

U.S. DEPARTMENT OF EDUCATION
GreenRibbonSchools
School Nominee Presentation Form

ELIGIBILITY CERTIFICATIONS

School and District's Certifications

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

1. The school has some configuration that includes grades 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. The Department of Defense Education Activity (DoDEA) is not subject to the jurisdiction of OCR. The nominated DoDEA schools, however, are subject to and in compliance with statutory and regulatory requirements to comply with Federal civil rights laws.
4. OCR has not issued a violation letter of findings to the public school district concluding that the nominated public school or the public school district as a whole has violated one or more of the civil rights statutes. A violation letter of findings will not be considered outstanding if OCR has accepted a corrective action plan to remedy the violation.
5. The U.S. Department of Justice does not have a pending suit alleging that the public school or the public school district as a whole has violated one or more of the civil rights statutes or the Constitution's equal protection clause.
6. There are no findings of violations of the Individuals with Disabilities Education Act in a U.S. Department of Education monitoring report that apply to the public school or public school district in question; or if there are such findings, the state or public school district has corrected, or agreed to correct, the findings.
7. The school meets all applicable federal, state, local and tribal health, environmental and safety requirements in law, regulations and policy and is willing to undergo EPA on-site verification.

U.S. Department of Education Green Ribbon Schools 2015-2018

X Public Charter Title I Magnet Private Independent Rural

Name of Principal: **Ms. Lisa M. Owen**

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

Official School Name: **Highland Regional High School**

(As it should appear on an award)

Official School Name Mailing Address: **450 Erial Road Blackwood, NJ 08012**

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

County: 07 State School Code Number *: 0390-020

Telephone: 856-227-4100 Fax: 856-227-3619

Web site/URL: <https://bhprsd.org/highland> E-mail: lowen@bhprsd.org

*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.



Date: 2/9/18

(Principal's Signature)



Name of Superintendent: **Mr. Brian Repici**

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

District Name: **Black Horse Pike Regional School District**

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

Date: 2/9/18


(Superintendent's Signature)

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.

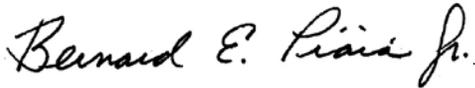
1. The school has some configuration that includes grades Pre-K-12.
2. The school is one of those overseen by the Nominating Authority which is highest achieving in the three ED-GRS Pillars: 1) reduced environmental impact and costs; 2) improved health and wellness; and 3) effective environmental and 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: **New Jersey Department of Education**

Name of Nominating Authority: **Mr. Bernard E. Piaia, Jr.**

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

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



Date: 2/15/2018

(Nominating Authority's Signature)

SUMMARY AND DOCUMENTATION OF NOMINEE'S ACHIEVEMENTS

Provide a coherent summary 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. Then, include concrete examples for work in every Pillar and Element. Only schools that document progress in every Pillar and Element can be considered for this award.

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 according to the instructions in the Nominee Submission Procedure.

OMB Control Number: 1860-0509

Expiration Date: March 31, 2018

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.

School Contact Information

School Name: [Highland Regional High School](#) District [Black Horse Pike Regional School District](#)

Street Address: [450 Erial Road](#)

City: [Blackwood](#) State: [NJ](#) Zip: [08012](#)

Website: <https://www.bhprsd.org/highland> Facebook page: <https://www.facebook.com/bhprsd/>

Principal Name: [Ms. Lisa Owen](#)

Principal Email Address: lowen@bhprsd.org Phone Number: [856-227-4100](#)

Lead Applicant Name (if different): [Jennifer Gramble](#)

Lead Applicant Email: jgramble@bhprsd.org Phone Number: [856-227-4100 X4300](#)

Level <input type="checkbox"/> Early Learning Center <input type="checkbox"/> Elementary (PK - 5 or 6) <input type="checkbox"/> K - 8 <input type="checkbox"/> Middle (6 - 8 or 9) <input checked="" type="checkbox"/> High (9 or 10 - 12)	School Type <input checked="" type="checkbox"/> Public <input type="checkbox"/> Private/Independent <input type="checkbox"/> Charter	How would you describe your school? <input type="checkbox"/> Urban <input checked="" type="checkbox"/> Suburban <input type="checkbox"/> Rural	District Name Black Horse Pike Regional <input type="checkbox"/> Largest 50 Districts in the nation? Total Enrolled: 1220
Does your school serve 40% or more students from disadvantaged households? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	% receiving FRPL 28% % limited English proficient Other measures	Graduation rate: 92.9% Attendance rate: 93.2%	

SUMMARY NARRATIVE:

At [Highland Regional High School](#), our community is committed to improving the efficiency of our facility (built in 1967), providing environmental leadership and demonstrating ecological stewardship through our Green Team, which consists of students, teachers, administrators, and community members. By identifying actions for reducing waste and our carbon footprint, the Green Team has been a catalyst for changing behaviors resulting in sustainable use of resources and reduced greenhouse gas emissions.

Over the past five years, we have achieved more than 12% reduction in energy costs and 24% reduction in green-house gas emissions through the installation of high efficiency lighting, new refrigeration, heating, A/C units and boilers, utilization of the EPA Energy Star Portfolio Manager, and participation in EnerNOC’s (Energy Network Operations Center) demand response program thereby reducing our electrical power during heat waves. Highland has created a “green equipment account” in the maintenance budget for purchasing green and energy savings supplies. By implementing responsible irrigation methods, we reduced our total water usage by 15%. In addition, we implemented composting by partnering with Organic Diversions, a company that coaches students and staff with strategies for collection and quantifying composting efforts.

Our grounds include two large, undisturbed rain gardens with a connecting 450-foot bio-swale for storm water management and protection of the water quality. Our three courtyards are sub-irrigated by roof scuppers and downspouts channeled into a perforated pipe system sustaining the courtyard gardens without mechanical irrigation. The gardens are home to more than 48 native wetland species of wild flowers, shrubs, trees and meadow grasses that help water and soil conservation. In consultation with Rutgers University turf management experts, we developed a deep root system by greatly reducing the use of nitrogen, therefore preventing the leaching of chemicals that reduced our use of fertilizer by 75%.

To improve the health of our students and staff, our drinking fountains have been outfitted with water bottle refilling stations, and reusable bottles are sold at the school store. In our efforts to improve air quality, we discontinued using chemicals to strip flooring and installed MERV8 filters in our HVAC systems. Our Wellness Coordinator helps staff set healthy goals, sets workout regimes, organizes biometric screenings, and conducts health risk assessments. Faculty members participate in an 8-week

Mindfulness program, a “Biggest Loser” contest, and healthy eating preparation workshops. Students are invited to attend a weekly Mindfulness class during their lunch, and outdoor seating areas are provided for “Tartan Time” to eat, work, or socialize. To encourage sustainable, healthy eating options, Highland is part of a program called DOD Direct Delivery Produce, which sources produce from local farms. In addition, our dairy products come from Cream-O-Land, a local company.

