

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

Instruction 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 Ohio Department of Education

Name of Nominating

Authority Mr. Jeremy Marks



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

A handwritten signature in black ink, appearing to read "James S. [unclear]".

(Nominating Authority's Signature)

Date 1/22/2014

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

West Geauga High School

Since we began our energy conservation program roughly five years ago, the efforts of our energy coordinator Wes Rogge, a high school social studies teacher, have avoided using nearly 6 million kW of electricity as well as over 28,000 mcf of natural gas. We have avoided producing nearly 7 million metric tons of CO₂ and provided the district a savings in utility costs of well over \$1,000,000. Through recycling and composting programs managed by student groups, thousands of pounds of solid waste is diverted from landfills. These tremendous milestone efforts are currently being realized by educating people on environmentally responsible behaviors and not with new technology, new infrastructure or construction. Energy savings are still an ongoing pursuit at West Geauga High School and throughout the District. Recently, all of the overhead lighting in the two gymnasiums was changed from the old sodium vapor lamps to new 80W high power CFLs. The lights are brighter, energy consumption is down, and the new CFL bulbs will last longer.

We continue to partner with agencies like the Ohio Department of Natural Resources, the Cleveland Museum of Natural History, The Holden Arboretum, Lake (county) Metroparks, Geauga Park District, Cleveland Metroparks, Geauga SWCD, Ohio Vernal Pool Partnership, The Western Reserve Land Conservancy, Case Western Reserve University, local landscape companies and nurseries, Brownies, Cub Scouts, and Boy Scout troops, as well as Russell, Chester and Munson Township governments in order to accomplish goals under the three Pillars. Each of these partners provides material goods or services, as well as access to some of the best, brightest and creative minds in the business of becoming green. Without these partnerships, student initiatives like our rain gardens, Salamander Education and Environmental Diversity (SEED) Trail, diesel particulate filters for all school buses (grant from Ohio EPA), "West G is Idle Free" zones at all school buildings, plastic and aluminum can recycling program and kitchen waste composting program would not have become integral parts of daily life at West Geauga.

We are always looking to do more with less in the world of public education. Curriculum realignments, alterations to the school schedule, enrollment trends and funding may provide opportunities to offer AP Environmental Science in the near future. Continued development of the Summer Ecology Expeditions program will become more valuable in providing deeply meaningful field experiences for students include expeditions in Ohio, Wyoming and Costa Rica. Team teaching (Science and Civics, or Human Geography/Env. Science) has also been discussed as a way to push integrations of sustainability across the curriculum. The adoption of the Common Core curriculum in Ohio provides new impetus to incorporate technical reading as well as literary non-fiction, like the works of Henry David Thoreau, Aldo Leopold and Michael Pollan, across multiple disciplines in an effort to bring sustainability issues to a larger audience of students. After school clubs have proven to be effective outlets for student to explore their own efficacy. Key Club handles our paper recycling program. Interact Club provides opportunities for volunteerism and service learning at the county park districts and at childcare and eldercare facilities. The Envirothon academic competition team has been a platform from which some students have developed the appreciation, knowledge and passion for the environment that has led them into environmental career paths at college. Our Lexus Eco Challenge Teams have been consistent First Place winners with projects locally and globally, including installing composting toilets in Afghanistan. The environmental Science teacher at West Geauga High School continues to strive for professional growth and to provide leadership in his

school, in the District, the community and throughout Ohio. Mike Sustin has been teaching Environmental Science at WGHS for seven years and has been recognized as the North American Association for Environmental Education's Teacher of the Year. He is on teacher advisory boards for both the Geauga Park District and the Lake Metroparks and is involved in program development and alignment. He was just recently recognized by Project Learning Tree-Ohio (Ohio Division of Forestry) Teacher of the Year and has been awarded a seat on the PLT-Ohio Board of Directors. He conducts professional development workshops for the wildly popular Project Wild, Growing Up Wild, Project WET, and Project Learning Tree curriculum supplements for in-service teachers as well as undergraduates in teacher training programs. He runs an award winning Summer Ecology Expedition program for high school students to earn credits on their official transcripts for in depth field studies in ecology, conservation biology, geology, and environmental science. His efforts with his students and staff have helped to earn West Geauga High School recognition as an Ohio Green Ribbon School this year in addition to the distinction of National Blue Ribbon School recognition.

