



U.S. Department of Education Green Ribbon Schools 2014

Charter  Title I  Magnet  Private  Independent

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

Official School Name **Three Bridges School**  
(As it should appear on an award)

School  
Mailing Address **480 Main Street, PO Box 443**  
(If address is P.O. Box, also include street address.)

City **Three Bridges** State **New Jersey** Zip **08887**

County **Hunterdon** State School Code Number\* **19-4350-060**

Telephone **(908) 534-5710** Fax ( )

Web site/URL [www.readington.k12.nj.us](http://www.readington.k12.nj.us) E-mail [khiggins@readington.k12.nj.us](mailto:khiggins@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.

**Karen Higgins** Date **1/30/14**  
(Principal's Signature)

Name of Superintendent\* **Dr. Barbara Sargent**  
(Specify: Ms., Miss, Mrs., Dr., Mr., Other)

District Name\* **Readington Township Schools** Tel. **(908) 534-2195**

I have reviewed the information in this application and certify that to the best of my knowledge all information is accurate. This is one of the highest performing green schools in my jurisdiction.

A handwritten signature in cursive script that reads "Barbara Sargent".

\_\_\_\_\_  
(Superintendent's Signature)

Date 1/30/14

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



## **PART II – SUMMARY OF ACHIEVEMENTS**

### **Instructions to School Principal**

Provide a concise and coherent "snapshot" that describes how your school is representative of your jurisdiction's highest achieving green school efforts in approximately 800 words. Summarize your strengths and accomplishments. Focus on what makes your school worthy of the title U.S. Department of Education Green Ribbon School.

## **PART III – DOCUMENTATION OF STATE EVALUATION OF NOMINEE**

### **Instructions to Nominating Authority**

The Nominating Authority must document schools' high achievement in each of the three ED-GRS Pillars and nine Elements. For each school nominated, please attach documentation in each Pillar and Element. This may be the Authority's application based on the Framework and sample application or a committee's written evaluation of a school in each Pillar and Element.

### **Nominating Authority's Certifications**

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

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

Name of Nominating  
Agency

**New Jersey Department of Education**

Name of Nominating  
Authority

**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.

*Bernard E. Piana Jr.*

Date 1/31/14

(Nominating Authority's Signature)

The nomination package, including the signed certifications and documentation of evaluation in the three Pillars should be converted to a PDF file and emailed to [green.ribbon.schools@ed.gov](mailto:green.ribbon.schools@ed.gov) according to the instructions in the Nominee Submission Procedure.

OMB Control Number: 1860-0509  
Expiration Date: February 28, 2015

#### **Public Burden Statement**

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless such collection displays a valid OMB control number. The valid OMB control number for this information collection is 1860-0509. Public reporting burden for this collection of information is estimated to average 37 hours per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. The obligation to respond to this collection is required to obtain or retain benefit P.L. 107-110, Sec. 501, Innovative Programs and Parental Choice Provisions. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the U.S. Department of Education, 400 Maryland Ave., SW, Washington, DC 20202-4536 or email [ICDocketMgr@ed.gov](mailto:ICDocketMgr@ed.gov) and reference the OMB Control Number 1860-0509. Note: Please do not return the completed ED-Green Ribbon Schools application to this address.

**School Contact Information**

School Name: Three Bridges School District: Readington Township

Street Address: 480 Main Street PO Box 443

City: State: Three Bridges, New Jersey Zip: 08887

Website: [www.readington.k12.nj.us](http://www.readington.k12.nj.us)

Principal Name: Kristen Higgins

Principal Email Address: [khiggins@readington.k12.nj.us](mailto:khiggins@readington.k12.nj.us) Phone Number: 908-534-5710

Lead Applicant Name (if different): Same

Lead Applicant Email: Same Phone Number: Same

Level <input type="checkbox"/> Early Learning Center <input checked="" type="checkbox"/> Elementary (PK - 3)	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	District Name Readington Township
			( ) Largest 50 Districts in the nation? Total Enrolled: 322
Does your school serve 40% or more students from disadvantaged households? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	% receiving FRPL 6.2% % limited English proficient 1.24% Other measures _____		Graduation rate: N/A Attendance rate: 95.191%

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

Three Bridges School (TBS) has made a conscious effort to bring sustainable practices to our school community. We are dedicated to teaching our students, staff and parents how they can green their world and reduce their carbon footprint.

The district’s facility manager has committed fully to supporting these conservation efforts by making our building more energy efficient, purchasing items such as a water bottle filling station, rain barrels and compost tumblers. The district has received the SAIF Award each year for the past eight years. Further, TBS participated in a New Jersey LGEA Energy Audit. Based on the recommendations, TBS upgraded fixtures and light bulbs and installed HVAC systems and room lights on motion detectors.

Further, the maintenance staff is certain that all trash and recycling was being sorted properly. The students and staff have embraced the recycling effort and remind each other about making good choices when disposing of waste. Students monitor their classmates in the classroom and the lunchroom. Our Student Leadership group also created a video about recycling that has been posted to our school webpage. These efforts have been so successful that we needed to upgrade our garbage and recycling containers. The recycling became so full, it needed a bigger canister!

