

Waconia Public Schools
Minnesota



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.



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

PART II – SUMMARY OF ACHIEVEMENTS

Instructions to School Principal

Provide a concise and coherent "snapshot" that describes how your school 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 school worthy of the title U.S. Department of Education Green Ribbon School.

PART III – DOCUMENTATION OF STATE EVALUATION OF NOMINEE

Instructions to Nominating Authority

The Nominating Authority must document schools' high achievement in each of the three ED-GRS Pillars and nine Elements. For each school nominated, 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 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 one or more of grades Pre-K-12.
(Schools on the same campus with one principal, even a Pre-K-12 school, must apply as an entire school.)
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 Minnesota Dept. of Education

Name of Nominating Authority Brenda Cassellius
(Specify: Ms., Miss, Mrs., Dr., Mr., Other)

Brenda Cassellius, Commissioner of Education



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

Brenda Conellin
(Nominating Authority's Signature)

Date _____

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

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.



2013-2014 District Nominee Presentation Form

PART II – SUMMARY OF ACHIEVEMENTS

Waconia Public Schools (WPS) have demonstrated sustainable commitment to implementing innovative and practical solutions to: 1) Promote energy and environmental conservation, limit its environmental footprint and reduce costs; 2) Improve student and staff health and wellbeing; and 3) Provide effective and compelling environmental and sustainability education. To fulfill this commitment, WPS have instituted a broad base collaborative strategy, which includes financial investment, active partnerships, and systemic integration of the three Pillars of Green Ribbon Schools across the entire district.

The School Board voted in November 2012 to approve a unique financing plan to use cost savings, energy rebates and other incentives to pay for environmental and energy conservation improvements. These included installing more energy efficient lighting, upgrading plumbing equipment to reduce water consumption, and utilizing better control systems to more efficiently regulate heating and cooling in all buildings. It is estimated that WPS will save \$117,000 annually in utility and operations costs along with \$46,000 in energy rebates. WPS will also conserve 1,243,000 gallons of water, 918482 kilowatt hours of electricity, and 17,024 Therm units of gas. Maintaining and improving these conservation efforts relies on sophisticated monitoring equipment and ongoing analysis. The district regularly performs energy and resource audits to determine alignment with district priorities, best practices, optimal efficiency and financial sustainability. Equipment, program and policy recommendations are made and implemented according to these guidelines. Systems have been put in place to track, notify, and assist in benchmarking. These systems enabled the district to identify and diagnose problems quickly so early corrective action can be taken. District personnel work closely with Institute for Environmental Assessment (IEA) engineers on B3 Benchmarking and collaborate on conservation improvement projects. Coupling equipment upgrades, improved monitoring systems, and collaborative analysis greatly enhances the district's capacity to manage energy and resources more efficiently.

Partnerships are extensively utilized to cultivate a high level of achievement in all three ED-GRS Pillar areas. These partnerships enable WPS to develop, improve and sustain programs that reduce environmental impact, promote nutrition and fitness, equip students with environmental literacy and provide a solid educational foundation for students to serve as good stewards of natural resources and pursue careers in environmental, STEM and agricultural related careers. Specific examples addressing Pillar I include: A collaborative agreement between WPS, Ridgeview Medical Center and City of Waconia on several energy, water and lighting conservation and waste reduction initiatives. Joint energy and resource audits are conducted to leverage cost savings and expand environmental impact. District is partnering with the City and Minnesota Board of Water and Soil



Resources on a major storm-water collection and reuse project. This project, along with rain gardens and storm-water collection systems currently in place, will result in 100% of district's irrigation needs coming from these sources. It will also contribute to the water quality of adjacent watersheds, and it is estimated that Burandt Lake will be "delisted" from the State Impaired Waters list within five years due to this project. District collaborates with Sheriff's Office regarding pharmaceutical waste disposal, and Environmental Services on organic recycling and hazardous waste disposal. Waconia high school students engage in water quality testing and leaf and road clean-up projects through partnerships with the Volunteer Water/Stream Monitoring Program.