Dear Brenda,

I was happy to hear from you regarding West Geauga School's favorable status with the Ohio EPA. Our administration spared no expense and wasted no time in responding to the waste water issue that had only been brought to our attention because of our Green Ribbon School application. As an environmental educator, I was encouraged to see how quickly our District responded to correct the issue.

West Geauga High School has just been awarded National Blue Ribbon School honors this fall. I believe that our school and community is so successful because we actively engage our students in learning and community service. Student understand why it is important to be active learning for a lifetime. I may be biased, but I am confident that a lot of those lessons are learned through a developing, but strong, environmental education program K-12. Students are connected by a sense of place, passion for understanding how the world works on many levels, and a constant search for ways to effect positive change. As you well know, those skills and attitudes are fostered through sound environmental education and modelling of those skills and attitudes, as demonstrated by our response to the EPA's concerns.

The material in our application from 2012 is still valid and I would request that you would consider it for 2013. We continue to make strides in energy conservation as a school district, still focusing on habits and behaviors with no major investment in physical equipment. Our custodial staff continues to experiment with low impact "green" chemicals as they move to become more effective and less environmentally intrusive at the same time. Our academic programming with respect to environmental education is pervasive, especially as our teachers explore how best to implement Common Core standards using cross-curricular strategies. Groups of students at West Geauga High School continue to be ambassadors for environmental education, awareness and responsible action locally and globally. Students run an after school Nature Clubs program for 5th graders at each building. Students build and monitor nesting structures and bat boxes throughout the county in cooperation with the local park district. One group of students has continued to express their passion for environmental studies and environmental justice through the Lexus EcoChallenge. Through their involvement, they have aided communities in Ecuador, Guatemala, and Afghanistan in dealing with issues of water quality and solid waste management. Using some of the money they raised, these students purchased new drinking fountains that are also water bottle fill stations (see photo). Each unit is equipped with a digital counter that keeps track of the number of "disposable" water bottles that were eliminated from the waste stream. In the month that has passed since their installation, West Geauga High School students have eliminated over 4000 single use plastic bottles from the production and waste stream.

Thank you again for inviting West Geauga to apply for a Green Ribbon Award. It would be a truly notable year here in Chesterland if our school earned two prestigious recognitions like these.

Mike Sustin
Science Educator
West Geauga High School
440-729-5900 x4192

If a child is to keep alive his inborn sense of wonder, he needs the companionship of at least one adult who can share it, rediscovering with him the joy, excitement, and mystery of the world we live in. - Rachel

Green Ribbon Schools Ohio Application Fall 2012

Response ID: 69 Data

3. Page Three

School Contact Information

School Name

West Geauga High School

Street Address

13401 Chillicothe Road

City

Chesterland

State

OH

Zip

44026

School Website

http://www.westgeauga.k12.oh.us/School_home.aspx?schoolid=1

Principal First Name

David

Principal Last Name

Toth

Principal Email Address

david.toth@westg.org

Principal Phone Number

440-729-5955

Lead Applicant First Name (if different from principal)

Michael

Lead Applicant Last Name (if different from principal)

Sustin

Lead Applicant Email

mike.sustin@westg.org

Lead Applicant Phone Number

440-729-5922 x4124

Level

High (9 or 10 - 12)

School Type

Public

How would you describe your school?

Suburban

District and Code

Does your school have at least 40 percent of your students from a disadvantaged background?

No

5. Page Five

1. A. If you have received EPA's ENERGY STAR certification, in what year was the certification earned:

2010

2. B. If you have reduced your total non-transportation energy use (i.e., electricity, lighting and temperature control) from an initial baseline, please provide:

Percentage reduction % : 36

Measurement unit used (kBtu/Square foot or kBtu/student) : kBtu/sqft

Time period measured : October 2008-August 2012

What documents can you provide to document this reduction? : Energy Star Portfolio

Are there any energy saving programs in place (such as student led programs)? : District employs a part-time Energy Manager (full-time classroom teacher)

3. C. What percentage of your energy consumption is derived from?

On-site renewable energy generation: % : 0

Purchased renewable energy: % : 0

4. BUILDINGS

D. If you have constructed and/or renovated buildings in the past three years, what percentage of the building area meets Leadership in Energy and Environmental Design (LEED), Collaborative for High Performing Schools (CHPS), Green Globes or other standards?