The district partnered with SEE last fall and hired an Energy Efficiency Coordinator who works as a liaison between SEE and the schools. This has resulted in regular data collection about energy usage, more stringent monitoring of facilities usage, and a new Energy Conservation policy. Our staff and students see the results of this new policy through the implementation of temperature set points. Together, with the SEE program, TBS staff and students worked on creation and education of energy efficient behaviors. For example, we had essay and poster contests for the students. Further, the students took charge of leading the school in practicing energy efficient habits. They put signs on computer monitors and printers to remind everyone to shut them off when not in use. Students also attended assemblies with the “Energy Hog” to increase students’ and teachers’ knowledge and awareness of saving energy.

The children have had many experiences to reinforce our efforts. For example, the school has student concerts with themes of green education. The students sang about recycling, sustainability, and preserving our world. At the concert, we sold reusable shopping bags with the school logo on it. The money raised was used to adopt a tiger.

We also have a bottle filling station. The students have excitedly educated each other as to why they should abandon the single use bottle. The children love watching the count on the fountain increase as it counts how many bottles they have saved.

TBS also held a “Green” essay contest. The essays were presented at a board meeting where the students performed earth friendly centered songs. We also created a video called “One Word”. Each attendee at the board meeting wrote one word that they associate with being green. Pictures of each person holding their “one word” were gathered in a video and shared on the website.

The district curriculum supports the school’s focus to teach about sustainability and responsible green citizenship. The school works together to enhance or teaching through sharing websites, festivities for Earth and Arbor days, class trips to the community garden (Spring 2014), and growing aquafarms in classrooms.

The students are taking leadership roles in educating each other and the public. They created a video to educate the town about single stream recycling that was presented at a town council meeting. A local organic farmer is so excited to share best practices in gardening. The Girl Scouts have been so helpful in watering and weeding-- even the when school is not is session. Parents have also offered to assist in sharing best practices in composting and growing our school vegetable/herb garden.

We also green our bodies inside and out. Character education programs abound within the schools. The students and staff routinely participate in philanthropies and clothing and toy drives. The *Girls on the Run* program at Three Bridges School collected for the food pantry. We also collect Halloween candy to send to military personnel. The district health programs teach students about diabetes, heart disease and sun safety.

Physical education helps teach our students how to stay healthy for life. We have established unique partnerships with the United States Tennis Association and the First Tee programs by securing grant money for both programs to bring tennis and golf instruction to our students.

TBS is committed to greening the students, staff and community of Readington Township. Supported by a district Strategic Planning Goal of continuing the district’s commitment to environmental sustainability, we know that our work and learning will continue in this critical area. We’ve only just begun!

**Instructions for Completing this form:** Please answer all of the questions below to the best of your ability, **in a different text color**. A more complete application will increase your chances of success. You may supplement the information in these questions by describing alternative benchmarks or indicators of progress (see final question in each section).

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

1. Is your school participating in a local, state, or national program, which asks you to benchmark progress in some fashion in any or all of the Pillars? Yes  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, NJPALS, Green Schools Leadership Institute, NJ Learns, NJ Sustainable Schools Project, NJ Recycling).  
Energy Star
2. Has your school, staff or student body received any awards for facilities, health or environment?  
Yes  No  Award(s) and year(s) 2012 Green in Action Honorary Mention, SAIF Award 8 years
3. Has your school identified or created a place for teachers to go to share lessons on Sustainability?  
Yes  No  If yes, where? The district level and the school level Green teams/committees work to keep the focus of sustainability in the forefront of planning for teaching and special events. The school website has space dedicated to web resources for all to share. In addition, teachers have common planning time where green initiatives are discussed and planned.
4. Has your School Board adopted a Green Strategic Plan? Yes  No  Other: In 2011 the district created a new strategic plan where mission statement and the goals reflect sustainable initiatives and education. The district has created a Green Committee with representative from each school, central office, board members and township committee members with an interest in promoting sustainability with published goals
5. Has your school created a Green Team? Yes  No  If yes, list team members and their roles.  
Kristen Higgins – Principal, Ed Dubroski and Paul Yunos – Physical Education Teachers, Kathy Cataldi – School Nurse, Tiffany Barca – Tech Teacher, Kristi Dauernheim – Kindergarten Teacher, Trish Coleman – First Grade Teacher, Alissa Buelow – Second Grade Teacher, Christine Lewis – Third Grade Teacher, Don Thornton – District Facilities Manager  
In addition, we have a program for third grade students called Student Voice. These student volunteers meet regularly to discuss and plan how they can help the environment and our community. Their projects have included education on turning off computer monitors and printers as they worked in conjunction with our SEE liaison. In addition, we have teams of students in each lunch period who have volunteered to join the Go Green Tiger Team to monitor how the lunch waste is being properly disposed of in either the single stream recycling bin, trash bin or compost bucket. The students also plan how they can encourage students to bring in reusable canisters for lunch.  
Further, our specialist team which includes the art, music, media specialist, technology and physical education teachers use their Common Planning Time to coordinate the Student Voice activities and create building wide projects to promote Green education. For example, the work from this team earned us the Honorable Mention for the Green in Action Award for the videos and the lunchroom Go Green Tiger Team. Further, this is the team of adults who oversee the creation of our school made videos which educate the public, students and staff about sustainability and Green endeavors.
6. Has your school seen a cost savings from green initiatives? Yes  No  If yes, describe the savings or use the table below to fill in your cost savings data.

