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

☒ Public ☐ Charter ☐ Title I ☐ Magnet ☐ Private ☐ Independent ☐ Rural

Name of Principal: **Mrs. Sharon Moffat**
(Specify: Ms., Miss, Mrs., Dr., Mr., etc.) (As it should appear in the official records)

Official School Name: **Readington Middle School**

Official School Name Mailing Address: **P.O. Box 700, 48 Readington Road, Whitehouse Station, NJ 08889**
(If address is P.O. Box, also include street address.)

County: **Hunterdon** State: New Jersey School Code Number *: **19-4350-050**

Telephone: **908-534-2113 Fax: 908-534-6802**

Web site/URL: www.readington.k12.nj.us E-mail: smoffat@readington.k12.nj.us

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

Mrs. Moffat

Date: **1/24/2020**

(Principal's Signature)

Name of Superintendent: **Dr. Jonathan Hart**
District Name: **Readington Township School District**

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

Date: **1/24/2020**

(Superintendent's Signature)

Nominating Authority's Certifications

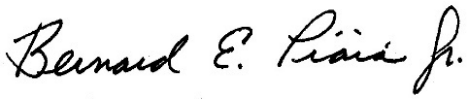
The signature by the Nominating Authority on this page certifies that each of the statements below concerning the school's eligibility and compliance with the following requirements is true and correct to the best of the Authority's knowledge.

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.**

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



Date: **February 13, 2020**

(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

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.

U.S. DEPARTMENT OF EDUCATION
GreenRibbonSchools

New Jersey 2019-2020 Green Ribbon Schools Application

School Contact Information

School Name: Readington Middle School District Readington Township Public Schools

Street Address: 48 Readington Road

City: Whitehouse Station State: NJ Zip: 08889

Website: www.readington.k12.nj.us Facebook page: www.facebook.com/readingtonschools/

Principal Name: Sharon Moffat

Principal Email Address: smoffat@readington.k12.nj.us Phone Number: 908-534-2113

Lead Applicant Name (if different): Betsy Freeman

Lead Applicant Email: bfreeman@readington.k12.nj.us Phone Number: 908-534-2113 x3419

<table>
<tr>
<td>Level
[ ] Early Learning Center
[ ] Elementary (PK - 5 or 6)
[ ] K - 8
[X] Middle (6 - 8 or 9)
[ ] High (9 or 10 - 12)</td>
<td>School Type
(X) Public
( ) Private/Independent
( ) Charter</td>
<td>How would you describe your school?
( ) Urban
(x) Suburban
( ) Rural</td>
<td>District Name
__Readington_____
( ) Largest 50 Districts in the nation?
Total Enrolled:
_____541_____
2018-19 school year</td>
</tr>
<tr>
<td>Does your school serve 40% or more students from disadvantaged households?
( ) Yes (X) No</td>
<td colspan="2">% receiving FRPL___6.0%_____
% limited English proficient___1.1%_____
Other measures_____</td>
<td>Graduation rate:__N/A____
Attendance rate: _____</td>
</tr>
</table>

Readington Middle School, Whitehouse Station, NJ
Happy people, healthy environment, and inspired learning and action for all!

Readington Middle School (RMS) serves over 500 sixth, seventh, and eighth graders in central New Jersey. Located in the Garden State midway between New York, Philadelphia, Delaware Water Gap National Park, and Atlantic Ocean, understanding how to balance the needs of people, planet, profit is ingrained in the everyday lives of the RMS community. It begins with - and is lived and led by - students and staff alike.

The school's physical space – its building, solar installation, and native- rain- and courtyard gardens – provide tangible context for student learning. Teachers to facility staff to engineers, master gardeners, and local environmentalists work side-by-side with students to examine and understand energy usage patterns, the rise of invasive species, and rain gardens as a solution to

keep our watershed clean. Students rehabilitate a neglected native garden to examine changes that have occurred over the past decade. They developed a grant application and were awarded funds to create test beds to investigate resource use, carbon footprint, and crop yield of traditional farming vs. indoor food growth in our vertical hydroponic gardens. Students are also designing a regenerative aquaponic food system for the school, and are creating smart solar-powered rain barrel irrigation that senses when watering is needed, based on real-time environmental conditions, to conserve water and optimize food growth.

Though RMS was built more than 60 years ago, the evolution of the physical space and surrounding natural environment is visible representation of the value RMS places on green technologies and natural features that enhance well-being and environmental and economic health. Nearly 30% of the school's energy is obtained from rooftop solar panels and ground arrays. Energy usage and savings data is displayed outside of the cafeteria and the 1:1 Chromebook initiative allows students and staff to download data and share and submit work electronically too, drastically reducing the need for printing and copying. Water fountains have been replaced with water bottle refilling stations. Reusable bottles are actively promoted; recycling is expected. RMS encourages and supports all to become active stewards of their environment.

The district Green Committee is actively led by a board member/environmental engineer. The Superintendent initiated and supports infusion of social and emotional learning to help cultivate a caring, participatory, and equitable environment. Curriculum supervisors align courses with Education for Sustainability standards and bolster non-fiction reading. The business administrator, facilities manager, and energy efficiency coordinator all keep an eye to our triple bottom line. The Principal spearheads an annual Student Academy Day, where staff and community members join to host a day of health and well-being workshops including archery, CrossFit, tai chi, nature walks, and more. The school health office and food services staff support a coordinated health and nutrition program where recommendations for healthier living have resulted in a salad bar, new menu items, and health education outreach to the school community, working in tandem with counselors and staff for a focus on mindfulness and restorative practices.

An advantage of middle school education is the opportunity for collaboration across the student body with teachers who are experts in their domains and students vested in creating their own futures. Each grade level embodies a unique theme: grade 6 "Dare to Dream," grade 7 "Believe You Can," and grade 8 "Achieve It." RMS 7th grade teachers organize an annual "Walk in the Woods" where students and staff hike with community leaders, engaging all senses to identify flora, fauna, geological formations, and human impact in their own woods and watershed.

Innovation and sustainability serve as integrating contexts for enrichment where the UN Global Goals for Sustainable Development serve as the students' "sandbox." Students across grade levels work to develop innovative ways to reduce waste, support responsible consumption and production, promote good health and well-being, and build internal and external school partnerships to make it happen. These students used this Green Ribbon School application as a benchmarking tool to understand where RMS excels, where RMS has opportunities to grow, and most importantly what students could do to help. Most recently the students conducted a waste audit, beginning in the cafeteria and reported results and proposed actions to the RMS Green Committee. Their suggestions included a student lunch survey, share table, food bank partners, food composting, unbundled menu choices, enhanced data collection, and more.

Happy people, healthy environment, and inspired learning and action for all! At RMS, vision and accountability for a sustainable future are truly a community effort.