What percentage? : 0

What is the total constructed area? : 0

What is the total renovated area? : 0

Which certification did you receive and at what level (e.g. Silver, Gold, Platinum)? : 0

5. E. What percentage of your total existing building area has achieved LEED Existing Buildings: Operation & Maintenance, CHPS Operations, Green Globes or other standards?

What percentage? % : 0

What is the total building area? : 0

Which certification did you receive and at what level (e.g. Silver, Gold, Platinum)? : 0

6. F. If you reduce or offset the GHG emissions from building energy use, please provide:

Current Total GHG Emissions (MtCO_{2e})? : 2096

Baseline Total GHG Emissions (MtCO_{2e})? : 3522

Change from Baseline: GHG Emissions (MtCO_{2e})? : 1426

Time period? : October 2007-August 2012

Explain any offsets used? : energy conservation habits, minimal technology upgrades or capital improvements

7. G. Have you fully implemented the Facility Energy Assessment Matrix within EPA's Guidelines for Energy Management?

No

8. Has the school building been assessed using the Federal Guiding Principles Checklist in

Portfolio Manager?

No

9. H. What percentage by cost of all your furniture purchases is certified under the Business and Institutional Furniture Manufacturers Association's "level" ecolabel? %

0

10. I. Is an energy- and water-efficient product purchasing and procurement policy in place?

No

11. J. Other indicators of your progress towards elimination of GHG emissions (describe in detail and include metrics if available):

Central HVAC computer controls allow for closer monitoring of system usage and finer control over the system during school closures. Discussion among School Board members has shifted from opening properties to oil/gas exploration to wind turbine feasibility studies for the High School-Middle School campus.

6. Page Six

12. Element 1B: Improved water quality, efficiency, and conservation Water use is a bigger issue in some regions of the country than others. Water should be conserved as much as possible and reused whenever possible, but a goal of zero use may not be realistic or even necessary in some areas.

A. If you can demonstrate reduced total water consumption intensity (measured in gal/square foot) from an initial baseline, please provide:

Percentage reduction? % : 0

Time period? : 0

What documents available to document this reduction if requested? : Well water, no meters, no documentation

13. B. Have low-flow fixtures been incorporated into the facilities? (such as faucets, toilets, sinks)

Yes

14. C. How often do you conduct audits of facilities and irrigation systems to ensure they are free of significant water leaks and to identify opportunities for savings?

Weekly

15. D. Describe how your site grading and your irrigation system and schedule is appropriate for your climate, soil conditions, plant materials, and climate, with an emphasis on water conservation:

No irrigation program, rely on rain water including rain barrels in landscaped gardens.

16. E. Do all your outdoor landscapes consist of water-efficient or regionally-appropriate (native species and /or adapted species) plant choices? Yes/No

Yes. Each building in the district features rain gardens and pollinator gardens populated with native plants. The High School and Middle School both have rain barrels for garden maintenance

17. F. Are alternative water sources (e.g., grey water) used before potable water for irrigation? Yes/No Describe

No. No irrigation system.

18. G. If drinking water is acquired from the school's own well, are your drinking water

sources protected? Yes/No Describe how they are protected:

No, no protection system (filters or or osmotic systems) is in place. The wells are all monitored regularly and records are on file at the county offices.

19. H. Do you have a program to control lead in drinking water (including voluntary testing and implementation of measures to reduce lead exposure in drinking water) in place?

Yes/No Describe:

Yes, voluntary testing. Results on file at the county offices.

20. I. Have you been cited within the past three years for failure to meet federal, state or local potable water quality standards?

No

21. J. Are all taps, faucets and fountains used for drinking and cooking cleaned on a regular basis to reduce possible bacterial and other contamination; and are faucet screens and aerators regularly cleaned to remove particulate lead deposits? Yes/No How often is such cleaning conducted?

Fountains and faucets cleaned daily, traps cleaned semiannually

22. K. Other ways you are working to improve water quality, efficiency, and conservation:

Automatic flush toilets and sink faucets are being rotated into service. New high efficiency dishwasher has been installed in the district's cafeteria which is housed inside the high school.

