



## 2014-2015 School Nominee Presentation Form

### ELIGIBILITY CERTIFICATIONS

#### School and District's Certifications

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

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

### U.S. Department of Education Green Ribbon Schools 2014-2015

Charter  Title I  Magnet  Private  Independent

Name of Principal: Mr. David D. Clark

(Specify: Ms., Miss, Mrs., Dr., Mr., etc.) (As it should appear in the official records)

Official School Name: Columbus North High School

(As it should appear on an award)

Official School Name Mailing Address: 1400 25<sup>th</sup> Street

(If address is P.O. Box, also include street address.)

County: Bartholomew State IN School Code Number \*: 0397

Telephone: 812-376-4431 Fax: 812-376-4291

Web site/URL: http://www.bcsc.k12.in.us/Domain/256 E-mail: clarkd@bcsc.k12.in.us

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

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

(Principal's Signature)

Date: 01/29/2015

Name of Superintendent: Dr. John B. Quick Ph.D.

(Specify: Ms., Miss, Mrs., Dr., Mr., etc.) (As it should appear in official records)



District Name: [Bartholomew Consolidated School Corporation](#)

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

*John B. Quack, Ph.D.*

(Superintendent's Signature)

Date: [01/29/2015](#)

### Nominating Authority's Certifications

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

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

Name of Nominating Agency: Indiana Department of Education

Name of Nominating Authority: Mr. Jeremy Eltz

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

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

*Jeremy Eltz*

Date: 1/30/2015

(Nominating Authority's Signature)

### SUMMARY AND DOCUMENTATION OF NOMINEE'S ACHIEVEMENTS

Provide a coherent "snapshot" that describes how your school is representative of your jurisdiction's highest achieving green school efforts. Summarize your strengths and accomplishments in all three Pillars and nine Elements. Then, include documentation and concrete examples for work in every Pillar and Element.

### SUBMISSION

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](mailto: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](mailto: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.



### Columbus North High School ED-GRS Award Summary –Public School

Pillar	Evidence of Success			
Reduced Environmental Impact and Costs	<b>Reduced or eliminated greenhouse gas emissions</b> <ul style="list-style-type: none"> <li>Renovations increased the school size by 25% but reduced Greenhouse emissions by 6.5%</li> <li>Reduced non-transportation energy by 30%</li> <li>Renovations are LEED Silver certified</li> <li>Partnered with Wesley Wheeldon of Cummins to improve energy efficiency throughout school system</li> <li>Award from Duke Energy in 2014 and Cummins</li> </ul>	<b>Improved water quality, efficiency, and conservation</b> <ul style="list-style-type: none"> <li>Landscaping is native to Indiana is not watered</li> <li>Maintain a large number of drywells for water retention of percolation</li> <li>Parking lots contain pervious concrete strips for water absorption</li> </ul>	<b>Reduced waste production</b> <ul style="list-style-type: none"> <li>17.2% reduction in solid waste due to recycling</li> <li>Non-significant or immeasurable amounts of hazardous waste produced</li> <li>Oil from auto-shop is recycled</li> <li>80% of cleaning products are green</li> </ul>	<b>Use of alternative transportation</b> <ul style="list-style-type: none"> <li>70% of students walk, bus, bike, or carpool</li> <li>No-idling, safe routes and bike lanes</li> <li>Bus routes have been optimized using VersaTrans to reduce mileage</li> <li>Uses small buses to transport students from afterschool activities such as sports and clubs</li> <li>Partnered with Cummins Engine Company to optimize buses, increasing diesel mileage by 0.5 miles per gallon</li> <li>School is replacing buses with new more fuel efficient buses</li> </ul>
Improved Health and Wellness	<b>Integrated school environmental health program</b> <ul style="list-style-type: none"> <li>Uses Integrated Pest Management program</li> <li>No smoking or mercury</li> <li>CO Monitors and Radon Monitoring</li> <li>Playgrounds are chromate copper arsenate free</li> <li>Air brought into the building is filtered and contracted with Alliance Environmental to analyze air and swab samples</li> <li>HVAC is equipped with moisture sensors and dehumidify when possible</li> </ul>		<b>Nutrition and fitness</b> <ul style="list-style-type: none"> <li>Participates in farm to school program and has an on-site garden for food</li> <li>Outdoor facilities are all weather and open to students and staff all hours</li> <li>Partnered with advocacy group Healthy Communities to support schools in health initiatives</li> </ul>	
Effective Environmental and Sustainability Education	<b>Interdisciplinary learning</b> <ul style="list-style-type: none"> <li>Government class has a focus on US environmental policy</li> </ul>	<b>Environment and sustainability to develop STEM content</b> <ul style="list-style-type: none"> <li>Provide CTE courses that cover LEED certification, waste water management,</li> </ul>	<b>Development and application of civic knowledge and skills</b> <ul style="list-style-type: none"> <li>Students build and sell houses to sustain the construction trades courses and</li> </ul>	



