



**U.S. Department of Education Green Ribbon Schools**

**2011-2012 Presentation of Nominee to the  
U.S. Department of Education**

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Attach State or Nominating Authority’s Evaluation of School Nominee (Either application or other documentation of review)

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

## **PART I - ELIGIBILITY CERTIFICATION**

### **School and District's Certifications**

The signatures of the school principal and district superintendent (or equivalents) on the next page certify that each of the statements below concerning the school's eligibility and compliance with the following requirements is true and correct.

1. The school has some configuration that includes one or more of grades K-12. (Schools on the same campus with one principal, even a K-12 school, must apply as an entire school.)
2. The school achieves or comes close to achieving the goals of all three green Ribbon Pillars: 1) environmental impact and energy efficiency; 2) healthy school environments; and 3) environmental and sustainability education.
3. The school has been evaluated and selected from among schools within the state or Nominating Authority's jurisdiction (BIE, DoDEA), based on *documented achievement* toward the three Green School Pillars and Elements.
4. Neither the nominated public school nor its public school district is refusing the U.S. Department of Education Office of Civil Rights (OCR) access to information necessary to investigate a civil rights complaint or to conduct a district wide compliance review.
5. OCR has not issued a violation letter of findings to the public school district concluding that the nominated public school or the public school district as a whole has violated one or more of the civil rights statutes. A violation letter of findings will not be considered outstanding if OCR has accepted a corrective action plan to remedy the violation.
6. The U.S. Department of Justice does not have a pending suit alleging that the public school or the public school district as a whole has violated one or more of the civil rights statutes or the Constitution's equal protection clause.
7. There are no findings of violations of the Individuals with Disabilities Education Act in a U.S. Department of Education monitoring report that apply to the public school or public school district in question; or if there are such findings, the state or public school district has corrected, or agreed to correct, the findings.
8. The school meets all applicable federal, state, tribal and local health, environmental and safety requirements in law, regulations and policy and is willing to undergo EPA on-site verification.

U.S. Department of Education  
Green Ribbon Schools 2012

For Public Schools only: (Check all that apply) [ ] Charter [X] Title I [ ] Magnet [X] Choice

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

Official School Name Pine Jog Elementary School  
(As it should appear in the official records)

School Mailing Address 6315 Summit Boulevard  
(If address is P.O. Box, also include street address.)

West Palm Beach Florida 33415  
City State Zip

County Palm Beach State School Code Number\* 50

Telephone ( 561 ) 656-5421 Fax ( 561 ) 656-5450

Web site/URL www.edline.net/pages/pine\_jog\_elementary\_school E-mail fred.barch@palmbeachschools.org

I have reviewed the information in this application, including the award and eligibility requirements on page 2-4, and certify that to the best of my knowledge all information is accurate.

[Signature] Date 3/6/12  
(Principal's Signature)

Name of Superintendent\* Mr. E. Wayne Gent  
(Specify: Ms., Miss, Mrs., Dr., Mr., Other)

District Name\* School District of Palm Beach County Tel. (561) 434-8200

I have reviewed the information in this application, including the award and eligibility requirements on page 2-4, and certify that to the best of my knowledge all information is accurate. I concur that this is one of the highest performing green school applicants in our state.

[Signature] Date 3/6/12  
(Superintendent's Signature)

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

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

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### **Instructions to School Principal**

Provide a concise and coherent "snapshot" that describes how your school is representative of your state's highest achieving green school efforts in approximately 600-800 words. Summarize your strengths and accomplishments. Focus on what makes your school worthy of the title U.S. Department of Education Green Ribbon School. Be sure to note if students were actively involved in preparing the application.

This summary should be written as a stand-alone document. It will provide the ED review panel with an overview of the school's green activities that were detailed in the application to the state, DoDEA or BIE evaluators. If the school is awarded a U.S. Department of Education Green Ribbon, this information may be shared with other schools, candidates for next year, the press, and the public.

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

### **Instructions to Nominating Authority**

For the pilot year, the Nominating Authority must review nominated schools for high achievement based on the schools' *documented achievement* toward reaching the goals of each of the three U.S. Department of Education Green School Pillars and elements. For each school being nominated by the Authority to ED, please attach state (or equivalent) evaluation materials (application) based on the Nominating Authority Evaluation Support Framework provided by ED to facilitate your evaluation of schools.