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) Energy Portfolio Manager 2012 to present, EcoSchools USA Silver 2015 to present, Sustainable Jersey for Schools bronze certified 2015 to present.

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

Yes_**X**__No____ Award(s) and year(s) Energy Star certified building 2016, Eco Schools Silver Award 2015, Sustainable Jersey for Schools bronze certified 2015 to present. Pennsylvania Horticultural Society, Garden of Distinction 2019, 2018, 2017. Student awards: Commendation from Agriculture Secretary Sonny Perdue for student "Ace the Waste" food waste solution 2019, Smithsonian SparkLab Global Invent-It Challenge: First Place Team Award and ePals Favorite for FIG: Fresh Food from Indoor Gardens, Growing Food and Resilience for Seniors, and Honorable Mention for Nutracise: Nutrition + Exercise for Seniors (cardio exercise/nutritious shake maker using ugly fruit and vegetables) 2019. World of 7 Billion Commendation for student video: Plastic Problem Plaguing our Planet 2019. NJ Future City 4th place for Sustainable City of the Future, 2019. Sustainable Jersey for Schools $2,000 Grant Award for "Food for Thought" Investigating Sustainable Farming and Food Security in the Garden State 2019. BASF STEM Education $5,000 Grant Award for "Feeding our Future," Investigating Regenerative Food Systems through Aquaponics 2019. Smithsonian SparkLab Global Invent-It Challenge: First Place Team Award and ePals Favorite for Catastrophe Care Kit for Kids (eco-friendly friendly care by kids), and Honorable Mention for Growganics (biodegradable seeded wrappers to reduce waste, prevent erosion, beautify our world), and Honorable Mention for Pet Palace (temporary sustainable shelter for rescued animals following natural disaster), 2018. NJSBA Association STEAMTank 3rd place in state Catastrophe Care Kit for Kids 2018.

3. Has your school identified or created a place for teachers to go to share lessons on Sustainability?

   Yes_X__No____If yes, where?_ Through our district-wide Teacher Academy sessions, teachers learn about and collaborate on integrating sustainability into their own practices and instruction. Though our school-wide enrichment program, we also use the USGBC Learning Lab platform. Within the school, we also share lessons on sustainability through our shared Google drive. Our Science Curriculum Map also indexes units to Cloud Institute Education for Sustainability Standards.

4. Has your School Board adopted a Green Strategic Plan or sustainability policy? Yes_X_ No____Describe-Max 50 words Board priorities: protecting students, staff, community from environmental harm; educating for sustainability, preserving current/future resources. Sustainable practices improve student health, academic performance, teacher retention, decrease operational costs, demands on natural resources. District Policies: Sustainability 7461, Energy Conservation 7460, Idle Free School Zones 7471, and Green and Healthy School Cleaning 7423.

5. Has your school created a Green Team? Yes_X_ No____If yes, list team members and their roles.
   Principal; Team Leaders in Grades 6, 7, 8; Nurse; Enrichment Teacher; Guidance Counselor; Cafeteria Manager; Custodian; Global Goal Green Team Student Representative. This stakeholder group provides for diverse perspectives, collaboration, and inclusive green practices.

6. Has your school seen a cost savings from green initiatives? Yes_X__No____If yes, input **cost savings** data into table:

Electricity Year	Electric Energy Consumption (kwh)	Electric Utility Costs ($)	Natural Gas Year	Natural Gas Consumption (therms)	Natural Gas Utility Costs ($)	Total Utility Costs ($)	Annual Savings ($)	% Reduction from Baseline Year
*9/11-8/12	1,407,873	184,755	*12/11-11/12	47,481	43,238	227,993	Baseline	Baseline
9/12-8/13	1,227,274	144,652	12/12-11/13	51,317	45,924	190,576	37,417	16%
9/13-8/14	1,188,363	149,386	12/13-11/14	55,549	51,060	200,446	27,547	12%
9/14-8/15	1,170,553	144,997	12/14-11/15	51,395	43,510	188,507	39,486	17%
9/15-8/16	1,156,612	143,190	12/15-11/16	42,841	31,841	175,031	52,962	23%

9/16-8/17	1,083,695	144,009	12/16-11/17	46,918	42,361	186,370	41,623	18%
9/17-8/18	1,284,458**	150,749	12/17-11/18	52,816	43,176	193,925	34,068	15%
9/18-9/19	1,243,111	132,938	12/18-11/19	44,921	43,196	176,134	51,859	23%

*Our Energy Efficiency Program began in 2012 and established baseline years for Readington Middle School. Baseline criteria was determined using a minimum of estimated bills and a year with minimal interruption in service. We continue to evaluate our energy saving progress against those baseline years, so they have been used here as well.
**Newly installed solar panels began production in Feb 2018 but solar credit from utility did not begin until Aug 2018 resulting in artificially inflated electricity consumption based on utility bills for those 6 months.

	Electric Energy Consumption (kwh)	Natural Gas Consumption (therms)	Fuel Oil (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
2011-12	1,407,873	47,481	0	2,139,967	555,528	0	927	2.91	Baseline
2012-13	1,227,274	51,317	0	1,865,456	600,409	0	817	3.02	-4%
2013-14	1,188,363	55,549	0	1,806,312	649,923	0	817	3.01	0%
2014-15	1,170,553	51,395	0	1,779,241	601,322	0	798	2.98	1%
2015-16	1,156,612	42,841	0	1,758,050	501,240	0	739	3.06	-2%
2016-17	1,083,695	46,918	0	1,647,216	548,941	0	698	3.15	-3%
2017-18	1,270,787**	52,816	0	1,931,596	617,947	0	662	3.85	-22%
2018-19	1,102,072	44,921	0	1,675,149	525,576	0	636	3.46	10%

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_X___or No____Evidence in table below.* Data obtained from_utility bills_(Portfolio Manager, district utility bills, etc.), as reported by _Jodi Bettermann, district Energy Efficiency Coordinator_ (Vendor or School/ District Personnel).

*Used same baseline year as outlined above in question 6.
**Newly installed solar panels began production in Feb 2018 but solar credit from utility did not begin until Aug 2018 resulting in artificially inflated electricity consumption based on utility bills for those 6 months.

8. Has your school conducted an energy audit of its facilities? (e.g. LGEA, Eco-Schools Energy Audit) Yes_X___No____
Percent reduction:_9_% Unit used (kBTU/sq ft or kBTU/student): kBTU/sq ft _Time period: from_1/17_to_12/17_

Compared to audit 1/10 – 12/10.