	Electric Energy Consumption (kwh)	Natural Gas Consumption (therms)	Electric Utility Costs (\$)	Natural Gas Utility Costs (\$)	Total Utility Costs (\$)	Annual Savings (\$)	% Reduction from FY 2009
FY 2009						Baseline	Baseline
FY 2010	727,740	38,065	\$111,033	\$36,492	\$147,525	BL	BL
FY 2011	726,480	39,187	\$100,010	\$36,595	\$136,605	\$10,920	7.4%
FY 2012	668,760	39,343	\$82,646	\$34,270	\$116,916	\$30,609	20.7%
FY 2013*	581,260	41,846	\$58,076	\$39,994	\$98,070	\$49,455	33.5%
Total						\$90,984	

**PILLAR I: REDUCED ENVIRONMENTAL IMPACT**

Element 1A: Reduced or eliminated greenhouse gas (GHG) emissions

**Energy** (Please convert energy data to Portfolio Manager format if possible)

7. Can your school demonstrate a reduction in Greenhouse Gas emissions? *Please fill in table below first.*

( ) Yes ( **X** ) No    Percent reduction: - 0 - Over (m/yy - m/yy): 1/1/2010 – 12/30/2013 (\*estimated Oct. Nov. Dec)

Initial GHG emissions rate (MT eCO2/person): 3.68

Final GHG emissions rate (MT eCO2/person): 3.69

Offsets: 0    How did you calculate the reduction? The GHG reduction was calculated by calculating the change in GHG from our energy consumption in baseline year 2010 – 2013. GHG equivalencies and calculations are based on the BPU approved conversion factors below. The independent student enrollment variable affected this percentage change.

NOTE: The student enrollment has declined 103 students since 2010. This reduction in student has not affected the square footage or the cost to run the basic building. In addition, our evening and weekend use has not declined. If the population remained the same our numbers would be 2.89 for a .79 reduction.

What do you use to benchmark your energy use? The 2010 benchmark was given to us in a LGEA program audit conducted in 2011.

Table is based on School data taken from [District Utility Bills](#) (Portfolio Manager, district utility bills, etc.), as reported by [Readington School District Facilities Manager Don Thornton](#) (Vendor or School/District Personnel). [Estimated Oct, Nov, and Dec.](#)

	Electric Energy Consumption	Natural Gas Consumption	Fuel Oil Consumption (gallons)	Carbon Dioxide from Electric	Carbon Dioxide from	Carbon Dioxide from Fuel Oil	Total number of students	MT eCO2 /person
<b>FY 2009</b>								<b>Baseline</b>
<b>FY 2010</b>	727,740	38,065		1,300,876.8	445,360.5		475	3.68
<b>FY 2011</b>	726,480	39,187		1,104,249.6	458,487.9		425	3.68
<b>FY 2012</b>	668,760	39,343		1,016,515.2	460,313.1		391	3.7
<b>FY 2013</b>	581,260	41,846		883,515.2	489,598.2		372	3.69

8. Has your school conducted an energy audit of its facilities? Yes  No

Percent reduction: 33.3%

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

Time period measured: from January 2010 to December 2013

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: 2010 score 39 current score 62 (Great Improvement!)

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

On-site renewable energy generation: - 0 - Type \_\_\_\_\_

Purchased renewable energy: - 0 - Type \_\_\_\_\_

Participation in USDA Fuel for Schools, DOE Wind for Schools or other federal or state school energy program: n/a

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

How did you document this reduction? Documented from existing utility meter billing data.

	Electric Energy Consumption (kwh)	Natural Gas Consumption (therms)	Number Students /Occupants	kBTU/Students/ Occupants	kBTU/sq.ft.	% Reduction from FY 2009
<b>FY 2009</b>						
<b>FY 2010</b>	727,740	38,065	475	13,246	102	
<b>FY 2011</b>	726,480	39,187	425	15,059	104	
<b>FY 2012</b>	668,760	39,343	391	15,904	101	
<b>FY 2013</b> Oct, Nov, Dec. est.	581,260	41,846	372	11,261	68	33.3%

12. In what year was your school originally constructed? 1950

What is the total building area of your school? 61,435 sq. ft.

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

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

**Water and Grounds**

	Water Consumption (gallons)	Total Square Feet	Water Consumption (gals/sqft)	% Reduction from FY 2009
<b>FY 2009</b>				<b>Baseline</b>
<b>FY 2010</b>				
<b>FY 2011</b>	693,000	61,435	11.28	Baseline
<b>FY 2012</b>	596,000	61,435	9.70	14%
<b>FY 2013</b>	608,000	61,435	9.89	12%

14. Can you demonstrate a reduction in your school’s total water consumption (measured in gal/square foot) from an initial baseline? Yes X No\_\_\_ If yes, please complete the table above, then provide the following information:

Average Baseline water use (gallons per occupant): 1630 gal. per occupant (2011)

Current water use (gallons per occupant): 1634 gal. per occupant (2013)

Percentage reduction in domestic use: 0%

Percentage reduction in irrigation: 0%

Percentage reduction: 0%

Time period: from 2011 to 2013

Do you include after-hour activities in your water consumption calculations? (adult sport leagues, adult education, scouting, other community events etc.?) Yes

How did you document this reduction (i.e. Energy Star Portfolio Manager, utility bills, school district report?)