23. GROUNDS

L. What percentage of your school grounds are devoted to ecologically or socially beneficial uses, including those that give consideration to native wildlife? (such as Bioswabs or Rain Gardens, etc.) Yes/no Describe:

10%. Three gardens at the high school serve as outdoor learning venues. One is also an alumni memorial garden with benches and memorial stones. One is planted with vegetables which are used by both the district cafeteria food service and the high school's Foods & Nutrition classes. A bluebird box trail connects educational gardens at the middle school (shared campus) through a successional living lab and a naturally occurring vernal pool.

7. Page Seven

24. Element 1C: Reduced waste production

Waste

You can work towards elimination of all solid waste through reduced consumption, reuse practices and recycling.

A. What percentage of waste is diverted from the landfill or incinerator by reuse, composting, and/or recycling: (total amount reused, composted or recycled)/(total amount reused, composted or recycled used + total sent to a landfill or incinerator)

As much as 20%. Paper, plastic and can recycling and organic composting program reduces waste in the cafeteria and throughout the building.

25. B. What percentage of total office/classroom paper content by cost is post-consumer material or fiber from forests certified as responsibly managed by the Forest Stewardship Council, Sustainable Forestry Initiative, American Tree Farm System or other certification standard? (If a paper is only 30% recycled, only 30% of the cost of that paper should be counted towards the recycled portion.)

Financial figures we unavailable. However, all of our paper hand towels and toilet tissue is labeled as "100% recycled product" and all of our plastic can liner bags are labeled as "at least 50% post-consumer material."

26. C. What percentage of total office/classroom paper content by cost is "totally chlorine-free" (TCF) or "processed chlorine-free" (PCF):

0%

27. D. Any procurement policies in place to encourage the purchase of recycled content materials, supplies or furniture? Yes / No Please explain what type if yes or if no why.

No, not yet. This is an ongoing process with our new business manager. Unfortunately, due to pressing financial issues in the district these policies and practices have become less of a priority in his fiscal planning.

28. Hazardous waste Please answer all the questions below if possible regarding elimination of hazardous waste streams.

E. How much hazardous waste do you generate: lbs/student/year?

Unavailable

29. Describe the types of hazardous waste, how hazardous waste is monitored and how the amount above is calculated. Please list each hazardous waste and the amount of each present at the end of the year.

Paints, floor wax and wax strippers, laboratory chemicals (for biology and chemistry). Quantities are monitored through supply inventories.

30. F. Is a Hazardous Waste Policy for storage, management and disposal of chemicals in laboratories and other areas with hazardous waste in place and actively enforced?

Yes

31. G. Have you been cited within three years for improper management of hazardous waste according to Federal and State regulations?

No

32. H. What percentage of total computer purchases by cost are Electronic Product Environmental Assessment Tool (EPEAT) certified products:

0%

33. How do you dispose of unwanted computer and other electronic products?

not available

34. I. What percentage by cost of all cleaning products in use are certified "green," or can otherwise demonstrate that they meet the environmental standards of established eco-label programs?

0%

35. Which standard(s) are you using?

36. J. Any procurement policies in place to encourage the purchase of "green" cleaning products? Yes / No Please explain what type if yes or if no why.

As noted above, plans for policy implementation are in development, both the custodial staff and the business manager are interested in moving towards "lower impact" materials.

37. K. Is your custodial program based in the principles of effective management and "green" service?

No

38. L. Has your custodial program been certified by the ISSA Cleaning Industry Management Standard - Green Building (or an equivalent standard):

No

39. M. Other indicators that you are reducing waste and eliminating hazardous waste

All mercury had been removed from the district's science labs by 2010. The consolidation of

educational chemicals to the high school science labs from elsewhere in the district is supervised by properly trained and knowledgeable staff.

8. Page Eight

40. Element 1D: Use of alternative transportation to, during and from school

A. What percentage of students walk, bike, bus, or carpool (2+ students in the car) to/from school:

34%

41. Describe how this information been collected and calculated

The transportation director conducted a survey in 2011 as part of a system audit prior to rerouting the entire district/

42. B. Do you have a no-idling policy on file and signs posted stating that all vehicles, including school buses and other vehicles dropping off and picking up students, are limiting idling on school premises?