Partnership addressing Pillar II and III include the following: A joint venture between WPS and City of Waconia on Safari Island Recreational Center to share facilities and coordinate exercise and healthy recreational programs. The district partnered with Three Rivers Park District to develop a primary school curriculum to utilize its designated School Forest. Grant funding from Minnesota Department of Education and Department of Agriculture have been utilized to expand outdoor education and embed environmental and agricultural science into core curriculum at both Clearwater Middle School and Waconia High School. Further collaborative projects are planned with the Historical Society to expand outdoor education opportunities with local historical farmsteads. WPS worked with Chef Marshall O'Brien to integrate the latest Federal Nutritional Standards into the district's school menu. The district capitalized on his expertise to review and propose modifications to the school wellness policy, and integrated a 4 step system for Sports Nutrition in collaboration with the Minnesota Timberwolves, Minnesota Lynx and University of Minnesota. WPS has expanded its Farm to School program, and just received the MN Department of Agriculture "Farm to School" grant. This grant will enable the district to expand the use of locally grown or raised food in its school meal program by 25%, and increase the district's capacity to process fresh fruit and produce grown through their Edible Classroom. The Edible Classroom has won numerous national and statewide awards, and collaborates with Carver County Farm Bureau, Minnesota Landscape Arboretum, Jeffers Foundation, Whole Kids Foundation, and many local businesses, farmers and residents in growing, nurturing and harvesting its produce.

District Information

District Name: **Waconia Independent School District 110**

Street Address: 512 Industrial Blvd

City: Waconia

State: MN Zip: 55387

Website: www.waconia.k12.mn.us



Facebook page: <https://www.facebook.com/pages/Waconia-Public-Schools/336491543028355>

Superintendent Name: Dr. Nancy Rajanen

Superintendent Email Address: nrajanen@waconia.k12.mn.us

Phone Number: 952-442-0600

Lead Applicant Name (if different): Richard Scott, Director of Grants & Development

Lead Applicant Email: rscott@waconia.k12.mn.us

Phone Number: 952-442-0600

Number of schools at each grade level

Elementary (PK – 4): 2

Middle School (5-8): 1

High School (9 – 12): 1

How would you describe your district: (place an “x” after your choice)

Urban:

Suburban: X

Rural:

Total Enrolled: 3,730

Does your school serve 40% or more students from disadvantaged households? Yes

No-X

Percentage receiving Free or Reduced Priced Lunch: 13%

Percentage limited English proficient: 1.2%

Other measures: Special Education: 13%

Graduation Rate (4 year): 91%

Attendance rate: 96%

Cross-Cutting Programs

1. Is your district participating in a local, state or national program, such as EPA ENERGY STAR Portfolio Manager, EcoSchools, Project Learning Tree, or others, which asks you to benchmark progress in some fashion in any or all of the Pillars?

Yes-X No

Program(s) and level(s) achieved:

Waconia Public Schools (WPS) utilize Minnesota B3 PBEEEP benchmarking standards for Pillar 1; CDC School Health Index, OSHA and EPA Standards for Pillar 2; Common Core and



Statewide Academic Standards for Pillar 3. Waconia has demonstrated 4% reduction in electricity consumption, 3% reduction in BTU/Occupant, and 25% reduction in water consumption. Established baseline data for modules 1-4 of CDC School Health Index for all schools K-12 and biometric indicators and performance criteria are tracked from Fitness Gram and President's Challenge. Implemented Farm to School, School Forest, Environmental Conservation and Sustainability, Agriculture literacy, and Edible Classroom (School Garden) programs and curriculum that align with Common Core, Minnesota Graduation, and Outdoor and Environmental Education standards and best practices.

2. Has your district received any awards for facilities, health or environment? Yes-X No

WPS has also been awarded several competitive grants and/or awards for energy conservation, health, waste reduction, recycling, water conservation, storm water and phosphorus reduction, outdoor education, sustainable and environmental sustainability programs, facilities and grounds across the entire district:

- Jeffers Foundation W.R.A.P. Award for its efforts to reduce waste at Bayview Elementary. The model used for Bayview has been expanded to Southview Elementary, and is currently being phased in at Clearwater Middle School.
- MN Board of Water & Soil Resources - Burandt Lake Water Reuse System grant (collaborative partner with the City of Waconia); - This project will install a water reuse system to capture untreated storm water and reduce pollutants entering Burandt Lake. This collaborative project with Carver County, City of Waconia and WPS will retain and reuse an estimated 35% of all storm water runoff (~ one million gallons per year) currently generated from eight acres of adjacent residential neighborhoods. Burandt Lake is a deep 92 acre lake within the City of Waconia, just downstream of Lake Waconia. Burandt Lake was listed as impaired for excess nutrients in 2004. It is anticipated that the BLWRS project combined with other municipal and residential water quality initiatives currently in operation will result in Burandt Lake being "delisted" from the State Impaired Waters list within the next 5 years.
- The MN State Health Improvement Program (SHIP) – WPS collaborated with City of Waconia, Carver County Public Health and Wilder Research on this initiative. This partnership supported the Safe Routes to School program; expanded and enhanced healthy nutritional policies and activities; and supported workforce wellness initiatives.
- Safe Routes to School Planning Grant – WPS partnered with MN Department of Transportation, City of Waconia, Alta Planning & Design and Carver County Public Health to conduct an environmental scan of infrastructure and programmatic needs to develop SRTS implementation recommendations for Bayview Elementary, Southview Elementary and Clearwater Middle School. Plans include an analysis of existing conditions, public outreach and identification of potential infrastructure and non-infrastructure solutions to help more children walk and bicycle safely to school.