Our greenhouse and courtyard provide hands-on learning opportunities for our AP Environmental Studies and Horticulture classes. Our Green Team students helped with global environmental issues by participating in a Thirst Project which raised money to establish fresh water wells in historically malnourished areas of Africa. Throughout the year our students complete research and prepare presentations to participate in our annual two-day Envirothon focused on complex environmental issues related to New Jersey’s natural resources including soils, aquatics, forestry, and wildlife. In addition, AP students collaborated with CAD, Math, and English classes on a sustainability project for a vacant lot in Gloucester Township and presented their plan to the mayor. In chemistry, students study the Bhopal disaster and new battery technology for electronics and hybrid cars. Horticulture students learn to propagate lemon geranium from cuttings for use as a natural pesticide. In Nutrition and Culinary and Hospitality classes, students discuss organic vs. non-organic foods, and our marine studies explore human impact on the ocean’s resources

Our two sister schools, Timber Creek Regional High School and Triton High School, have both previously been recognized as U.S. Department of Education Green Ribbon Schools. Highland is excited about the progress experienced in the last couple years and take pride in our ability to effect change within our school, impact our local community, and make a difference in the preservation of our global environment. In 2016, we received Bronze Certification from Sustainable Jersey for Schools, and we are very proud to now be designated a 2017 U.S. Department of Education Green Ribbon School.

SCHOOL PROFILE: GREEN SCHOOL PROGRAM AND AWARDS (Cross-Cutting Question)

1. Has your school participated in a local, state, or national program, which asks you to benchmark progress in some fashion in any or all of the Pillars? Yes X No ___ If yes, please explain what program(s) and what level you are currently at, and state the years you have been involved in these programs. (e.g. [EPA Energy Star Portfolio Manager](#), [Eco-Schools USA](#), [PLT Green Schools](#), [Sustainable Jersey for Schools](#), and [NJ Learns](#)). (100 word max) In 2016, Highland received Bronze Certification from Sustainable Jersey for Schools. We have been involved with Sustainable Jersey for Schools for 4 years and have been certified for two years. Also, Highland is part of the Energy Savings Improvement/Investment Program with Gloucester Township Municipality. We are currently in year 5 of a 15-year agreement. Through this program Highland was able to install new, more efficient boilers and efficient lighting. For the past four years, the district has utilized EPA Energy Star Portfolio manager.
2. Has your school, staff or student body received any awards for facilities, health or environment?
Yes ___ No X Award(s) and year(s) _____
3. Has your school identified or created a place for teachers to go to share lessons on Sustainability?
Yes X No ___ If yes, where? Our staff shares lessons in a Google Drive folder.
4. Has your School Board adopted a Green Strategic Plan or sustainability policy? Yes X No ___ Describe-Max 50 words The policy elevates the focus on energy conservation and sustainability by making GREEN efforts. Increasing our sustainability is a goal for both our Board of Education and superintendent.
5. Has your school created a Green Team? Yes X No ___ If yes, list team members and their roles.

Brian Repici, Superintendent	Joe Newsham, District Facilities Director
Jennifer Gramble, District Green Team Leader and District Supervisor of Science	
Jennifer Brown, District Wellness Coordinator and Health and Physical Education Supervisor	
Mary Alice Baratta, Supervisor of Planning, Research, evaluation, Assessment, Special Projects and Business	
Lisa Owen, Highland Principal	Christina Durante, Highland Green Team Advisor
Robynn Dyl, Highland Green Team Advisor	Mike Shuster, Highland Facilities Foreman
Jason Burns, Student member	Victoria Harripersad, Student member

Jen Millisy, Student member
 Ummulkhayer Sameha, Student Member
 Pryanka Sanghavi, Student member
 Caitlyn Sinclair, Student member
 Mehajabin Wara, Student member
 Paige Thomas, Student member

Immaculata Nwoga, Student member
 Maya Sandin, Student member
 Grace Simmons, Student member
 Dan Walker, Student member
 Sarah Sandlin, Student member
 Barut Ramos, Student member

6. Has your school seen a cost savings from green initiatives? Yes No If yes, input **cost savings** data into table:

	Electric Energy Consumption (kwh)	Natural Gas or Fuel Oil Consumption (therms)	Electric Utility Costs (\$)	Natural Gas Utility Costs (\$)	Total Utility Costs (\$)	Annual Savings (\$)	% Reduction from Baseline Year
FY13-14	6,784,000	151,000	276,500.00	72,200.00	348,700.00	Baseline	Baseline
FY14-15	6,165,800	112,750	242,128.00	70,255.00	312,383.00	36,317.00	10.41
FY15-16	5,847,000	111,425	240,495.00	70,187.00	310,682.00	38,018.00	10.90
FY16-17	5,251,000	101,200	238,537.00	65,624.00	304,161.00	44,539.00	12.77

PILLAR I: REDUCED ENVIRONMENTAL IMPACT

Element 1A: Reduced/eliminated greenhouse gas (GHG) emissions. Use Portfolio Manager format if possible

7. Can your school document a reduction in **Greenhouse Gas emissions**? Yes or No Evidence in table below. Data obtained from [EPA Energy Star Portfolio Manager](#) & [AvidXchange](#), as reported by the [District Facilities Director](#) (Vendor or School/District Personnel).

	Electric Energy Consumption (kwh)	Natural Gas Consumption (therms)	Fuel Oil Consumption (gallons)	Carbon Dioxide from Electric 1.52 lbs/kwh	Carbon Dioxide from Natural 11.7 lbs/therms	Carbon Dioxide from Fuel Oil 26.033 lbs/gal	Total # of Staff & Students	MT eCO2 /person	% Decrease from prior year
Example	100,000	15,000	5,000	100,000 x 1.52 = 152,000	15000 x 11.7 = 175,500	5000 x 26.033 = 130165	250	(152000+ 175500+ 130165) /250/1000 =1.83	
FY13-14	6,784,000	151,000	0	10,311,680	1,766,700	0	1411	8.56	Baseline

FY14-15	6,165,800	112,750	0	9,372,019	1,310,400	0	1357	7.87	11.56
FY15-16	5,847,000	111,425	0	8,887,440	1,303,672	0	1332	7.65	15.63
FY16-17	5,251,000	101,200	0	7,981,520	1,184,040	0	1293	7.08	24.11

8. Has your school conducted an energy audit of its facilities? (e.g. [LGEA](#), [Eco-Schools Energy Audit](#)) Yes No

Percent reduction: **14.1%** Unit used (kBtu/sq ft or kBtu/student): **kBtu**. Time period: from **5/2011** to **4/2012**

9. Has your school received [EPA ENERGY STAR certification](#) or does it meet the requirements for ENERGY STAR certification? (score of 75 or above) Yes No Year(s) and score(s) received: **2016/17-Score=63**

10. Percentage of school's energy is obtained from on-site renewable energy generation **0%**

Participation in USDA Fuel for Schools, DOE Wind for Schools or other federal or state school energy programs: (Ex. ACES) Yes No If yes, what programs? **NJ Clean Energy Program and Energy Saving Improvement Program (ESIP)**

11. Has your school reduced its total non-transportation energy use from an initial baseline? Yes No

How did you document this reduction? **Energy Star Portfolio Manager and AdvidXchange.**