Yes

43. C. Are all vehicle loading & unloading areas at least 25 feet away from all building air intakes (including doors and windows)?

Yes

44. D. Describe how your school transportation use is efficient and environmentally benign (e.g. the percentage of school-owned electric/hybrid/alternative fuel vehicles or vehicles retrofitted with emission reduction or idle reduction equipment in your fleet, or other indicators of significant reductions in emissions):

All buses have been retrofitted with particulated filters purchased through a 2009 grant from the Ohio EPA that was won by a student.

45. E. Have "Safe Pedestrian Routes" to school or "Safe Routes to School" been designated, distributed to parents and posted in the main office?

No

46. Describe any other accomplishments you've made under Pillar One towards eliminating your negative environmental impact or improving your environmental footprint which you feel should be considered:

Since we began our program roughly four years ago, we have avoided using nearly 4 million kW of electricity as well as over 22,000 mcf of natural gas. We have avoided producing nearly 5 million metric tons of CO2 and provided the district a savings in utility costs of well over \$900,000. Through recycling and composting programs managed by student groups, hundreds of pounds of solid waste is diverted from landfills. These tremendous milestone efforts are currently being realized by educating people on environmentally responsible behaviors and not with new technology, new infrastructure or construction.

9. Page Nine

47. Integrated Pest Management

A. Do you have an integrated pest management plan in effect to reduce or eliminate pesticides?

Yes

48. B. Do you provide notification of your pest control policies, methods of application and

requirements for posting and pre-notification to parents and school employees?

49. C. Do you maintain annual summaries of pesticide applications, copies of pesticide labels, copies of notices and MSDSs in an accessible location?

Yes

50. D. Do you prohibit children from entering the pesticide area for at least 8 hours following the application or longer, if feasible, or if required by the pesticide label?

Yes

51. Ventilation

E. Does your school meet the stricter of: ASHRAE Standard 62.1-2010 (Ventilation for Acceptable Indoor Air Quality) OR your state or local code? Yes/No Which one

Yes, ASHRAE

52. F. Are local exhaust systems (including dust collection systems, paint booths, and/or fume hoods) installed at all major airborne contaminant sources, including science labs, copy/printing facilities, chemical storage rooms?

Yes

53. G. Have you installed energy recovery ventilation systems where feasible to bring in fresh air while recovering the heating or cooling from the conditioned air?

No

54. Contaminant Controls

H. Radon: Have all ground-contact classrooms been tested for radon within the past 24 months?

No

55. What percentage of all classrooms with levels greater than 4 pCi/L have been mitigated in conformance with ASTM E2121?

56. I. Carbon Monoxide (CO): If you have combustion appliances, do you have an inventory of all combustion appliances & do you annually inspect these appliances?

Yes

57. Are CO alarms installed which meet the requirements of the National Fire Protection Association code 720?

No

58. J. Mercury: Have all unnecessary mercury-containing devices been replaced with non-mercury devices? Yes/No (Explain)

Yes

59. Do you recycle or dispose of unwanted mercury laboratory chemicals, mercury thermometers, mercury sphygmomanometers, gauges and other devices in accordance with federal, state and local environmental regulations?

Yes

60. K. Chromated Copper Arsenate (CCA): Have all wooden decks, stairs, playground equipment or other structures treated with Chromated Copper Arsenate been replaced or sealed within the past 12 months?

Yes

61. L. Secondhand Tobacco Smoke: Is smoking prohibited on campus?

Yes

62. M. Asthma Control: Do you have an asthma management program in place consistent with the National Asthma Education and Prevention Program's (NAEPP) Asthma Friendly Schools Guidelines?

No

63. N. Indoor Air quality: Have you developed and implemented a comprehensive indoor air quality management program consistent with IAQ Tools for Schools?

No

64. O. Moisture Control: Are all structures visually inspected on a regular basis and free of mold, moisture & water leakage?