- The Community POWER - “Living Better...Living Green” Project – WPS have received two grants (FY 2011 & FY 2013) from the Solid Waste Management Coordinating Board to empower over 250 students to serve as ambassadors of social change to promote the practices of “reduce-reuse-recycle” within the communities of Waconia.
- AmeriCorps-GreenCorps Member – WPS hosted a GreenCorps Member in 2011-2012, and is currently co-hosting a GreenCorps Member with Carver County Environmental Services for FY 2013-2014.
- MN Department of Agriculture Farm to School grant – WPS was recently awarded a “Farm to School” grant, which will expand the district’s capacity to utilize locally grown or raised food in its school nutrition program by 25%.
- University of Minnesota Humphrey School of Public Policy Local Government Innovation Award and United Health Heroes Award for Service Learning. Many of the service learning projects conducted by students have focused on health and environmental conservation.
- Multiple awards for the Waconia Edible Classroom (Welsh Harvest Award, KidsGarden Youth Garden Award, General Mills Champions for Healthy Kids Award, ING Unsung Heroes Award, and Whole Kids Foundation);
- Other recent grants and awards that focus on health, fitness and the environment include: MDE Outdoor and Environmental Education Grant (2012-2013); Medtronic Heart Rescue Award (2010); Twins Fields for Kids Grant Award (2011 & 2013); Delta Dental Serve-A-Smile Award (2011, 2012, 2013); Agricultural Literacy Grant (2012 & 2013), and others.

3. Does the district have a sustainability program or coordinator? If yes, describe it. Yes No

The roles and responsibilities of a Sustainability Coordinator are shared between the Director of Grants & Development, Director of Nutrition Services, Director of Facilities and Grounds, and District Health Coordinator. This team oversees the coordination of health and wellness programs and environmental sustainability practices across the entire district.

Pillar I: Reduced Environmental Impact and Costs

Energy

Element 1A: Reduce or Eliminate Greenhouse (GH) gasses: While Waconia Public Schools (WPS) have not yet set up a quantifiable tracking system to monitor greenhouse gas emissions, it has invested resources in implementing programs and installing equipment that are directly tied to reduction in GH emissions. Waconia installed catalytic converters to its standby generators; Conducts regular boiler emission testing to ensure maintenance of optimal performance; Installed energy efficiency lighting and an Energy Management Control Systems; Waconia contracts with



Koch Bus Company who has instituted strict idle reduction policies and practices.

Non-transportation energy reduction:

Current energy usage (kBTU/student/year): = **13,764 kBTU/student/year**

Current energy usage (kBTU/sq. ft. /year): = **78.94 kBTU/sq.ft./year**

Percentage reduction: **4% reduction for electric use; 3% reduction in BTU/Occupant from 09/2007 – 09/2012**

How did you document this reduction? **MN B3 Benchmarking records**

Renewal Energy: Waconia Administration and Facilities Consultants have not felt it cost effective to invest in on-site renewable energy generation with current facilities; however, approximately 15% of energy purchased from XCEL Energy and Minnesota Valley Electric Cooperative comes from renewable sources. Administration is supportive of investing in renewable energy regeneration on site when it builds new facilities. It has upgraded and retrofitted 98% of all lighting systems to CFL or low energy lighting systems within all facilities across the entire district. This includes integration of timer/motion sensor switches to regulate use of lighting based on need. It has also installed new window shades and window tinting in selected buildings.