	Electric Energy Consumption (kwh) 1kwh=3.412 kBtu	Natural Gas Consumption (therms) 1therm=100kBtu	Fuel Oil Consumption (gallons) 1 gal. = 139 kBtu	Total kBtu	kBTU/sq.ft.	% Reduction From Baseline
FY13-14	6,784,000	151,000	0	36,020,000	170.7	Baseline
FY14-15	6,165,800	112,750	0	32,312,710	153.1	10.31
FY15-16	5,847,000	111,425	0	31,092,464	147.7	13.47
FY16-17	5,251,000	101,200	0	28,036,412	132.8	22.20

12 What year was school originally constructed? **1967** Total building area (sq.ft) **210,994**

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

For new building(s): Percentage building area meeting green building standards: _____ Certification & level: _____ Total constructed area: _____ Which green building standard was used? _____ ([LEED for Schools](#), [CHPS](#), [Green Globes](#) or other)

For renovated building(s): Percentage building area meeting green building standards: _____ Certification & level: _____ Total renovated area: _____ Which green building standard was used? _____ ([LEED Existing Buildings: Operation & Maintenance](#), CHPS Operations Report Card, Green Globes or other)

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

Water and Grounds

14. Can you demonstrate a reduction in your school’s total water consumption (measured in gal/square foot) from an initial baseline? Yes No If yes, please complete the table below. If no, please explain. (max 50 words)

	Water Consumption (gallons)	Total Occupants	Gallons Per Occupant	% Reduction from FY 2013
FY13-14	2,352,000	1411	1667	Baseline
FY14-15	2,304,000	1357	1697	+1.76
FY15-16	2,064,000	1332	1549	7.07
FY16-17	2,001,000	1293	1547	0.130

Do you include after-hour activities in your water consumption calculations? (adult sport leagues, adult education, scouting, other community events etc.?) Yes No

How did you document this reduction (i.e. Energy Star Portfolio Manager, utility bills) [Energy Star Portfolio Manager and AvidXchange](#).

15. Describe any strategies you use to discourage single-use beverage containers on school property. Describe how you assure the recycling of those containers if/when purchased and used at athletic locations, or other outdoor events. (Ex. Hydration Stations, bottle refilling fountains) (50-words max) [More than half of Highland’s drinking fountains have been outfitted with water bottle refilling stations, and reusable bottles are sold at the school store. The athletic department uses reusable water jugs and bottles on the field for our athletes. The school building, athletic fields and the stadium complex offer side-by-side recycling and waste containers at strategic, convenient locations.](#)
16. What percentage of your landscaping is considered water-efficient and/or regionally appropriate? [70%](#) What types of plants are used and where are they located? Have you preserved any areas with native vegetation with minimal disturbance? (50-words max) [In 2016, two large undisturbed rain gardens with a connecting bio-swale project were completed at Highland. This was funded by the NJDEP Pollution Control and Management Implementation Grant issued by the Watershed Management and the Camden County Soil Conservation District for the purpose of implementing a storm water management system that helps protect water quality. The garden is home to over 38 native wetland species of wild flowers, shrubs, trees and meadow grasses.](#)
17. How have you incorporated [native plants](#) into your landscaping? (50-words max) [92% of the plants incorporated in the landscaping are native plants. The native plants are used for ornamental purposes and water and soil conservation.](#)
18. Describe alternate Non-potable water sources used for irrigation (e.g. roof or parking lot run-off). (50-words max) [Highland’s three courtyards are sub irrigated by roof scuppers and downspouts that are channeled into a perforated pipe system that sustains the courtyard gardens without mechanical irrigation. Highland’s rear parking lot was designed to run-off into the Junior varsity baseball and football fields, thus greatly reducing mechanical irrigation time.](#)
19. Describe efforts to reduce storm water run-off or reduce impervious pavement (e.g. rain gardens, bio swales, storm water basins). (50-words max) [Highland’s rain gardens and bio-swale were implemented to reduce storm water flooding onto connecting residential properties and onto the district administration building parking lot. This was accomplished along with the added bonus of sub irrigating the connecting practice football and varsity baseball field, again reducing our mechanical irrigation time on our sports fields.](#)

20. Our school's drinking water comes from: () Municipal water source () Well on school property(AKA a non-transient non-community water system) () Other:

If well on school property, school complies with all monitoring requirements? Yes ___ No ___

If well on school property, drinking water meets all applicable standards? Yes ___ No ___

Have all drinking water violations been corrected, if applicable? Yes ___ No ___

Resources: NJDEP Sampling & Regulatory Guidance for Drinking Water Systems (<http://www.nj.gov/dep/watersupply/dws-sampreg.html>)

NJDOE Lead Testing Regulations at N.J.A.C. 6A:26-12.4 with additional definitions at 6A:261.2 (<http://www.state.nj.us/education/code/current/title6a/chap26.pdf>)

21. Describe how the water supply for your school is protected from potential contamination. (Ex. Backflow preventers) (50-words max) [Highland is equipped with backflow preventer/anti-siphon valves on all irrigation systems. In addition, there are vacuum breakers/anti-siphon connectors on all exterior hose bibs, as well as backflow preventer valves on each of the 3 boilers and the 2 domestic hot water boilers.](#)

22. Describe the program you have in place to control lead in drinking water (e.g., pipe flushing, old plumbing solder). NJDEP Lead in Drinking Water – Public Water System Information (<http://www.nj.gov/dep/watersupply/dwc-lead-public.html>) (50-words max) [Water is supplied and regulated by public utility. They alert us when the system will be flushed \(semi-annually\). When alerted, we promptly flush our own building. We abide by third-party lead testing annually through an environmental company.](#)

23. Describe how your school's site grading, irrigation system and schedule is appropriate for your climate, soil conditions, and plant materials, with an emphasis on water conservation and/or improved storm water management. (50-word max) [Highland's experienced grounds keepers use a strict turf management program by developing a deep root growth system, therefore cutting down on the use of fertilizers & vastly lowering the watering schedule. In addition, the recent bio-swale and rain gardens project reduced the need for irrigation on the two large sports fields.](#)

24. What percentage of school grounds are green space? (ex. Green roof, rain gardens, native plants, solar panels, fish farms, outdoor raised beds, living walls, wetlands/marsh, forest, grassland, etc.) [12%](#) and list items (50 word max) [The green spaces are a three quarter acre rain garden, a half-acre rain garden and a 450 foot connecting bio-swale. The school grounds are home to over 48 species of native plants of which approximately 80 % are in the bio-swale/rain gardens space.](#)

Element 1C: Reduce waste production – Waste/Hazardous Waste

25. What percentage of solid waste (including food service waste) is diverted from landfills or incinerators due to reduction, recycling and/or composting? Complete all the calculations below to receive points.