9. What is your EPA ENERGY STAR SCORE: _52___YEAR:___9/2019_____Has your school received or met the requirements for EPA ENERGY STAR certification (score of 75 or above) Yes____No_X___

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

__27%_Type_solar_Purchased renewable energy: _24%_Type_RPS through ACES electricity contract_

Participation in USDA Fuel for Schools, DOE Wind for Schools or other federal or state school energy programs: (Ex. ACES) Yes__X___No_____If yes, what programs? _ACES Plus___

11. Has your school reduced its total non-transportation energy use from an initial baseline? Yes_X___No___
How did you document this reduction?_EnergyManager software and EnergyStar Portfolio Manager_____

	Electric Energy Consumption (kwh) 1kwh=3.412 kBtu	Natural Gas Consumption (therms) 1therm=100kBtu	Fuel Oil Consump-tion (gallons) 1 gal. = 139 kBtu	Total kBtu	kBTU/sq.ft.	% Reduction From Baseline
2011-12	1,407,873	47,481	0	9,551,763	78.59	Baseline
2012-13	1,227,274	51,317	0	9,319,159	76.68	2%
2013-14	1,118,363	55,549	0	9,609,509	79.07	-1%
2014-15	1,170,553	51,395	0	9,133,427	75.15	4%
2015-16	1,156,612	42,841	0	8,230,460	67.72	14%
2016-17	1,083,695	46,918	0	8,389,367	69.03	12%
2017-18	1,284,458**	52,816	0	9,664,171	79.52	-1%
2018-19	1,243,111	44,921	0	8,733,595	71.86	9%

*Used same baseline year as outlined above in question 6.
**Newly installed solar panels began production in Feb 2018 but solar credit from utility did not begin until Aug 2018 resulting in artificially inflated electricity consumption based on utility bills for those 6 months.

12. What year was school originally constructed? 1960 Total building area (sq.ft) 121,536

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

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 _X___ During the 2016-17 school year, new water quality testing regulations for lead for the school's two onsite wells resulted in increased flushing of the water supply system. In Feb. 2017, modifications were made to the system to better control pH which also resulted in increased flushing while the system came online. In the summer of 2017, new water bottle filling stations were installed which have contributed to increased usage because they are well used where the previous bubblers were not. Additionally, outside usage of our facility has increased during this time. Because our usage patterns have changed greatly, it is probably appropriate for us to establish a new baseline beginning in 2018-19.

	Water Consumption (gallons)	Total Occupants	Gallons Per Occupant	% Reduction from FY 2015
FY15-16	1,017,433	1809	562	Baseline
FY16-17	1,294,867	3090	419	25%
FY17-18	1,191,033	3157	377	33%

FY18-19	1,054,057	3956	266	53%

Do you include after-hour activities in your calculations? Yes__X_ How was reduction documented? EnergyManager software and regular meter readings by staff- The school is used extensively by outside groups including, Readington Township Recreation programs, Girl and Boy Scouts, YMCA care programs, and the Readington Tewskbury Junior Baseball League. The school also hosts two large weekend basketball tournaments each year. Even though our student enrollment is decreasing, usage by people outside our normal student and staff occupancy is increasing each year based on data taken from Facility Usage Forms.

15. Describe any strategies you use to discourage single-use beverage containers on school property and 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) Conventional water fountains have been replaced by water bottle filling stations, and students and staff are encouraged to use reusable water containers. Blue recycling bins are located throughout the building, at all extracurricular events, and are prominently located to maximize recycling.

16. What percentage of your landscaping is considered water-efficient and/or regionally appropriate? 100%
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) Plantings of purple cornflower, common milkweed, goldenrod, and black-eyed susans as well as native grasses were planted into a rain garden that collects and uses stormwater run-off from parking lots, and rooftop drainage for irrigation. All plantings onsite are native, naturalized, or regionally appropriate.

17. How have you incorporated native plants into your landscaping? (50-words max) Native plants have been incorporated into a rain garden, protected from being disturbed. Students are currently working with Rutgers Master Gardeners and Raritan Headwaters to rehabilitate an onsite Native Garden, established in 2007, that had been neglected for many years. This Native Garden serves as a Living Lab for students.

18. Describe alternate Non-potable water sources used for irrigation (e.g. roof or parking lot run-off). (50-words max) We do not use irrigation. We use roof run-off. Students are currently building a rain barrel with soil moisture sensors and solar powered irrigation to collect rainwater and irrigate a garden only when needed.

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) Stormwater run-off from parking areas and roof drainage is collected in a retention basin on school property. The collected water is released slowly to reduce stress on drainage systems and is also used by native vegetation and trees.

20a. Our school's drinking water comes from: ( ) Municipal water source (X) 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_X_ No____
If well on school property, drinking water meets all applicable standards? Yes_X___No_____
Have all drinking water violations been corrected, if applicable? Yes_X_ No____
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:26-1.2 (http://www.state.nj.us/education/code/current/title6a/chap26.pdf)

21. Describe how your school's water supply is protected from contamination. (Ex. Backflow preventers) (50-words max) Backflow preventers are installed on boilers and hot water systems preventing contaminants from reentering the domestic water system used for drinking and food preparation.

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 (http://www.nj.gov/dep/watersupply/dwc-lead-public.html) (50-words max) Drinking and food prep water supplies are routinely tested for lead and copper contamination. Periodic pipe flushing is completed after extended non-use of the building. Repairs to plumbing systems are completed using non-lead certified

products. Filters are installed to reduce lead contamination if needed.

23. Describe how your school's site grading, irrigation system and schedule is appropriate for your climate, soil conditions, and plant materials for water conservation and/or improved storm water management. (50-word max) School building does not use irrigation systems. Plantings were purposefully selected to be native and self-sustaining.

24. What percentage of school grounds are green space? (ex. Green roof, rain gardens, native plants, solar panels, fish farms, raised beds, living walls, wetlands/marsh, forest, grassland, etc.) 10% and list items (50 word max). Courtyard flower/vegetable garden managed by student Garden Club; rehabilitation of native garden underway by student Global Goals Team for use as living lab; retention pond redesigned as rain garden in partnership with Township Environmental Commission for green infrastructure education. Solar panels on roof; solar ground arrays on adjacent field.

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

25a. 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): 128 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): 56 cubic yards

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): 0

Recycling Rate = ((B + C) ÷ (A + B + C) x 100): 30%

Monthly waste generated per person = (A/number of students and staff): 0.09 cubic yards

25b. Is school lunch waste composted on-site? Yes____No X Percent____
Note: Student Global Goals Green Team conducted a food waste audit this fall and in January 2020, they will be presenting their findings and proposed solutions to the District Green Committee. Proposed food recovery/waste reduction solutions include: share table, food pantry donation, composting, and modified food packaging.

25c. Do you have a zero-waste goal? Yes____No **X** Describe (50 words max) This topic is under discussion with our District Green Committee for future implementation

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? The paper we purchase for our school is SFI Certified.