Water and Grounds

Element 1B: Improved Water Quality, Efficiency and Conservation: WPS have demonstrated a 24% reduction in domestic water use, and 95% reduction in irrigation water use from May 2009 to present as measured by utility bills and school district reports. Average baseline had been recorded at 1400 gallons per occupant per year and has been reduced to 1070 gallons per occupant per year. The reduction in domestic water use has been accomplished by installing minimum and low flow fixtures at all facilities throughout the district. Rain gardens and water collection ponds totaling more than 6 million gallons of capacity are used for irrigation at high school, middle school, adjacent fields and Edible Classroom locations. Bayview Elementary and adjacent football, soccer and baseball fields will also be irrigated with diverted storm water as part of the Burandt Lake Water Reuse System grant. A 27,000 gallon storage tank with filtering system to remove contaminants has already been installed and four (4) additional tanks will be installed in 2014. This will result in 100% of all fields and landscaping across the district being irrigated by rain and/or storm water collection systems (representing an estimated 100 acres of athletic fields, gardens, orchard and landscaping). Irrigation is not needed for Southview Elementary or District Offices. Waconia has made it a priority to utilize plants and vegetation that is 100% water-efficient and/or regionally appropriate for its landscaping. Specific plants include: Fescues for athletic fields; Bluegrass for lawns; Low maintenance dwarf shrubbery for landscaping.

WPS utilizes municipal drinking water for all campuses, and the City of Waconia conducts monthly testing of potable water for lead, copper and other contaminants. Non-lead pipes are used throughout the district. The district has taken several steps to reduce risk of watershed and water source contamination: 1) Utilization of rain gardens and storm water collection ponds; 2) Fall leaf cleanup projects by students and Conservation Club; 3) Partnership with City of Waconia and MN Board of Water & Soil Resources on the Burandt Lake Water Reuse System grant; and 4) Partnership with Carver County Volunteer Stream (and Lake) Monitoring System to monitor water



quality of local lakes and streams.

WPS have devoted the majority of its grounds for ecologically beneficial purposes. Approximately 15 acres are devoted to wetland, approximately 5 acres of native woods adjacent to Bayview Elementary and Burandt Lake have been designated as a School Forest. Teachers from Bayview and Southview Elementary collaborated with Three Rivers Parks District on developing outdoor education curriculum to utilize the School Forest. Approximately 4+ acres of old farm land adjacent to Clearwater Middle School was purchased, and is now used for the Waconia Edible Classroom, which includes a school garden, orchard and a “pumpkin patch.” Waconia High School is currently collaborating with Pheasants Forever organization to convert a portion of empty field space to plant native prairie grass and flora as natural habitat for birds, bees and other animals. These spaces are utilized for outdoor education for both core academic classes and extra-curricular activities for all grades K-12 (see Pillar 3 for details).

Waste Reduction

Element 1C: Reduced Waste Production: Waconia Public Schools is committed to the concept of “Reduce-Reuse-Recycle” in preventing and reducing waste and toxic chemicals wherever and whenever feasible. The district limits the generation of hazardous wastes to varnishes, washer fluids and waste oil. It does not generate any corrosive liquids, toxics or other hazardous waste. All hazardous waste is disposed of according to regulations and tracked through MPCA manifests. The percentage of non-hazardous solid waste that is currently diverted from landfill or incineration due to reduction, recycling and/or organics diversion is calculated as follows:

A - Monthly garbage service in cubic yards (garbage dumpster size(s) x number of collections per month x percentage full when emptied or collected): **384 cubic yards (Yd³)**

B - Monthly recycling volume in cubic yards (recycling dumpster sizes(s) x number of collections per month x percentage full when emptied or collected): **176 Yd³**

C - Monthly organics diversion (food to people, food to hogs and/or composting) volume(s) in cubic yards (leftover food collection bin/food scrap and/or soiled paper dumpster size(s) x number of collections per month x percentage full when emptied or collected): **16 Yd³**

Recycling and Diversion Rate = $((B + C) \div (A + B + C) \times 100)$: **33%**

Monthly waste generated per person = $(A/\text{number of students and staff})$: **0.09 Yd³/Student-Staff**

Other measures taken to prevent or reduce waste:

- See also Pillar 2: Element 2A
- Accurate food ordering, which has limited food waste to <1.5% at the point of service.



- Organic recycling at both elementary schools, with plans to include Clearwater Middle School this year (collaborative project with AmeriCorps GreenCorps Member and Carver County Environmental Services).
- Single Sort Recycling and Junk Mail Reduction Initiatives at all facilities.
- Eliminated single serving packaging and limited use of disposable tableware.
- In house laundry which reduces need for transportation and packaging. Also allows district to have control over use of “Green Seal” cleaning products.
- Electronic ordering, invoice processing, communications to eliminate paper use.
- Use of non-toxic “Green Seal” cleaners.
- Strict compliance with pharmaceutical and biohazard waste disposal protocols according to County and National Guidelines.
- Participation in the Volunteer Water/Stream Monitoring Program with coordinated Leaf and Road Cleanup projects through Waconia High School Conservation Club.
- Repurposing of all electronic equipment when feasible, and Clearwater Middle School hosts community wide electronic recycling program once a year in collaboration with Carver County Environmental and Recycling Center.