A - Monthly garbage service in cubic yards (garbage dumpster size(s) x number of collections per month x percentage full when emptied or collected): [\(8 yard X 3 containers x 16 pickups X 85%\) 326 cubic yards.](#)

B - Monthly recycling volume in cubic yards (recycling dumpster sizes(s) x number of collections per month x percentage full when emptied or collected): [\(8 cubic yards x 2 containers x 8 pickups x 75%\) 96 cubic yards/month.](#)

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): [17.8 cu yards/month \(numbers given to us by Organic Diversions LLC.\)](#)

Recycling Rate = $((B + C) \div (A + B + C) \times 100)$: [24.7%](#)

Monthly waste generated per person = $(A/\text{number of students and staff})$: [.14 cubic yards/month](#)

26. What percentage of your school's total office/classroom paper content **contains at least 30%** post-consumer material, **or** fiber from forests certified as responsibly managed and/or chlorine-free? **100% of our paper is "ecf" -- elementally chlorine free -- and SFI Certified, indicating sustainable forest management in the making of this product**

27. Do you include after-hour activities in your garbage reduction calculations? (adult sport leagues, adult education, scouting, other community events etc.?) Yes X No _____

28. Describe how you have reduced your paper consumption, and how you measured that reduction or other uses you created for the materials (e.g. working and reviewing online, white boards). (50-word max) **Highland has instituted the following electronic practices: digital newsletter, payroll, parent communication (report cards, announcements, and emergencies), staff evaluations, discipline referrals, lesson planning, and SchoolDude. The 2017-18 school year is the first year that each student has his/her own device. Teachers used Google Classroom for the majority of assignments, eliminating the need for paper. Highland's copy count is down approximately 65% from last year.**

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

Flammable liquids	Corrosive liquids	Toxics	Mercury	Other:
Methanol: 150 mL Ninhydrin Solution in n-Butanol: 100 mL	Carbon monoxide absorbing solution cont. Sodium Hydroxide: 75 mL HCl: 750 mL NaOH: 500mL	None	None	None

How is this calculated? **Detailed inventory of chemicals is kept using a web-based program.** How is hazardous waste disposal tracked? **Environmental consulting Inc. comes in prior to removal to calculate the amounts of waste. Teachers place waste chemicals in designated containers. Strategic Environmental Consulting, Inc. and Environmental Waste Minimization, Inc. regularly remove the waste and properly disposes of it according to NJ environmental standards.**

30a. Describe other measures taken to reduce or eliminate solid waste and hazardous waste (on-site composting etc.). (ex. Switching to re-usable cafeteria trays, silverware, etc.) (100-word max) **Teachers neutralize acidic/basic solutions into nonhazardous waste. Waste copper solutions are chemically manipulated to produce solid copper, which is then recycled. Laboratories have been converted from large scale to micro scale. We utilize an acid neutralizing tank. Grass clippings and leaves are mulched. In every classroom and office, there are two trash receptacles, one for landfill trash and one for recyclable waste. In locations where lunch is served, there are three receptacles for trash: landfill trash, recycling, and compost. Our cafeteria utilizes compostable lunch trays.**

30b. Describe how electronics are handled at the end of their useful life. (TV, computers, laptops, tablets, printers, toner cartridges, etc) (50 word max) **All electronic waste such as computers, televisions, laptops, tablets, batteries, printers and toner cartridges are sent to Upcycle LLC for disposal.**

How many pounds of electronics did you discard as hazardous waste? **The recycler does not keep records of poundage.**

What was the weight of material reused? _____ Was any donated? Y___ N_____

(E-CYCLE NJ: <http://www.nj.gov/dep/dshw/ewaste/index.html> EPEAT: <http://www.epeat.net/>)

31. Which green cleaning custodial standard is used? **Cleaningforhealthyschools.org, Eco Conscious 100% Green Cleaning and NSF Public Health & Safety.**

What percentage of all products is certified? **90%**

What specific third party certified green cleaning product standard does your school use? [Our custodial products are third-party certified by a number of organizations: EPA, Green Seal, Eco-Logo, NFS, USDA and dFE.](#)

Describe the measures your school has taken to use only green cleaning product. [On May 5th, 2016, the BHRSD Board of Education adopted a Green Purchasing Policy which includes the purchase of environmentally-preferable cleaning products whenever possible.](#)

32. If your school has a nurse's office, how does the nurse track regulated medical waste? Describe the [tools or mechanisms](#) used to track this waste. Indicate (X) if you have the following:

- School has a Generator ID number, unless exempted; [Highland ID# 0078131](#)
- School manages the regulated medical waste on-site properly? (Use the proper containers, properly segregate the regulated medical waste, and properly store the containers) [There are separate Medical Waste and Sharps containers located in the medical office.](#)
- School uses a licensed and registered regulated medical waste transporter, unless exempted? [Highland uses a licensed and registered waste transporter: Med-Flex. Med-Flex is a company that the District is contracted with that is comprised of trained individual for proper transporting and disposal of Sharps and medical waste material.](#)
- School ships the regulated medical waste to a facility authorized to accept the regulated medical waste? [Med-Flex comes to school annually in January to pick up medical waste. Should the need arise where amounts of solid or contaminated waste require immediate disposal, Med-Flex will be contacted for an additional pick-up.](#)
- School completes the proper paperwork to document the shipment and maintain records for 3 years? [All transport orders are recorded and kept in Nurse's office for 3 or more years.](#)
- School files the generator annual report, unless exempted? [Med-Flex files the report annually.](#)

33. 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 No

34. Do you have Underground Storage Tanks located at your School?

- Yes, Active. Are tanks properly [registered](#)? Yes No Are monitoring systems operating? Yes No
- Yes, Inactive. Are tanks buried? Yes No Are tanks scheduled for removal? Yes No
- X None

35. Is your school compliant with the New Jersey Department of Environmental Protection's (DEP) Air Quality Permit requirement? (Equipment at schools that require air permits include boilers, emergency generators, space heaters and hot water heaters that have a maximum rated heat input of 1 million BTU/Hr or greater, to the burning chamber. Also, some schools might require an air permit for certain woodshop operations. Most of these pieces of equipment can be [permitted](#).) Yes No
List Permits: [NJDEP Air Quality Permits GP-009A for Boilers, GP-003 for Woodworking Equipment and GP-005A for Emergency Generators.](#)

Element 1D: Use of Alternative Transportation

36. What percentage of your students walk/bike/skateboard, ride a school bus/use public transportation, or carpool (2+ students per car) to/from school? (Note if your school does not use school buses). How were these percentages collected and calculated? (50-word max) [We have 99 students that drive their cars to school which is 8% of our school population. Of the remainder of our students, 92% walk, bike, ride a bus or carpool. 89% of our students were issued bus passes this year.](#)

37. Indicate (X) if you have implemented the following. Descriptions up to 50 words may be added for each item.

- ___ Designated carpool parking spaces
- X A well-publicized no idling policy that applies to all vehicles (including school buses, cars and delivery trucks)
- X A policy that encourages walking and/or bicycling to school
- X Vehicle loading/unloading areas are at least 25 feet from building air intakes, doors, and windows
- ___ A Safe Routes to School program or a School Travel Plan.
- ___ Walk and Bike to School Days
- ___ A Walking School Bus program
- ___ Walking and bicycling safety curriculum
- ___ Electric vehicle charging stations have been installed to encourage the use of these vehicles
- X Secure bicycle storage (such as bicycle lockers, racks, or rooms) is provided to encourage bicycling to school