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) Our 1:1 chromebook initiative allows assignments to be shared and work submitted electronically, drastically reducing printing/copying. Printing is limited and actively discouraged. Whiteboards, smartboards, chromebooks, and iPads have drastically reduced the need for paper copies. We are moving to centralized printing which reduces the need for classroom printers**.**

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

Flammable liquids	Corrosive liquids	Toxics	Mercury Fluorescent Light Bulbs	Other:

How is this calculated? Fluorescent bulbs containing mercury are collected and inventoried as replaced. How is hazardous waste disposal tracked? Chain of custody documents are created by a recycling company which track hazardous materials from collection to disposal. Documents are provided to the district kept in the district central file.

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) Recycling bins present in every classroom. Recycling is expected, actively promoted and reinforced. Cafeteria has reusable lunch trays. Reusable water bottles are actively promoted. Our student Global Goals Team conducted a food waste audit this fall. In January, they will present their findings to District Green Committee. Proposed waste reduction solutions: share table, food donation, composting, and modified food bundling, and packaging During locker clean-outs, notebooks and markers are recycled or donated. All ink cartridges are recycled via manufacturer's return/recycle program. Grasses, leaves, and branches are composted for use in garden.

30b. Describe how electronics are handled at the end of their useful life. (TV, computers, toner, etc.) (50 word max) Total pounds of electronics discarded as hazardous waste? __0_ Total weight of material reused?____Not weighted____ Was any donated? Y_X___N____(E-CYCLE: www.nj.gov/dep/dshw/ewaste/index.html EPEAT: www.epeat.net/) As computers from upper grades are replaced due to age, many are re-imaged and re-purposed for the younger grades to increase availability of technology for all students. Electronics that have reached the end of useful life for our district are put out to bid. The winning bidder removes all items from an on-site trailer and obtains ownership for reuse, parts, or upcycling.

31. Which green cleaning custodial standard is used? Green Seal Standards What percentage of products are certified? 85%
What third party certified green cleaning product standard does your school use? Green Seal, DFE (Defined for the environment).-Describe the measures your school has taken to use only green cleaning products: District policies have been adopted to increase procurement and use of green cleaning products. Peroxide-based cleaners have replaced more hazardous chemicals previously used by custodians for daily cleaning. Cleaning chemicals, deodorizers, and other cleaning products potentially brought in by staff, parents, etc. are prohibited inside the building.

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:

X School has a Generator ID number, unless exempted; Generator # 0088770

X_School manages the regulated medical waste on-site properly? (Use the proper containers, properly segregate the regulated medical waste, and properly store the containers) Disposable, red medical waste containers.

X_School uses a licensed and registered regulated medical waste transporter, unless exempted?

X_School ships the regulated medical waste to a facility authorized to accept regulated medical waste?

X School completes the proper paperwork to document the shipment and maintain records for 3 years?

X School files the generator annual report, unless exempted?

The district is a category 1 licensed medical waste generator. Our school's regulated medical waste consists of sharps that are generated when treating diabetic students (lancets, insulin needles) and children with severe allergies (EpiPens) as well as the conducting of TB testing for new employees (TB syringes). Sharps are placed in Stericycle Needle Drop container, tracked and sent via the Sharps Disposal by Mail System to the disposal facility.

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_X No_____District Policy 7420-Hygienic Management

34. Do you have Underground Storage Tanks located at your School? No underground storage tanks

- X None

35. Is your school compliant with the New Jersey Department of Environmental Protection's (DEP) Air Quality Permit requirement? (Air permits required for 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. Schools might require an air permit for certain woodshop operations (See what can be permitted.) Yes_____No X List Permits:_____Boilers in the building fall below BTU limits needed for air permits.

Element 1D: Use of Alternative Transportation

36. What percentage of 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). 100% of students are assigned bus transportation due to our rural location, 48 square mile service area, and absence of sidewalks.

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). No idling policies are clearly displayed in prominent locations. We provide supervised drop-off for students enable parents to pull up, drop off, and go. This speed up drop times, which in combination with staff-regulated traffic flow, minimized forced idling by reducing time waiting in line for a parking spot, etc.
- ☐ ___A policy that encourages walking and/or bicycling to school and promotes alternative transportation. As noted in question 36, there are no safe routes for students to walk or cycle to school due to our rural location, large service area, and absence of sidewalks.
- ☐ _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. As noted in question 36, there are no safe routes for students to walk or cycle to school due to our rural location, large service area, and absence of sidewalks.
- ☐ ___A Walking School Bus program. As noted in question 36, there are no safe routes for students to walk or cycle to school due to our rural location, large service area, and absence of sidewalks.
- ☐ ___Walking and bicycling safety curriculum
- ☐ ___Electric vehicle charging stations have been installed to encourage the use of these vehicles
- ☐ ___Secure bicycle storage (such as bicycle lockers, racks, or rooms) is provided to encourage bicycling to school. As noted in question 36, there are no safe routes for students to walk or cycle to school due to our rural location, large service area, and absence of sidewalks.
- ☐ ____Electric vehicle charging stations

38. If your school has only bus transportation, describe how your transportation is efficient and has reduced its environmental impact (more efficient bus routes, diesel retrofits, biodiesel fuel, electric vehicles). (50-word max) Consolidated bus routes put in place in the district in 2015 have resulted in improved efficiency and reduced fuel usage. The change from a 3-tier to 2-tier bus routing resulted further in reduced emissions and reduced wear and tear on vehicles, translating into a yearly savings of nearly 8,000 gallons of fuel, and reducing mileage of buses by nearly 300 miles per school day. The district is investigating the possibility of using propane fueled buses to further reduce environmental impact. If approved, the plan would be to replace current buses with propane fueled buses once they reach the end of their useful life.

Summary Question for Pillar 1: Describe any other innovative practices and partnerships for reducing environmental impact. (100-word max)

In partnership with Class 5 Energy's School for energy Efficiency (SEE) program, we aim to reduce district wide energy use. SEE has netted improvements in facility operations, energy conservation policies, and modified staff and student behavior. The student Energy Club has monitored the building and check to see if students and staff are switching off

lights, shutting down computers, and closing shades to conserve heat. Students have collected data, left complimentary notes for compliance, and reminders when necessary. Energy savings are shared with students, staff, and families through our Energy Efficiency website.

In turn, our health office has switched to paperless charting to reduce our carbon footprint. We email forms and accept electronic correspondence.