Alternative Transportation

Element 1D: Use of Alternative Transportation: Waconia Public Schools are committed to enabling and encouraging all students and staff (including those with disabilities) to engage in safe and healthy ways of getting to and from school. The District has just completed a Safe Routes to School (SRTS) Planning Grant in collaboration with the City of Waconia, Minnesota Department of Transportation and Alta Planning & Design. The district plans to submit a SRTS Infrastructure Grant in February 2014. Several program recommendations from the planning grant have already been implemented. These include walk and bike to school days, idling reduction practices and student and parental educational campaigns.

According to student surveys conducted by classroom teachers in 3rd, 5th and 8th grade, approximately 70% of students walk, bike, bus or carpool to and from school. Surveys were gathered as part of the SRTS Planning and State Health Improvement Plan (SHIP) grants. Over 250 Elementary and Middle School students participate in “Walk or Bike to School” events, which are held twice a year.

The District contracts with Koch Bus Company, which has established idle and exhaust reduction practices and policies. These include routing busses to make routes more efficient and eliminate excess miles. They have implemented strict idling policy to reduce emissions at pick up and drop off areas. Buses are equipped with programmed pre-heaters to start up to reduce warm-up idling before routes and co-curricular activities. Buses are plugged into electric outlets with timers to



warm the engine prior to starting. Vehicle loading/unloading areas are at least 25 feet from building air intakes, doors and/or windows.

Pillar 2: Improve the Health and Wellness of Students and Staff

Environmental Health

Element 2A: Integrate School Environmental health Program:

Waconia Public Schools have integrated a comprehensive pest management system to reduce and mitigate the use of pesticides. The district has reduced the use of pesticides to less than 1/3 ounce per student per year. To accomplish this reduction, Waconia incorporates the use of pest control policies, methods of application, and posting requirements that are provided to parents and school employees in accordance with the Janet B. Johnson Parents' Right-to-Know Act (Minn. Stat. § 121A.30). All MSDS Manuals are updated and located in Administrative, Nurses and Custodial offices. Information on pesticide use is communicated to parents and staff at the beginning of each school year and prior to each application. Pesticides are only applied twice a year and at the minimum recommended amount. All affected areas are flagged and access is prohibited for recommended period of time. Non-toxic traps are used for rodent control.

Waconia Public Schools have employed several policies and practices to minimize exposure to hazardous contaminants:

- The Health and Safety Advisory Committee developed the district's comprehensive indoor air quality management policy (Health and Safety Policy #807) and programs in accordance with Minnesota Department of Health best practices and EPA's IAQ Tools for Schools.
- District prohibits smoking on all campuses and on public school buses in accordance to District Policy #419). Appropriate signage is displayed at all facilities, grounds & fields.
- District maintains compliance with Minnesota Statutes (section 121A.33), and has identified and properly removed sources of elemental mercury. District prohibits its purchase and use at all district facilities. Metro ESCU Director provides yearly inspection and consultation to ensure compliance with statute and best practices.
- While district currently needs to rely on fuel burning appliances, it has taken steps to protect occupants from CO and other toxic fumes that may be generated by these appliances. All fuel burning appliances have dedicated fresh air intake and exhaust fans that are interconnected (intake and exhaust fans both go on at the same time; thereby, reducing risk of cross contamination with room air). CO monitors and alarms have been installed. District has replaced pneumatic control switches to digital systems, which are more energy efficient. They have also been integrated into a comprehensive Energy Management System to more accurately regulate temperature to reduce waste and improve comfort.



- District has recently completed a Long-Term (9 month) Radon Gas Detection testing of all its facilities and no radon (zero pCi/L) was found in any rooms or buildings across the entire district.
- District has identified and properly removed all asbestos containing materials according to U.S. EPA AHERA regulations and Minnesota Department of Health asbestos abatement rules where applicable. Yearly inspections with recommended repairs or removals are done by District's Environmental Consultant (IEA).
- District has identified and properly removed all sources of lead, and all renovations and painting are done according to EPA standards and rules.
- District has identified any wood playground or other structures and that contains chromate copper arsenate and has taken steps to eliminate exposure. Inspections are done by District's Environmental Consultant (IEA).
- District has taken the following steps to minimize student and staff exposure to chemicals: Cleaning chemicals are used and stored according to chemical safety training standards (Materials Safety Data Sheets). "Right to Know" training is conducted annually. All chemicals are clearly labeled and stored in their appropriate and recommended containers. Non-toxic cleaners are used whenever possible.

