

Dr. John D. Barge, State School Superintendent "Making Education Work for All Georgians"

**High Meadows School** is a private, non-profit, co-educational, independent and non-sectarian day school for students in preschool through eighth grade. Established in 1973 and located on 42 wooded acres in Roswell, Georgia, High Meadows School's innovative, inquiry-based, integrated curriculum emphasizes love of learning, creativity, meaningful connections and environmental responsibility.

"Environmental Sustainability" is more than just a fancy term at High Meadows; it is a way of life. Ask our youngest students where to throw your apple core and they'll point you toward the compost, not the trash. Ask older kids about environmental responsibility and they'll talk as much about the practical applications of real science as the trendiness of the idea. Middle Years students study the earth and its ecosystems in even greater depth, including examination of environmental issues, evaluation of potential solutions and plans for action.

Since our earliest days, we have been committed to the health of our environment. Today, respect for the natural environment pervades every element of High Meadows, including curricular education, extra-curricular activities, and a commitment to build and operate according to the highest environmental standards.

In recognition of our environmental leadership, High Meadows was invited to participate in state-wide round table discussions sponsored by Captain Planet and the Turner Foundation. Led by national environmental leader Laura Turner Seydel, the group advances environmental sustainability in schools through both curriculum and facilities. High Meadows was the only private school and the only preschool through eighth grade school represented in the group. In 2010, High Meadows hosted the national Farm 2 Schools program for a one-day workshop taught by Georgia Organics, geared toward area educators.

Environmental Sustainability awards and recognition include:

- Finalist: Atlanta Business Chronicle 2011 Environmental Awards ("Beyond LEED" category)
- •City of Roswell Environmental School and Teacher of the Year
- •River of Words National and State Level Winners in Art and Poetry
- •Schoolyard Wildlife Habitat (National Wildlife Federation)

- Pollinator Garden Certification (Monarchs Across Georgia)
- •Georgia Native Plant Habitat (Georgia Native Plant Society)
- •Audubon Wildlife Sanctuary (Atlanta Audubon Society)
- •Honorable Mention, National Green Ribbon Award 2013
- •Finalist, Georgia STEM Education Award, Technology Association of Georgia
- We have also been recognized as community partners by the following organizations and programs:
- •Keep North Fulton Beautiful/EverGreen Schools Program
- •Chattahoochee Nature Center
- •Fulton County Master Gardeners
- •The Clean Air Campaign
- •Environmental Education of Georgia
- •Monarchs Across Georgia

#### **Q1: District Contact Information**

School Name High Meadows School

District Name N/A

Principal Name Jay Underwood

Address: 1055 Willeo Road

City/Town: Roswell

State: GA

ZIP: 30075

Lead Applicant Name: Jay Underwood

Lead Applicant Email Address: junderwood@highmeadows.org

Lead Applicant Phone Number: 678-507-1172

### **Q2: School Information**

How would you describe your school: Suburban Does your school serve 40% or more students from disadvantage households? No % receiving FRPL 0 %limited English proficient 0 Other Measures 0 School Type: Private/Independent Level: (Elementary, Middle, High, K-12) Elementary and Middle Total Enrolled: 395 Graduation Rate: 100%

Attendance Rate: 100%

Is your school participating in a local, state or national school program which asks you to benchmark progress in some fashion in any or all of the Pillars? Yes or No, Program(s) and level(s) achieved: Yes, the Clean Air Campaign, and we have been a Clean Air School since 2004.

2. Has your school, staff or student body received any awards for facilities, health or environment? Yes. We have received the following awards, recognitions, and designations: LEED Gold Certification for our Community Center Building (2010); Finalist, Environmental Education award, U.S. Green Building Council; Finalist, Atlanta Business Chronicle 2011 Environmental Awards ("Beyond LEED" category); City of Roswell, Environmental School and Teacher of the Year; River of Words National and State Level Winners in Art and Poetry; Designated a Schoolyard Wildlife Habitat, National Wildlife Federation; Pollinator Garden Certification, Monarchs Across Georgia); Designated a Georgia Native Plant Habitat, Georgia Native Plant Society); Designated Audubon Wildlife Sanctuary, Atlanta Audubon Society; Honorable Mention, National Green Ribbon Award 2013