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) . Yes, Indoor Air Quality occupant survey (EPA's Tools for Schools).
2. Do you have an Operations & Maintenance Policy for your building? Yes X No_____District Policy 7410-Maintenance & Repair
3. Does your school have an Integrated Pest Management plan? Yes X No_____Date last updated: 9/2019

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. The school has a full scale IPM program that complies with the IPM in Schools Act. Monthly monitoring is performed and records are kept. Pest issues are handled promptly utilizing low impact methods such as proper cleaning techniques, and using caulking and weather stripping to reduce pest entrance points.
   - X School reduces or does not use fertilizer on our property We do not use fertilizers on school grounds
   - X School prohibits smoking on campus and in public school buses District policy 7434-Smoking in school
   - X School has identified and properly removed sources of elemental mercury and prohibits its purchase and use in the school. With the exception of fluorescent bulbs which are recycled as hazardous waste.
   - ___School uses fuel burning appliances and has taken steps to protect occupants from carbon monoxide (CO)
   - ___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 X
   - ___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)
Readington Middle School manages chemicals following the NJ Hazard Communication Standard. Yearly surveys are conducted to identify chemicals present and to ensure that containers are labeled properly. Safety Data Sheets are filed and kept in the main office. All new staff members receive Right To Know Training and refresher training is provided to employees who routinely work with chemicals. Normal daily cleaning is performed in the evening when the building is unoccupied. Construction and intense cleaning is scheduled during summer breaks to reduce exposure of staff and students to dust, and/or odors.

6. Describe actions your school takes to prevent exposure to asthma triggers in and around the school. (100-word max) . An Indoor Air Quality plan is in place to ensure that HVAC equipment is maintained and filters are cleaned to promote good air quality inside the building. Water intrusion or plumbing leaks are taken care of in a timely manner to prevent mold and mildew. Green cleaning chemicals and practices promote good air quality and limit toxins that could be asthma triggers. Staff, parents, and visitors are prohibited from brining in cleaning chemicals, deodorizers,

and other perfume products from home. Mats are placed at doors and students are encouraged to stamp off shoes and wash hands after outdoor activities to reduce the transfer of outdoor allergens. Additionally, "Asthma Management in the Classroom: What Teachers Need to Know" are posted for staff and as Tools for Schools resource information.

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_X___No____This information is posted on the Health Office website, and is shared with our school community with colored flags that correspond to air quality rankings.

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_X___No____Outdoor activities are held weather and air quality permitting. When air quality is deemed unhealthy (or higher), decisions are make in partnership with the school nurse about the appropriateness of outdoor activities.

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_X___No____Healthy Schools posters are on display and information is available on the facilities page on the district website about air quality and asthma.

7. 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) Preventive roof and building maintenance are completed regularly to prevent leaks and moisture/mold issues. When leaks occur, repairs are made promptly by in-house maintenance staff or contracted services. Wet materials are removed and the affected area cleaned and dried of moisture. The building is fully air conditioned to control humidity, and regular maintenance on condensate pans and lines ensure the moisture is removed from the building properly.

8. Our school has installed local exhaust systems for major airborne contaminant sources. Yes____No _ Describe (max 100 words) The school cafeteria kitchen has exhaust systems for cooking and dishwashing that removes airborne contaminants created during food preparation. Restrooms have exhaust systems to remove odors. These systems are directly vented to the outdoors and not recycled in the occupied spaces. General exhaust is provided by exhaust fans throughout the building and the HVAC systems.

9. 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) The buildings HVAC systems are maintained as part of a preventative maintenance program. HVAC units are inspected for proper operation, cleaned, lubricated, and filters changes quarterly during the school year. Reported unit or comfort issues are promptly checked and repaired by maintenance staff.

10. 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) To ensure adequate ventilation rates of 6 to 8 air changes per hour, the HVAC units are designed to bring in 20% outdoor make up air. The outdoor air mixes with recycled air from the space, it is filtered, and then returns to the space. Outdoor intakes and dampers, and filters are checked regularly to ensure they work properly and are clear of obstructions. Classroom teachers are briefed on proper operation of HVAC equipment, such as keeping supply and return vents clear to ensure efficient operation of systems.

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

- X Implementing US EPA IAQ Tools for Schools and/or
- X Conducting other periodic, comprehensive inspections of the school facility to identify environmental health and safety issues and take corrective action. As part of building preventative maintenance program
- X Participating in the Pediatric/Adult Coalition of NJ's Asthmas Friendly Awareness Program-School nurses conduct awareness training with staff
- X Other (max 100 words) Our district facilities manager conducts annual indoor Air Quality (IAQ) training with staff to raise awareness and to share reporting procedures.

12. Indicate (X) if your school's green procurement practices pertain to the following: (Buy Recyled / Buy Green)

- ___Construction
- ___Carpets
- **X** Cleaning Green cleaning products
- ___Electronics
- ___Fleets
- ___Food Services
- X Landscaping- Recycled mulch
- ___Meetings & Conferences
- ___Office Supplies
- _X_Paper. FSC certified (FSC Co10014 Responsible)
- X Other (50 word max)- Paper towels and toilet paper are made from recycled materials

13. 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) DOE Purchasing for Energy Efficient Products, Green Seal Standards for cleaning chemicals, and recycled paper content.

Element 2B: Nutrition and Fitness

Food and Nutrition, Fitness and Outdoor time

14. Which practices does your school employ to promote nutrition, physical activity and overall school health? Provide specific examples of innovative practices, partnerships and actions for each statement below (100-word max each)

_X_Our school participates in the USDA's Healthier US School Challenge. Level and year: _____

- _X_Our school participates in a Farm to School program to use local, fresh food._____
- _X_Our school has an on-site food garden that teaches nutrition and environmental education, describe. Our garden club adviser and enrichment teacher partner with the Rutgers Master Gardeners to provide enrichment around food growth and production, soil health, nutritious foods, composting, and alternative farming methods.
- __X_Our school garden supplies food for our students in the cafeteria, a cooking or garden class or to the community. Our Global Goals team partners with our Life Skills students for Farm to Table food growth, harvest, and preparation.
- _X_Our students spent at least 120 minutes per week over the past year in school supervised physical education. Our school grounds feature a Fitness Jungle Gym, soccer and lacrosse fields, softball field, basketball court, running paths, basketball court, and open field for other activities. Students also participate in Project Adventure and other cooperative team building activities. Seven competitive outdoor team sports are offered to students: soccer, field hockey, and cross country in the fall; and baseball, softball, lacrosse, and track in the spring. Other extracurricular offerings include clubs such as Girls on the Run, Ultimate Frisbee, Tennis, Dance and Fitness, Yoga, and more.
- _X_At least 50% of our students' annual physical education takes place outdoors. _ As weather permits.___
- ___Our school participates in the NJ Safe Routes to School Resource Center. Level and year:_____
- ___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 school complies with all federal and state mandates for nutrition and physical activity under the Healthy, Hunger-Free Kids Act of 2010 (HHFKA). Our Wellness Policy includes goals for nutrition promotion, nutrition education, physical activity, and other school-based activities that promote student wellness. Board Policy 8505: Wellness Policy/Nutrient Standards for Meals and Other Foods.
- _X_Our school has a School Wellness Committee that meets at least once a year. Our committee has five overarching goals: safety precautions, crisis planning, student well-being, nutrition, and fitness and community outreach. Topics include healthy food choices, cafeteria selections, and physical activity events or fundraisers. Recommendations for healthier living have resulted in new menu items in the cafeteria, installation of water bottle refilling stations, great health education outreach to our school community, and enhanced focus on mindfulness and restorative practices. Fitness and wellness workshops are our offered through professional development and our Teacher Academies. Weekly fitness and yoga sessions are offered for students and

teachers alike.