39. If your school has only bus transportation, describe how your school transportation use is efficient and has reduced its environmental impact (e.g. more efficient bus routes, diesel retrofits for buses, use of biodiesel fuel, electric vehicles). (50-word max) [Bus routes are designated by neighborhood and eliminates need for extra mileage. Bus routes are efficient and minimize extraneous transportation. Also, we use the least amount of buses possible for after school programs. Buses do not idle during pick up.](#)

Summary Question for Pillar 1

40. Describe any other efforts toward reducing environmental impact, focusing on innovative or unique practices and partnerships. (100-word max) [Highland has created a “green equipment account” in the maintenance budget for purchasing of green and energy saving supplies and materials such as LED lighting and occupancy controls. We use this in conjunction with NJ Clean Energy to secure thousands of dollars in rebates. We also have a contracted partnership with EnerNOC \(Energy Network Operations Center\) where we participate in a "demand response program" to reduce electrical power during heat waves. The District has a shared service agreement with the Gloucester Township Housing Authority where we are introducing the use of green cleaning methods. In May of 2016, the Highland’s Board of Education adopted a Green Purchasing Policy.](#)

PILLAR 2: IMPROVE THE HEALTH AND WELLNESS OF STUDENTS AND STAFF

Element 2A: Integrated School Environmental Health program

Environmental Health

1. Has your school conducted any “Occupant Survey” with teachers and students? If so, please state the date(s) and over results of the survey. [\(CHPS Occupant Survey\)](#) **No**
2. Do you have an Operations & Maintenance Policy for your building? Yes X No _____
3. Does your school have an Integrated Pest Management plan? Yes X No _____ Date last updated: [7/5/2017](#)
4. Indicate (X) which of the following practices your school employs to minimize exposure to hazardous contaminants. Provide specific examples of actions taken for each checked practice.

X School conducts both indoor (structural) and outdoor (turf and ornamental) IPM to reduce student exposure to chemical pesticides. [Highland follows an annually updated IPM plan and policy that is required by the NJDEP. These results along with a “Use of Pesticides & Herbicides Notification” are posted and updated annually on the district website. We have reduced our indoor use of pesticides by 95% in the last 3 years and our outdoor use by 85%.](#)

School reduces or does not use fertilizer on our property In consultation with Rutgers University turf management experts, the school has developed a deep root system by greatly reducing the use of nitrogen, therefore preventing the leaching of chemicals. This helped reduce our use of fertilizer by 75%

School prohibits smoking on campus and in public school bus The District School Policy #7434 prohibits smoking on school grounds is strictly enforced. This includes school buses on Highland grounds. Prohibitive signs are posted throughout our facility as well as on our School Website and in our Student handbook

School has identified and properly removed sources of elemental mercury and prohibits its purchase and use in the school. Science classrooms have eliminated the use of mercury and have properly disposed of it with Environmental Waste Minimization, Inc. All HVAC thermostats incorporating mercury have been replaced.

School uses fuel burning appliances and has taken steps to protect occupants from carbon monoxide (CO) In August 2017, Highland was retrofitted with twenty-one CO detectors with alarms. This is in compliance with the NJ Department of Community Affairs regulations adopted September 3rd 2017.

School does not have any fuel burning combustion appliances (e.g. boilers, generators, hot water heaters)

School has tested all frequently occupied rooms in contact with the ground, and first floor rooms above basement spaces that are not frequently occupied for radon gas and has fixed and retested rooms with levels that tested at or above 4 pCi/L . [NJ Recommends School Radon Testing](#) Yes ___ No

School built with radon resistant construction features tested to confirm levels below 4 pCi/L. Yes ___ No

Our school has identified any wood playground or other structures that contain chromate copper arsenate and has taken steps to eliminate exposure to this pesticide/wood sealing preservative.

5. Describe how your school controls and manages chemicals routinely used in the school, as well as construction or cleaning activity that produces odors or dust, to minimize student and staff exposure. (100-word max) [All staff are trained annually in Hazard Communications PEOSH-NJ using the Global Compliance Network Training Module \(GCN\)](#). A Chemical Hygiene Plan, Chemical Storage Plan and Chemical Storage Guidelines are provided for all staff. All stock areas are maintained on a quarterly basis. A District chemical hygiene officer ensures that all MSDS fact sheets provided by the District Environmental LLC are uploaded to the school shared directory and that a hard copy is accessible. Cleaning is done after staff and students have left the building. Emergencies areas are secured and maximum ventilation is employed. Contracted services are performed while the school is unoccupied. Contractors must use health & safety practices which includes proper ventilation to minimize odors and dust.

6. Describe actions your school takes to prevent exposure to asthma triggers in and around the school. (100-word max) Highland uses the high density MERV 8 filters on all HVAC equipment that eliminates 90% of all mold and pollen spores. Highland's Robotics & Cad Lab shops are equipped with a cyclone dust collection system and electronic air cleaners. We also use green cleaning and disinfecting products. We eliminated 100% of our wax and floor stripping agents by diamond cutting our terrazzo floors and using the EcoFlex REV Technology Auto-Scrubbing Machine on Highland's VCT floors. In addition, Highland purchased Hepa filtered back pack vacuum cleaners to replace our conventional floor models.

Is your school signed up to receive air quality alerts through [Enviroflash](#) which issues notifications of days when poor air quality is forecasted to occur? [Learn more](#) Yes No ___

Has your school developed a plan for implementation to modify activities to protect the health of students and teachers when poor air quality is forecasted? Yes No ___ [Some precautions that are taken include moving physical education classes and sports practices to indoor facilities, or limiting the amount of time students spend outdoors.](#)

Have you provided [brochures](#) to students, teachers and parents to educate them about air quality and steps they can take to protect their health and decrease their contribution to ozone pollution? Yes No ___

9. Describe actions your school takes to control moisture from leaks, condensation, and excess humidity and promptly cleanup any visible mold or remove moldy materials when found. (100-word max) [Highland maintenance department completes a moisture](#)

control log quarterly which identifies any and all trouble areas if they exist. Routine inspections of the roof, roof drains, and downspouts are performed to try and minimize damage, leaks and mold in the interior of the building. If a problem surfaces, the area is contained, the proper safety equipment is issued to maintenance/custodial personnel, and action is taken to remove any contamination and safely dispose of it.

10. Our school has installed local exhaust systems for major airborne contaminant sources. Yes No Describe (max 100 words) In 2015, Highland completed an HVAC renovation to the 2nd floor of the building. All existing sub-standard unit ventilators were replaced with a new HVAC RTU system made up of 100% fresh air with economizer. All our chemical labs are equipped with the proper chemical ventilation hoods. Highland is in the process of installing a new exhaust and a fresh-air makeup system in the gymnasium locker rooms.