### Pillar 1: Reducing environmental impact and costs

High Meadows School's commitment to the environment extends well beyond the curriculum. We believe in walking the talk; we demonstrate to our students and to the community that we make responsible choices with maintenance, building construction and renovation, and waste management. We have clear purchasing policies that are aimed at reducing our environmental impact. We have undertaken many actions that demonstrate our reduction of environmental impact, including

•All appliances that we purchase must be Energy Star certified;

- Purchasing new cabinetry that is urea-formaldehyde-free;
- •Making our older facilities more energy-efficient by installing double-pane windows and better insulation;
- •Repurposing existing cabinetry and fixtures so as not to create additional waste;
- Donating computers and other equipment to sister schools in need;

•Establishing and maintaining a comprehensive, campus-wide recycling program that recycles an average of three cubic yards per week;

- •Replacing old lighting fixtures with newer more energy-efficient bulbs and fixtures across the campus;
- Maintaining an active composting program, which composts an average of one cubic yard per week;

• Educated by the Clean Air Campaign, our students designed an action-oriented project to challenge parents not to idle their cars during carpool time, significantly reducing emissions on campus;

•Built in 2009, our 7,000 square-foot Community Center demonstrates extremely high levels of environmental sensitivity, earning it Gold LEED certification.

Q3: Energy A. Can your school demonstrate a reduction in Greenhouse Gas emissions? B. Has your school received EPA ENERGY STAR certification or does it meet the requirements for ENERGY STAR certification? C. Has your school reduced its total non-transportation energy use from an initial baseline? D. What percentage of your school's energy is obtained from: E. In what year was your school originally constructed? F. Has your school constructed or renovated building(s) in the past ten years?

- A1. Yes or No: No
- A2. Percentage reduction: N/A
- A3. Over (m/yy m/yy): N/A
- A4. Initial GHG emissions rate (MT eCO2/person): N/A
- A5. Final GHG emissions rate (MT eCO2/person): N/A
- A6. Offsets: N/A
- A7. How did you calculate the reduction? N/A
- B1. Yes or No No
- B2. Year(s) and score(s) received: N/A

C1. Yes or No Yes

C2. Current energy usage (kBTU/student/year): 2958 kBTU/student/year

C3. Current energy usage (kBTU/sq. ft./year): 24.8 kBTU/sq. ft./year

C4. Percentage reduction: 9%

C5. Over (m/yy - mm/yy): 1/13-12/13

C6. How did you document this reduction? Information obtained from monthly electric bills, used spreadsheet to document changes in energy usage over the course of 12 months

D1. On-site renewable energy generation: 0

D2. Type N/A

D3. Purchased renewable energy: Yes

D4. Type Biomass

D5. Participation in USDA Fuel for Schools, DOE Wind for Schools or other federal or state school energy program: No

E1. In what year was your school originally constructed? 1973

E2. What is the total building area of your school? 47,000 sf

F1. Yes or No Yes

F2. For new building(s): Percentage building area that meets green building standards: 100%

- F3. Certification and level: LEED Gold
- F4. Total constructed area: 7,000 sf

F5. For renovated building(s): Percentage of the building area that meets green building standards: 0

F6. Certification and level: N/A

F7. Total renovated area: No areas have been thoroughly renovated, but efficiency improvements have been made. We have installed energy efficient double-pane windows and Icyene insulation in 33% of buildings over the last year. We anticipate these renovations to make a significant difference in heat and cool air retention, thus reducing our energy usage considerably. We will continue to monitor and document the changes over the course of the year.

Q4: Water and Grounds A. Describe alternate water sources used for irrigation. B. Describe any efforts to reduce stormwater runoff and/or reduce impermeable surfaces. C. Our school's drinking water comes from: D. Describe how the water source is protected from potential contaminants. E. Describe the program you have in place to control lead in drinking water. F. What percentage of the school grounds are devoted to ecologically beneficial uses?

A. Rain barrel water catchment systems, pervious asphalt installed in all new roadways, comprising about 10% of all roadways campus-wide. Rain barrels augment the water used for our school and class gardens.