- _X_Health measures are integrated into assessments.___Tests,quizzes, observational assessments. All students are assessed annually All students are assessed annually by the school nurse with regard to height, weight, BMI, blood pressure, hearing and vision. The data is tracked over time to identify at-risk children.
- _X_At least 50% of our students have participated in the EPA's Sunwise,or equivalent program. Health curriculum for 6th grade. All of our students participate in the SunWise program.
- _X_Some food purchased by our school food service is locally sourced from regional farms.____When seasonally available.

15. What environmental tech. supplements curriculum? (weather station, energy monitoring system, GIS, web cam, etc)
In addition to the current air quality is posted on our school website, students from our Global Goals team are developing an environmental monitoring station for our school that will use sensors to detect environmental data that will be tracked and recorded daily. The students' goal is to research and track markers for climate change (creating hyperlocal baseline data now that will be collected for years to come). The team is also developing an Arduino-controlled pollen counter. Students are partnered with an MD/PhD from Rutgers to become a data collection site for AccuPollen, so that we may likewise track hyperlocal data to ultimately gauge if changes in weather (or climate in the long term) can be correlated to a rise in asthma/allergies. We anticipate the environmental monitoring project to be piloted in the spring. Our solar array also feeds data that is projected on a large monitor outside of our cafeteria/auditorium that provides students, staff, and visitors with information about how much electricity the array is generating, along with equivalencies for context.

16. Describe the type of outdoor education, exercise and recreation available. (100-word max)
In addition to our Fitness Jungle Gym, soccer and lacrosse fields, softball field, basketball court, running paths, basketball court, and open field for other activities, students participate in Project Adventure and other outdoor cooperative team building activities. Seven competitive outdoor team sports are offered to students: soccer, field hockey, and cross country in the fall; and baseball, softball, lacrosse, and track in the spring. Other extracurricular offerings include clubs such as Girls on the Run, Ultimate Frisbee, Tennis, Dance and Fitness, Yoga, and more. Students may also choose to work on projects in our courtyard garden and native garden project. We also run a Student Academy Day in the spring spearheaded by our Principal, where teachers and community members offer a day of workshops including but not limited to archery, crossfit, cheer, tai chi, flora and fauna focused hikes, traits of strong athletes, baseball and basketball strategies, tennis, and more!

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

17. 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 your health-related initiatives or approaches:
Our district believes in a coordinated school health program that encompasses health education, physical education, health services, nutrition services, counseling services, school safety, health promotion for staff, and community involvement. As the staff members model good nutrition, fitness, and health habits, we also actively engage students in those areas. Teachers embrace brain research and understand the importance of nutrition, hydration, and movement throughout the day. All students are encouraged to bring/purchase healthy snack during the daytime; students also have free access to our water bottle filling station to encourage proper hydration. Teachers often structure brain breaks and movement as needed. We have eliminated food-centric birthday and holiday celebrations. The school nurse works in tandem with our health and physical education teachers to teach health related topics including hand washing, hygiene, how to respect your body, and maturation. Mental wellbeing is also addressed through mindfulness activities which are infused through learning. Our district has a new Social-Emotional Learning Supervisor who is developing a framework for integrating SEL instruction into academic learning, as well as restorative practices to promote healthy coping skills for students (and teachers alike). These activities help students to refocus their minds, as well as a variety of group or self-directed relaxation techniques.

18. Does your school partner with postsecondary institutions, businesses, nonprofit organizations, or community groups to support student health, school garden education and/or safety?____Yes_____No If yes, describe partnerships:

Rutgers Agricultural Extension (2019-20): Rutgers Master Gardeners Workshops, Native Garden Support
Rutgers University Institute of Earth, Ocean and Atmospheric Science (2019): Teen Climate Change Summit + PD
Raritan Headwaters Watershed Association (2018-20): Understanding our Watershed; Native Garden support
Exxon Mobil: Introduce a Girl to Science and Engineering Day (ongoing): Mentoring Girls in STEM
Readington Township Environmental Commission (2019-20): Green Team Partners
Sustainable Jersey for Schools (2019): Food for Thought Grant (Aeroponics), Professional Development
Drop the Beet, Aquaponic Farming (2019-20): Workshops and Mentoring, Aquaponics,
Alliance of Therapy Dogs (2019-20): Reading with Therapy Dog Sessions
Stonehouse Group Environmental Engineering (2019): Mentoring, Sustainable Engineering + Architecture
Princeton University Student Climate Initiative / NJ Student Climate Advocates (2019): Climate Change Workshops
NORWESCAP Food Bank (2019-20): Workshops on Food Insecurity and Nutrition, Working with FoodBanks
Community Food Bank of Central Jersey (2019-20): Teen Hunger Summit, Service Learning
Rutgers Environmental Stewards Program(2019): Teacher Training in Environmental Stewardship and Programming
BASF Chemical Corporation (2019): $5,000 STEM Education Grant: "Feeding Our Future" Grant (Aquaponics)
NJDOH Wellness Grant and EmPower Somerset (2017): Funding for a Soft Fitness Room

19. Does your school have a school nurse and/or a school-based health center? _X_ Yes_____No
    Certified School Nurse and an additional RN

20. Describe efforts to support student mental health and school climate (anti-bullying programs, peer counseling, etc.):
    This year, under the leadership of our new SEL Supervisor and Guidance Counselors we have implemented a district-wide Social and Emotional Learning initiative. Our goal is to cultivate a caring, participatory, and equitable environment, infusing social and emotional learning into children's daily lives, through classrooms, homes, and communities. Collaboration is key! There are five competencies we work on: understanding and managing emotions, setting and achieving positive goals, feeling and showing empathy for others, establishing and maintaining positive relationships, and making responsible decisions. At the middle school, we've started with Connection Circles to build classroom community and culture, flexible seating, giving students more responsibility for what goes on in the classroom, offering real-world connections, opportunities for students to reflect, and helping students learn to ask for help. We're practicing restorative approaches to resolving conflict and healing harm when handling behavioral issues. We learn to seek the root cause behind individual and group behaviors, to avoid judging students as good or bad, and to hold the mindset that all students are worthy and deserving, that behavior is learned, and that a specific incident is often an extension of some other issue needing resolution. Staff are trained too in Adverse Childhood Experiences, conflict resolution, anti-bullying, and suicide prevention.