Yes

65. Is indoor relative humidity maintained below 60% (cold climates during freezing temperatures should target 20-30%)?

No

66. Are moisture resistant materials/protective systems installed (e.g., flooring, tub/shower, backing, and piping)?

No

67. P. Chemical Management: Do you have a chemical management program in place that includes the following elements: -Chemical purchasing policy, including low- or no-VOC products

-Chemical inventory

-Storage and labeling

-Training and handling

-Hazard communication

-Spills, clean-up and disposal

-Select EPA's Design for the Environment - approved cleaning products

Yes/No/Explain

Yes. The Science Department chairwoman is a Chemistry teacher and the author of our Chemical Management Plan

68. Q. Describe any other measures regarding the school's built and natural environment that you take to protect student and staff health and which you feel should be considered.

Our business manager is in his second year and his efforts towards addressing goals within this pillar have been derailed by financial circumstances within the district that are beyond his control.

10. Page Ten

69. Element 2B: High standards of nutrition, fitness, and quantity of quality outdoor time for both students and staff Fitness and Outdoor Time

A. What percentage of your students over the past year engaged in at least 150 minutes of school-supervised physical education and/or outdoor time per week?

50%

70. What is the average amount of time over the past year that each student engaged in school-supervised physical education and/or outdoor time per week?

_____minutes/week

30

71. B. Do you have outside classrooms or learning labs available? Yes/No If yes please

describe

Yes. A memorial pavilion shelters outdoor programs on one side of the building and three gardens are easily accessible from the opposite side. All venues have seating and a planted with native species. Two of the three garden spaces are handicapped accessible.

72. Food

C. Have you earned USDA's HealthierUS School Challenge award for school food? Yes/No

List award level earned:

Not available at the time of application

73. D. What percentage (by cost) of food purchased is certified as environmentally preferable (e.g. Organic, Fair Trade, Food Alliance, Rainforest Alliance, etc.)?

74. E. What percentage (by cost) of food purchased is grown and processed within 200 miles of the school (including food grown on school grounds)?

75. Does the school have an on-site garden in which the students participate?

Yes

76. UV Safety

F. What percentage of your current student body has participated in EPA's Sunwise Program or an equivalent program?

11. Page Eleven

77. A. What percentage of last year's graduates scored proficient or better during their high school career on state or school:

environmental education assessments? % : 80

sustainability assessments? % : 70

environmental science assessments ? % : 80

78. Briefly describe the assessment(s):

Students are provided instruction on specific environmental, ecological, and sustainability content in their Biology, Biology II, AP Biology, Environmental Science and Applied Chemistry courses during which students are assessed both summatively and formatively.

79. B. Does your school or your state have an environmental or sustainability literacy graduation requirement? Yes/No Describe

The state's Environmental Literacy Plan is nearing completion and approval, if it hasn't been already at the time application. Our new science standards include a model curriculum for Environmental Science. The Environmental Education Council of Ohio continues to work with the Ohio Dept. of Ed. to provide licensure or professional endorsements for formal educators in Environmental Education.

80. C. Are environmental and sustainability concepts integrated throughout the curriculum? Yes/No Describe

Yes. The Environmental Science teacher at the high school has provided professional training for K-12 colleagues on Project WILD curriculum supplements. He collaborated regularly with teachers in other departments.

81. D. Is your curriculum aligned to the state science standards 2002 or 2010?

2010

82. E. What percentage of your eligible graduates last year had completed Advanced Placement Environmental Science during their school career?

0%

83. What percentage of these students scored 3 or better on the Advanced Placement Environmental Science assessment?

84. F. If your school does not conduct environmental science, sustainability or environmental education assessments, what percentage of your students scored proficient or better on science education assessments in the last year?

95%

85. G. Are professional development opportunities in environmental and sustainability education available to all teachers at least every other year? Yes/No Describe a few of these opportunities.

Yes. The high school Environmental Science teacher is a certified program facilitator for Project WILD, WILD-Aquatic, Growing Up WILD, Project Learning Tree and Project Wet, and regularly offers training for staff members throughout the district.

86. H. Does your environmental education curriculum pay particular attention to scientific practices, such as asking questions, developing and using models, planning and carrying out investigations, analyzing and interpreting data, using mathematics and computational thinking, constructing explanations, and engaging in argument and applications based on evidence:

Yes

87. I. Do your students have meaningful outdoor experiences (an investigative or experiential project that engages students in critical thinking, problem solving and decision making) at every grade level?