The Nominating Authority must review and sign the following certification for each school being nominated to ED.

### **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.

1. The school has some configuration that includes one or more of grades K-12. (Schools on the same campus with one principal, even a K-12 school, must apply as an entire school.)
2. The school achieves or is one of those overseen by the Nominating Authority which comes the closest to achieving the goals of all three green Ribbon Pillars:  
1) environmental impact and energy efficiency; 2) healthy school environments; and  
3) environmental and sustainability education.
3. The Nominating Authority has evaluated the school and selected it for submission to the U.S. Department of Education from among those schools overseen by the Nominating Authority which have applied for a Green Ribbon, based on *documented achievement*

toward the three Green School Pillars and Elements.

4. The school meets all applicable federal civil rights and federal, state, tribal and local health, environmental and safety requirements in law, regulations and policy and is willing to undergo EPA on-site verification.

Name of Nominating Agency Florida Department of Education

Name of Nominating Authority Commissioner Gerard Robinson  
(Specify: Ms., Miss, Mrs., Dr., Mr., Other)

I have reviewed the information in this application, including the award and eligibility requirements on pages 2-4, and certify, to the best of my knowledge through a documentary verification assessment, that the school meets the provisions in this Part of the Nominee Presentation Form.

Gerard Robinson Date 3/21/12  
(Nominating Authority's Signature)

Note to Nominating Authority: The application, including the signed certifications and documentation of evaluation in the three pillars should be converted to a PDF file and emailed to Director, ED-Green Ribbon Schools at [green.ribbon.schools@ed.gov](mailto:green.ribbon.schools@ed.gov) according to the instructions in the Nominee Submission Procedure.

### 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.

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

Since its inception in 2008, Pine Jog Elementary has been committed to becoming a world leader in developing a culture of sustainability for our future generations. Being voted Best Designed School in Florida 2009 and Best Green Building in the SE Region of the United States, we choose to “live green” by modeling sustainable and healthy choices through conserving, reducing, reusing, recycling, gardening, and outdoor nature explorations.

Under the leadership of Principal Fred Barch, dedicated teachers and staff, along with curious children and their families, excite all who visit us whether in person or through the media. This Title I school of 861 K-5 students with 70% free/reduced lunch is successful because of extensive collaboration of these concerned individuals. By providing real world experiences, our young children shine as leaders by working to find solutions for local, as well as global, issues. For example, Madison, a fifth grader, initiated a movement to eliminate the use of Styrofoam cafeteria trays in schools. She is currently collecting signatures on her petition. Eric, a former student, launched a recycling program at his new school, carrying on the green initiatives he learned at Pine Jog.

As an “A-rated” public LEED Gold Certified Green School of Excellence, Pine Jog respectfully uses its protected 150-acre environment as a unique outdoor classroom. We share this distinctive campus with Florida Atlantic University and Pine Jog Environmental Education Center. Inquiry activities are facilitated at the pond, observation beehive, on the nature trails, and in native plant restoration areas.

In conjunction with the United Nations Billion Tree Campaign, every student and staff member planted a total of 1700 native trees. Students manage all aspects of our 4000 plant hydroponic garden, including writing a business plan for daily produce sales. On campus, we also have nine themed ground gardens, a native butterfly garden, a newly planted sunflower house, and Florida’s first urban peach orchard consisting of 29 specially grafted trees. These agricultural initiatives educate our students on growing and buying local, organic produce and how their choices affect freshness and eliminate fuel costs. Through our extensive outdoor instruction and first hand experiences of growing nutritious food using water collected by cisterns, students understand the critical need for pollinators, composting, clean water, and natural/organic pest control developing a green message to take home. Our green behaviors earned us the National Wildlife Habitat and Bird Friendly Certifications.

Our teachers attended and presented at the 2011 and 2012 National Green Schools Conferences. Imagine our pride when Arne Duncan mentioned our hydroponic garden and student involvement in his keynote speech. In a national study conducted by Dr. Brian Dunbar of University of Colorado, our school was featured as one of the top model green schools in the nation that teach whole school sustainability. Besides the data shared, he summed up our green culture by saying “...at Pine Jog Elementary, their green initiatives go beyond the walls and beyond the hours.”

