its non-transportation energy use from an initial baseline by 28%.

The school uses the following green building practices to increase energy efficiency:

- ✓ School has developed an Energy Policy Plan (Date developed: 2010) Comments: This policy document was produced by a cross section of staff incorporating KEEP guidelines.
- ✓ Solar thermal: estimates that 36% of pool heat comes from solar system as well as domestic water.

Energy monitoring and awareness is a large focus of the CESA 10 Sustainability Services provided to the district. 75% of High School was renovated with energy efficiency in mind, but is not certified to any standard.

The school installed the following energy saving devices to increase energy efficiency:

- ✓ Switched to energy efficient lighting. Comments: Replaced all T-12 lamps with T-8s in 2004
- ✓ Installed occupancy sensors. Comments: Installed in each room in 2004
- ✓ Installed vending misers. Comments: Provided by vendor (Coke)
- ✓ Upgraded to a more energy efficient HVAC system. Comments: Upgraded HS HVAC system in 2007 with digital controls; Upgraded heating plants in MS in 2007 (and digital controls), Canterbury in 2003, College Park in 2006, and Highland View in 2011; Upgrade unit ventilators in all elementary schools as old units fail
- ✓ Other: Replaced leaking windows, cleaned duct work, repaired/replaced all roofing, building envelope repairs, pool heat recovery system

The district participated in the ENERGY STAR Challenge in 2007 and took the Lt. Governor's Energy Challenge to reduce energy use by 10%. The district more than complied, saving $120,000 over two years in energy costs. The new heating plants installed in the HS, MS, and Canterbury replaced 40-50 year old boilers, greatly improving energy efficiency. Replaced all drinking fountains in the district with energy saving models. Installed new restroom plumbing and fixtures throughout the HS that are more water and energy efficient. Lights turn on and off via a

control panel at the HS to save usage and outside lights were put on timers. Focus on Energy provided an incentive to replace the pool heating coil with an energy efficient model at the HS. Thermostats are set to 68 degrees during the day and 55 degrees at night, windows and doors are kept closed during heating season, portable space heaters are banned in the district, personal appliance use is monitored and shared where possible by staff, office equipment is turned off nightly, computers are shut down automatically nightly, energy use is tracked with School Dude Utility Direct program and reports are generated.

The school has provided professional development to their staff to ensure proper building operations:

- ✓ WASBO Facility Managers Program certification Name of staff: Brian Koffarnus, Steve Coombs Date of Certification: May 2011
- ✓ Practical Energy Management (PEM) Name of staff: Brian Koffarnus, Steve Coombs Date of Certification: Winter 2008
- ✓ Building Operator Certification (BOC) Name of staff: Joe Braam, Jim Small, Robert Becker, Steve Coombs; Date of Certification: 1999
- ✓ Other: Name of certification: FOAM - Sustainability Course through MATC name of staff: Brian Koffarnus; date of certification: 2009

Students and/or staff help identify and/or implement behavioral changes to reduce energy consumption in the following ways:

Students at College Park Elementary have a Green Team monitoring light usage, keeping blinds open during day for natural light, and ensuring projectors are off when not in use. District staff is encouraged to use day lighting when possible and turn off banks of lights to save energy. Highland View Elementary staff were awarded $200 from a KEEP mini-grant and will be used to purchase desk lamps for staff use during prep times where they can turn off overhead lights and save energy. Select Middle School and High School science classes are involved with hands-on projects to measure and reduce energy use in those buildings. Some examples of projects identified by students in the MS include: study to determine if occupancy sensors can be adjusted to turn lights off sooner, identifying appliances that can be unplugged, determine if computers can be shut down sooner and turned on later, determine if ice cream freezer can be removed, proposal to reduce lighting in hallways, creating a number of posters with energy conservation messages, developing short videos sharing energy saving messages, increasing use of power strips, and presenting information to other staff and students.

Energy is taught in the curriculum in the following ways:

MS 8th grade science teacher has had Paul Van de Sand, Franklin Energy, present to students about energy generation, distribution, and conservation. Students created 'webs' to record and organize their understandings of energy as they worked on non-fiction reading. Students also played School Savings game from the KEEP Energy and Your School activity guide to learn more ways to conserve energy at school. Students investigated school energy use and proposed solutions that will be implemented and analyzed over the year by collecting evidence in a scientific manner - addressing science and engineering standards as well as providing reliable data on effectiveness of implemented practices. HS Env Ed and Special Ed teachers team up to have students conduct a light survey in the building. Results will be shared with the staff and recommendations will be made to the B&G Director. A teacher at the HS will conduct a nonfiction film and lit environment week unit where films such as Switch: Discover the Future of Energy and Gasland for students to watch as they conduct research on energy and/or environmental issues.

Professional development is offered to staff regarding energy and/or energy education:

Eight teachers participated in the KEEP School Building Energy Efficiency Education graduate course through UW-Stevens Point in August 2013. Energy action plans were developed to raise energy awareness and implement new energy saving practices throughout the district. Sustainability Leader, Erin Green attended the US Green Building Council annual conference in Washington, D.Cc the summer of 2013. This was attended by 30 school sustainability leaders from around the country, and was led by a faculty member from Harvard who teaches Sustainability. GSD is now a US Green Building Council member and receives access to energy-related resources and discounts on professional development opportunities, such as the Center for Green Schools Green Classroom Professional Certificate. At this conference, specific plans for student wellness, recycling, and energy reduction was formulated.

Additional progress the school has made towards energy education:

CESA 10's sustainability specialist administered an online energy behavior survey to all staff (162 responses) identifying current energy practices and areas of improvement. When asked to grade the sustainability in the 'energy' area - the most common grade was a 'B'. CESA 10 has provided weekly energy tips that are shared with staff in their monthly Notebook Newsletter. The “Kilowatt Challenge” was initiated in May 2013 where each building will reduce energy use by 5%. If a building reaches its goal, they will receive a portion of the dollars saved. Posters in each school are updated with energy usage each month to raise awareness and encourage staff to use energy wisely. In addition, a life-sized cardboard cut out of Mr. DeSalvo (teacher known for his energy conservation habits) is placed in a location highlighting an energy conservation practice. 'Keep Calm' bookmarks were distributed to students at the beginning of the 2013-2014 school year with a list of ways to conserve energy. Energy conservation tips were also shared with staff when the Kilowatt Challenge was started.