    Each grade carries a unique theme: grade 6 - Dare to Dream; grade 7 - Believe You Can; and grade 8 - Achieve It. The Guidance Counselors meet with each and every student at the beginning and end of each year. Throughout the year they join teachers in classrooms and assemblies to discuss cultural differences, grit, empathy, digital citizenship, conflict vs. bullying, conflict resolution, communication, disabilities, and more! And peers work with peers side-by-side with the counselors too.

Summary Question for Pillar 2: Describe any other efforts to improve coordinate health and safety, nutrition and fitness, highlighting innovative or unique practices and partnerships. (100-word max)
Through our Food for Thought investigation, developed by 8th graders and funded with a 2019 Sustainable Jersey for Schools grant, students investigated ways they could help mitigate food insecurity and reduce waste by reimagining how we grow and store food. They determined that 40% of all food in the US goes to waste. Food often travels far to get to your plate, and it spoils during transport and distribution. Not to mention healthy greens hiding away in the fridge, spoiling because we "forgot" they were there. They took a step back to reimagine people's relationship to food, bypassing industrial growth, pesticides, transport, distribution, and delivery. Why the fridge, when healthy greens grow at room temperature? So, they researched the nutritional value of foods, the possible toxins in plastic for hydroponics and treated wood for raised garden beds, environmental conditions and nutrients required for plant growth. They reached out to experts at Rutgers to understand soil and compost, and they partnered with special education peers to learn together how to produce, prepare, and consume their own locally grown, richly nutritious food. They shared their bounty with the school, developed food growth and healthy eating workshops for elementary

students, and made new friends across the school as students flocked to the glow and water trickle of indoor gardens. Now students across grade levels are growing leafy greens to give to our local food bank in need of fresh food. A new group of students will be heading to the Teen Hunger Summit in the spring (snowed out in December), hosted by the Community Food Bank of Central Jersey to share ways they can bring nutrition and sense of sharing to all. It started as a seed, a student wondering and idea, and has grown into a movement and the start of our FIG (Fresh Food from Indoor Gardens) Program that seamlessly blends social and emotional learning, health, safety, and STEM.

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 practices and partnerships.

_ X___School has an environmental or sustainability literacy requirement. (200-word max)
Environmental/sustainability literature is required reading infused into many subject areas including non-fiction reading units in Language Arts, Social Studies, Innovation and Design, Gifted and Talented, Health, Science, and a Sustainability elective. Our Sixth grade students study natural laws and ecological principles and the dynamics of systems and changes therein. Seventh grade students study plant reproduction, interdependent relationships in ecosystems, and biodiversity. Eighth grade students study Earth's materials and systems, human impact, history of the Earth, adaptation and resilience, weather and climate. Each of these areas reinforce respect for all living things, maintaining balance in ecosystems, interconnectedness, and the importance of our reducing, reusing, and recycling program in and out of school. Our students hands-on through experimentation and minds-on through non-fiction reading which is an integral part of our school programming. We do not have a specific environmental literacy requirement policy; it is an integral part of our curriculum.
_X_Recurring E/S concepts are integrated throughout an interdisciplinary curriculum. (200-words)
Environmental and sustainability concepts are supported and expanded through interdepartmental collaboration, community partnerships, student leadership, and our aim to prepare all of our students to be knowledgeable, active citizens. At RMS, a sustainable future is a shared vision, and it starts with actions we take today. In 6th grade, students practice responsible local and global citizenship as they analyze rate and percent math problems relating to pollution, endangered species, and population growth. At the same time in science, they are reading, analyzing, and creating graphs related to global warming. Through enrichment, they design sustainable cities of the future, envisioning and writing about dystopian, utopian, possible, probable, or desirable futures related to climate change, adaptation, and resilience. They create virtual city simulations and physical models to identify and make visible the interrelationships between social, economic, and environmental systems. In financial literacy, students examine how ethics influence consumer behavior and define what civic financial responsibility means to them. In language arts and social studies, they explore cross-cultural similarities and difference, adopting multiple perspectives to better understand what it means to be a community. In 7th grade, all students and staff take a Walk in the Woods together led by local guides, focusing on ecosystems, as they use all of their senses to identify flora, fauna, and geological rock formations within their own bio-region. They look for signs of human impact, and make connections to concepts like deforestation and unsustainable farming practices and their consequences for early civilizations they are studying. Student also relate their own observations to the present as guest speakers ranging from environmental lawyer to university expert, to NJ student climate advocates to watershed conservationist describe conditions and system change in play today. Students practice local and global citizenship as they measure their carbon footprint and engage in outreach to local media outlets and local, state, and federal leaders. In 8th grade, students explore current events through the lens of journalist and reader as they practice establishing objectivity, identifying bias, and evaluating sources in order to prepare students to be educated citizens and to make informed decisions. In math, students take on exponential growth and decay math problems as they relate to environmental factors. While in science, they explore the impact of human activities and the short- and long-term consequences (positive and negative) for the health of people and the natural environment.
_X__Student learning of environmental & sustainability concepts is evidenced by authentic assessments. (200-word max) All student learning is evaluated throughout the year, both informally, through class discussions and journal entries, and formally with lab reports, quizzes, unit tests, reflections, essays, or the creation products of performances of

understanding such as puppetry, model-building, outdoor data collection, inventions, videos, and presentations. Descriptions of specific activities are detailed throughout this application.

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

Readington Middle School students consistently perform highly on the annual NJASK science test indicating that students are secure on science concepts and can apply the knowledge to alternate situations on statewide testing. Students understanding of scientific content is assessed throughout the year, both informally, through class discussions and journal entries, self-assessment, and formally with lab reports and unit tests. Mastery is assessed across the curricula through rubrics, unit tests, informational writing, online quizzes, and reflection.

_X_Professional development (PD) in environmental and sustainability education (E/S) are provided to teachers.

Teachers enjoy sustainability PD in- and out- of the district. Teachers have attended and presented at the NSTA conference, the RVCC Science Education Institute, the Sustainable Jersey conference, and professional development in environmental stewardship at Rutgers and Duke Farms. These in-depth workshops fully immerse teachers in hands-on minds-on authentic and relevant learning experiences that they can bring directly back to the classroom to enhance their teaching. Our district facilitates many in-house trainings both required during PD days, and voluntary through our Teacher Academy throughout the school year and over the summer.

_X_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)

As part of our district's Sustainability Policy 7461, Professional Development for Sustainability opportunities are provided each year for staff as part of Teacher Academies. These opportunities are open for the entire district to attend. During 2018-19, we offered two online courses in partnership with the US Green Building Council for Green Classroom Professional certificates and the Learning Lab educational platform. During 2017-18, we offered courses on how to bring the district's solar array project into the classrooms. Sessions were presented on various solar energy projects that could easily be incorporated into the classrooms, demonstrations of solar energy kits located in each school, and overviews of the solar project from the facilities perspective and from the solar owner, Ameresco, were given. Our staff offers peer education and support in living healthier lifestyles, infusing SEL into the classroom and into their own lives. Our Facilities Manager also offers training on indoor air quality and green cleaning yearly to staff. Teacher Academy PD is offered to all staff, administrators, board of education members, and some to community and families.