By living our vision, we inspire learners in our Asthma Friendly School while integrating STEM, nature, and art. Our learning climate has fostered other partnerships, such as The Marshall Foundation, a local food bank, local agricultural businesses, and a LEED attorney.

Our remarkable accomplishments include earning the title **Green School of Excellence** in 2009, 2010, 2011; 2009 finalist and 2010 winner of the **Governor's Serve to Preserve Green School Award**; and Florida's highest accolade: **First Recipient of the 2011 Florida Power and Light Sustainable Legacy Circle Award**. Our most cherished awards, won by students, include Florida Wildlife Federation recognizing our **OWL Team (Our World LEEDers)** as the **2011 Youth Conservationist of the Year Award**. Our 2008 **SECME** Team won first place out of 68 elementary schools. In April 2009 **Time Magazine for Kids** featured our student gardening program on their front cover which reached 3.5 million readers worldwide.

When students move on to middle school, they take with them a changed attitude and environmental behaviors toward sustainability. They have participated in rigorous academic activities, including our educational STEM based outdoor learning stations, featuring the human sundial, our student researched and designed *Native Plant Hunt*, and LifeLab interactive centers, overnight environmental experiences, beach cleanups, tree plantings, canoeing the Everglades, writing to politicians, including the President and First Lady, learning healthy habits through exercising and growing their food from seed to plate, giving green tours, and speeches about the environment in school and our community. These opportunities prepare them to become environmental ambassadors as they sow the seeds of a green culture into their future endeavors.

Our youngest stewards in the green schools movement build enthusiastic momentum in all of us by taking risks, using creativity and developing inquiry skills. Through our guidance in growing up green, our hope is to influence other educators and their students to become agents of change.

# Green Ribbon Schools Florida Application with Resources

Response ID: Data

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## 3. Page Three

### School Contact Information

**School Name**

Pine Jog Elementary School

**Street Address**

6315 Summit Blvd.

**City**

West Palm Beach

**State**

FL

**Zip**

33415

**School Website**

[http://www.edline.net/pages/pine\\_jog\\_elementary\\_school](http://www.edline.net/pages/pine_jog_elementary_school)

**Principal First Name**

Fred

**Principal Last Name**

Barch

**Principal Email Address**

fred.barch@palmbeachschools.org

**Principal Phone Number**

561-656-5421

**Lead Applicant First Name (if different from principal)****Lead Applicant Last Name (if different from principal)****Lead Applicant Email****Lead Applicant Phone Number****Level**

Elementary (PK - 5 or 6)

**School Type**

Public

**What is your student population?**

861

**How would you describe your school?**

Public

**District (county) and Code**

50 PALM BEACH

**Does your school have at least 40 percent of your students from a disadvantaged background (i.e., eligible for free or reduced price lunch)?**

Yes

**My Principal and Superintendent are aware of and in support of this application.**

Yes

## 5. Page Five

**QCC1: Is your school participating in local, state, or nationally recognized green school program which asks you to benchmark progress in some fashion (for example, National Wildlife Federation Eco-Schools USA, Green Schools Alliance, Collaborative for High Performance Schools, or Project Learning Tree's Green Schools!)?**

Yes

**Which program(s) are you participating in and what level(s) have you achieved?**

US Green Building Council LEED Gold Certification, Florida Green School Awards AKA FL Governors Serve to Preserve Green School Award Program 2008,09,10,11, FPL Sustainability Leadership Circle Award, Palm Beach County Green Schools Recognition Program - Green School of Excellence in 09, 10, 11, Asthma Friendly School in 09, 10,11, United Nations Billion Tree Campaign, Every Student planted a tree, National Wildlife Federation Certification as a Wildlife Habitat, FL Fish and Wildlife Charter Member for FL Project Wild - 100% of teachers trained in program

**QCC2: Has your school, staff or student body received any awards for environmental or sustainability stewardship/action?**

Yes

**Please list the awards you have received and the years you received them.**

2011 Florida Power and Light Sustainable Legacy Circle Award, Governors Serve to Preserve Green School Award 2010, Green School of Excellence 09,10,11, Asthma Friendly School 2009, 2010, 2011, United Nations Plant for the Planet Campaign - each student planted a tree, In 2011, Students won the Florida Youth Conservationists of the Year by the Florida Wildlife Federation, Won 1st place in the 2009 SECME Competition, School Featured on the front cover of Time Magazine for Kids for our Gardening Program, Nominated for the NEA Green Prize in 2008