Element 1B: Improved water quality, efficiency, and conservation

Focus Area: Water

The school’s drinking water comes from a municipal source.

The school uses the following practices to increase water efficiency and ensure quality:

- ✓ Our school conducts annual audits of the facility and irrigation systems to ensure they are free of significant water leaks and to identify opportunities for savings. Comments: Facility only - no irrigation systems; Use water wheels
- ✓ Our school's landscaping is water-efficient and/or regionally appropriate.
- ✓ Our school has reduced storm water runoff and/or reduced impermeable surfaces. Comments: Installed bioswale at baseball field to manage storm water, removed old tennis courts
- ✓ Student medications are sent home to be disposed if expired or no longer needed

Additional progress the school has made towards improving water quality, efficiency, and conservation:

Installed synthetic football turf in 2008, reducing chemical use, mower use, and the need for watering. After a significant reduction in water use, the village of Greendale contacted the district to see if a water meter had been removed. The water wheel had been watering the field daily for approximately 8 hours a day prior to installing the turf. Installed water filling stations at the HS and MS and plan to install in the elementary buildings. Installed new rest room plumbing and fixtures in the HS that are more water and energy efficient during 2007 renovation. Replaced a leaking boiler during HS renovation in 2007 where old boiler leaked approximately 3,000 - 5,000 gallons per month during the heating season. Installed terrazzo and concrete polished floors at the HS to reduce water and eliminate chemical use.

Students and staff identified and implemented water conservation and increased water quality in your school in the following ways:

Water fountains were all replaced with water conservation models in the past five years. Many of the stools in the washrooms also changed to water conservation models. Artificial turf installed on football/athletic field to reduce use of water in a major way. Class of 2012 donated water fountain bottle refillers to the school, with counters of how many plastic bottles are kept out of the landfill from its use. Additional systems are being installed at other district schools.

Water topics are taught in the curriculum in the following ways:

2nd Grade: Discuss water during air and weather unit. 5th Grade: During Ecosystems unit, students build a water based ecosystem out of 2 liter bottles and pollute it to learn about impact. 8th Grade: Study water as a resource and its conservation. Students study water storage on Earth, availability, conservation in real-life examples, lab activities involving engineering and collecting local water information, and partake in guided higher-order thinking discussions. The performance assessment is a simulation where students take on different roles in communities and make decisions about the design and laws based on values and understanding of water resources. 8th grade students also take a personal water footprint audit for regular usage and how much water is used for the products they use. HS AP and Regular Env Science: Students perform lab experiments in the field by studying a nearby water source. Env Science looks at the Water Quality Index (WQI) short-term whereas AP Env Science participates in a long-term WQI study of the water source. Students learn basic concepts relative to the water cycle, watersheds, freshwater and saltwater use, and water pollution.

Professional development related to water education includes:

All staff participated in a presentation on sustainability at GSD, including the use water. Staff receives updates on sustainability topics regularly, including water.

Additional progress the school has made towards water education:

Water conservation tips are occasionally sent out to all staff by Business Manager. CESA 10 administered a sustainability survey and when staff was asked to grade the sustainability of the 'water' area, the most common response was 'I don't know' followed by a 'B'. In the HS Biological Processes class, basic water properties are discussed and students use hands-on activities to apply concepts learned. Students learn more about the importance of water to the environment and to people.

Element 1B: Improved water quality, efficiency, and conservation

Focus Area: School Site

The school uses the following types of outdoor grounds on or near the school site:

- ✓ Our school has a habitat garden. Approximate size: 4' by 10' Comments: Located within the GHS garden
- ✓ Our school has a food garden. Approximate size: 20' X 24'; 1/2 acre Comments: Large garden at HS with hoop house nearly completed and smaller garden at Highland View
- ✓ Our school has a school forest registered with the Department of Natural Resources. Approximate size: 14 acres; 2.5 acres Comments: Located behind the MS and Canterbury; Greendale High School; Both Registered in 2013
- ✓ Our school utilizes a wooded site adjacent to the school site. Approximate size approximately 15 acres Comments: Milwaukee County property behind HS
- ✓ Our school utilizes a community park. Approximate size: 5 parks of various sizes; Comments: 5 parks are within walking distance to the schools and are used regularly
- ✓ Our school uses the existing site, lawns, parking areas, playgrounds, etc. for outdoor teaching. Approximate size: 3 Comments: There are outdoor classrooms at the HS, MS, and Canterbury schools and Highland View is in process of building a formal outdoor classroom
- ✓ Natural playground has been designed and will be built on school property this spring

Additional progress the school has in place to maintain or improve safe, healthy, and environmentally sound grounds:

Additional bushes and plantings enhance the grounds. We have removed shrubbery next to the buildings for safety and planted native plants/shrubs at all schools for easier maintenance. We practice integrated pest management and use no chemicals/fertilizers on grounds for safety of students at all sites.

The school encourages educational use of the school grounds, school forests, and outdoor teaching sites in the following ways:

County foresters worked with the HS Environmental Science class to create a School Forest Management Plan - completed on December 11, 2013. Two forests will be used as outdoor classroom space. One of the 4K classes at Highland View has a worm compost bin in the classroom and castings are used to help nourish the school gardens. The Green Team at College Park helps plan the school's plot in the school garden - what to plant and layout of plot. There was a Summer Garden Challenge in 2013 and each school developed a team and was given the same size garden plot on which to raise vegetables, with an award given to the greatest producing team (Highland View in 2013). HS Special Ed students are involved in planning, planting, and harvesting produce as well as preparing it for Free Sample Friday at the HS.

Professional development offered to staff regarding use of school grounds school forest, and/or outdoor teaching sites in the following ways:

A LEAF (Forestry Education in the K-12 Classroom) in-service is scheduled for April 2014 in the district at the newly registered school forest areas. LEAF hybrid workshop teaches about key forestry principles, demonstrates teaching techniques, and provides great activities that can easily integrate forestry education into an indoor or outdoor classroom. Several staff has taken Project Learning Tree, Project WILD, and Project WET at some point and have been introduced to outdoor educational resources.