11. 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) Highland now employs an EPA certified HVAC technicians along with a NJ licensed HVACR Master Mechanic. All equipment is maintained to manufacturer's specifications. HVAC log books are kept with the intention of tracking all filter changes, belts, motor repairs, damper positions, lubrications and refrigerant reclaiming when necessary. We also incorporate the SchoolDude PM Direct system to schedule all preventive maintenance on all HVAC equipment.

12. Describe actions your school takes to ensure that all classrooms and other spaces are adequately ventilated with filtered outside air, consistent with state or local codes, or national ventilation guidelines. (100-word max) Highland uses a strict HVAC preventative maintenance schedule. This in conjunction with the indoor air quality testing that we perform of the CO2 levels, relative humidity and temperature, which allows us to make any seasonal adjustments that may be necessary to the fresh air dampers. Our testing results are guided by NJ Peosh, ASHRE, and national standards; they are compiled by the school's required PEOSH IAQ designee. The school also has a partial building automation system (BAS) that allows us to monitor damper position percentages.

12. Indicate (X) steps your school has taken to protect indoor environmental quality:

- Implementing [US 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.
- Participating in the Pediatric/Adult Coalition of NJ's Asthmas Friendly Awareness Program
- Other (max 100 words) The Maintenance Department implements and fills out a NJSIG Quarterly Moisture Control Report, which include a walk-through of the entire interior & exterior of the facility. In addition, Highland now performs an annual indoor air quality sample testing that is performed by our Environmental LLC with results posted on our district website.

13. Indicate (X) if your school's green procurement practices pertain to the following: ([Buy Recycled](#) / [Buy Green](#))

- | | | |
|---|---|--|
| <input type="checkbox"/> <input checked="" type="checkbox"/> Construction | <input type="checkbox"/> <input type="checkbox"/> Fleets | <input type="checkbox"/> <input checked="" type="checkbox"/> Office Supplies |
| <input type="checkbox"/> <input checked="" type="checkbox"/> Carpets | <input type="checkbox"/> <input checked="" type="checkbox"/> Food Services | <input type="checkbox"/> <input checked="" type="checkbox"/> Paper |
| <input type="checkbox"/> <input checked="" type="checkbox"/> Cleaning | <input type="checkbox"/> <input checked="" type="checkbox"/> Landscaping | <input type="checkbox"/> <input type="checkbox"/> Other (50 word max) |
| <input type="checkbox"/> <input checked="" type="checkbox"/> Electronics | <input type="checkbox"/> <input checked="" type="checkbox"/> Meetings & Conferences | |

14. What system do you use to determine if the above products and services are considered sustainable? (ex. DOE Purchasing for Energy Efficient Products, CHPS High Performance Database, Electronic Product Environmental Assessment Tool (EPEAT) [EPA.gov](#) registered green products or products containing at least 80% post-consumer recycled materials, such as CRI Green label plus carpet cleaners, NSF public safety & health organization, Organic herbicides & pesticides when possible, NJSIG safety committee meetings, Energy Star.gov, EPEAT and PEFC.org

Element 2B: Nutrition and Fitness

Food and Nutrition, Fitness and Outdoor time

15. 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 Healthier Us School Challenge. Level and year: _____
- ___ Our school participates in a Farm to School program to use local, fresh food. _____
- ___ Our school has an on-site food garden that teaches nutrition and environmental education, describe. _____
- ___ Our school garden supplies food for our students in the cafeteria, a cooking or garden class or to the community.
- X Our students spent at least 120 minutes per week over the past year in school supervised physical education. All students receive physical education a minimum of 3 times (classes) a week for 55 minutes per class.
- X At least 50% of our students' annual physical education takes place outdoors. All students participate in physical education classes outdoors throughout the year, weather-permitting.
- X Our school participates in the NJ Safe Routes to School Resource Center. Level and year: Several students are walkers or car riders. The maintenance staff is responsible for keeping sidewalks and driveways free and clear of debris and snow. They also repair sidewalks and pathways that surround school property so students can walk safely to and from school.
- ___ Our school participates in International Walk to School Day in October or National Bike to School Day in May. Year(s):.
- X Our school has a School Wellness Policy that addresses both nutrition AND physical activity. The Wellness Program has been in place for the past three years. There is a Wellness Coordinator for the District and building leaders who organize workout sessions and promote healthy living tips through monthly communication. Comprehensive biometric screening and health risk assessments are provided. Participants are able to access the Tavi Health Challenge Portal to log their individual and team challenges. They also run the Biggest Loser contest and healthy eating preparation workshops to assist staff in setting healthy goals. Mindfulness sessions are offered to faculty and staff throughout the year as well.
- X Our school has a School Wellness Committee that meets at least once a year. The Wellness committee meets on a monthly basis.
- X Health measures are integrated into assessments. Students participate in Fitnessgram assessments which measure muscular strength/endurance, cardiovascular endurance, body composition and flexibility. Students also learn to take and track their target heart rate. All information is used so that students can set personal goals as well identifying focus areas for the department.
- X At least 50% of our students have participated in the EPA's Sunwise, or equivalent program. The School nurse posts information regarding sun safety. This includes wearing sunscreen, sunglasses, staying hydrated and wearing protective clothing. She educates students on how to identify a heat-related emergency, such as heat stroke or heat exhaustion. This content is also covered in the First Aid and Safety course taught in Health class.
- X Some food purchased by our school food service is locally sourced from regional farms. Highland is part of a special program called DOD Direct Delivery Produce. This program uses local farms to obtain some of their produce. Our dairy comes from Cream-O-Land, a local company.

16. Is school lunch waste composted on-site? Yes X No ___ Percent 1% How is it used in your outdoor classroom? The majority of our compost is collected by Organic Diversion. The Horticulture collects some of the lunch waste which they compost for use in growing their plants.

17. What environmental technologies are used with curriculum? (weather station, energy monitoring system, GIS, web cam, etc) Related to energy monitoring, we use Energy Star Portfolio and Energy Solve.

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

Students participate in outdoor education during their Physical Education classes. These activities include, but are not limited to, walking, jogging and running to increase and maintain cardiovascular endurance. Students also participate in a variety of team and individual sports as well as fitness-based activities: flag football, softball, soccer, tennis, Frisbee and cooperative games. Students involved in athletics and marching band utilize the outdoor facilities for regular practice, games and competitions. In science, the courtyard and greenhouse are used to conduct classes. There are also seating areas outside for students to use during “Tartan Time” to eat, work, or socialize.