## 7. Page Seven

**Q1A1: Can your school demonstrate a reduction in its Greenhouse Gas emissions?**

Yes

**If yes, please provide the following information:**

Initial GHS emissions rate (MT eCO<sub>2</sub>/person) : 742 MT eCO<sub>2</sub>/693 people = 1.07

Final GHG emissions rate (MT eCO<sub>2</sub>/person) : 762 MT eCO<sub>2</sub>/951 people = .80

Percentage reduction : 25.2%

Time period measured (mm/yyyy - mm/yyyy) : 10/2008 - 09/2009 to 10/2010 - 09/2011

How did you document this reduction (e.g., the inventory module from Clean Air Cool Planet's Campus Carbon Calculator)? :  
EPA.gov/cleanenergy/energy-resources/calculator.html#results

**Q 1A2: Has your school received EPA ENERGY STAR certification or does it meet the requirements for ENERGY STAR certification?**

Yes

**If your school received the certification, please note the year it was achieved and the score received:**

We met the requirements of Energy Star but District did not fund a formal evaluation by an outside engineer for certification purposes.

**Q 1A3: Has your school reduced its total non-transportation energy use from an initial baseline?**

Yes

**If yes, please provide the following information:**

How did you document this reduction (ie. ENERGY STAR portfolio, district report)? : District Report - Please note that the total school population increase from 693 to 951

Measurement unit used (kBTU/square foot, kBTU/student, annual therms, etc.) :  $1075920/693 = 1,552$  -  $1105200/951 = 1,162$

Time period measured (mm/yyyy - mm/yyyy) : 10/2008-9/2009 - 10/2010-9/2011

Percentage reduction : 25% Reduction. Note that we had a significant increase in total population over time period measured

**Q 1A4: What percentage of your school's energy is obtained from:**

On-site renewable energy generation : Less than 5% from 69 Solar Panels and \_\_\_ solar hot water panels

Purchased renewable energy : -0-

**In what year was your school constructed?**

2007 - 2008, Opened August of 2008

**What is the total building area of your school?**

119,837

**Q 1A5: Has your school constructed a new building or renovated an existing building in the past ten years?**

Yes

**If yes, please provide the following information:**

Percentage of the building area that meets green build standards (for example, LEED, CHPS, Green Globes or other standards) : 100%

Which certification did you receive and at what level? : LEED Gold Certification

What is the total constructed area? : 119,837

**Q 1A6: Do any parts of your existing buildings meet green build standards (for example, LEED, CHPS, Green Globes, or other standards)?**

No

**If yes, please provide the following information:**

**Q 1A7: Does your school reduce and/or offset the greenhouse gas emissions from building energy use?**

Yes

**If yes, please provide the following information:**

Current total GHG emissions (MtCO<sub>2</sub>e) : 762 MtCO<sub>2</sub>e for 951 people (.80 MtCO<sub>2</sub>e/person)

Baseline total GHG emissions (MtCO<sub>2</sub>e) : 742 MtCO<sub>2</sub>e for 693 people ( 1.07 MtCO<sub>2</sub>e/person)

Change from baseline : 25.2 percent decrease

Time period measured (mm/yyyy - mm/yyyy) : 10/2008 - 10/2011 (Note the significant increase in enrollment over time period measured)

List offsets used : No offsets used

**Q 1A8: Please indicate which green building practices your school is using to ensure your building is energy efficient.**

School has fully implemented the Facility Energy Assessment Matrix within EPA's Guidelines for Energy Management.

School Building has been assessed using the Federal Guiding Principles Checklist in Portfolio Manager.

School has an energy and water efficient product purchasing and procurement policy in place

Other (please describe): Students monitor energy and water use and have competitions to decrease usage.