Additional progress the school has made to encourage educational use of the school grounds, school forests, and outdoor teaching sites:

CESA 10 administered a sustainability survey to all staff to determine the level of interest in accessing and using the school forest and gardens. The responses indicate high-level interest with some professional development provided on how to best use these environments. The HS Garden Club has a Mum and Kale sale each September. The school gardens generated 769 pounds of produce in 2013. The School Forest Coordinator will be forming a School Forest Team in the near future now that the school forest areas are registered. HS Environmental Science classes have help clean up the grounds. Adding the hoop house to the garden at the HS will lengthen the growing season and allow more students to use the space for educational purposes.

Element 1C: Reduced waste production

Focus Area: Recycling & Waste Management

The school has a 26% diversion rate and recycles the following materials:

- ✓ Paper
- ✓ Glass
- ✓ Metals
- ✓ Plastics
- ✓ Ink Cartridges
- ✓ Cell Phones
- ✓ Milk Cartons
- ✓ Batteries
- ✓ Other: light bulbs, ballasts, wire, building materials, furniture

Comments: The technology department handles all electronic device recycling. Some batteries are recycled in the HS library. GSD spent $18,994 on waste and recycling fees in 2012-2013. All trash and recyclables go from the schools to the Franklin Landfill/MRF.

With the exception of outdoors, blue recycling bins are clearly labeled, always placed next to gray trash cans, and are in the following locations:

- ✓ Hallways
- ✓ Classrooms
- ✓ Lunch Room
- ✓ Staff Lounge
- ✓ Student Lounge
- ✓ Main office

Comments: Limited in outside recycling bins at this time.

The district uses 100%Comet Copier Paper, which is certified to the Chain of Custody standards of both the Forest Stewardship Council™ (FSC®) and the Sustainable Forestry Initiative (SFI).

The school composts waste in the following ways

- ✓ Our school composts our cafeteria food waste. Comments: Collects kitchen scraps and FCE food waste

The school takes the following actions to minimize and safely manage hazardous waste:

- ✓ Follow WI Dept. of Safety and Professional Services Guidelines and OSHA; Work with EMC and Chemical Hygiene officer
- ✓ Our school disposes of unwanted computer and electronic products through an approved recycling facility or E-cycle Wisconsin program.
  Comments: Only small amounts of hazardous waste are generated at a time, so compounds are isolated, separated, packaged and stored until enough is collected to justify expense of HazMat company pickup.

Additional progress the school has made to reduce waste, increase recycling/composting, or eliminate hazardous waste:

Over the last six years, the HS Chemistry Teacher has taken many steps to alter or eliminate student activities using chemicals that require special disposal and has taken steps to pare down chemical supply. When students do reactions with materials that are not able to undergo sink disposal, they do microscale

reactions, using small amounts of chemicals. Other reactions are teacher-led demonstrations, one per class.

Waste reduction, reuse and recycling behaviors are encouraged in the school in the following ways:

District uses co-mingled single stream recycling to facilitate ease of recycling. The HS introduced specific 'Coca-Cola' shaped recycling bins for plastic, aluminum cans, and plastic bottles. The HS has switched to using reusable lunch trays instead of disposable. Staff and students at Highland View participate in terracycle.com where they collect used markers and other art supplies as a fundraiser. Staff at College Park made a list of unwanted items (furniture, etc.) at the end of the school year and sent to all staff to find new homes instead of discarding items. All items found new homes and that reduced the amount of 'new' purchases the next school year. Milk carton recycling was introduced in 2013 to divert more waste from the landfill. A Social Studies teacher at the HS repairs distressed textbooks over the summer for reuse.

Waste reduction and recycling are part of the curriculum in some/all grades:

Highland View 5th graders were invited to JACO Environmental by Focus on Energy's staff to watch how a refrigerator is recycled. As part of participating, Focus on Energy replaced one of the school's older refrigerators with a newer Energy Star appliance. Students learned how older refrigerators use more energy, are less cost effective, and can be harmful if put into landfills, and learned how almost every part of the refrigerator can be recycled. Vermi-composting is done in several classrooms throughout the district and teachers engage their students in general discussions about composting through hands-on activities.

Professional development is offered to staff regarding waste and recycling education:

The CESA 10 sustainability specialist presented recycling and waste management information to the District Sustainability Team (i.e. Green and Healthy School Team) in October 2013. The presentation included recycling facts and specific district waste and recycling statistics. Results from a staff waste and recycling behavior survey were also shared identifying current practices and opportunities for improvement emphasizing the 5 'R's: Reduce, Reuse, Recycle, Refuse, Repair.

Additional progress the school has made towards waste and recycling education:

CESA 10 administered an online waste and recycling survey to staff in fall 2013. The results indicated a high percentage of staff is actively recycling at school. Some areas of improvement include composting, recycling electronics, and discontinuing unwanted catalogs. When staff were asked to grade the sustainability in the 'waste and recycling' area - the most common grade was a 'B'.

Element 1C: Use of alternative transportation

Focus Area: Transportation

The school offers the following transportation options:

- ✓ Vehicle loading/unloading areas are at least 25 feet from building air intakes, doors, and windows.
- ✓ A plan to regularly review bus routing. Comments: Done annually.
- ✓ Bike racks. Comments: Available at all buildings.
- ✓ Safe Pedestrian Routes to school or Safe Routes to School.
- ✓ Other: Walking School Bus at some elementary buildings. All schools are walkable with multiple sidewalks and walking trails embedded in our 1937-planned community

Comments: We do know that 1089 students are eligible for bussing (41%).

Describe how your school transportation use is efficient and has reduced its environmental impact:

Greendale was designed in 1937 with walking paths to all schools and sidewalks throughout. The district purchased two minivans for use when just a few students are transported to save fuel and vehicle costs. A new small-sized, fuel-efficient bus transports special education students and smaller groups and teams to save energy/gas. All routes are reviewed annually for maximum efficiency with limited stops (students may walk up to 4-5 blocks to catch the school bus). Students are encouraged to walk to school. Crossing guards protect the routes for safety.

Additional progress the school has made towards transportation efficiency and decreasing emissions:

When weather is appropriate, students walk on field trips and enrichment opportunities, including garden work, to watch marching band performances, for assemblies, to village for various field trips/enrichment --

Historical tour of village and PRIDE Christmas tree decorating. School buses are used by HS and MS teams with transportation consolidated so all levels of teams travel together when possible. When football team played at state, school sponsored fan buses to transport students, keeping parent vehicles off the road.