	<ul style="list-style-type: none"><li>• Economics and Sociology courses have a unit on the connectivity and cooperation for all</li><li>• Printing class makes environmentally friendly advocacy posters</li><li>• Recycling bins in classrooms</li><li>• 4% of students took AP Environmental Science</li><li>• Environment Club runs the recycling program</li></ul>	and design principles for green engineering	<p>provide housing to the community</p> <ul style="list-style-type: none"><li>• School built 2 full size baseball diamonds</li><li>• Seniors complete a community service project, which has included city clean-up, recycling at the high schools, bike rides to benefit diabetes, planting trees and the fairgrounds, etc.</li></ul>
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## **ED-GRS Indiana Department of Education Application**

Thank you for your interest in completing the Indiana Department of Education application for nomination to U.S. Department of Education Green Ribbon Schools (ED-GRS). In order to complete this application, you will need to collect data about your school's facility, health and safety policies; food service; and environmental and sustainability curriculum.

ED-GRS recognizes schools taking a comprehensive approach to greening their school. A comprehensive approach incorporates environmental learning with improving environmental and health impacts. Becoming a U.S. Department of Education Green Ribbon School is a two-step process. The first step is to complete and submit this form to be selected as a nominee by an eligible nominating authority. The second step of the process requires signatures for the nominee package that will be sent to the U.S. Department of Education (ED). ED selects honorees from those presented by eligible nominating authorities nationwide. Selection will be based on documentation of the applicant's high achievement in the three ED-GRS Pillars:

Pillar I: Reduce environmental impact and costs.

Pillar II: Improve the health and wellness of students and staff.

Pillar III: Provide effective environmental and sustainability education, incorporating STEM, civic skills and green career pathways.

Schools demonstrating exemplary achievement in all three Pillars will receive highest rankings. It is important to document concrete achievement. It will help you to assemble a team to complete the application. This team might include: a facilities manager, physical education director, food services director, curriculum director, finance department representatives, teachers and students. You should consult the ED-GRS [resources page](#) for standards, programs and grants related to each Pillar, Element and question. This is an excellent clearinghouse of resources for all schools, not just those who apply.

The questions in this application will help you demonstrate your high achievement in these Pillars as well as provide space for you to include pertinent documentation. You will receive points when you provide documentation for your answers. **Applications are due by midnight December 5, 2014.**

Note that if selected for nomination to ED-GRS, the school principal and district superintendent must be prepared to certify that each of the statements below concerning the school's eligibility and compliance with the following requirements is true; however, in no case is a private school required to make any certification with regard to the public school district in which it is located.

1. The school has some configuration that includes one or more of grades K-12. (Schools on the same campus with one principal, even a K-12 school, must apply as an entire school.)
2. The school has been evaluated and selected from among schools within the Nominating Authority's jurisdiction as 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. Neither the nominated public school nor its public school district is refusing the U.S. Department of



Education Office of Civil Rights (OCR) access to information necessary to investigate a civil rights complaint or to conduct a district wide compliance review.

4. OCR has not issued a violation letter of findings to the public school district concluding that the nominated public school or the public school district as a whole has violated one or more of the civil rights statutes. A violation letter of findings will not be considered outstanding if OCR has accepted a corrective action plan to remedy the violation.

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

6. There are no findings of violations of the Individuals with Disabilities Education Act in a U.S. Department of Education monitoring report that apply to the public school or public school district in question; or if there are such findings, the state or public school district has corrected, or agreed to correct, the findings.

7. The school meets all applicable federal, state, local and tribal health, environmental and safety requirements in law, regulations and policy and is willing to undergo EPA on-site verification.

**School Contact Information**

School Name: Columbus North High School

Street Address: 1400 25<sup>th</sup> St.

City: Columbus State: Indiana Zip: 47201

Website: <http://www.bcsc.k12.in.us/site/Default.aspx?PageID=1324> Facebook page:

<https://www.facebook.com/pages/Columbus-North-High-School/103118049728388>

Principal Name: David Clark

Principal Email Address: [clarkd@bcsc.k12.in.us](mailto:clarkd@bcsc.k12.in.us) Phone Number: 812-376-4431

Lead Applicant Name (if different): Charlie McCoy

Lead Applicant Email: [mccoych@bcsc.k12.in.us](mailto:mccoych@bcsc.k12.in.us) Phone Number: 812-376-4219

<p>Level</p> <p><input type="checkbox"/> Elementary (PK - 5 or 6)</p> <p><input type="checkbox"/> K - 8</p> <p><input type="checkbox"/> Middle (6 - 8 or 9)</p> <p><input checked="" type="checkbox"/> High (9 or 10 - 12)</p>	<p>School Type</p> <p><input checked="" type="checkbox"/> Public</p> <p><input type="checkbox"/> Private/Independent</p> <p><input type="checkbox"/> Charter</p>	<p>How would you describe your school?</p> <p><input checked="" type="checkbox"/> Urban</p> <p><input type="checkbox"/> Suburban</p> <p><input type="checkbox"/> Rural</p>	<p>District Name</p> <p>Bartholomew Consolidated School Corporation</p> <hr/> <p>Total Enrolled: 2023</p>
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<p>Does your school serve 40% or more students from disadvantaged households?  <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p>% receiving FRPL 32%</p> <p>% limited English proficient 12%</p> <p>Other measures 92% of students pursue a post-secondary education.</p>	<p>Graduation rate: 84.7%</p> <p>Attendance rate: 95.2%</p>
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Application Outline:

<u>ED-GRS Pillars and Elements</u>	<u>Points</u>
Cross-Cutting Question: Participation in green school programs	5 points
Pillar I: Reduce environmental impact and costs: 30%	
Element 1A: Reduced or eliminated greenhouse gas (GHG) emissions Energy Buildings	15 points
Element 1B: Improved water quality, efficiency, and conservation Water Grounds	5 points
Element 1C: Reduced waste production Waste Hazardous waste	5 points
Element 1D: Use of alternative transportation	5 points
Pillar II: Improve the health and wellness of students and staff: 30%	
Element 2A: Integrated school environmental health program Integrated Pest Management Contaminant controls and Ventilation Asthma control Indoor air quality Moisture control Chemical management	15 points
Element 2B: Nutrition and fitness Fitness and outdoor time Food and Nutrition	15 points
Pillar III: Provide effective environmental and sustainability education, incorporating STEM, civic skills and green career pathways: 35%	
Element 3A: Interdisciplinary learning about the key relationships between dynamic environmental, energy and human systems	20 points
Element 3B: Use of the environment and sustainability to develop STEM content, knowledge, and thinking skills	5 points
Element 3C: Development and application of civic knowledge and skills	10 points
Total	100 points



**Summary Narrative:** Provide an 800 word maximum narrative describing your school’s efforts to reduce environmental impact and costs; improve student and staff health; and provide effective environmental and sustainability education. Focus on unique and innovative practices and partnerships.

Columbus North High School has a tradition of excellence that has focused on meeting and exceeding the needs of our community. Our students are required to complete a “Senior Project” that is a service project to our community as a final step toward Graduation. Each year, many of these projects focus on improving the physical environment of the school and include recycling and energy reduction projects. These projects focus on generating an awareness of the need to recycle. Often they focus on the two major sources of student produced recyclables, paper and plastic. Public service announcements are made during lunch and at sporting events encouraging students and spectators to place their trash in the provided recycling containers. These projects are very successful but are not sustainable because the individual conducting the project has to transport the plastics to the recycling center. Our community does not offer a recycling program for plastics; however, a new curbside recycling program is being started and we are hopeful it will include recycling dumpsters for the school. We have a system to make this happen if we can only have a practical and convenient manner for disposal.

During the most recent renovation, a state of the art HVAC system was installed in CNHS. Energy efficient boilers, chillers and pumps were installed and controlled by a state of the art digital control system. This system has allowed us to monitor the environmental conditions throughout the building. Even though the overall energy reduction is not significant, when consideration is given to the 25% increase in conditioned space the reduction is significant.

At the time of the renovation project, the lighting systems were retro-fitted with energy efficient T-8 and T-5 lighting. Each classroom has occupancy sensors that turn lights off when the room is vacated for 15 minutes or more. Hallway lighting and lighting in common spaces is controlled by a Lutron Quantum lighting control system and operate according to a programmed time schedule. Access to natural lighting was paramount in the lighting design on the newly constructed spaces and allows for significant daylight harvesting. Lighting in non-renovated spaces has been upgraded by our in house electricians to energy efficient T-8 and LED lighting systems. An excellent example of this is the high school gymnasium that had LED lights with dimming and occupancy sensors installed. Energy consumption in that space was reduced by 75% because of this innovative system.

One of the requirements of the renovation was to improve parking for students and staff. Increasing the size of the parking lots meant that green spaces would be lost to asphalt. So to reduce the environmental impact of this loss of green space, drywells, a Rain Garden and pervious concrete was utilized to minimize the environmental impact of water entering the storm sewer system by allowing as much as possible to naturally percolate into the soil.

There are several curricular components at Columbus North High School that are designed to connect the students to a healthy lifestyle, encourage them to become environmentally conscious and actively engaged in our community. Courses such as Health, Physical Education Individual and Team, Weightlifting and fitness, and Physical Fitness are either required or electives available to our students. In addition, AP Environmental Science, Introduction to Agriculture Food and Natural Resources, Plant and Soil Science, PLTW: Civil Engineering and Architecture, Nutrition and Wellness, Sports Nutrition and Wellness, and Advanced Life





Science: Foods allow students to pursue an in depth study of their relationship to their environment and healthy lifestyles. The Senior Project -- Project Pride -- at CNHS is a graduation requirement for all students. Students develop their projects based on their personal interests and their abilities to highlight critical thinking, problem solving, and the Six Standards for Success. By focusing on the identification of these points throughout the proposal, planning, implementation, and reflection portions of the Senior Project, students will gain an understanding of the relevance of their studies here at North and their connections with the community. Students are encouraged to identify projects that match passions or interests, demonstrate breadth in learning, and connect to the community.