Asthma Triggers: ISD 110 Health and Safety Committee has developed an Indoor Air Quality (IAQ) management plan that help prevent asthma triggers and provide optimal air quality for students, staff and visitors. The key components of this plan include: annual walk-through assessments; annual staff perception survey; and a nurse office visit-tracking log. Health Services also works with the Carver County Health Alert system to monitor outdoor air quality and restricts outdoor physical activities during poor air quality times. District collaborates with IEA (Environmental Consultant) on recommended air quality tests and frequency of testing.

Cleaner Operating Busses: District contracts with Koch Bus Company who has retro-fitted their entire fleet of busses in 2008 with different mufflers to reduce particulates. Installed particles filter to reduce particulate emissions as part of the "Project Green Fleet" administered through the Minnesota Environmental Initiative. They have established a bus replacement schedule to retire older busses and to put older busses on shorter routes. Installed pre-heaters on selected buses to warm the engine prior to starting the buses, and installed timers on electrical outlets to turn on to warm the electric block heaters to minimize warm-up idling.

Other Strategies to Minimize Airborne Contaminants:

- Custodial and maintenance staff regularly engage in mold prevention and mitigation by thoroughly cleaning and repairing leaks, structural barriers and equipment to reduce condensation and excessive humidity. Environmentally friendly mold inhibitor and cleaning products are used when needed.



- Dedicated filtering and exhaust systems are utilized for woodworking, paint booth, and other potentially toxic generating projects. All fuel burning appliances at the district have dedicated fresh air intake and exhaust fans that are interconnected (intake and exhaust fans both go on at the same time; thereby, reducing risk of cross contamination with room air).
- All occupied district buildings utilize ventilation and filtration systems that are managed by an Energy Management System, which has CO² and occupancy sensors interconnected. CO monitors and alarms have also been installed. Preventative maintenance schedule is maintained to monitor and replace filters as needed. All occupied spaces are ventilated with outside air consistent with State Mechanical Code/American Society of Heating, Refrigerating and Air-conditioning Engineers (ASHRAE) guidelines, greatly reducing moisture and mold problems.
- Indoor environmental quality: All classrooms have natural daylight, and are equipped with 2 stage high efficiency lighting. The Energy Management System maintains a high level of thermal comfort throughout the building and adjusts automatically based on occupancy usage to maximize energy efficiency and desired comfort level.
- WPS contracts with IEA as their Environmental Consultant to give oversight to all environmental health and safety issues. Consultation with Environmental Consultant occurs on a monthly basis. The Health and Safety Committee meets on a quarterly basis to discuss strategies to improve safety, and promote personal and environmental health; the Consultant is often a part of these meetings.

Nutrition and Fitness

Element 2B: Nutrition and Fitness: Waconia Public Schools incorporate the following practices to promote nutrition, physical activity and overall school health:

- Farm to School – currently 15% of total food purchased for school nutrition program comes from locally grown or raised food. The new Farm to School grant, district will increase the amount purchased from locally grown or raised food by 25% with a goal of 30% of all food coming from local sources. Local farmer partnerships will include organic farmers whenever feasible.
- School Nutrition Program – The Waconia School Nutrition Service offers scratch cooking; use of locally grown or raised foods, which includes food grown in the Edible Classroom; fruit, vegetable and greens salad bar; no candy or pop in vending machines; use of whole grains; age appropriate portions; “just the right amount” pre-ordering of meals (which has reduced point of service waste to <1.5%).
- Edible Classroom (School Garden and Orchard) – discussed in other sections of this application. Fifteen 10’ x 10’ Community Garden Plots are made available to the public every summer for a nominal fee of \$20. Funding generated from these fees



are used to support the Edible Classroom. A portion of the food grown at the Edible Classroom is donated to the local food shelf. This enables students to learn about food security and hunger issues “right in their own backyard.” Environmental friendly horticultural practices are followed.