Yes

88. J. Are the sustainable elements of your building used as an educational opportunity? Yes/No If Yes, briefly describe.

Yes. Environmental Science students manage some of the sustainability initiative on campus. The district's Energy Manager is a social studies teacher at the high school and he infuses his lessons with energy education, sustainability issues and models those strategies for students and staff.

12. Page Twelve

89. Element 3B: Use of the environment and sustainability to develop STEM content knowledge and thinking skills to prepare graduates for the 21st century technology-driven economy

A. Do your students graduate with a robust general science education that includes a deep understanding of life, physical, and earth sciences?

Yes

90. Describe (e.g., percentages of enrollment in environmental sciences, earth sciences, biological sciences, statistics and post-secondary school or career-intended focus)

Unfortunately, no one keeps track of our graduates after they enter their post-secondary experiences. Our best estimates are that 15% of our graduates enter and complete a STEM baccalaureate program.

91. B. Does your curriculum provide a demonstrated connection between classroom content

and college and career readiness, particularly to post-secondary options that focus explicitly on environmental and sustainability fields, studies, and/or careers? Yes/No Describe.

Yes. Our program throughout high school focusses on college and career readiness. In the natural science, we strive to develop sound scientific thinking and reasoning skills while challenging students to make connections and extend their ability to apply knowledge to situations beyond the classroom. Field experiences with professionals opens students' eyes to career paths and opportunities.

92. C. Does your curriculum provide any environmental focused career preparation, career-technical education programming, agricultural and environmental systems career field, college-level science or math course enrollment or specific science/math assessments? Describe.

Our school provides interested students the opportunity to attend the Gates Mills Environmental Education Center, providing vocational training in forestry, landscaping and design and horticulture. Students can also pursue Post-Secondary Educational Options at a local community college, although the district does offer 5 different STEM related AP courses.

93. Community and Civic Engagement

Element 3C: Development of civic engagement knowledge and skills, and students' application of these to address sustainability and environmental issues in their community

A. What percentage of last year's graduates scored proficient or better on a community or civic engagement skills assessment?

80%

94. B. Are your students required to conduct an age-appropriate civic/community engagement project around a self-selected environmental or sustainability topic at every grade level?

No

95. What percentage of students satisfactorily completed such a project last year?

96. C. Do you partner with local academic, business, government, nonprofit, informal science institutions and/or other schools to help advance the school and community toward the 3 Pillars and/or assist the progress of other schools, particularly schools with lesser capacity in these areas? Yes/No Briefly describe the scope and impact of these partnerships:

Yes. We partner with agencies like the Ohio Department of Natural Resources, the Cleveland Museum of Natural History, The Holden Arboretum, Lake (county) Metroparks, Geauga Park District, Cleveland Metroparks, Geauga SWCD, Ohio Vernal Pool Partnership, The Western Reserve Land Conservancy, Case Western Reserve University, local landscape companies and nurseries, Brownies, Cub Scouts, as well as Russell, Chester and Munson Township governments in order to accomplish goals under the three Pillars. Each of these partners provide material goods or services, as well as access to some of the best, brightest and creative minds in the business of becoming green.

97. D. Do you have outdoor classrooms on your grounds which include native plantings and do you use them to teach an array of subjects in context, engage the broader community and develop civic skills?

Yes

98. What other indicators or benchmarks (quantified whenever possible) of your progress towards the goal of 100% of your graduates being environmental and sustainability literate do you feel should be considered?

We are always looking to do more with less in the world of public education. Curriculum realignments, alterations to the school schedule, enrollment trends and funding may provide opportunities to offer AP Environmental Science in the near future. Continued development of

the Summer Ecology Expeditions program will become more valuable in providing deeply meaningful field experiences. Team teaching (Science and Civics, or Human Geography/Env. Science) has also been discussed as a way to push integrations of sustainability across the curriculum.

14. Page Fourteen

Email Confirmation

Nov 13, 2012 21:43:02 Success: Email Sent to: david.toth@westg.org

Response Location

Region:	United States
Region:	OH
City:	Wickliffe
Postal Code:	44092
Long & Lat:	Lat: 41.598499, Long:-81.464302