Student and staff, health, safety and wellness are driving forces in our school system. Through participation and collaboration with vital community resources such as Safe Routes to School ([http://www.healthbydesignonline.org/documents/SRTSWorkshop\\_BCSC.pdf](http://www.healthbydesignonline.org/documents/SRTSWorkshop_BCSC.pdf)) and Healthy Communities (<http://www.crh.org/community-involvement/healthy-communities.aspx>) we provide for our student and staff's safety and encourage them to pursue healthy lifestyles. Our HVAC team meets quarterly to review our overall quality of service. Topics include energy efficiency and issues that could negatively impact the environment within our schools such as temperature, humidity and CO<sup>2</sup>.

1. Is your school participating in a local, state or national school program which asks you to benchmark progress in some fashion in any or all of the Pillars?

Yes  No Program(s) and level(s) achieved: Energy Star Program

2. Has your school, staff or student body received any awards for facilities, health or environment?

Yes  No Award(s) and year(s) Energy Star Award 2014 Currently eligible for 2015

**Optional work:** Certain questions have been labeled optional. These questions require more research than the applicant may have capacity to answer or the school currently may not be tracking the requisite data. Answering these questions will provide reviewers a more complete view of your green efforts. However, if you do not have the capacity to answer the question in the format it is asked; please provide either estimates or plans of how you intend to begin collecting this data.

## **Pillar I: Reduced Environmental Impact and Costs**

### **Energy**

1. (Optional) Can your school demonstrate a reduction in Greenhouse Gas emissions?  Yes  No

[Click here to enter text.](#)

Percentage reduction: 6.5%

Over (m/yy - m/yy): 6/2008-6/2014

Initial GHG emissions rate (MT eCO<sub>2</sub>/person): 2.7

Final GHG emissions rate (MT eCO<sub>2</sub>/person): 2.5

Offsets: The building was undergoing renovation during part of this time. The new HVAC system was being programmed and commissioned during the 2012-13 school year which leads to increased energy consumption until the system was calibrated. In addition, the size of the facility increased from 401, 439 ft<sup>2</sup> in 2009 to 534, 930 ft<sup>2</sup> in 2012 or a 25% increase in square footage. The energy consumption includes all athletic facility and music venues.

How did you calculate the reduction? We use the Utility Manager Pro Software Program to track our data and make the calculations.



2. Has your school received EPA ENERGY STAR certification or does it meet the requirements for ENERGY STAR certification?

Yes  No Year(s) and score(s) received: 2014 Energy Star Score 86

3. **(Optional)** Has your school reduced its total non-transportation energy use from an initial baseline?  Yes  No

[Click here to enter text.](#)

Current energy usage (kBTU/student/year): 1727 kbtu/student/year

Current energy usage (kBTU/sq. ft./year): 66 kbtu/ft<sup>2</sup>

Percentage reduction: 30%

Over (m/yy - mm/yy): 6/2007-6/2014

How did you document this reduction? We have detailed energy data collection and utilize the Utility Manager Pro software to track our usage.

4. What percentage of your school's energy is obtained from:

On-site renewable energy generation: Type 0%

Purchased renewable energy: None Type 0%

Participation in USDA Fuel for Schools, DOE Wind for Schools or other federal or state school energy program: 0%

5. In what year was your school originally constructed? 1952

What is the total building area of your school? 534,930 ft<sup>2</sup>

6. Has your school constructed or renovated building(s) in the past ten years?  Yes  No

For new building(s): Percentage building area that meets green building standards: 100%

Certification and level: LEED Silver Total constructed area: 134,091 ft<sup>2</sup>

For renovated building(s): Percentage of the building area that meets green building standards: 100%

Certification and level: LEED Silver (Certification in progress) Total renovated area: 226,386

## Water and Grounds

7. **(Optional)** Can you demonstrate a reduction in your school's total water consumption from an initial baseline?  Yes  No

Water consumption has increased due to the change from air cooled to water cooled chillers. We have now added deduct meters on the water supply to the towers and will be able to differentiate between water used for consumption and water used for cooling. In addition to the cooling towers, our baseball and softball facilities have doubled in size.

Average Baseline water use (gallons per occupant): 3.6 kgal/student

Current water use (gallons per occupant): 5.4 kgal/student

Percentage reduction in domestic water use: Unknown

Percentage reduction in irrigation water use: [Click here to enter text.](#)

Time period measured (mm/yyyy - mm/yyyy): 6/2008-6/2014

How did you document this reduction (ie. ENERGY STAR Portfolio Manager, utility bills, school district reports)? Our past recording keeping for water did not always differentiate between water for



irrigation and water for consumption. Therefore it is impossible to accurately answer this question.