Transportation issues and outdoor air quality are part of the curriculum in some/all grades:

While there is no formal inclusion of transportation in our curriculum, students and teachers have informal discussions regarding alternative forms of transportation in social studies and science.

Professional development is offered to staff regarding sustainable transportation education:

Staff has been introduced to the 'walking school bus' concept and other related transportation initiatives via a presentation made by Erin Green in 2012 at each school.

Additional progress your school has made towards sustainable transportation education:

The 'walking school bus' and other programs encourage elementary students to walk to school.

Pillar II: Improved Health & Wellness
Element 2A: Integrated school environmental health program

Focus Area: Environmental Health

The school has fully complied with the state law prohibiting elemental mercury and has an indoor environmental quality plan.

The school employs the following practices to improve contaminant control and ventilation:

- ✓ Our school has a comprehensive indoor air quality management program that is consistent with EPA's Indoor Air Quality (IAQ) Tools for Schools. Comments: Began in 2003; Partners over the years include ASBO IAQ Program (John Gayetsky and Kathy Prosser), MMSD - Milwaukee Metropolitan Sewerage District, EMC - Environmental Management Company, Village of Greendale; Received Award in 2009
- ✓ Our school has taken actions to prevent exposure to asthma triggers such as mold, dust, and pet dander. Comments: Large de-cluttering initiative in 2009 throughout district to reduce allergens
- ✓ Our school developed in-house asthma management plan
- ✓ Our school meets ASHRAE Standard 62.1-2010 (Ventilation for acceptable indoor air quality). Comments: Tested and balanced Canterbury in 2005, HS/MS 2007, HV in 2011; College Park in 2008
- ✓ Our school has installed one or more energy recovery ventilation systems to bring in fresh air for use in the HVAC system. Comments: High School Pool
- ✓ Our school has installed local exhaust systems for major airborne contaminant sources. Comments: Kilns, central kitchen, and chemistry labs all have exhaust systems
- ✓ Our school has CO alarms that meet the requirements of the National Fire Protection Association code 720. Comments: Boilers inspected twice a year
- ✓ Our staff visually inspects all our school's structures on a monthly basis to ensure they are free of mold, moisture, and water leakage. Comments: Inspected during routine cleaning
- ✓ Our school has moisture resistant materials/protective systems installed (i.e. flooring, tub/shower, backing, and piping). Comments: At High School as a result of renovation
- ✓ There are no wood structures on school grounds that contain chromate copper arsenate. Our school prohibits smoking on campus and in public school buses. Our school has combustion appliances that are annually inspected to ensure they are not releasing Carbon Monoxide? (Not applicable – the school does not have combustion appliances.) Comments: Preventative Maintenance plan to inspect annually

The school has not completed radon testing, as it is not a requirement in Wisconsin. According to the Department of Health Services, the radon average for this zip code is 5.76 pCi/L, which is just above the EPA recommendations. The schools are encouraged to complete radon testing as a part of becoming a Green & Healthy School.

The school has a chemical management program that includes:

- ✓ Storage and labeling. Comments: Chemical Hygiene Officer, Dr. Melissa Senn manages chemicals on academic side, MSDS online
- ✓ Training and handling. Comments: Melissa trains educational staff, Brian trains maintenance staff
- ✓ Spills (clean up and disposal). Comments: Program in place, inform custodian, EMC coordinates clean sweeps and recycling ballasts and bulbs; Melissa handles academic-related items
- ✓ Selecting third-party certified green cleaning products. Green Seal paper products; Enviro Solutions, EcoLogo on all 3 products we use daily and all are certified green cleaners: Neutral Cleaner 256H, Super

H2O Multi Purpose Cleaner 71C, Like Acid Washroom Cleaner
Please explain below.

- What percentage of all products is certified? estimated 75%
- Which certified green cleaning product standard does your school use? Green Seal, Enviro Solutions, EcoLogo

The school controls and manages chemicals routinely used in the school to minimize student and staff exposure:

- ✓ Experiments with hazardous chemicals are limited. 100% of daily cleaning products are certified green cleaners.

The school has a pest management policy and works with Orkin for any pesticide application.

- ✓ Our school has an integrated pest management policy with an employee who is certified to apply pesticides. Comments: Joe Martin, maintenance staff, will take test in 2014 to become certified
- ✓ Our school contracts with a certified and licensed pesticide applicator. Comments: Orkin contracted in all buildings
- ✓ Our school post a notice at the time of pesticide application and for at least 72 hours following application Comments: For outdoor application
- ✓ Copies of pesticide labels, copies of notices, material safety data sheets (MSDS) and annual summaries of pesticide applications all available and in an accessible location.
- ✓ Students are prohibited from entering a treated area for at least 8 hours after the treatment or longer if required by the pesticide label.

Describe any efforts to reduce use of pesticides at school:

Used to treat 112 acres for dandelions, now only treat athletic fields. Make sure doors are closed and sweeps are working properly. Any indoor applications are non-toxic and safe around students and staff.

Additional progress the school has made towards improved environmental health specifically on the school building and grounds:

De-cluttering of all spaces, offices and classrooms, to allow for adequate cleaning, leading to better health outcomes for all students and staff. Proper storage of all classroom and office items promotes a safe, clean environment. Staff adheres to operational priorities to maintain low allergy incidence, such as no air fresheners, no hanging things from ceilings, reduce paper on walls, no plants or animals, no stuffed furniture or items that cannot be cleaned properly. Staff now have to 'check-out' at end of school year to ensure only necessary items are left in the classrooms. IEQ Team formed in 2009 meets quarterly to discuss concerns, strategies for environmental improvement and identify district IEQ management needs. This team became the Green Team for IEQ in 2009-2010 and is the foundation of the current Green and Healthy School Team for the district. GSD earned the Great Start and Leadership Awards in 2009.The district also received the Award of Excellence from the EPA for its programs in all buildings in 2010.

Professional development or training offered to staff regarding environmental health:

District staff have participated in training through WASBO (air quality and a number of other environmental issues); Safe Schools training: Indoor Air Quality for Schools; Sustainable Facilities classes at Milwaukee Area Technical College (MATC); EPA's Indoor Air Quality Symposiums beginning in 2003.