Water meter monitoring and reporting

15. Describe any strategies you use to discourage single-use beverage containers on school property. Describe how you assure the recycling of those containers at athletic locations, or other outdoor events.

A water bottle refilling station was installed next to the gymnasium in the school where a typical water fountain had stood. The students were tasked with educating their peers about why they should use reusable bottles at school. Further, the school offered reusable bottles with the school logo for sale in order to further advertise and entice the students to participate. Profits from the sale are used to support the school gardens. We also have lunchtime competitions for students to bring in lunch packaging that is reusable. As a primary school, we do not have school sporting events on a regular basis. But during field day, we offer a large jug of water to refill water bottle and recyclable cups to use for drinking.

16. What percentage of your landscaping is considered water-efficient and/or regionally appropriate?

100% The school does not use landscape irrigation

Types of plants used and location: All plantings on site are native, naturalized or regionally appropriate.

17. What plants are native to your geographic location and how have you incorporated them?

All the plants that are planted at TBS thrive in the environment relatively maintenance free. We do not irrigate as all varieties were chosen based on suitability for our climate and policy not to use pesticides or need to irrigate. We use the plants as decoration, shade, food, and instruction.

18. Describe alternate water sources used for irrigation (e.g. roof run-off, parking lot runoff). (50-words max)

We have two rain barrels to collect roof run-off water to use for watering our two gardens.

19. Describe any efforts to reduce stormwater runoff and/or reduce impervious pavement (e.g. rain gardens, bioswales, ponds). (50-words max)

At the school, the roof run-off that is not collected in the rain barrels and the storm drains are collected in a detention basin on school property. Storm water collects there and is released slowly to reduce the stress on the system. There is also a rain garden planted at the bottom to further utilize rain water.

20. Our school's drinking water comes from: ( ) Municipal water source (X) Well on school property

21. Describe how the water source is protected from potential contaminants. (50-words max)

TBS is treating its potable water for ph adjustments, hardness removal and arsenic removal. TBS routinely monitors for contaminants in the drinking water according to federal and state laws and meets all safety requirements.

22. Describe the program you have in place to control lead in drinking water. (50-words max)

TBS water is routinely tested for lead. Water passes through an acid neutralizer and water softener for ph adjustment which reduces the risk of lead leeching from the piping system.

23. Does your school have its own well? Yes X No\_\_\_ If yes, did your school comply with all monitoring requirements and did the drinking water meet all applicable standards? Yes X No\_\_\_

24. Describe how your school's site grading and irrigation system and schedule is appropriate for your climate, soil conditions, plant materials, with an emphasis on water conservation: (50-word max)

TBS does not irrigate.

25. What percentage of school grounds are devoted to ecologically beneficial uses? (50 word max)

TBS has two gardens, a detention basin and playing fields for recreational sports. 60% of the school grounds are grass, garden, basin while 40% is used for parking and the building footprint.

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

26. What percentage of solid waste is diverted from landfilling or incinerating 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): 72 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): 18 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): 2 cubic yards

Recycling Rate =  $((B + C) \div (A + B + C) \times 100)$ : .22 cubic yards

Monthly waste generated per person =  $(A/\text{number of students and staff})$ : .19 cubic yards

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

Office and classroom paper is purchased under the Hunterdon County Cooperative Purchasing Agreement. Contracts run for the year. The school does not have the option to purchase plain, white copy that is comprised of post consumer recycled paper. However, the specialty paper purchased such as pre-three hole paper is 30% post consumer recycled. In addition, toilet paper, facial tissues and paper towels are comprised of 100% recycled material and are bleach free.

28. Do you include after-hour activities in your garbage reduction calculations? (adult sport leagues, adult education, scouting, other community events etc.?) Yes

29. Verify that your school is compliant with the New Jersey Department of Environmental Protection's (DEP) Air Quality Permit requirements. 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.

Our school has the required [New Jersey DEP Air Quality Permits](#).

TBS was exempt from the rule due to age of the boilers.

30. Describe how you have reduced your paper consumption, and how you measured that reduction (e.g. working and reviewing online, white boards). (50-word max)

The school has practices which save consumption of paper. We use an email blast system called Genesis, to send out notices. The blasts include links to the website to notices and flyers for events so the parents can download what they want. The Genesis blast also includes items for the Home School Association, Readington Recreation and other community groups. Paper is saved by all through our communication system. Tech items in all classrooms reduce paper and copies

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

Flammable liquids	Corrosive liquids	Toxics	Mercury	Other:
None	None	None	Lighting	None

How is this calculated? N/A

How is hazardous waste disposal tracked? Florescent bulbs are recycled through Grainger 2x per year

32. Describe other measures taken to reduce solid waste and eliminate hazardous waste (on-site composting etc.). (100-word max) On site composting and single stream recycling are the biggest ways we reduce solid waste. We also participate in used clothing drives. The scouts regularly sponsor collection of various items such as eyeglasses, cell phones, etc. We also send our used computer ink cartridges right back to Staples. Used fluorescent light bulbs are collected and recycled through Grainger.

33. Which green cleaning custodial standard is used? TBS custodial staff uses a 7 step cleaning procedure for classrooms and a restroom cleaning procedure. The cleaning program adjusts to a more aggressive approach if there is a communal threat to the occupants.