B. Georgia Native plantings control storm water runoff. Additionally, new culverts have been installed to redirect waterways underneath walking paths. The culverts form a stream bed that directs water into our untouched, preserved natural growth area at the center of the campus, which are designated and used for ecological study.

C. Municipal water source, Well on school property or Other: Municipal

D. We use back flow preventers, which are tested annually.

E. We monitor and test drinking water at least annually. Faucets and fountains are cleaned on a regular basis to reduce the risk of any potential contaminants.

F. 80%-90%. Approximately 20% of our 42 acres is developed. The rest of the campus includes intentionally preserved meadows and forests, which include several trails for student use and study.

Q5: Waste A 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. B. 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? C. List the types and amounts of hazardous waste generated at your school: D. Which green cleaning custodial standard is used? What percentage of all products is certified? What specific third party certified green cleaning product standard does your school use? E. Describe other measures taken to reduce solid waste and eliminate hazardous waste.

E. We have a campus-wide, comprehensive recycling program for all paper, glass, and aluminum products. We do not provide a food service, and we encourage the use of reusable lunch pails by selling them directly at the school. We also re-purpose all furniture and equipment used on campus, typically by donating materials (computer equipment and furniture) to sister schools in need.

D3. Green Seal certified

D2. 100% of our cleaning products are certified

D1. Green Seal certified standard

C7. How is hazardous waste disposal tracked? Bulbs are boxed carefully and sent to an approved recycling company (Aircycle).

C6 How is this calculated? We measure the components of each lighting bulb/tube and divide the number of used bulbs by the number of months used.

C5. Other none

C4. Mercury Yes, through lighting fixtures only.

C3.Toxics none

C2. Corrosive liquids none

C1. Flammable liquids none

B. 100%--We use green seal paper.

A5. Monthly waste generated per person = (A/number of students and staff): .021

A4. Recycling Rate =  $((B + C) \div (A + B + C) \times 100)$ : 50%

A3. 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): 1 cubic yard

A2. Monthly recycling volume in cubic yards (recycling dumpster sizes(s) x number of collections per month x percentage full when emptied or collected): 3 cubic yards

A1. Monthly garbage service in cubic yards (garbage dumpster size(s) x number of collections per month x percentage full when emptied or collected): 10 cubic yards

Q6: Alternative Transportation A. 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) How is this data calculated? B. Has your school implemented? C. Describe how your school transportation use is efficient and has reduced its environmental impact. D. Describe any other efforts toward reducing environmental impact, focusing on innovative or unique practices and partnerships.

A1. We do not use buses; approximately 40% of students carpool.

A2. Surveys

B1. Designated carpool parking stalls. 5

B2. A well-publicized no idling policy that applies to all vehicles (including school buses). Yes, studentcoordinated and led. See below for more information about the curricular connection with this effort.

B3. Vehicle loading/unloading areas are at least 25 feet from building air intakes, doors, and windows.

Yes

B4. Safe Pedestrian Routes to school or Safe Routes to School No, we do not have students who walk to school.

B5. Yes, we actively encourage carpooling through newsletter articles and parent-led initiatives to find families living in proximity to each other.

C. Please see below.

D. Each year, our fourth and fifth grade students lead an inquiry into air quality as a result of idling on campus, and are always successful in raising parent awareness resulting in an overall general reduction in idling. On Earth Day, we showcase green vehicles for students and families to see.

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

High Meadows is deeply invested in the health and wellness of its community. From choosing safer cleaning products to ensuring that all of our students have ample time in the outdoors, High Meadows makes significant choices in our practices that positively impact the health and wellness of students and families. Some of the actions taken to improve campus-wide health and wellness include:

•Undergoing rigorous indoor air quality testing on a regular basis;

•Having a clear asbestos-removal and remediation plan for older buildings;

•Following an integrated, safe pest-management plan;

• Partnering with the organic and healthy food provider "Wholesome Tummies" to provide healthy lunch options for students who choose to purchase lunch;

•Sponsoring an annual Farmers' Market, open to the community, which showcases healthy and locally sourced organic products;

•All students spend a minimum of one hour outdoors each day during lunch and recess, and ample time is dedicated to outdoor physical education experiences.