Chemical safety and awareness and mercury information are part of the curriculum in some/all grades:

Science teachers include safety instruction as part of every lab in writing and as part of pre-lab discussions. Students are required to pass a safety test at the beginning of the year and first year chemistry students answer safety questions before every lab. Not much is done with mercury information in chemistry because mercury and mercury compounds are banned from schools. Students and staff always wear appropriate personal protection equipment when working with chemicals in classrooms. Goggles are always used whenever glass and chemicals are used. Aprons and gloves are added where appropriate.

Additional progress the school has made towards improved environmental health through training, teaching, and professional development:

Greendale Safety Committee was established in 2002 led by Erin Green. This committee was made up of administrators, the district nurse, maintenance staff, workers compensation coordinator and the director of buildings and grounds. This committee was established to create and maintain an active interest in safety and health through broad scope safety and loss control programs. This group still meets quarterly. CESA 10

administered a sustainability survey to the staff and when asked to grade the sustainability of the 'environmental health' area, the most common grade was a 'B'.

Element 2B: Nutrition & Fitness

Focus Area: Health & Wellness

The school has a school health, nutrition, and/or wellness policy:

Greendale School District's Wellness Policies on Physical Activity and Nutrition were originally adopted in August 2006 and revised in April 2012. GSD promotes healthy schools by supporting wellness, good nutrition, and regular physical activity as a part of the total learning environment. The District supports a healthy environment where children learn and participate in positive dietary and lifestyle practices, including opportunities for physical activity. Goals include: provide a comprehensive learning environment by developing and practicing lifelong wellness behaviors; support and promote proper dietary habits contributing to students' health status and academic performance; increase the amount of time students are engaged in physical activity; and increase the nutritional and fitness education and opportunities available to all students and families.

The school provides the following to promote nutrition and fitness:

- ✓ Our school has a salad bar during lunch. Comments: Available at MS and HS
- ✓ Our school offers fresh fruits and vegetables, some from its garden. Comments: District-wide
- ✓ Our school uses whole grain foods. Comments: District-wide
- ✓ Our school has restricted access to foods of minimal nutrition value. Comments: District-wide
- ✓ Our school has restricted access to beverages of minimal nutrition value. Comments: District-wide
- ✓ Our school garden supplies food for our students in the cafeteria, a cooking or garden class or to the community. Comments: District-wide
- ✓ Our school has an on-site indoor fitness center available to students and staff. Comments: MS has workout facility for use; All buildings have gyms to use

The school purchases all produce and dairy are from local resources. The district's primary vendor, Performance Fox River Foods, said that their produce is Good Agriculture Certified (GAC).

The school has a policy for harassment and bullying:

The district policy on bullying was approved November 2010. The policy includes the following introduction: The Greendale School District strives to provide a safe, secure and respectful learning environment for all students in school buildings, on school grounds, and school buses and at school-sponsored activities. Bullying has a harmful social, physical, psychological and academic impact on bullies, victims and bystanders. The school district consistently and vigorously addresses bullying so that there is no disruption to the learning environment and learning process. In addition, the policy defines bullying behavior (physical, verbal, and indirect), provides a statement of prohibition, details the procedure for reporting/retaliation, details the procedure for investigating reports of bullying, describes sanctions and supports, and provides a statement on disclosure and public reporting. The district policy on discrimination and harassment of students was originally approved in 1993 with a number of revisions since then (latest was May 2013). The policy defines discrimination and harassment, provides examples, and details procedures for dealing with violations of policy.

Additional progress the school has made towards improved health and wellness specifically related to the school facilities and policies:

The GSD Climate and Culture Task Force was formed in October 2012 to address harassment in the community and schools. The Task Force is made up of parents, teachers, administrators, staff, students, and community members, charged with assessing and understanding the current situation and proposing solutions to issues and challenges related to harassment and make recommendations for solving issues. The district established Partners for Community Action to help create programs and initiatives geared toward improving the odds for success for Greendale youth. Greendale Schools partnered with Aurora Health Care to launch the Student and Family Assistance Program (SFAP). The Step Up to Better Health Committee is a community group committed to wellness in the community. They partner with various organizations such as the Greendale School District, the Greendale Park & Recreation Department, and the Greendale Health Department. The Committee is involved with the Lighten Up Wisconsin program, the Greendale

Community Charity Walk, and the Fun Run & Walk. They also sponsor winter walking at the HS. All buildings have hand sanitation dispensers in classrooms as well as wipes.

Resources the school provides for staff and student social well-being:

The Student & Family Assistance Program, sponsored by the Aurora Employee Assistance Program, offers free confidential access to a variety of counseling professionals. The SFAP is available to all household members of Greendale Schools, whether the concerns related to a student, an adult, or the whole family. The program promotes healthy homes, healthy minds and healthy families. The Greendale School District provides students with access to the services of a nurse practitioner at no cost to parents. Services, available by appointment at the on-site clinic, include physical exams; diagnosis and treatment of acute illness and injury; diagnosis and management of chronic and episodic illness; health education and promotion; and athletic physicals.

The school promotes nutrition, physical activity and overall school health in the following ways:

- ✓ Our school will implement Greendale Students Get Moving and Stay Active 60 minutes a day in 2014
- ✓ Our school participates in Movin' and Munchin'. Comments : College Park
- ✓ Our school is a Team Nutrition School.
- ✓ Our school participates in a Farm to School program or other program to use local, fresh food.
- ✓ Our students spent at least 120 minutes per week over the past year in school supervised physical education. Comments: Elementary: 90 mins/week PE plus120+ mins/week recess; MS has 120 min/week in PE; HS is 240 min/week during PE semester they are enrolled
- ✓ At least 50% of our students' annual physical education takes place outdoors. Comments: For elementary students
- ✓ Our school promotes hand washing for staff and students.

Types of outdoor education, exercise and nature-based recreation available:

GSD has implemented 2 school gardens to provide outdoor classroom spaces, grow produce used in the lunch program; use for class experiments, and with our special needs population. The garden was planned in conjunction with the UW Ext Master Gardener program, and has spaces for vegetables, flowers, butterfly gardens, berries, pumpkins and each school (5) has a space for school projects. GSD has recently been approved for two School Forest classroom spaces to be developed this year. For example, in Advanced Environmental Science, where the wildlife and other creatures are studied, the plants and trees are used for studies, and the habitat is improved. The use of water is also studied. The Wisconsin DNR will work with us to provide outdoor education to students. All students in our Middle School take part in a 3-day Outdoor Education trip to allow them to learn about the outdoors in a natural setting. Students have access to afterschool kids Yoga at no charge and a basketball skills program. PE classes provide skills for living a healthy lifestyle through example of exercising and playing skills for lifelong participation.