## 8. Page Eight

**Q 1B1: Can you demonstrate a reduction in your school's total water consumption (measured in gallons/occupant) from an initial baseline?**

Yes

**If yes, please provide the following information:**

How did you document this reduction (i.e., ENERGY STAR Portfolio Manager, school district reports)? : District Reports - touch screen monitor information

Percentage reduction domestic : 3% reduction

Percentage reduction irrigation : 50% decrease based on mandatory water restrictions

Time period measured (mm/yyyy - mm/yyyy) : 09/2010 - 10/2010

**Q 1B2: Which of the following practices does your school employ to increase water efficiency and ensure quality? (Please check all that apply)**

Our school conducts annual audits of the facility and irrigation systems to ensure they are free of significant water leaks and to identify opportunities for savings.

Our school has a smart irrigation system that adjusts watering time based on weather conditions.

Our school's landscaping is water-efficient and/or regionally appropriate.

Our school uses alternative water sources (ie. grey water) for irrigation before potable water.

Taps, faucets, and fountains at our school are cleaned at least twice annually to reduce contamination and screens and aerators are cleaned at least annually to remove particulate lead deposits.

Our school has a program to control lead in drinking water (including voluntary testing and implementation of measures to reduce lead exposure).

**Please provide the following information about your school's landscaping:**

What percentage of your total landscaping is considered water-efficient or regionally appropriate? : 100%, The entire campus was landscaped with native vegetation and every attempt was made to keep native plants. For example, our parking lot was designed around the native trees.

What types of plants are used and where are they located? : All native plants used in landscaping throughout the entire campus.

**Please describe the alternate water sources used for irrigation. (Maximum 100 words)**

We have a total of 6 cisterns which hold over 6,500 gallons of rainwater along with a small demonstration rainbarrel that holds 55 gallons. The water collected in our cisterns is used to irrigate our 4,000 plant hydroponic garden and 9 raised bed ground gardens and our butterfly garden. A large portion of our campus is not irrigated and is heavily forested or xeriscaped. The small irrigated portion is only watered when needed from a well. Children hand water ground gardens using the cisterns. If cisterns run dry, we use well water for gardening purposes.

**Please describe the program you have in place to control lead in drinking water. (Maximum 100 words)**

The Municipality provides quarterly water quality reports. The School District has a system for reviewing the reports and identifying concerns with water contaminants. Our school was built in 2008 so we do not have issues with lead soldering of our water pipes. The Palm Beach County Health Department also does periodic tests at the school center. All refrigerators have filtration systems and all faucet screens are cleaned monthly. Our water supply is from an aquifer, the water is treated utilizing lime softening and ozone treatment, followed by disinfection. Lead is significantly less than 15 parts per billion.

**Q 1B3: Our school's drinking water comes from:**

Municipal water source

Please describe how the water source is protected from potential contaminants. (Maximum 100 words)

**Q 1B4: Please describe any additional progress your school has made towards improving water quality, efficiency, and conservation. (Maximum 200 words)**

Students monitor water usage from data posted on touch screen monitoring systems located throughout the school and the front office for parent information. They are educated on dual flush toilet systems, cisterns, xeriscaping and other ways to conserve water in our school and community. We broadcast a live news program from our school studio every morning featuring a weekly green tip including water conservation suggestions. Students learn the value of irrigating with cisterns and the use of waterless urinals. We address water conservation through educational programs and signage located near fountains, bathrooms and other key locations on campus. Students created a You Tube Video for the National Green Cup Challenge sponsored by the Green Schools Alliance. The informational video provided an overview of how we collect water in our cisterns and reuse it to irrigate our gardens. Students also discussed other water saving features of our school. Students learn how to save water at home while saving their parents money on their water bill.

## 9. Page Nine

**Q 1C1: What percentage of solid waste is diverted from landfilling or incinerating due to recycling and/or composting (i.e., Recycling Rate)?**

A - Monthly garbage service in cubic yards (garbage dumpster size(s) x number of collections per month x percentage full when emptied or collected). : 105

B - Monthly recycling volume in cubic yards (recycling dumpster sizes(s) x number of collections per month x percentage full when emptied or collected). : 51.17

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). : 44

Recycling Rate =  $(B + C) \div (A + B + C) \times 100$  : 47%

**Q 1C2: What percentage of your school's total office/classroom paper content by cost is post-consumer material or fiber from forests certified as responsibly managed by the Forest Stewardship Council, Sustainable Forestry Initiative, American Tree Farm System or other certification standard? (If a product is only 30% recycled, only 30% of the cost should be counted)**

45%

**Q 1C3: What percentage of the total office/classroom paper content by cost is totally chlorine-free (TCF) or processed chlorine free (PCF)?**

100%

**Q 1C4: Please provide the following information about your school's hazardous waste:**

How much hazardous waste does your school produce (lbs/person/year)? : 0lbs/person

How is the generated amount calculated? : No hazardous waste allowed on campus. The only type of waste is from fluorescent lights and they are recycled by the school district

List the types of hazardous waste generated : Fluorescent Lights

How is hazardous waste monitored? : Fluorescent lights are picked up by the school district for recycling.