Q7: Environmental Health A. What is the volume of your annual pesticide use (gal/student/year)? Describe efforts to reduce use: B. 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. C. Describe how your school controls and manages chemicals routinely used in the school to minimize student and staff exposure. D. Describe actions your school takes to prevent exposure to asthma triggers in and around the school. E. Describe actions your school takes to control moisture from leaks, condensation, and excess humidity and promptly cleanup mold or removes moldy materials when it is found. F. Our school has installed local exhaust systems for major airborne contaminant sources. G. 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. H. 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. I. Describe other steps your school takes to protect indoor environmental quality such as implementing EPA IAQ Tools for Schools and/or conducting other periodic, comprehensive inspections of the school facility to identify environmental health and safety issues and take corrective action.

A. What is the volume of your annual pesticide use (gal/student/year)? Describe efforts to reduce use: .38 gal/student/year. We use integrated pest management. Have-a-Heart traps are used for larger animals in wooden sheds and structures, and animals are released into the forest when captured (we rarely have captives!)

B1. Our school prohibits smoking on campus and in public school buses. Yes

B2. Our school has identified and properly removed sources of elemental mercury and prohibits its purchase and use in the school. We do not use or purchase elemental mercury.

B3. Our school uses fuel burning appliances and has taken steps to protect occupants from carbon monoxide (CO) We have installed carbon monoxide detectors in every building that uses gas.

B4. Our school does not have any fuel burning combustion appliances We do (gas cook tops only), but monitor their Carbon Monoxide output.

B5. Our school has tested all frequently occupied rooms at or below ground level for radon gas and has fixed and retested all rooms with levels that tested at or above 4 pCi/L OR our school was built with radon resistant construction features and tested to confirm levels below 4 pCi/L. Yes

B6. Our school has identified any wood playground or other structures that contain chromate copper arsenate and has taken steps to eliminate exposure. Yes. All of our play structures are constructed in the past eight years, when railroad ties potentially containing creosote were removed.

C. We only use green seal certified chemicals. All chemicals are locked away in non-student areas with only custodial staff having access to them. In general, we limit the use of any chemicals in student and staff-occupied buildings.

D. We use the EPA Tools for Schools as our guide. All vacuum cleaners are equipped with HEPA filters. As mentioned above, we have a no-smoking policy and strong, widely respected no-idling program. Any areas found to contain mold or moisture are remediated immediately.

E. Leaks are repaired immediately. All materials containing moisture are removed promptly. Our maintenance staff monitors potential issues by doing campus "walk-arounds" at least weekly.

F. Yes or No: No

G. All ventilators are inspected three times per year by a certified HVAC contractor.

H. Every classroom has a doorway directly to the outdoors, and all contain several energy-efficient

windows which are opened during favorable weather. We use EPA Tools for Schools as the standard.

I. We administer frequent inspections to ensure health and safety from a variety of perspectives. We use the EPA Tools for Schools as mentioned above.

Q8: Nutrition and Fitness A. 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) B. Describe the type of outdoor education, exercise and recreation available. C. Describe any other efforts to improve nutrition and fitness, highlighting innovative or unique practices and partnerships.

A1. Our school participates in the USDA's HeathierUS School Challenge. Level and year: No

A2. Our school participates in a Farm to School program to use local, fresh food. We have hosted Farm to School workshops, and we plan on growing our efforts here. We do not provide food to our students. We do provide an optional lunch service ("Wholesome Tummies"), which has in its standards the priority of using healthy, locally-sourced foods.

A3. Our school has an on-site food garden. Yes. Gardens are maintained by students, harvested and used in our own cooking activities, and have been donated to people in need through "Plant a Row for the Hungry."

A4. Our school garden supplies food for our students in the cafeteria, a cooking or garden class or to the community. Yes. See above.

A5. Our students spent at least 120 minutes per week over the past year in school supervised physical education. Yes. Beyond the focused physical education classes, all students participate daily in "Meadow," which is a play-oriented, unprogrammed time where students are outdoors for at least 45 minutes per day.