Coordinated School Health, Mental Health, School Climate, and Safety

19. Does your school use a Coordinated School Health approach or other health-related initiatives to address overall school health issues? Yes No If yes, describe the health-related initiatives or approaches used by the school:
- Hand washing: Hand washing signs are posted in all staff and student restrooms throughout the building. These signs stress the importance of handwashing and provide instructions on the proper way to wash hands.
 - “Cover your cough” signage: “Cover your cough” posters are displayed in prominent locations throughout the building.
 - Hypo/hyperglycemia signage: Posters are displayed in four locations in the building to assist in identifying signs and symptoms of hypo/hyperglycemia.
 - Emergency exit procedures are located in every room in the building.
 - AED signs are directional signs specifying the location of the AEDs.
 - Code Annie: All staff is trained annually in “Code Annie” cardiac emergency procedures. Signs are located in every classroom detailing the procedure.
 - Anti-bullying awareness posters are displayed in classrooms and hallways throughout the building. Question 23 elaborates on the programming information that coincides with this information.
 - Several actions are taken to assist students of low socioeconomic status throughout the year. Clothing, food, and gift drives are ongoing and provide necessities for students and their families. The staff also participates in “Dress for a Cause”; 10% of the proceeds go directly to the students of the school, and the remainder is given to the chosen causes.
 - Local resources are listed regarding immunizations and local clinics.
20. Does your school partner with any postsecondary institutions, businesses, nonprofit organizations, or community groups to support student health, school garden education and/or safety? Yes No If yes, describe these partnerships:
- School Nurses office partnership with Thomas Jefferson University. Student Nurses come in and identify a Health or Wellness educational need and address that need within the school community. Some examples include classroom presentations, informational bulletin boards, and pamphlets.
 - American Red Cross: We offer a certification course for First Aid in CPR for students.
 - Code Annie Team
 - Annual Health screenings prescribed by the State of New Jersey.
 - Sports physicals are conducted by the school physician biannually.
 - Gloucester Township police presentations on driver safety, sexting, and dating violence.
 - Yoga for Living provides training for students on the topic of mindfulness and mediation.
21. Does your school have a school nurse and/or a school-based health center? Yes No
22. Describe your school’s efforts to support student mental health and school climate (e.g. anti-bullying programs, peer counseling, etc.):
- Challenge Day: “Be The Change” Program: The mission is to provide youth and their communities with experiential programs that demonstrate the possibility of love and connection through the celebration of diversity, truth and full expression.

- The Student Assistance Coordinator (SAC) facilitates individual and group counseling (groups: 2 Anxiety and Depression, 2 Family Group, Gay Group, Grief Group, 2 COSA (Children of Substance Abusers) group, and 1 Teen Mom group.)
- The HIB coordinator follows laws to prevent, investigate, and respond to bullying. District policies are posted on the website.
- Student to Student Mentor Program: This group consists of upperclassmen who mentor current freshman students.
- Transition Project: This is an outreach program to 9th grade students to assist with the transition into high school. Students discuss organizational skills, study skills, and peer relationships.
- Monthly Spotlight: Students and staff are honored for showing care and consideration to promote a positive school climate.
- Teen Pep: This is a peer leadership group who outreach to 9th and 10th grade students to discuss current topics on student sexuality. This promotes good decision-making skills.
- Counselors, SAC, and CST communicate with outside agencies to provide mental health support, specifically helping families to connect with the appropriate mental health agencies.
- STOP program (Center for Family Guidance): This is an early-intervention substance abuse program comprised of a 6-week session offered 4 times a year.
- Mental health and substance abuse resources are available throughout the school and website.
- Gloucester and Camden County municipal alliances provide funds that are used for an assembly during the Week of Respect and presenters who discuss topics pertinent to enhancing a positive school climate and combatting bullying.
- Freshmen Seminar students participate in activities on stress reduction and de-escalation of anger.
- All grade 9 students have participated in an introductory workshop for Mindfulness and mediation. There is continued training on the B.R.E.A.T.H.E. program as well.
- Mindfulness Monday: This practice is comprised of time set aside in the day to stop and breathe.
- Gathering Space: This location offers a lunch-time drop- in for students who don't always have a place to eat or who do need a comfortable space during within the social environment of the lunch period.

Summary Question for Pillar 2

23. Describe any other efforts to improve coordinate health and safety, nutrition and fitness, highlighting innovative or unique practices and partnerships. (100-word max) Speakers from many organizations visit the Health and Physical Education class to supplement information in the area of public safety, organ donation, and driver safety. The Physical Education department also offers an enrichment period for physical fitness daily. This year a cardio room was added to Highland High Schools. The room consists of treadmills, elliptical trainers, and stationary bikes for both staff and students to use throughout the year. The school also has a Physical Activity Advisor that runs after school physical activities for students each week. Our district has partnered with Global Compliance Network (GCN) to provide annual mandatory professional development in Sexual Harassment, AED, Affirmative Action, Asthma, Anaphylaxis, Bullying, Blood Borne Pathogens, Fire Extinguishers, and Slips, Trips, and Falls.

PILLAR 3: EFFECTIVE ENVIRONMENTAL AND SUSTAINABILITY EDUCATION

Element 3A: Interdisciplinary learning that prepares students to navigate the key inter-relationships between dynamic physical and social systems (E/S literacy) is documented, assessed for and mapped.

1. Indicate (X) which practices your school employs to help ensure effective environmental and sustainability education. Provide examples of actions taken for each practice, highlighting innovative or unique practices and partnerships.

X School has an environmental or sustainability literacy requirement. (200-word max) All students are required to make informed decisions about their environment by participating in evidence-based discussions and investigations. Students focus on the ways in which humans disrupt ecosystems, list major sources of environmental pollution and devise methods to alleviate their effects, compare and contrast renewable and nonrenewable resources, and develop solutions to combat environmental problems. In our Freshman Read 180 course, students are required to read articles and answer questions on environmental or sustainability

topics through Achieve 3000 technology software. Example articles include, "Save the Yellow Bison" and "Happy 100 years Muir Woods." In US History II, students must complete at least one current event assignment each marking period related to environmental issues.

Recurring environmental and sustainability concepts are integrated widely throughout an interdisciplinary curriculum. (200-word max)

AP Environmental Science: Highland's students have been involved with a cross curricular project in conjunction with Gloucester Township. Students created a sustainability project for a vacant lot in Gloucester Township. In order to complete the project, students from the CAD, Math, and English classes worked with the AP Environmental students to complete a presentation for the Mayor. The mayor was so impressed by the projects that the planning board is working on using their ideas in the township.

Chemistry: Use environmental and sustainability concepts to bring chemistry to life. For example, the Bhopal disaster is used as an example of chemical use gone badly. Also, the course studies new battery technology used in electronics and hybrid cars.

Horticulture: The students learned how to propagate lemon geranium from cuttings that will be used as a natural pesticide. In the spring, the students will be working with the Green Team to grow tomatoes and herbs in the greenhouses for the school's cafeteria.

Nutrition and Culinary and Hospitality: Both courses discuss nutritional concepts, food contamination, organic vs. non organic

Digital Photography: Stress conservation by creating a digital portfolio.

Marine: The final unit of the course focuses on human impacts on the oceans and sustainable ways that we can interact with the of the ocean's resources

Student learning of environmental & sustainability concepts is evidenced by authentic assessments. (200-word max) In Science classes, students are assessed on many different aspects of environmental and sustainability concepts. Assessment takes place in the form of department benchmarks, AP Exams, laboratory reports, projects, current events, Gizmos, and Socratic Seminars. Most of the authentic assessments are graded using a rubric.

Chemistry: Students have an end of the year project based on how science impacts their lives. Topics include alternative energy sources, environmental disasters, and global warming.

Fine arts: Art and Design re-purpose old art and recycled materials for projects, and Digital Photography uses the school's natural environment to create landscapes and creative composition.