8. What percentage of your landscaping is considered water-efficient and/or regionally appropriate?: 98%  
Types of plants used and location: The in the ground landscaping at CNHS is not sprinkled or provided water from domestic sources. It is all watered naturally. All plants must be able to survive the natural weather conditions in Indiana. There are a few flower planters by the entrances with annuals planted in them that are watered and maintained by the school corporations landscaping service. The only areas that are sprinkled are the athletic fields (band practice, football practice, softball and baseball). There are a variety of plants included on the site. Trees- October Glory Red Maple, Armstrong Red Maple, European Hornbeam, Cherokee Brave Red Flowering Dogwood, Imperial Honeylocust, Black Gum, Colorado Spruce, Pin Oak, Ivory Silk Japanese Tree Lilac, Accolade Elm, Blackhaw Viburnum, and Village Green Zeikova; Shrubs and grasses-Kari Foerster Feather Reed Grass, Sea Green Juniper, Big Blue Lilyluft, Hamein Dwarf Fountain Grass, Gro-low Fragrant Sumac, Blue Hills Perennial Salvia.
9. Describe alternate water sources used for irrigation. (50 words max)  
Other than drywells that allow rain water to percolate into the soil naturally, we do not use any other alternative sources of water for irrigation.
10. Describe any efforts to reduce storm water runoff and/or reduce impermeable surfaces. (50 words max)  
There are a significant number of drywells that allow the rain water to naturally percolate into the soil. Only when the drywells overflow does water flow into the storm sewer system. Parking lots have pervious concrete strips that allow the rain water to percolate into the soil naturally instead of flowing directly into the storm sewer system.
11. Our school's drinking water comes from:  Municipal water source  Well on school property  Other:  
[Click here to enter text.](#)
12. Describe how the water source is protected from potential contaminants. (50 words max)  
City standards for water quality are applicable to this site. Annual are reports on file and available for review in the Maintenance office.
13. Describe the program you have in place to control lead in drinking water. (50 words max)  
Lead is not present in our water.
14. What percentage of the school grounds are devoted to ecologically beneficial uses? Approximately 5% of the grounds have ecologically beneficial uses. CNHS sits on 33 acres. Approximately 28 acres are covered by buildings or parking lots. The front lawn and perimeter of the school site is landscaped with a variety of trees that are native to Indiana. These trees are used annually instructional purposes when the high school biology students learn to classify trees. The original concept was to plant these trees as an educational tool for teachers to use a classroom resource. The trees on the south side of the building provide a significant amount of natural shade to the building that significantly reduces the amount of solar heat gain in the building. CNHS has an interior courtyard which is a Rain Garden and has plants that need little to no maintenance. It is a self-renewing environment. One small area of the Rain Garden is set aside for students to plant and maintain a small vegetable garden.



**Waste**

15. **(Optional)** What percentage of solid waste is diverted from landfilling or incinerating due to reduction, recycling and/or composting? 17.2%. The only recycling available to the school system is cardboard recycling. The city has decided to start a curbside recycling program which will hopefully trickle down to the schools. All trash collected by the city goes to the landfill. Complete all the calculations below to receive points.

See below

A - Monthly garbage service in cubic yards (garbage dumpster size(s) x number of collections per month x percentage full when emptied or collected): There are 6 three cubic yard and 2 two cubic yard dumpsters on site. They are emptied 3 times weekly and are approximately 80% full when emptied. They are emptied on M-W-F or 12 times monthly during the school year.

B - Monthly recycling volume in cubic yards (recycling dumpster sizes(s) x number of collections per month x percentage full when emptied or collected): There are 3 three cubic yard dumpsters designated for cardboard recycling that are part of the municipal trash service plus one 4 cubic yard paper recycling dumpster (Abitibi) for paper. 4 x 4

C - Monthly compostable materials volume(s) in cubic yards (food scrap/food soiled paper dumpster size(s) x number of collections per month x percentage full when emptied or collected): Service not currently available.

Recycling Rate =  $((B + C) \div (A + B + C) \times 100)$ :  $((44+0)/(211+44+0)*100)=17.2$

Monthly waste generated per person =  $(A/\text{number of students and staff})$ :  $255/2040=.125$  cubic yards per person.

16. What percentage of your school's total office/classroom paper content is post-consumer material, fiber from forests certified as responsibly managed and/or chlorine-free? 100% of our paper is chlorine free. 12% of our copy paper is from certified forests.

17. List the types and amounts of hazardous waste generated at your school:

Flammable liquids 0	Corrosive liquids 0	Toxics 0	Mercury Small amount associated with fluorescent lamps and bulbs. Not measured	Other: Waste oil from Auto Shop is recycled-not measured
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How is this measured? It is not measured

How is hazardous waste disposal tracked? State and federal guidelines are followed to monitor the removal of hazardous waste.

Describe other measures taken to reduce solid waste and eliminate hazardous waste. (100 word max)

[Click here to enter text.](#)

18. Which green cleaning custodial standard is used? The Green cleaning standards are beginning to be implemented Columbus North High School.

What percentage of all products is certified? Approximately 80%

What specific third party certified green cleaning product standard does your school use? Green Seal



### Alternative Transportation

19. What percentage of your students walk, bike, bus, or carpool (2 + student in the car) to/from school? (Note if your school does not use school buses) 70%

How is this data calculated? (50 word max) This is our best estimate. ((344 Parking permits + 200 street and unpermitted parkers)\*20% )+ 860 bus students + 200 walk/bike students = 1426 / 2023 current enrollment = 70% This estimate is probably a bit low because some of the students who are transported by parents are carpooling.