A6. At least 50% of our students' annual physical education takes place outdoors. Yes. In fact, approximately 80% takes place outdoors. Our fields and woods are adjacent to our community center, which is only used for PE during very inclement weather.

A7. Health measures are integrated into assessments. Yes

A8. At least 50% of our students have participated in the EPA's Sunwise (or equivalent program). No

A9. Food purchased by our school is certified as "environmentally preferable" Yes, but we do not have a cafeteria, so the amount purchased is very little. The food company with which we are contracted, as described above, uses only environmentally-preferable foods. When we purchase foods for cooking activities, we only choose environmentally-preferable foods (typically organic).

A10. Percentage: 100%

A11. Type: Snacks and ingredients used for cooking activities and classes.

B. All students participate in physical education, of which about 80% occurs outdoors as described above. All students also participate in environmental education courses, which begin outdoors through exploration and discovery. All students spend a minimum of one hour per day outside for play and physical activity. In our middle years program, all students are required to take a course in outdoor living skills.

C. Our physical education teacher and school counselor work collaboratively to teach children about healthy choices and best wellness practices. Part of our strategic priorities include hiring a Director of Health and Wellness when our budget allows. The Head of School is working with parents who professionally administer a wellness program, which will first be focused on faculty and staff wellness.

# Pillar 3: Providing effective environmental and sustainability education, incorporating STEM, civic skills, and green career pathways.

The High Meadows environmental education program combines the study of environmental science with environmental responsibility and is integrated into classroom activity and offered as part of the regular enrichment curriculum for grades preschool through five. Our Middle Years curriculum goes even deeper and includes relevant literature, indoor and outdoor laboratory experiments, examination of environmental issues, and evaluation of potential solutions and action plans. And extra-curricular opportunities exist for students who wish to pursue environmental studies and action on an even broader level. Examples of our outstanding environmental education program include:

•An all-school three-week study of trash and its impact on our world. Called "Emphasis," the study produced such student projects such as "up-cycled" jewelry and clothing; a raft made of plastic bottles; power point presentations on the evolution and the journey of trash; the creation of a playground climbing "dragon" made entirely of old tires; and explorations into the politics of trash

•Regular environmental education classes that are closely linked to topics of studies in each grade level general classroom

•During a unit study on energy, fifth grade students visited a local home built with energy conservation in mind, then returned to campus and reflected on their experience

•Students garden, hike, play, explore, and read on our 42-acre campus. The campus itself is an outdoor classroom, and includes

- •An Amphitheater
- •Bird Feeding Stations
- •Compost Bins, Meadows
- •Butterflies/Insect Pollinators

- •Vegetable, Herb, Flower and Bog gardens
- Native Plant Landscapes
- Nature Trails
- Picnic Tables, Benches and other study sites
- •A Supplemental Water Source for Wildlife
- •A Weather Station
- •Wildlife Shelters
- •A Labyrinth

Q9: A. 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. B. Our school has an environmental or sustainability literacy requirement. C.. Environmental and sustainability concepts are integrated throughout the curriculum. D. Environmental and sustainability concepts are integrated into assessments. E. Students evidence high levels of proficiency in these assessments. F. Professional development in environmental and sustainability education are provided to all teachers.

A. Third through fifth grade students attend Environmental Education (EE) class three times per week for two six week blocks of time during the school year for 45 minutes each. This model allows the EE teacher to age-appropriately take the students deeper onto environmental issues such as understanding the importance of living in a sustainable manner. K-2 students participate in EE class 30 minutes per week. The EE teacher works closely with the classroom teachers during units of study that do not include a regular EE class. This could involve the EE teacher co-teaching in the regular classroom, planning and executing field trips that connect to the current unit of study or assisting teachers in drawing connections between units of study and EE. The EE teacher also offers classroom teachers support in using our 42 acre campus to provide hands-on teaming in an outdoor setting. Classroom teachers also infuse the NAEE Guidelines for K-12 into their regular International Baccalaureate curriculum, further reinforcing our overall mission to provide a "connection to the natural environment" for all of our students.