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

Our enrichment and after-hour club offerings span from Model UN and Youth and Government simulations where students tackle our world's most pressing problems from environmental issues, to cybersecurity, to human rights. Our Nature and Garden Club helps students develop sustainable practices to grow and maintain vegetable and fruit gardens and native habitats, right on school grounds. Our Global Goals Green Team identifies opportunities within our school community to find innovative ways to reduce waste, support responsible consumption and production, promote good health and well-being, and develop in-school and out-of school partnerships to create a more sustainable future for all.

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)

   One of the advantages of middle school education are the opportunities for collaboration across the curriculum with teachers who are experts in their domains, as well as the ability to offer specialized electives in STEAM. RMS offers courses in coding, innovation and design technologies, and an interdisciplinary enrichment program that uses innovation, sustainability, and systems thinking as integrating contexts where students may choose to participate in project-based learning in partnership with external partners that offer STEAM-based expertise, consultation, and resources for students. These include the eCybermission STEM challenge, NJSBA STEAM Tank, Smithsonian Invent-It Challenge, World of 7 Billion documentary challenge, Future City competition, and Math League.

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)

Our school's physical space – our built environment and notably our solar installation – as well as our natural environment and rain garden provide tangible context for student learning as well as partnership with field experts and

community leaders. The evolution of our physical space and surrounding natural environment and gardens are also a visible representation of the value we place on green technologies and natural features that enhance human (and other life forms!) health, as well as environmental and economic health.

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? Our science curriculum correlates to NJ Model Curriculum and is further mapped to the Next Generation Science Standards and the Cloud Institute's Education for Sustainability Standards. Student learning is assessed both informally through observation and science journal entries, and formally through quizzes, unit tests, lab reports, as well as innovative student-driven products and performances of understanding.

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:____N/A_____

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) To reach out and include families and the public in our renewable energy initiative, two opportunities for community engagement were offered. The first was a district wide Solar Dedication Ceremony held on May 9, 2018, at Readington Middle School. Invitations were sent out to the Readington Township Committee, Readington Green Committee, all companies involved with the solar design and installation, the district's Green Committee, all staff, and a Genesis blast was sent out inviting students and their families to attend. Students from Readington Middle School and their families were part of the ribbon cutting and dedication ceremony. Two students from the school's Energy Club gave presentations as part of the program and shared the solar houses they built. The second opportunity for community engagement was for education about the solar installations and how they are able to be used in the classrooms. The Energy Efficiency Coordinator, in partnership with the solar operator, Ameresco, offered a workshop on May 2018 to staff as well as the community called Incorporating Solar into the Classroom. Our students also partner with schools across the state to volunteer service at America's Grow A Row, the Rutgers Teen Climate Summit, the Community FoodBank of NJ Teen Hunger Summit, and many of the projects references in earlier responses.

7. Describe how outdoor learning is used to teach an array of subjects in contexts, engage the broader community, and develop civic skills. (200-word max) (ex. citizen science, field trips, overnight camping, retreats) Our students are building an outdoor environmental monitoring station in conjunction with a Rutgers professor so that we may collect, track, analyze, and share weather and climate over time. As noted in earlier examples, our students and staff all participate in the 7th grade Walk in the Woods, the 6th grade have conducted nature outings at Duke Farms, and our 8th grade will be partnering with an urban youth center to pilot indoor and outdoor vertical gardens.

8. Describe students' outdoor learning/ place based learning experiences at every grade level. (200 word max) Students at every grade level have learned about the benefits of our solar array, to the school and the community. Classes may also investigate our outdoor courtyard garden and our indoor aeroponic garden, obtained with a generous grant from Sustainable Jersey for Schools. This year we will be building an aquaponic garden in partnership with BASF. Our rain garden provides insight for all into green infrastructure too.

9. Describe how 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? (Ex. student exchange forum, sister school program, global PBL program, state-wide professional learning communities) (Max 200-words)

We partner extensively with other schools and community experts and resources to understand and reduce our environmental impact, promote the health and wellness of our school community, and provide ongoing and effective environmental and sustainability education. Our partnerships have included:

- Rutgers University Agricultural Extension of Hunterdon County

- Rutgers University Institute of Earth, Ocean and Atmospheric Sciences, New Brunswick
- Rutgers University Water Resources Dept, New Brunswick
- Raritan Headwaters, Flemington, NJ
- MD/PhD researcher to investigate asthma and allergies markers for climate change
- Hunterdon County Board of Health
- Hunterdon County Department of Emergency Management
- Hunterdon County Vocational Academies
- Readington Township Environmental Commission
- Sustainable New Jersey for Schools
- Rutgers University Teen Climate Change: Partnered with 14 schools across state
- Community FoodBank of NJ Teen Hunger Summit
- America's Grow-A-Row
- (pending) Laikipia, Kenya: Partner school with Environmental Scientist in Kenya for Kenya/NJ water quality investigation

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. (Max 100-words)

Our partnership with Schools for Energy Efficiency (SEE) program has resulted in a significant reduction in energy use over the last 4 years. The district benefits in terms of reduced expenditure, but more importantly for our environment, we have lower demand on local utilities. The installation of the solar panels has resulted in increasing electricity consumption drawn from our solar panels and not the grid. Our Raritan Headwaters Watershed Ambassadors underscores the need for all of us to protect our watershed, and the importance of not taking our water source for granted. In a community where the majority of the homes are supplied primarily by well water, children and adults alike need to understand the importance protecting our most precious resource through conserving water use and also ensuring that our waterways are kept clean and free of trash, point- and non-point source pollution, toxins, lead, pet waste, and more.

Summary Questions for Pillar 3: 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. (Max 200-words) Our enrichment program in an interdisciplinary program rooted in 21st century themes of Global Awareness and Innovation, along with Economic, Business, Entrepreneurial, Civic, Health, and Environmental Literacies. Innovation and sustainability serve as integrating contexts, allowing students to link knowledge, inquiry, and action through inquiry-based learning and action research. Open-ended assignments include the development of student-driven products related to real-world applications or problem-solving. Students interact with role models, community resources, mentors or professionals in the field to explore advanced content as they work to address and find solutions to social, economic, and environmental challenges in the local and global community. The Sustainable Development Goals are the program "sandbox" where students work together with an aim towards a better and more sustainable future for all. They address the global challenges, many often interconnected, such as poverty, inequality, climate change, environmental degradation, and justice. Enrichment topics include: sustainable cities, storytelling with data, the triple bottom line (people, planet, and profit), biomimicry, and regenerative design.