What percentage of all products is certified? 80%

What specific third party certified green cleaning product standard does your school use? DFE (Designed for the Environment)

Describe the measures your school has taken to use only green cleaning product All chemical dispensers are filled with H2 Orange 2 and can be dispensed in two concentrations – green for lighter jobs and red for more demanding cleaning.

34. 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. The only medical waste generated in the school health office is sharps from a diabetic student’s Novolog pen and expired school Epipens. The district is a category 1 licensed medical waste generator. TBS has a 1-gallon sharps container and utilizes a mail order system through School Health to return and dispose of medical waste.

35. 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

36. Are there any Underground Storage Tanks located at your School? No

Element 1D: Use of Alternative Transportation

37. What percentage of your students walk, bike, bus, or carpool (2 + student in the car) to/from school? (Note if your school does not use school buses) 3.4% of our students are walkers. This low number is caused by the large square miles covered by our school sending area. Also, the school is located right off a major highway. Most of the students who attend TBS live on the other side of the highway. All other students are assigned a bus. There are students who are driven to school but those students vary depending on the day.

How is this data calculated? (50-word max) I took the number of students not assigned to a bus because their homes border the school property and created a percent based on our total population. All other students are assigned to a bus.

38. Has your school implemented?

designated carpool parking spaces.

a well publicized no idling policy that applies to all vehicles (including school buses).

a policy that encourages walking and/or bicycling to school?

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?

39. 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)

Readington has a fleet of 20 buses and 7 vans. Since 2010 Readington Township Schools has reduced 19 routes based on an efficiency study and 6 school vans that were diesel were replaced with vans with gas motors.

### 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)

TBS is committed to developing partnerships with outside organizations that can assist us in educating our students to learn the importance and the skills and strategies of becoming responsible citizens who will become stewards of our planet. Though some of our practices have a small impact, they are huge in the pay it on factor. Once a child learns to compost at school, they will become advocates of composting at home and in other arenas such as public food courts. They will also become our voters and lawmakers in the future and will advocate for sustainability practices.

## 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. Describe your school's Integrated Pest Management efforts, including IPM/green certifications earned, routine inspection, pest identification, monitoring, record-keeping, etc.: **Three Bridges School has a full scale IPM plan that complies with the IPM in Schools Act. Monthly monitoring results are recorded, pest reports are handled promptly and have always been resolved with low impact methods such as cleaning, caulking and weather stripping. No chemicals are sprayed inside or outside.**
3. What is the volume of your annual pesticide use (gal/student/year)? Describe efforts to reduce use:  
**No pesticides are used**
4. Which of the following practices does your school employ to minimize exposure to hazardous contaminants? Provide specific examples of actions taken for each checked practice.

Our school conducts both indoor (structural) and outdoor (turf and ornamental) IPM to reduce student exposure to chemical pesticides.

Our school prohibits smoking on campus and in public school buses.

Our school has identified and properly removed sources of elemental mercury and prohibits its purchase and use in the school. **With the exception of light bulbs which are recycled**

Our school uses fuel burning appliances and has taken steps to protect occupants from carbon monoxide (CO)

Our school does not have any fuel burning combustion appliances (e.g. boilers, emergency generators, hot water heaters, etc.)

[NJ Recommends School Radon Testing](#):- Our 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 .  No

Our school was built with radon resistant construction features and 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. All outdoor equipment is plastic or metal. Our outdoor classroom utilizes metal benches and rock cinders for floor covering. A new playground was installed 2005.

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)

Three Bridges School manages chemicals in the building using the NJ Hazard Communications Standard. A yearly survey is conducted insuring containers are labeled and MSDS sheets are filed in the main office. All staff is trained in Right to Know and refresher training is given to staffers who routinely work with chemicals. Normal cleaning is done at night when the building is unoccupied. Construction and summer cleaning is done while the building is unoccupied. There is minimal if any exposure to dust or odors by students and staff.

6. Describe actions your school takes to prevent exposure to asthma triggers in and around the school. (100-word max)

Any activity done at TBS that creates dust or introduces chemicals in the environment is done when the building is unoccupied by students and staff. If an issue arises where the building would have to be worked on during school, steps would be taken to insulate children and staff from possible irritants. Further, we are prepared to prevent and respond to asthma. Each child diagnosed with asthma has an individual health plan which is followed. Further, the school nurse has standing medical orders to treat diagnosed and undiagnosed children who have airway reactions with a medicated nebulizer and oxygen.

7. Describe actions your school takes to control moisture from leaks, condensation, and excess humidity and promptly clean up mold or removes moldy materials when it is found. (100-word max)

Roof maintenance is completed regularly to prevent leaks. When a leak is found cleaning begins immediately. Wet materials are disposed of and the rest of the affected area is cleaned and dried. Repairs are made as soon as possible by district staff if possible or a contracted roofing professional. Three Bridges School is fully air conditioned which holds humidity down, drip pans and drain lines are maintained regularly to insure condensation is exiting the building envelope.

8. Our school has installed local exhaust systems for major airborne contaminant sources.  Yes

Only the kitchen has a very large exhaust system for heat; there are no science labs at the school so all the exhaust is done through normal exhaust fans and the buildings HVAC system.