- Community Education fitness programs. Community Ed launched the “More Than Pink” initiative in 2012. This program targets girls in grades 3-6, and is designed to promote physical fitness, positive self-image, and emotional wellbeing. Girls meet for 2 hours every day over a course of 8 weeks during the summer. At the end of the 8 weeks they participate in a 5K run to celebrate their completion of the program. Community Ed also provides a multitude of other recreational and team sport options for youth and families.
- Elementary and Middle School Students spend over 120 minutes per week throughout the school year in supervised physical education (PE). Elementary students (K-4) receive 25 minutes a day of PE, which is equal to 125 minutes per week (this is in addition to recess time, which is usually held outside). Middle school students (5-8) receive 43 minutes per day (215 min/week) for three quarters and one quarter is dedicated to health education (average PE minutes prorated over the year is 161 minutes per week). High School students (9-12) are required take three PE credits (1 ½ years) of physical education. They also have many opportunities to engage in exercise and physical activity through extra-curricular activity and outdoor educational opportunities.
- Outdoor Education: At least 50% of students’ annual physical education takes place outdoors. A variety of outdoor PE opportunities are available such as softball, baseball, golf, bicycling, archery, Frisbee, golf, and winter outdoor sports such as broomball, snow-shoeing, cross-country skiing, ice fishing, etc. In addition to required PE classes, students have access to a large variety of extra-curricular sports and activities that often require physical exercise and being outside. Approximately 82% of the high school student body participates in one or more of these activities. Show choir is also one of Waconia’s signature extra-curricular activities, and this event involves extensive dance and choreographic activity that is often very aerobic in nature. Approximately 150 students are involved in one of the three Show Choir groups. Over 300 high school students are active in the Conservation Club, which frequently engages in physical outdoor activity that includes both recreational and environmental related community service.
- Health measures are integrated into school supervised PE programs. Student’s body measurements including height, weight and BMI are integrated into PE curriculum at the secondary level (Middle School and High School). Students set individual goals for improved performance. Biometric assessment indicators and performance criteria from the Fitness Gram and President’s Challenge are utilized.



Pillar 3: Effective Environmental and Sustainability Education

Element 3A: Interdisciplinary Learning About the Key Relationships Between Dynamic Environmental, Energy and Human Systems. Environmental and sustainability concepts that integrate these key concepts are embedded into educational curriculum across multiple subjects and academic disciplines with all grades K-12.

Elementary: Environmental learning concepts at the elementary level focus on reducing waste and recycling, animal habitats, the water cycle, the life cycle, matter and energy, air and weather (which includes observing daily weather conditions). Health and Physical Education Curriculum has also been established for each grade according to Minnesota Academic Standards and/or National Academic Standards. Both elementary schools partner with the DNR and Three Rivers Park District to incorporate lessons related to the designated School Forest.

Middle School: At the middle school level, the Waconia Edible Classroom (School Garden and Orchard) provides hands-on opportunities for students to learn how food is planted, grown, harvested and prepared. They learn the connection between food production, distribution and food security. They gain an understanding of “seasonality” and the “seed to table” progress. They also develop an awareness of sustainable agriculture and environmentally friendly horticultural practices. The Edible Classroom is used as an outdoor educational space for Science, Math, Social Studies, Family and Consumer Science, Language and Visual Arts classes. Environmental and sustainability concepts are also integrated into these core curricula through “Adventure Learning” (see www.go4thesummit.com), use of “GeoThentic” online learning systems, “Project Lead the Way,” one-to-one mobile digital technology (e.g. use of tablets) and other project based learning pedagogy. Most recently, geospatial technologies are utilized to study climatology and life science. In selected required courses, students conduct field studies to compare wildlife populations, evaluate water quality of Lake Waconia, study relationships among populations in an ecosystem, and describe ways that human activity can change populations in an ecosystem.

High School: Environmental, energy and human system concepts are embedded in several of the required core classes. These classes include: Principles of Engineering, Principals of Physics, Biological Systems, Health, Foundations of Fitness, among others. High School students also have elective options including: Conservation Biology, Environmental Biology, Winter Biology, and Fish and Wildlife Biology, which all focus on outdoor experiences and hands-on learning. Minnesota Culture and Heritage incorporates the origins of local food, different kinds of farms and farming practices, and includes field trips to several local farms. Family and Consumer Science addresses healthy nutrition and the energy balance between dietary intake and physical activity. Video Production Class produced a Newscast featuring “Living Better...Living Green” as part of a community wide educational campaign to reduce waste and promote recycling. Waconia has over 300 high school students actively enrolled in their Conservation Club. A cooperative partnership with Southwest Educational Cooperative enables students to enroll in agriculture related courses such as Natural Resources, Agribusiness, Plant and Soil Science and Introduction to Agriculture.

Element 3B: Use of the Environment and Sustainability to Develop STEM Content, Knowledge, and Thinking Skills: WPS has launched Project Lead the Way® (STEM) initiative in



grades 8 through 12 as part of its core required science classes. STEM related classes will often use environmental and sustainability principles and real life examples to teach core concepts. STEM and “green” concepts are also employed in Social Studies, Environmental Science, Family and Consumer Science, Geography and History courses at both the middle and high school as part of WPS interdisciplinary and cross curricular pedagogy.