B. All students in grades K-5 are required to take EE. In the middle school, students also participate in a required Outdoor Living Skills course, in which they learn plant and animal identification and classification and sustainable outdoor living practices.

C. During this past calendar year, Environmental Education has been combined with Technology education for grades K-2 to provide meaningful learning behind technology concepts. Not only has this experience proven successful (based on assessment results), this approach has been scientifically supported with peer-reviewed research based on the idea of a "Hybrid Mind." This research confirms

the importance of children receiving a balance of technology education and access to the natural world in order to harness the skills necessary to be successful as adults. All teachers receive support from the Environmental Education teacher on incorporating the NAAEE Guidelines for K-12 across all disciplines into their classroom curriculum. In addition, when students attend EE class, lessons include all disciplines.

D. Yes, within the environmental education projects and assignments executed during EE class. Such assessments are authentic in nature, as is the practice for the entire school, in which student success is measured by effective individual and team problem-solving.

E. Yes, and all students take action based on their teaming. Examples include students testing water quality in area streams and conducting anti-idling campaigns. Again, such projects are action-oriented and authentic, empowering students to learn that their actions can make an impact on their world.

F.) The EE teacher actively comes into classrooms (outside of the students' regular EE time) to assist with lessons related to infusing environmental and sustainability education into the curriculum. She advised teachers about how to integrate EE topics and practices into their curriculum. Teachers are also made aware of EE-related training and conferences offered from outside organizations; The EE teacher receives more intensive opportunities such as attendance at relevant conferences, membership into relevant organizations, opportunities to present at conferences and network with colleagues in the same field at different schools all over the country. The EE teacher is tasked with bringing these experiences back to High Meadows and incorporating them into the collaboration and support efforts with classroom teachers. The EE teacher has been asked to present at international conferences based on the best practices she works to bring to our school community.

Q10: A. For schools serving grades 9-12, provide: Percentage of last year's eligible graduates who completed the AP Environmental Science course during their high school career: Percentage scoring a 3 or higher: B. How does your school use sustainability and the environment as a context for learning science, technology, engineering and mathematics thinking skills and content knowledge? C. How does your school use sustainability and the environment as a context for learning green technologies and career pathways? D. Describe students' civic/community engagement projects integrating environment and sustainability topics. E. Describe students' meaningful outdoor learning experiences at every grade level. F. Describe how outdoor learning is used to teach an array of subjects in contexts, engage the broader community, and develop civic skills. G. Describe your partnerships to help your school and other schools achieve in the 3 Pillars. Include both the scope and impact of these partnerships. H. Describe any other ways that your school integrates core environment, sustainability, STEM, green technology and civics into curricula to provide effective environmental and sustainability education, highlighting on innovative or unique practices and partnerships.

A1. Percentage of last year's eligible graduates who completed the AP Environmental Science course during their high school career: N/A

### A2. Percentage scoring a 3 or higher: N/A

B. While studying a unit on Energy, our students learn about renewable and nonrenewable resources, and pros and cons of using both. All Fourth & Fifth grade students attend a field trip to a local home built entirely with energy conservation in mind. From solar panels on the roof to kitchen counters made of recycled paper, this home gives students a real-life laboratory to study the impact of sustainable architecture choices, apply mathematics to learn the economics behind energy conserving homes (cost per square foot versus money saved monthly on energy use, etc.), explore engineering and technology necessary to create, store and transport energy created by our sun, realize choices we make daily that are good for our natural world are also good for human health. In the younger grades (first/second), students design, build and test model-sized wind turbines based on their acquired knowledge about how the force of wind can be harnessed and converted into energy. Using their test results, they make a recommendation to a fictitious company on which design they should invest their money. This process includes math (measurement & addition/subtraction), science (scientific method to conduct experiments as well as understanding forces, both man made and natural), problem solving (design and testing), creativity and thinking (design, working in "science teams").