20. Has your school implemented?

- designated carpool parking stalls.
- a well-publicized no idling policy that applies to all vehicles (including school buses).
- Vehicle loading/unloading areas are at least 25 feet from building air intakes, doors, and windows.
- Safe Pedestrian Routes to school or Safe Routes to School

Describe activities in your safe routes program: (50 word max) We've had a Safe Routes Task Force in the county for 7 years. The SRTF meets monthly and it's multidisciplinary. The 5 E's (education, encouragement, enforcement, engineering and evaluation) are the key words for safe routes. Students at Columbus North High School receive encouragement and educational items such as helmets, bike lights and reflective items/lights for walkers as needed.

21. Describe how your school transportation use is efficient and has reduced its environmental impact. (50 word max) Bus routes have been optimized using VersaTrans software to minimize the daily route mileage. The no idle policy is strictly enforced in the transportation fleet. The school district uses small activity buses that get better gas mileage to transport athletes to after school events.

22. Describe any other efforts toward reducing environmental impact, focusing on innovative or unique practices and partnerships. (100 word max) Our transportation department has partnered with engineers from Cummins Engine Company and the transmission manufacturer to optimize the gas mileage on our buses. This successful partnership increased the school bus diesel mileage by .5 miles per gallon. In addition, the district has started purchasing conventional buses instead of cab over buses. The new conventional buses average two miles more per gallon than our current buses

### Pillar 2: Improve the health and wellness of students and staff

#### Environmental Health

1. (Optional) What is the volume of your annual pesticide use (gal/student/year)? Describe efforts to reduce use: Our pesticide use is minimal in the school. We have an Integrated Pest Management program that is designed to reduce the amount of pesticides used within the school environment. A variety of non-toxic methods are used to eliminate pests from the environment. The only spaces that are treated with pesticides are.

2. Which of the following practices does your school employ to minimize exposure to hazardous contaminants? Provide specific examples of actions taken for each checked practice.

- Our school prohibits smoking on campus and in public school buses. [Click here to enter text.](#)
- Our school has identified and properly removed sources of elemental mercury and prohibits its purchase and use in the school. Not 100% because we believe that there are a few mercury switches on



old heaters in the gymnasium area. We do not allow the purchase of items that contain mercury other than fluorescent light bulbs.

Our school uses fuel burning appliances and has taken steps to protect occupants from carbon monoxide (CO) There are CO monitors in these areas.

Our school does not have any fuel burning combustion appliances [Click here to enter text.](#)

Our school has tested all frequently occupied rooms at or below ground level for radon gas and has fixed and retested all rooms with levels that tested at or above 4 pCi/L OR our school was built with radon resistant construction features and tested to confirm levels below 4 pCi/L. All buildings in our district have been tested and retested as required.

Our school has identified any wood playground or other structures that contain chromate copper arsenate and has taken steps to eliminate exposure. These items have been removed from our playground areas.

3. Describe how your school controls and manages chemicals routinely used in the school to minimize student and staff exposure. (100 word max) All chemicals are stored in locked storage rooms. Staff members that will come into contact with the chemicals are trained to do so in a safe manner. This includes chemicals for Science instruction, cleaning and maintaining the swimming pool. A professional disposal service is used to remove outdated or unused chemicals from the Science Department.

4. Describe actions your school takes to prevent exposure to asthma triggers in and around the school. (100 word max) First and foremost we actively implement state guidelines regarding Indoor Air Quality. During our environmental/energy walk-throughs, plug-in air fresheners are removed, and other potential allergens are noted. This information is given to the building principal for correction if warranted. Air brought into the building by the AHUs and Unit Ventilators is filtered and the filters are changed regularly. Rooms with carpet are vacuumed with HEPA filtered vacuums and floors with hard surfaces are cleaned with mops that are treated to capture the dust. The cleaning agents used in the building are low or no odor products. Our district also has a contract with Alliance Environmental to provide certified analysis of IAQ samples and surface swabs. When an issue is uncovered we follow the recommendations from Alliance Environmental to remediate the problem. Alliance now includes a process to check specifically for asthma triggers such as pet hair, pet dander and other triggers.

5. Describe actions your school takes to control moisture from leaks, condensation, and excess humidity and promptly cleanup mold or removes moldy materials when it is found. (100 word max)  
BCSC has an automated work order system that allows all staff members to quickly communicate concerns to the custodial and maintenance workers assigned to address those issues. Custodian and maintenance staff members have been trained in the proper remedial actions when these issues occur. Our HVAC system is equipped with humidity sensors in the return air ducts and in the classrooms with unit ventilators humidity sensors are located on the wall. The system is programmed to actively dehumidify when needed.

6. Our school has installed local exhaust systems for major airborne contaminant sources.  Yes  No

7. Describe your school's practices for inspecting and maintaining the building's ventilation system and all unit ventilators to ensure they are clean and operating properly. (100 word max)

We have a regular filter replacement and unit inspection program for all HVAC equipment. Filters are changed



quarterly at a minimum. The frequency of these changes is dictated by the condition of the filters. In addition to changing the filters, the company also checks the dampers and damper controls, belts and motors to insure that the units are functioning properly.