Professional development in environmental and sustainability education is offered as an option to all teachers. Several middle and high school teachers participated in MDE Environmental and Outdoor Education grant training; School Gardening at U of MN Landscape Arboretum; Ag Literacy training through MN Dept of Agriculture; Volunteer Water Monitoring Program through the County; “Team Teaching in Nature” and “Waters to the Sea” program at Hamline University, 2013 Summer Institute on Climate Change Education sponsored by Will Steger Foundation. Elementary teachers participated in School Forest curriculum development with Three Rivers.

WPS use sustainability and the environment as a context for learning green technologies and career pathways: For the last two summers, the Edible Classroom has provided a learning environment for several college interns, where they gained valuable job skills preparing them for careers in education, horticulture and environmental science.

Element 3C: Development and Application of Civic Knowledge and Skills:

Grant funding was used to engage students as ambassadors for social change to promote the “Living Better...Living Green” initiative. WPS contracted with an award winning media specialist who collaborated with a Language Arts Teacher to engage students enrolled in the Video Production class to develop and produce a 25 minute “Newscast.” This video was used as part of an education campaign to reduce waste in schools, businesses and the community. Students participated in all aspects of the production, and 35 other students, teachers, school personnel, agency/business staff and community residents were featured in the Newscast. The Newscast premier was debuted at the local movie theatre to an audience of over 140 parents, students, school staff, local officials, School Board Members, business owners and community residents. Newscast was also presented to the Rotary Club. A link to the Newscast was established on the district’s website, and an email message was sent to all parents. Over 750 views were recorded. Students from Waconia High School Conservation Club staffed a Rethink-Recycling educational booth during the Ridgeview Foundation “Friends and Family Come Together” expo. Approximately 550 people attended the event and informational brochures were distributed. Pledge Cards committing to reducing, reusing and/or recycling were signed by a total 112 participants.

Outdoor Learning: Outdoor learning provides hands-on opportunity to teach a wide variety of subjects across all grades, develop civic skills, and engage the broader community. One great example cited earlier is the Edible Classroom, whose goals include: 1) Cultivate a willingness to try new foods and make healthy food choices. 2) Learn how food is planted, grown, harvested, and prepared. 3) Learn the connections between food production, distribution, and food security. 4) Gain understanding of “sustainability” and environmental stewardship. 5) Gain understanding of “seasonality” and the connections and “seed-to-table” progression. 6) Learn life skills, including respect for self and others, active listening, and cooperative work. It is located on 4+ acres of



farmland next to Clearwater Middle School, and includes a 13,500 sqft garden, 1+ acre orchard, and a Quonset hut that serves as a utility shed and sheltered workspace. Approximately 1500 students, teachers and community volunteers participate. Students learn about the "seed to table" progression and the relationship between environmental stewardship, healthy food choices and food security. It provides learning opportunities for student interns to learn about outdoor education, horticulture and environmental science, and provides Community Garden Plots.

Adventure Learning: PhyEd, Science, Social Studies and Geography teachers at both Clearwater Middle School and Waconia High School embed “Adventure Learning” activities and teacher pedagogy in their lesson plans. The most notable example is the 2013 Educational Expedition to climb Denali, the highest peak in North America. Two Clearwater Middle School teachers created “Go4theSummit” to motivate and educate the next generation of world explorers. Go4theSummit is a “grass-roots” program which seeks out innovative ways to motivate students beyond the walls of the classroom. More information is available at www.go4thesummit.com.

Service Learning: WPS was recently awarded the Local Government Innovation Award for integrating service learning as a core requirement. Students work throughout the year planning, raising money and gathering resources to participate in a capstone service project on MLK Day. Many students focus on environmental and sustainable service learning projects. It is estimated that \$100,000 in cash and goods are raised, and over 10,000 people directly benefit from these projects. Furthermore, students have come to embrace the attitude, knowledge and skills to engage in collaborative servant leadership to make the world a better place.

Partnerships: Waconia currently partners and/or collaborates with Minnesota Department of Agriculture, Three Rivers Park District, Carver County Public Health and Environment, Carver County Water Management, Carver County Environmental Center, Carver County Park and Recreation, Carver County Farm Bureau, City of Waconia, Institute for Environmental Assessment (IEA), Ridgeview Medical Center, Jeffers Foundation, Minnesota Department of Health, University of Minnesota Landscape Arboretum, Waconia-West Carver Rotary, Waconia Chamber of Commerce, and approximately 30 other local, regional and international organizations through its many Service Learning initiatives and projects.