Professional development, training, or programs offered to staff regarding health and wellness:

GSD is a recognized leader in providing health and wellness staff development and programs (an award of excellence was obtained from UnitedHealth Care). Over the past decade renewal costs have averaged under 4%, in a decade when 10-12% was normal. Group health is measured through on-site biometric screenings. We have addressed the needs to become active, manage stress, address nutrition, and body mass through our on-site programming and incentive program. To receive incentives, an employee must complete a health challenge and attend one educational session, with topics such as stress, nutrition, and healthy drinks, among others presented. Incentives were provided to persons who obtained the most points and lost the most body weight by %. The district provides personal training in a staff fitness center (subsidized), free on-site Yoga and other programs for staff. GSD staff receives Wellness Wednesday Newsletter biweekly with tips, reminders, and resources. CESA 10 administered a sustainability survey and when staff was asked to grade the sustainability of the 'health & wellness' area, the most common response was a 'B'.

Health, nutrition, wellness, and physical activity are a part of the curriculum in all grades:

There are a number of classes, events, and programs offered to MS and HS students including: Health 9, Human Sexuality, Exercise Physiology, FACT (Anti-tobacco), Teens with Impact, TATU (Teens Against Tobacco Use), HOSA Club (Health occupations and healthy living focus), Smoking Cessation Class, FBLA (healthy-sized snacks for sale), Foods (FACE), ProStart Culinary Arts (FACE), Real-Care Baby (FACE), Physical Education class, 6th, 7th, and 8th Grade Healthy Choices, Tobacco Fighters, Drug Free

Week in April, Student Activity Nights 3 times a year, AODA Trials. In addition, Canterbury Elementary offers a daily running club before school, several classrooms participate in Adventure to Fitness (online program to track physical activity during day), and they won a Radio Disney Dance Party through participation in the Get Active, Get Fit program. College Park students participate in Jump Rope for Heart during recess. Highland View's Dig-it Club works in school garden one day a week. Members of the Dig-it Club survey students to determine what should be planted. HV's Movin' Miles is an after school program to promote physical activity in winter. 2nd graders chart snacks to raise awareness.

The school engages staff, students, and the surrounding community to promote health enhancing behaviors and wellness:

The 3rd Annual Nourish Expo, May 2013, sponsored by GSD Wellness and Sustainability Teams along with Partners for Community Action (PCA), the Greendale Health Department (GHD) and the Step Up to Better Health Team, featured resource booths, exhibits, demos, and student projects, including cookbook, related to living physically and emotionally healthy and environmentally friendly, sustainable lifestyles. Nourish featured a community run before the Expo and a Cafe, run by the ProStart Culinary students. The community Step Up group partnered with the PTO's and other organizations at GSD to expand participation in the FUN Run/Walk held each October encouraging families, students, district employees and residents to participate in this healthy activity. The 2012 run had over 600 participants. Step Up also coordinates a Community Walk each June, the summer Playground Challenge for children through age 10, and provides the Hallway Walkers program free for Greendale residents during the winter. GSD, in conjunction with PCA, presented the Parents as Partners Conference, a free evening of learning and discussion about topics related to raising today's youth in October 2012 and February 2013.

Additional progress the school has made towards improved health and wellness among staff and students:

The district employs two full time psychologists, two full time social workers, and four full time guidance counselors to improve the health of students, staff and families of employees and students. They have free access to an on-site medical clinic. The SFAP program will see any student, staff member, dependent and any family member of a student, at no charge, with free professional counseling provided off site by dialing an 800 number. This program addresses mental health needs, behavioral issues, substance abuse issues, and a number of other issues/problems. Aurora EAP has provided in-service to our parents and staff on topics such as bully prevention, substance abuse in our area, recognizing mental health issues, among many other topics. GSD encourages healthy snacks and non-food treats in classrooms. The MS has Fitness Fridays with 10-minute workouts. Attendance data on staff and students suggests an increase in attendance in both groups over the last three years can be attributed to health and wellness initiatives throughout the district.

Pillar III: Effective Environmental and Sustainability Education
Element 3A: Interdisciplinary learning about the key relationships between dynamic environmental, energy, and human systems

Focus Area: Environmental & Sustainability Education

The school has a K-12 scope and sequence that integrates environmental and/or sustainability education as part of the regular coursework at all grade levels:

The following units focus on environmental or sustainability: 1st grade: Pebbles, Sand, & Silt (FOSS kit) 4th grade: Earth's Materials (FOSS kit) 5th grade: Ecosystems (Einstein unit) & Solar Energy (FOSS kit) 8th grade: Entire course, HS biology: Ecology unit (required for graduation) HS earth: Elective 1 semester HS Environmental course: 1 year long; AP Environmental Science Class: one year long

Environmental and sustainability education concepts are integrated throughout the curriculum in grades pre-kindergarten through twelve:

Ongoing throughout all/nearly all grade levels to some degree: emphasis on recycling day to day; use of natural light; layering clothing to be comfortable; conserve paper when possible; share resources; print responsibly in the library. Middle School: All students read articles related to environmental challenges as part of their Reading Workshops; science - energy measurement, reduction, analyzing bills. Middle/High school: Emphasize digital hand-in for assignments to reduce paper use. Elementary: Eat and discuss the importance of healthy snacks; Social Studies learn about natural resources; Science teach solar energy unit and adapted it to be a sustainability unit so lessons cover many energy sources, renewable and nonrenewable, as well as their effects on our environment; ELA - when reading nonfiction text. 3rd: endangered animal reports and discussions on protecting the environment, recycling discussions, and some

groups of students read books about protecting the environment. 4K: Terracycle.com program in coordination with art teacher to gather used supplies as a fundraiser and to raise awareness or how to minimize waste sent to landfill.