C. In the example above regarding wind turbines, students were exposed to careers in both the world of research and development as well as top-level positions in companies where economic-based decisions are made and take into account environmental and economic sustainability. During a unit on Ancient Civilizations, students found extensive evidence of how ancient civilizations developed based on their connection with and use of their natural world. Through a detailed study of the components of a civilization (politics, intellectual, economics, social), students realized that a respect for working in collaboration with our natural world was necessary for prolonged success for any ancient civilization. They applied this knowledge to the creation of a realistic fictional eco-friendly civilization. In the process of developing every component of that civilization, they discovered the real-life existence of green careers today and the possibilities of more green careers in the future.

D. A large portion of our curriculum involves a "Take Action" component which challenges students to take their newly-acquired knowledge and skills and apply them in a way that serves the greater school and/or social community. This year, student learning has led to the creation of a bird watching station open to all students and teachers, including a chart to collect data on what bird species are seen throughout the year. Another project resulted in a group of fourth/fifth grade students creating a guide, available to all K-5th students, to identify shark teeth and rocks and minerals brought into the school's Natural Science Museum by other students. Last year, student learning has led to the creation of a new playground for our preschool students using recycled tires and other reusable materials; an extensive campus-wide student-driven no littering campaign; planting, harvest and delivery of fresh produce to a local food pantry several times per year, expansion of the food pantry garden to include a greenhouse to provide food during the winter; contribution of data to a statewide water quality database based on monitoring of an on-campus stream. All of these community efforts originate from curriculum-based lessons.

E. Preschool students learn all subject areas, including a specific class on nature, always located outdoors. All other students garden, hike, play, explore, write, and read on our 42-acre campus. There are outdoor experiences integrated into all subject areas and grade levels.

F. Maps created to scale are created on the lower and upper meadows, leading students to understand the need for keys on real maps; compass and math skills are taught using a variety of geographic terrains on campus; science and math are taught through monitoring of the on-campus stream quality and submitting the data to a statewide database; using individual field kits stocked with binoculars, note-taking materials, and other science tools, students are taken on campus exploration hikes where they are given the opportunity to practice observation skills, writing and journaling skills, and numerous other subject areas inspired by student-driven, nature-inspired inquiry.

G. Our Earth Day celebration partners student teaming with a community business or non-profit organization to teach the whole student body during "Empowerment Hour." For example, the Georgia Adopt-a-Stream organization works directly with our students who monitor the campus stream to teach Earth Day participants how to properly monitor the chemical and biological health of a stream.

H. As a part of our annual Earth Day celebration, we partner with organizations such as the Chattahoochee Nature Center to bring programming to our students. As for STEM, our middle years students are engaged in robotics instruction and design. Sixth grade students engage in a technology product design course.

## GreenRibbonSchools

ED-GRS (2012-2013)

U.S. Department of Education Green Ribbon Schools 2013

2	For Public Schools only: [] Charter [] Title I [] Magnet [] Choice
	Name of Principal Mr. Jay Underwood, Head of School (Specify: Ms., Miss, Mrs., Dr., Mr., etc.) (As it should appear in the official records)
	Official School Name High Meadows School As it should appear in the official records)
	School Mailing Address 1055 Wilko Road (If address is P.O. Box, also include street address.)
	Roswell GA 30075 City State Zip
	County Fulton State School Code Number* N/A
	Telephone ( $\frac{10}{993} - 2940$ Fax ( $\frac{10}{993} - 833$ )
	Web site/URL www. highmeadows.org E-mail junderwood Dhighmeadows.org
	I have reviewed the information in this application and certify that to the best of my knowledge all information is accurate. (Principal's Signature)
	Name of Superintendent*
	District Name*Tel.(
	I have reviewed the information in this application and certify that to the best of my knowledge all information is pecurate. This is one of the highest performing green schools in my jurisdiction.
	(Superintendent's Signature) Date 2/19/14
	*Private Schools: If the information requested is not applicable, write N/A in the space.

ED-GRS (2012-2013)

Page 2 of 4

Page 1 of 4



2) improved health and wellness; and 3) effective environmental and sustainability education.

2. The district 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 Georgia Department of Education

Name of Nominating Authority Dr. John Barge

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

Date: February 1, 2014 (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 according to the instructions in the Nominee Submission Procedure.

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

#### **Public Burden Statement**

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

Page 3 of 3