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)

Three Bridges School's HVAC units are cleaned and inspected regularly with classroom filter (1") changes quarterly and rooftop unit filter (2") changes twice a year. Outdoor inspections are also done to ensure outside air intakes are clear and moisture free. Issues with classroom comfort are relayed to the Maintenance Department and repairs are made in a timely fashion.

10. Describe actions your school takes to ensure that all classrooms and other spaces are adequately ventilated with outside air, consistent with state or local codes, or national ventilation standards. (100-word max)

The classroom HVAC is set to ventilate classrooms using 20% outside makeup air. Air intakes are inspected periodically to ensure they are clear and moisture free. Classroom teachers are briefed to keep supply and return air vents clear to ensure the system can run efficiently. We should maintain 6 to 8 air exchanges per hour.

11. Describe other steps your school takes to protect indoor environmental quality such as: (200-word max)

implementing EPA IAQ Tools for Schools and/or

conducting other periodic, comprehensive inspections of the school facility to identify environmental health and safety issues and take corrective action.

participating in the Pediatric/Adult Coalition of NJ's Asthmas Friendly Awareness Program

We also have met standards Annual Facilities Checklist and QSAC requirement.

## Element 2B: Nutrition and Fitness

### **Food and Nutrition, Fitness and Outdoor time**

12. 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.

Vegetable and herb gardening assisted by local organic farmer, classroom aquafarms to show how hydraulics can grow food using fish waste to nourish plants and the plants to clean the water, sensory garden (some plantings are edible). All gardens are watered from the rain barrels.

Our school garden supplies food for our students in the cafeteria, a cooking or garden class or to the community. As our school garden becomes ready for harvesting, the students celebrate with a salad day. We eat what we have grown and the supplement the feast as needed. Further, the classroom aquafarms are yielding wheatgrass, basil and lemongrass. Recipes are shared for how those herbs can be eaten.

Our students spent at least 120 minutes per week over the past year in school supervised physical education. Students receive two 47 minute physical education periods and five 30 minute recess sessions on a weekly basis. We also have special days where fitness activities are featured outside those times.

At least 50% of our students' annual physical education takes place outdoors.

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 and/or National Bike to School Day in May. Year: N/A almost all students are bused due to the location of the building near a major highway and in an area without sidewalks. Only students whose homes border the school are walkers. The township is 49 square miles with only two primary level schools. The farthest child lives 9.55 miles from the school.

[X] Our school has a School Wellness Policy that addresses both nutrition AND physical activity. TBS meets all federal and state mandates for physical activity and nutrition. These mandates have been made into board policy.

[X] Our school has a School Wellness Committee that meets at least once a year. TBS has school committees which address wellness and the school nurses throughout the district meet regularly to discuss health issues.

[X] Health measures are integrated into assessments. The school nurse assesses all students hearing, vision, blood pressure and weight. In addition, the physical education program uses a computer program called Fitness Gram to track physical strength, agility, endurance, flexibility and speed.

[X] At least 50% of our students have participated in the EPA's Sunwise (or equivalent program).

All students grades K – 3 will be included this year to receive the program. Last school year, third graders received a Sun Education program from the Hunterdon Medical Center. In addition, sun block and proper clothing reminders go out before outdoor events at school. Students are monitored that they have applied sun block before long exposure to sun.

[X] A certain percentage of the food purchased by our school food service is locally sourced from regional farms. Percentage: 6% Type: Vegetables

13. Does your school compost lunch waste on-site? If so, what percent? How much is used in your outdoor classroom? Yes, we compost appropriate excess lunch and classroom snack foods. TBS has two five gallon compost tumblers which yield compost for our gardens. We can use all the compost we make.

14. What environmental technology is used at your school? (e.g. weather station, composting, rain garden) Weather station, two compost tumblers, two rain barrels, and a rain garden in the detention basin

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

We received a grant from the USTA and the MSTA to create a 10 and Under Tennis Program. Tennis lessons are offered after school hours by a certified tennis professional. Barclays Bank funded a grant for the First Tee program, a golf instruction and character education building program. TBS hosts physical education clubs, Girls on the Run and Tennis lessons after school in gym and on outdoor courts. The township recreation program offers many different activities for the students which are held in the school after hours in the weekdays and weekends. These programs include basketball, flag football, and tennis.

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

16. 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:

A coordinated school health program encompasses health education, physical education, health services, nutrition services, counseling services, school safety, health promotion for staff, and community involvement. Three Bridges school strives to include all these services. An example of this is our annual school community fundraiser. Three Bridges School partners with a local charity to raise funds for a worthy cause and to engage students, parents, staff, and the community in a fun, educational, and character building experience. This year the school has chosen to join the American Heart Association, Jump Rope for Heart campaign. Students in all grade levels will receive instruction on heart healthy lifestyle choices such as proper diet and nutrition, exercise, and healthy habits. These concepts will be reinforced through classroom presentations and physical education class. Teachers will be encouraged to

participate in the activity with their students. Parents will receive newsletters and updates to share in what their children learn and give guidance to foster and encourage these habits at home. Our nutrition services provider follows the New Jersey Model Nutrition Policy, which ensures children are getting proper nutrition when buying school lunch.