Environmental education is integrated into the following courses: Mathematics, English Language Arts, Science 9, Honors Physics, Current World Issues, Spanish, German, Nonfiction Film, Study Skills, Health Education, Contemporary Foods, ProStart, Physical Education, and Technology Education:

Mathematics: Use situational word problems to calculate different numbers pertaining to amount of materials saved. Science: Study alternative energy sources; Energy/Sustainability research projects. ELA: Social issue essays. Spanish: Study a unit on environment; water resources, landfills and reusing waste to make musical instruments. German: Environmental themes interwoven. Current World Issues: Learn what sustainability is and analyze the sustainability of policy options such as sustainable organizations providing water resources or sustainable ways to fight the war on terror. Students chose the topics to study including a unit on access to food and water that focused much more on sustainability of practices. Nonfiction Film: Will cover films based on environmental issues. Study Skills: Unit on environment. FCS: Work through Nourish curriculum in Contemporary Foods class; Project on Farm to Table where they trace how far the food product had to travel to reach them; The ProStart class also hosts the Nourish Cafe in the spring where at least 50% of the food is coming from within a 150-mile radius of Greendale. Health/PE: Minimize waste.

Current Biological Processes class integrates environmental education into curriculum, with an ecology unit towards the end of the school year, and discussion of connections to the environment throughout.

Two environmental science courses offered at the high school, Environmental Science and Advanced Placement Environmental Science. In Environmental Science, students explore concepts in ecology, conservation, global climate change, natural resources, energy, and sustainability. Advanced Placement Environmental Science is designed to be the equivalent of a one-semester environmental science course at the introductory college level. Major topics of study include earth systems and resources, the living world, population, land and water use, energy resources and consumption, pollution, and global change. Sustainability is an underlying theme in the course throughout the year. This class has partnered with UW-Milwaukee to work and learn at their Field Station-Cedarburg Bog. Both courses emphasize laboratory and fieldwork as part of the learning process.

Environmental and sustainability concepts are integrated into assessments: These concepts are integrated into the regular science course work and therefore assessed. Proficiency levels would be determined by individual teachers.

Students have the option of joining the following environmentally or sustainability focused clubs:

Garden Club: 18 core people. Activities include planning, planting, growing, harvesting, and general education regarding the garden, sell kale and mums in the fall. 8-10 Sp Ed students utilize the produce grown in garden for life skills and create food items for Free Sample Fridays during lunch for staff and students. Student Council at College Park: Green Team of 18 students focused on being "green." They do daily checks of recycling efforts and light and energy usage. The information is being tracked in a Google doc to find ways to reduced usage. Results are shared with classrooms and students will be involved with spring planting in beds around the school. Greendale Environmental Organization (GEO) Club: 12 core members from the HS. Activities include selling Earth Friendly Coffee, create awareness and organize initiatives, Halloween Howl at Timberwolf Preserve in Franklin, participate in Sturgeon Bowl (environmental knowledge contest), WEED OUTS to help eliminate invasive species. Green Team student member representative provides input into planning and evaluating sustainability initiatives.

Professional development offered to ensure environmental and sustainability education include:

- ✓ Aquatic WILD - Number of staff _2
- ✓ Trainings offered through your local CESA - Number of staff_3_ Comments: Green & Healthy School Workshop
- ✓ Facing the Future - Number of staff_1
- ✓ Global Environmental Teachings Course - Number of staff_1_ which trip/year? __Puerto Rico 2007___
- ✓ KEEP (WI K-12 Energy Education Program) –Number of staff_9_ Comments: NRES 634 plus others
- ✓ Project Learning Tree – Number of staff_1_
- ✓ Project WET - Number of staff_2_

- ✓ Project WILD - Number of staff_6_
- ✓ Related university level course - Number of staff_5_ Comments: Sustainability Courses from UWSP
- ✓ Other in-service, training, workshop, or course: __6_ Sustainability Team, Clean Air Quality Committee, Environmental Newsletters,

Outdoor learning experiences offered to students at the school each year include:

Kindergarten learns about shadows outdoors and collects leaves during nature walk in the fall. 5th graders conduct solar energy experiments outdoors on sunny days where they measure sunlight levels and collect energy. 7th graders spend the entire first quarter studying plants and classification. They use the woods behind Canterbury Elementary and take a field trip to Kettle Moraine State Forest. 8th graders visit Scout Lake to conduct outdoor activities organized by the County Park staff (i.e., following scat and other evidence of animals). 1st graders visit Scout Lake as well during their animal unit. GHS: Hands-on fieldwork experiences and school forests work is a part of Environmental Science courses. Both offer off-campus field trips to natural areas for water quality and forestry, including Riveredge Nature Center to do water quality tests in the Milwaukee River, a nearby bog to learn more about wetland ecology, and the Audubon Nature Center in Milwaukee for Great Lakes education. All MS students Outdoor Ed trip offers a variety of outdoor activities, including orienteering, hiking, forestry, and aquatic ecology.

Element 3B: Use of the environment and sustainability to develop STEM content, knowledge, and thinking skills

Focus Area: Environmental & Sustainability Education

Learning experiences offered to students connecting STEM and environmental and sustainability education:

8th Grade Science: Use Project Lead the Way - Energy and the Environment. Both science teachers have been trained in Project Lead the Way and use this module. High School: There was a past project where students designed a playground (natural materials and environmentally friendly) using engineering software as part of Introduction to Engineering Design course assignment. The students worked with the Parks and Recreation department and community members to fundraise for construction of the playground and it will be built in the near future on school property.

School curriculum make connections between classroom and college and career readiness, in particular post-secondary options in environmental and sustainability fields:

At College Park Elementary students do career exploration projects that includes environmental/technical careers. At Greendale Middle School, teachers and students discuss career options as we look towards work scientists do. Also, 8th grade students explore careers relating to their interests in both health and math classes. GHS: The Project Lead The Way (PLTW) (Biomedical) classes make connections between classroom experiences and career/college readiness. Students are exposed to careers in the biomedical field and they make connections between the content in the class and real world applications of that content. Students can also earn college credit for the PLTW-Biomed classes. Yes, these connections are made in both Environmental Science and AP Environmental Science. Students are given a solid foundation in core concepts and are given a great deal of experience in both field and laboratory work.

Career and technical student organizations' (i.e., DECA, FBLA, FCCLA, HOSA, FFA, and SkillsUSA) focus on environmental or sustainability topics:

HOSA club at Greendale High School is dedicated to introducing and promoting careers in the health sciences to students. HOSA stands for the Health Occupations Students of America and allows students to explore careers through field trips, shadow opportunities, and volunteer experiences. Students also take time to help educate their peers on important health issues from heart disease to breast cancer awareness.