8. Describe actions your school takes to ensure that all classrooms and other spaces are adequately ventilated with outside air, consistent with state or local codes, or national ventilation standards. (100 word max)  
The indoor air quality coordinator makes visits to the building during the year to check temperature, humidity CO2 and CO levels in the building. He uses a Graywolf IAQ probe that is certified accurate. In addition there are IAQ sensors in the return air system on the AHUs in our system that measures all aspects of the air returning to the unit.

9. Describe other steps your school takes to protect indoor environmental quality such as implementing EPA IAQ Tools for Schools and/or conducting other periodic, comprehensive inspections of the school facility to identify environmental health and safety issues and take corrective action. (200 word max)  
As noted above the IAQ coordinator for the district checks the facilities regularly to identify areas of concern regarding indoor air quality. The BMS sends alarms to the Lead HVAC tech and the building boiler operator if a space IAQ is out of standards. Spaces that do not meet the requirements of the state and federal guidelines are reported to the Manager of Maintenance, Director of Facilities and Transportation and Lead HVAC technician for correction.

### **Nutrition and Fitness**

10. Which practices does your school employ to promote nutrition, physical activity and overall school health? Provide specific examples of actions taken for each checked practice, focusing on innovative or unique practices and partnerships. (100 word max each)

- Our school participates in the USDA's HeathierUS School Challenge.  
Level and year: [Click here to enter text.](#)
- Our school participates in a Farm to School program to use local, fresh food. [Click here to enter text.](#)
- Our school has an on-site food garden. A small vegetable garden is located in our Rain Garden.
- Our school garden supplies food for our students in the cafeteria, a cooking or garden class or to the community. [Click here to enter text.](#)
- Our students spent at least 120 minutes per week over the past year in school supervised physical education. Students are required to earn credit in two semesters of physical education and participate in 250 minutes weekly during that time period.
- At least 50% of our students' annual physical education takes place outdoors. Our school facility has a turf football field and all-weather track on site that is used for physical education during the school day. Because of these surfaces the amount time students can spend outside is increased.
- Health measures are integrated into assessments. [Click here to enter text.](#)
- At least 50% of our students have participated in the EPA's Sunwise (or equivalent program). [Click here to enter text.](#)
- Food purchased by our school is certified as "environmentally preferable"  
Percentage: 3% Type: Vegetables and produce



11. Describe the type of outdoor education, exercise and recreation available. (100 word max)

At CNHS students have access to several outdoor learning opportunities. The facility has a turf football field, an all-weather track, 12 tennis courts, a marching band rehearsal field, a rain garden and wooded lawn. These facilities are available to teachers and students to utilize daily as outdoor learning labs. The athletic facilities are available to students and staff for recreational purposes during non school hours. Since the facilities are considered all weather, they are available rain or shine during daylight hours.

12. Describe any other efforts to improve nutrition and fitness, highlighting innovative or unique practices and partnerships. (100 word max)

Our schools are in the process of implementing Smart Snacks in Schools. Fundraising activities will strive to support healthy eating and wellness. In the cafeteria, the healthiest choices like fruits and salads are prominently displayed to encourage students to make the healthy choice. Our schools participate in the local Farm to School program. Fresh fruits and vegetables are purchased from local farmers when practical. At least 50% of the food options at staff meetings will meet the standards as well allowing for stretch breaks for meetings longer than one hour. School facilities and spaces are available to the students, staff and community during the week, the weekends and during school vacations. The Columbus Regional Hospital is the sports medicine provider for the athletic departments at both high schools. They pay for two full time trainers at each high school. Healthy Communities supports the school system as an advocate and partner on health initiatives like tobacco, healthy lifestyles (nutrition, physical activity, and school gardens), Safe Routes to School, domestic violence/safe dates program, etc.

### **Pillar 3: Effective Environmental and Sustainability Education**

1. Which practices does your school employ to help ensure effective environmental and sustainability education? Provide specific examples of actions taken for each checked practice, highlighting innovative or unique practices and partnerships.

Our school has an environmental or sustainability literacy requirement. (200 word max)

[Click here to enter text.](#)

Environmental and sustainability concepts are integrated throughout the curriculum. (200 word max)

Our Government class has a unit that, in part, requires our students to study in greater depth the U.S. policies around the environment. They have assignments designed to create deeper learning in reference to the necessity of these policies and how our decisions impact the world. Additionally, we have our Economics and Sociology courses that have components built into their curriculums which allow our students to research how their decision can create a domino effect on the lives of others and the connectivity which necessitates cooperation and collaboration for all. In addition, each year our printing classes design and print posters that focus on reducing waste, recycling and reducing energy consumption.

Environmental and sustainability concepts are integrated into assessments. (200 word max)

In these classes where the Environment is given extra focus, there is always a component to assess what they have learned, through both formative and summative assessments.

Students evidence high levels of proficiency in these assessments. (100 word max)

As a whole our students score well on their assessments.

Professional development in environmental and sustainability education are provided to all teachers. (200 word max)





We provide recycle bins for each classroom. Our Student led Environment Club shares “Do’s and Don’ts” with the school.