17. 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: Every year we partner with a local dentist or the Central NJ Health Consortium to provide dental presentations to all enrolled students. Last year, we partnered with JDRF – Walk for the Cure (used pedometers) This year we will partner with the American Heart Association (Jump Rope for Heart & Double Dutch group). We are now hosting year two of a blood drive in conjunction with New Jersey Blood Center and had students participate in their Little Doctors program.

Readington Township has a community garden. Parents from the school are involved with the garden as well as teachers from the middle school. Together we have created a trip for students to educate them about communal gardening.

We have also partnered with the scouts to help design and care for our gardens. Further, our local organic farmer has assisted the scouts and the school. Her guidance has helped us create an organic garden that yields vegetables and herbs appropriate for New Jersey and that children enjoy.

We have a unique partnership with Ocean High School. High school students come to TBS and teach our students how to double Dutch jump rope.

A Readington resident, John Marshall, former meteorologist at NBC News, has developed our school's weather station program by choosing an appropriate station and teaching the students about its use.

Grand Falloons come to the school each year to perform. Funded by the Hunterdon Clean Communities.

Merck Pharmaceuticals (MISE) and ExxonMobile Michelson Academy have offered training to our teachers in best practices in science education. These relationships have increased our abilities as educators to bring the science to life and given us the resources to conduct the experiments in the most effective manner. The result is an inquiry-based approach to science that promotes curiosity, hypothesizing, and data collection.

TBS also has a very active Home and School Association that brings in environmental awareness based assemblies. We have featured a full day assembly with workshops for students and teachers on the life cycle and importance of the honeybee, Mr. Good Slim Body, The Earth – It's a Gas, etc.

18. Does your school have a school nurse and/or a school-based health center?  Yes \_\_\_ No

19. Describe your school's efforts to support student mental health and school climate (e.g. anti-bullying programs, peer counseling, etc.):

The TBS day begins with the school population saying a school pledge and singing a song that both promote making good choices, respecting others and trying hard. We aim to instill school pride by having these routines. We understand that those who are proud of their school work to keep it a nice place.

Through coordination with the school guidance counselor, school nurse and the teachers, TBS hosts a multitude of programs focused on character education and conflict resolution programs.

- Instituted a school wide conflict resolution program
- Weekly lessons in kindergarten classroom focused on Curtis Covey's *Seven Habits of Happy Kids*
- Friendship groups that meet at lunch time to help children make and keep friends
- Monthly character word which promoted during morning announcements and through the Caught You Being Good program where children are rewarded for displaying the character word of the month.
- The school observes the Week of Respect, Red Ribbon Week and Violence Prevention Week
- Teacher lessons on character and good choices
- HIB Safety team meets to discuss issues in the school and ways to solve them. For example, we identified that the bus ride home had the most issues. Lessons were given on the buses and an incentive program for good behavior was implemented. We had many issues before and have seen very few since. Reminder lessons are given to our hot spots on specific buses to keep their behavior stellar.

### Summary Question for Pillar 2

21. Describe any other efforts to improve coordinate health and safety, nutrition and fitness, highlighting innovative or unique practices and partnerships. (100-word max) The students at TBS are well aware of the focus on fitness and health. The staff leads by example through our weight loss program that kicks off in January. Fitness tapes are offered daily after school and meeting occur where staff members are weighed in and the participants share healthy habits made easy. Staff members who are self proclaimed experts lead others.

The school principal is a competitive tennis player and shares her love and the benefits of a life long sport while encouraging all students to find the sport that best suits them.

### PILLAR 3: EFFECTIVE ENVIRONMENTAL AND SUSTAINABILITY EDUCATION

Element 3A: Interdisciplinary learning about the key relationships between dynamic environmental, energy and human systems.

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

[special note] Our school has an environmental or sustainability literacy requirement. (200-word max) Three Bridges School, being a pre-school to grade three public school in New Jersey does not have a requirement, but our avocation towards sustainability has led us in our efforts to incorporate education, cooperative partnerships and special projects which promote sustainability knowledge and respect.

[X] Environmental and sustainability concepts are integrated throughout the curriculum. (200-word max) SEE program provides grade specific curriculum regarding energy efficiency. The students are introduced to the concepts at assemblies with the Energy Hog. The teachers then carry out the learning in to the classroom. This year, the third grade students will provide a "green tip" or fact of the day to share during morning announcements. TBS also celebrates Earth Week and Arbor Day. We ceremoniously plant trees, sing songs and write persuasive essays about how they can make a difference. TBS lives its curriculum by having students take leadership roles in educating the public through various campaigns delivered through video, essay and poster.

Our science, social studies and language arts programs incorporate non-fiction literature about green education topics. The school library has a large collection of "green" books (about 80). The classrooms also abound with non-fiction titles such as *Recycle, Recycle, Recycle*, *Where Does Your Garbage Go?*, *Riches from Nature*, *Saving the Bald Eagle*, to just name a few.

[X] Environmental and sustainability concepts are integrated into assessments. (200-word max)

TBS assesses its science and social studies units formally through chapter tests and through performance based projects. For example, the second graders received a test on the soils unit in science. They also were given a test on government and how laws are formed.

Further, the school participates in contests for which class has the perfect recycling sorting for the most days in the month. The winning class earns an extra recess with the principal. Green lunches are celebrated by placing leaves on trees for each lunch brought in that meets the qualification. Science fair participants must meet requirements for the scientific method and those with a green theme are given an extra reward.