Element 3C: Development and application of civic knowledge and skills

Focus Area: Community Involvement

The school has community involvement all of the focus areas (Energy, Water, School site, Recycling and waste management, Transportation, Environmental Health, Health and Wellness, Environmental and Sustainability Education)

Description of community partnerships/involvement:

- Energy: Highland View 5th graders were invited to JACO Environmental by Focus on Energy's staff to watch how a refrigerator is recycled. As part of participating, Focus on Energy replaced one of the school's older refrigerators with a newer Energy Star appliance. Paul Van de Sand, Franklin Energy, was a guest speaker for over 200 MS students to discuss how electricity is generated and distributed.
- Water: The AP Environmental Science students will be working with the County on water quality testing in Dale Creek, near the HS.
- School Site: GSD worked with the DNR to develop a School Forest Management Plan on two parcels of recently registered school forests. Environmental Science students also visit Riveredge Nature Center for water quality tests in the Milwaukee River and the Audubon Nature Center for Great Lakes education.
- Recycling & Waste Management: GSD works with Waste Management to single source recycling. Waste Management provided educational resources detailing the proper way to dispose of waste material.
- Transportation: The Village of Greendale in general supports the minimal use of transportation by the district due to the design of the community. With an emphasis on safe walking routes, students can take field trips to local sites without taking a bus in many instances.
- Environmental Health: GSD has been partnering with Environmental Management Company (EMC); an Environmental Health and Safety service provider to meet the environmental health needs of the district for over 10 years.
- Health & Wellness: The community Step Up group (through GHD) partnered with the PTO's and other organizations at GSD to expand participation in the FUN Run/Walk held each October encouraging families, students, district employees and residents to participate in this healthy activity. Step Up also coordinates a Community Walk each June, the summer Playground Challenge for children through age 10, and provides the Hallway Walkers program free for Greendale residents during the winter. GSD, in conjunction with PCA, presented a free evening of learning and discussion about topics related to raising today's youth each year. The next event is scheduled for February 26, 2014. The district will launch a Get Moving & Stay Active program at that time and include 8 health and wellness breakout sessions for parents to attend while students are engaged in physical activities. The district also plans to use this event to solicit family volunteers for the school gardens. The UW Extension Master Gardeners organization provided a master plan for the school garden. The first annual Greendale Garden Championship was coordinated through the district PTOs and PCA. Schools competed to win the "Greendale Golden Gourd" and be crowned Garden Champion. Kellner's Garden Center (Owned by a Canterbury student's father) donated a generous supply of seedlings and garden supplies to the contest. Community members donated gardening supplies and enough gardening gloves so that an entire class of students will have a pair.
- Environmental Healthy & Sustainability Education: A parent built a sustainability-themed float for the Greendale 75th Anniversary Parade in 2013. In addition, GSD is partnering with CESA 10 to help raise environmental and sustainability literacy, reduce their environmental impact, and improve staff and student health and wellness. CESA 10 is assisting with the Green Ribbon School application. As part of the information gathering process, a sustainability survey was sent to all district staff with 162 responses. Survey results indicate a general sustainability score of a 'B'.

Community involvement where students participate in civic/community engagement projects related to environmental and sustainability education:

- HS students in Environmental Science past service learning activities (visited Highland View Elementary on more than one occasion to teach about recycling and/or composting). Classes have participated in the Nourish Event to share what we do in our classes with the community. Environmental Science and AP Environmental Science have also had guest speakers/instructors visit their classroom. These members of the community and surrounding areas are experts in their field. Plans are to continue to work with county on forest issues, bringing together the community to make better use of our school forests while also taking care of our natural resources sustainably.
- Environmental Health: 'Nourishing Snacks 2013 Cookbook' - This tasty collection of everyday and holiday snacks developed by HS health students. MS 6th grade students make fleece blankets for 3 organizations. Students and staff participate in community fun run/walks throughout the year. MS students participate in spring and fall clean up activities assisting local elderly neighbors with yard work.

Community involvement where staff contribute to the community-based project of local organizations as representatives of the school:

- Superintendent, as a school representative, welcomes new families to the community by personally delivering welcome packets to their homes on a monthly basis. Some staff, on behalf of the district, are members of community organization steering committees including the Greendale Public Library Board, Greendale Community Learning Center Board, Facilities Ad Hoc Committee, and The Community Development Authority. Many staff members helped organize community wide events to celebrate the 75th anniversary of the establishment of Greendale.

Additional progress your school has made towards community involvement related to environmental and sustainability focus areas. (Response is limited to 1200 characters.)

- GSD often publishes articles with pictures on their website highlighting environmental and sustainability focused activities. This is a great way to share progress with the community. See the GSD profile on EEinWisconsin.org for direct links, also provided here:
  http://www.greendale.k12.wi.us/pages/Greendale/News/GHS_Garden_Has_Beautiful_New_B
  http://www.greendale.k12.wi.us/pages/Greendale/News/APESWorkOnSchoolForest
  http://www.greendale.k12.wi.us/pages/Greendale/News/Some_4K_Students_Picked_a_Pump
- Two district staff will be co-presenting at the National Green Schools Conference in Sacramento in March 2014. Their session title is 'Creating a Culture of Wellness in Schools: Collaboration at the State and Local Level' and session description: School health advisory councils, coalitions and broadly based constituencies for school health can build support for school health programs. School administrators, teachers and school health must actively engage families and utilize community resources, expertise and services to respond effectively to the health-related needs of their communities.

Cross-cutting Questions

- The school participates in the Sturgeon Bowl (environmental knowledge contest) run by Great Lakes Water Institute (UW-Milwaukee).
- GSD presented at the National Green Schools Conf in 2012 and will again in 2014; Erin Green has been asked to be on the Advisory Board for the National Green Schools organization; Will be presenting at School Business Officials conferences
- The school received the following awards for facilities, health, environment, sustainability, or environmental education:
  - EPA's IAQ Tools for Schools Great Start and Leadership Awards in 2009 (all buildings) and the Excellence Award in 2011; Award of Excellence was obtained from United Health Care in 2011-2012

The school is developing a story of their success which can be found at:
http://eeinwisconsin.org/net/content/go.aspx?s=99964.0.0.2209