2. For schools serving grades 9-12, provide:

Percentage of last year's eligible graduates who completed the AP Environmental Science course during their high school career: 4% Percentage scoring a 3 or higher: 51%

3. How does your school use sustainability and the environment as a context for learning science, technology, engineering and mathematics thinking skills and content knowledge? (200 word max)

We have several classes at Columbus North High School that teach Architecture, Construction Technology, and/or Engineering. Those classes include as a part of their curriculum LEED certification and what that means in the big picture. Specifically, the Architecture class studies aspects of building “Green” and “Sustainable Design Principles” of building. This class also covers other principles such as wastewater management and managing storm water runoff.

4. How does your school use sustainability and the environment as a context for learning green technologies and career pathways? (200 word max)

Responsible instructional design in our day and age always includes curriculum around how we all can be a part of the solution. Our Construction Technology class has actual hands on work around building homes that they in turn, through their own coop, sale. Instruction in these classes is designed to lead to a profession. Learning these lessons at CNHS allows our students to take this knowledge and skills to their chosen profession, even if it is in a field other than construction.

5. Describe students’ civic/community engagement projects integrating environment and sustainability topics. (200 word max)

As shared above our Construction Trades students build and sale a home every year and have done so for the past 20 years. As a part of this class the instructors have a board of directors that help to manage the finances and market the home. This partnership provides a healthy and vibrant educational experience for our instructors and students alike. Additionally, in 2014, our Construction Trades class built two full size baseball diamonds. As a part of that course, they learned a different side of wastewater management and how to help water flow in as natural a way as possible. One of our science teachers used a portion of our Courtyard for students to grow vegetables. Another took a portion of the Courtyard space for his students to grow natural grasses of Indiana and then monitored their growth over time.

6. Describe students’ meaningful outdoor learning experiences at every grade level. (200 word max)

As previously mentioned our students have meaningful outdoor learning experiences in Physical Education, Marching Band, Science and building trades classes. Even though it is not part of the written curriculum students in English, Mathematics and Art classes also use the outdoor environment as a natural learning lab.



7. Describe how outdoor learning is used to teach an array of subjects in contexts, engage the broader community, and develop civic skills. (200 word max)

Our Senior students are required to complete a community service project prior to graduation. These projects are required to have three components, a research paper, a service project in the community and finally a presentation of the results. There are a variety educational programs, sports training camps, improvements to the interior spaces in the schools and community venues and many focus on improving the outside environment of our community. There are over twenty-five projects this year that direct connections to the outside environment. This is a list of just a few of the projects.

- Coordinating a clean-up of a burned out house
- Hosting gardening sessions for families at Cambridge Apartments
- Cleaning up and re-mulching the Columbus Dog Park
- Hosting a bike ride at Mill Race to benefit diabetes
- Building bird houses for endangered birds at Grouse Ridge Lake
- Building a roof for the trash area at Parkside Court Retirement Home
- Recycling at CNHS
- Painting playground equipment at ABC Stewart School
- Refurbishing two apartment complexes for " Homeless Veterans of American Home Depot Foundation"
- Hosting a "bike drive" to collect and refurbish bikes and give them to community members
- Designing book markers to teach children about the importance of clean water and conservation
- Leading the Bartholomew County Fair Board in planting trees around the fairgrounds
- Planting a wildflower garden and designing a software program for the Humane Society
- Fixing up a neighborhood basketball court
- Teaching sessions for "a wish for water" about the growing water crisis around the in world
- Building a chicken coop for Columbus Animal Care Services
- Teaching a class about recycling at San Souci
- Collecting clothing and items from church members to benefit the Pregnancy Care Center
- Building bird houses and feeders and bat houses for Parkside Elementary's Courtyard
- Restoring the facilities at Heflen Park

8. Describe your partnerships to help your school and other schools achieve in the 3 Pillars. Include both the scope and impact of these partnerships. (Maximum 200 words)

Our Environment Club recycles plastics and certain types of papers/cardboards. Our District Energy Manager conducts quarterly Energy Audits in our building to reinforce the implementation of the Energy Management Program. We have partnered with Wesley Wheeldon of Cummins Engine Company who conducted a Six Sigma Project to improve energy efficiency in our school system. Our school corporation received a \$10,000 award from Cummins Engine Company to help us further our environmental improvements. We work with Performance Services, a company focused on energy management, improve our energy efficiency and reduce operating costs. Our school corporation partners closely with Duke Energy and was the recipients of the 2014 Duke Power Partner Award.

9. Describe any other ways that your school integrates core environment, sustainability, STEM, green technology and civics into curricula to provide effective environmental and sustainability education, highlighting on innovative or unique practices and partnerships. (Maximum 200 words)



Another way CNHS integrates core environment, sustainable, STEM into our school is through our annual participation in a National Challenge called “The Moody's Mega Math Challenge.”

In 2013, the topic was Waste Not, Want Not - Putting Recyclables in Their Place. This problem asked teams to come up with a way to quantify the plastic waste filling our nation’s landfills, and to suggest the best recycling methods for U.S. cities to implement, based on modeling relevant variables. They were then to use that model as a basis for recommending nationwide recycling standards. One of our teams earned a National Hon. Mention and a \$1000 award for their work on this problem.