Further, TBS student voice members wear SEE (Schools for Energy Efficiency) Squad Badges and monitor classroom energy use. They leave stickers as a reward or reminder based on their findings.

[X] Students evidence high levels of proficiency in these assessments. (100-word max)

Fourth grade NJASK scores: Partially Proficient: 2 students, Proficient: 68 students, and Advanced Proficient: 137 students

[ X] Professional development in environmental and sustainability education are provided to all teachers.

All regular classroom teachers receive extensive training in the science curriculum through our partnerships with Merck Pharmaceuticals (MISE). Many topics in the curriculum focus on soils, seed to plant, wood, organisms, rocks and minerals, sun moon stars, etc.

Other teachers receive education through faculty meetings and school wide assemblies. Each year, the Hunterdon County Environmental Committee sponsors an assembly for Earth Day. The specialist teachers also educate the staff at faculty meetings as to how our programs and activities will be instituted. They lead creation of school wide videos that focus on green education.

#### Element 3B: Use of the environment and sustainability to develop STEM content, knowledge, and thinking skills

3. How does your school use sustainability and the environment as a context for learning science, technology, engineering and mathematics thinking skills and content knowledge? (200-word max) Grades preschool to first all have aquafarms which use fish waste to fertilize plants while the plants clean the water for the fish. Science units focus on environment and nature such as units on wood and paper, insects and their importance, soils, and rocks and minerals. We also incorporate computer applications in monitoring and recording water bottles saved per day, weather readings and by creating classroom podcasts and school wide videos. We publicize our efforts on our web page.

4. How does your school use sustainability and the environment as a context for learning green technologies and career pathways? (200-word max) TBS is a primary school. Therefore, the learning about career pathways comes from modeling by members around the community. For example, the Readington resident who was a major network weatherman has introduced the technologies he uses to predict the weather and why they are important. Further, having parents come in to share their interests and professions during Home and School sponsored mini-courses include nature seminars focusing on animals, reptiles. Our local organic farmer has been instrumental in teaching the students about natural ways to keep pests out of the garden by introducing specific insects, planting specific herbs and making choices that our vegetable predator, the groundhog, may not want to eat. Our yearly science fair in involves the parents in the community to work with their children. Many parents in Readington are scientists, computer scientists, engineers, carpenters, septic system engineers, etc. the projects that have come from the students for display have assisted them in finding excitement and wonder in many different STEM based fields.

#### Element 3C: Development and application of civic knowledge and skills

5. Describe students' civic/community engagement projects integrating environment, environmental justice ([as defined by EPA](#)) and sustainability topics. (200-word max)

Second grade participates in mock law making following the systems of government they are learning in social studies. Here the students identify problems they see and design, introduce and vote on laws they feel will make Readington a better place to live. Many students focus on requiring smaller, gas free cars to save fuel and pollution, stronger recycling laws (the children want very harsh penalties to anyone caught not recycling properly i.e. life in prison). The battle cry is to catch all those who pollute.

The use of the community garden to teach our students about responsibility and being a good participant in a community project is wonderful. They need to learn that when we work together all can benefit. The garden gives the community quite a harvest. They develop an understanding that it gets that way through cooperation and hard work.

The third graders also created a video which was shared over the community email blast system and shared at a town council meeting about educating the residents on the new single stream recycling program. The students' work was honored by the town council.

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)

Our school weather station teaches math skills, meteorology and communication skills. Physical education units on tennis and golf, as well as other units, provide students with an appreciation and awareness of how to be involved in exercise and personal health for a life time. The use of the school gardens and the need to cooperate among many people has taught the students how to support each other in an important endeavor. TBS third graders also created QR codes at outdoor public sites in Readington which link to the web where the students have presentations saved sharing information about the place, giving the locations' history and important facts. These were done in conjunction and with the support of the Town Council.

7. Describe students' meaningful outdoor learning experiences at every grade level. (200 word max) **All grade levels use the vegetable garden, sensory garden and our outdoor classroom. Nature walks are taken to enhance sensory images. Physical education classes are often held outside when weather permits. Building projects such as the recreation of the Mayflower is large and is done outside. And lots of playtime!**

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

Readington Township Schools are unique because we have a district level Green Committee. The committee meets regularly. Representatives from each school share their practice, projects and efforts. It has an effect of getting all four schools in the district on board with green practices. If we hear a good idea, we implement it and vice versa.

### Summary Questions for Pillar 3

Describe any other ways that your school integrates core environment, sustainability, STEM, equity and environmental justice issues ([as defined by EPA](#)), green technology and civics into curricula to provide effective environmental and sustainability education, highlighting on innovative or unique practices and partnerships. (Maximum 200-words) **Science Fair is an optional evening event where students bring a project they worked on at home and present their learning and findings at a fair. This year, the fair will give Green Ribbons to any projects that have a focus or topic pertaining to sustainability or green technologies.**

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 collaborative effort in the staff and the district level SEE coordinator and our manager of building and grounds has atmosphere in the building one in which we think and act in order to be green. We place trash in the correct bins, we consciously compost the correct items, we turn off lights and power down technology equipment. When the children are asked to they happily oblige. In fact, they remind the adults!**