Students evidence high levels of proficiency in these assessments. (100-word max) High levels of proficiency on assessments reflect student achievement. 43% of AP Environmental students received a 3 or higher on the AP Exam. In addition, 98 % of our students taking Environmental Science, AP Environmental Science, and AP Biology received a passing grade as their final grade. The high passing rate demonstrates our students understanding of the environmental and sustainability concepts.

Professional development (PD) in environmental and sustainability education (E/S) are provided to teachers. Describe the PD in which faculty or administrators participated and how it contributed to the implementation of your E/S Goals. When was the PD held? Who attended? (200-words) The School's Green Team has given presentations to educate our staff on sustainability topics. Teachers have attended District Green Team meetings where sustainability issues are discussed. Our Foods and Consumer Science teachers and our Food Service team have participated in seminars on composting. All staff received Global Compliance Network Training specific to the areas of Fire Extinguishers and Hazard communications PEOSH.

Environmental/Sustainability Education is offered in after-hour school programs (200 words)

Element 3B: Use of (E/S) to prepare students for career pathways and to develop STEM/STEAM content, knowledge, and thinking skills.

2. How does your school use sustainability and the environment as a context for learning science, technology, engineering [art] and mathematics (STEM/STEAM), thinking skills and content knowledge? (200-word max) Our STEAM Academy, which focuses students on a career path related to STEAM, includes courses that teach sustainability or encourages green thinking. For example, students can take AP Environmental or AP Biology that include sustainability in the curriculum, or courses like AP Art or Computer Graphics

which utilize electronic portfolios. Capstone projects completed by seniors in the STEAM Academy can include research on sustainability issues. Chemistry labs have been converted to microscale to align with green practices. We have two working green houses where our horticulture classes implement green practices as part of their curriculum. The Science Department offers AP Environmental Science, Environmental Science, Horticulture, and Ecology, all of which emphasize sustainability in the curriculums. AP Biology and Biology both devote about 10% of their class time to sustainability.

3. How does your school use sustainability and the environment as a context for learning green technologies and/or career pathways? Please describe student performance criteria and assessment results (200-word max) [The School Green Team](#) educates the staff and students on green technologies and how they benefit the school (Topics: Solar energy, composting, recycling). Every year, we host a career fair for juniors where careers that focus on sustainability are represented. Freshman students complete surveys on Naviance to identify career paths. Students in AP Environmental Science work with community members on a sustainability class project for developing unused land. Special Education students work with our grounds crew to maintain our flower beds and other landscaping.
4. How does your school address teaching the science of sustainability in your K-12 scope and sequence? What science standards do you target? What evidence of student learning are you assessing for and monitoring in this area? [We are a 9-12 district that has made a commitment that sustainability is an essential part of our learning and practices.](#) Sustainability concepts are introduced in the Freshman Seminar class. The Green Team introduce the freshman to composting and recycling at the school. All Biology classes contain a unit on the environment science and our course sequence includes a course in Environmental Science, AP Environmental Science, and Ecology. Standards covered are HS-LS2:1-8 and HS-ESS3: 1-6.

Percentage of last year's eligible HS graduates who completed the Environmental Science / Earth Systems (or similar environmental course) course during their high school career: [10%](#)

Element 3C: Development and application of authentic civic engagement knowledge, skills and dispositions through place based learning experiences (project-based/service) and community partnerships

5. Describe students' civic/community engagement projects integrating environment, environmental justice ([as defined by EPA](#)) and sustainability topics. (200-word max) [The main civic project that Highland focuses on is the Thirst Project.](#) In partnership with their two sister schools, Highland students raise money to build a well in areas where clean water is an issue. The project raised enough money to build a well in Swaziland which was completed this year. Highland plans on continuing the project to build more wells. [Our students also volunteer at the Gloucester County Greenhouse throughout the year.](#) This allows our students to contribute to the sustainability of the county.
6. 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) (ex. citizen science, field trips, overnight camping, retreats) [One of the dynamic events that Highland students have experienced is the Envirothon competition.](#) This is an annual two-day competition that the students prepare for throughout the school year. Guided by a teacher leader, our students pursue in-depth knowledge about New Jersey's natural resources and gain skills needed to navigate the complex environmental issues of today and tomorrow. The areas of study include soils, aquatics, forestry, and wildlife. The students must also prepare a presentation on a current topic that involves an environmental issue.
7. Describe students' outdoor learning/ place based learning experiences at every grade level. (200 word max) [The greenhouse is utilized by the horticulture class and the Green Team.](#) In addition to the greenhouse, classes use the surrounding courtyards to do environmental surveys. Our rain gardens also serve as an outdoor classroom. Classes utilized the gardens for discussions on biodiversity and the use of natural design for structural issues.
8. Describe how your partnerships help your school and other schools integrate the 3 Pillars into the curriculum, student learning and school culture. Include both the scope and impact of these partnerships. In what ways is your school sharing & promoting

(outside of school) its efforts to uphold all 3 Pillars? (Maximum 200-words) (Ex. student exchange forum, sister school program, global project based learning program, state-wide professional learning communities) We participate with EnerNOC, which is a company that informs us when there is an energy issue in the community, upon which we shut down our building to reduce the chance of a black out in the community. In our partnership with Gloucester Township Housing Authority, we are now introducing and implementing the use of green cleaning methods, supplies and equipment. The 3 schools in the district support each other in the Green effort. Since Timber Creek does not have a greenhouse, Highland was able to begin growing the plants needed for the organic garden. Dr. Brian Repici, Superintendent, has presented at the School Boards Convention for Green Ribbon Schools. Mrs. Gramble, District Supervisor of Science and District Green Team Coordinator, presented to the Bellmawr Board of Education to help them in their pursuit for certification from Sustainable Jersey for Schools. The school's Green Team is a prominent force in the school. Every month there is a segment of the Spotlight newsletter that is dedicated to Green Team efforts. The Team has created commercials and maintains a bulletin board to inform the school of ways to increase our sustainability.

Summary Questions for Pillar 3

9. Describe any other ways that your school integrates all three pillars into curricula, student learning and school culture to provide effective environmental and sustainability education. Highlight innovative or unique practices and partnerships. (Maximum 200-words) With the creation of the Green Team and the efforts they put forth, we have been able to have a cultural change within the building. Students and staff understand the importance of being Green and the benefits it has for them and the school. As a result, Highland Regional High School has joined their sister schools, Timber Creek and Triton, in being a community-wide leader for reducing energy usage and cost; for increasing recycling and composting collection amounts; and for integrating curricula that educates students about the importance of caring for our environment.
10. How are your descriptions in number 8 supported or enhanced by your efforts in Pillar 1 to reduce environmental impact and costs for your school. (Maximum 100-words) The focus of Highland and the district is to reduce our carbon footprint and increase our sustainability. Many of our practices has reduced our cost; for example, our new broilers and the installation of 640 LED lights. We are most proud that we have created a culture where Green practices in the norm. We have established ourselves as a leader in sustainability and have had the opportunity to share our practices with other districts.