**Q 1C5: Which of the following benchmarks has your school achieved to minimize and safely manage hazardous waste? (Please check all that apply)**

Our school has a hazardous waste policy for storage, management, and disposal that is actively enforced.

Our school disposes of unwanted computer and electronic products through an approved recycling facility or program.

All our computer purchases are Electronic Product Environmental Assessment Tool (EPEAT) certified products.

Our custodial program has been certified by the ISSA Cleaning Industry Management Standard - Green Building (or other equivalent standard).

**Which green cleaning standard is used?**

USGBC whole-building cleaning and maintenance issues (including chemical use), recycling programs, exterior maintenance programs, and systems upgrades

**Q 1C6: Does your school use "third-party certified" green cleaning products?**

No

**If yes, please provide the following information about the green cleaning products used in your school:****Q 1C7: What other indicators do you have of your school's reduction of solid waste and elimination of hazardous waste? (Maximum 200 words)**

Our mantra is to reuse rather than recycle, but we recycle almost everything. Students create artwork and musical instruments from items that would have gone to the landfill. For example, we collect bottle caps to recycle but primarily use them to create murals. Other containers are used for pencil holders, supply boxes and as storage containers. Students learn about different ways to compost. They experiment with a standard black composter from Solid Waste Authority, a Roly Pig Composter from Kids Gardening and a Can-O-Worms Vermiculture. We also have an open composting pile. All classrooms have recycle bins to eliminate garbage. Students are responsible for emptying classroom bins. We recycle almost everything and waste almost nothing. Bingo for Books allows student to bring in gently used books to participate in a Bingo game to win books. We have a Reuse Center where large bins are used to collect large items such as clothing, books, classroom supplies. People can drop things off that they no longer need or find treasure to take. We have a recycling program for our florescent lights, used batteries and old paint.

**Q 1D1: What percentage of your students walk, bike, bus, or carpool (i.e., two or more students in the car) to/from school?**

55%

**How was this data collected and calculated? (Maximum 100 words)**

All students are identified as a walker, biker, bus rider, or after school bus. Copies of this information is kept in the front office so calculating this was easy. We updated the transportation list in early February so the data was fairly easy to access. We have joined the Florida Department of Transportation School Pool Program in hopes of raising the number of students. This program helps match families interested in car pooling. Over 90% of our students live within 2 miles of our school so our even the commute distance for parent drivers is minimal.

**Q 1D2: Which of the following policies or programs has your school implemented:**

Our school has designated carpool parking stalls.  
Our school has a well-publicized no idling policy that applies to all vehicles (including school buses).  
Vehicle loading/unloading areas are at least 25 feet from building air intakes, doors, and windows.  
Our school has established Safe Pedestrian Routes to school which are distributed to parents and posted in our office.  
Our school participates in a "Safe Routes to School"

**Q 1D3: Describe how your school transportation use is efficient and has reduced environmental impacts (e.g., the percentage of school-owned electric/hybrid/alternative fuel vehicles in your fleet or other indicators of significant reductions in emissions). (Maximum 100 words)**

We have instituted a no idle zone to make sure that parents are aware that they are not allowed to run their vehicles while waiting for their children. We joined the School Pool program to increase car pooling. This school was designed as a community school with limited choice students. This means that 90% of our students live within 2 miles of school, making a shorter commute for parents who must drive their children to school. Principal has a Diesel car that runs off of used vegetable oil and a solar powered golf cart.

**Q 1D4: What percentage of the school grounds are devoted to ecologically beneficial uses (e.g., school vegetable garden, wildlife or native plant habitats, outdoor classroom, environmental restoration projects, rain garden) or socially/culturally beneficial uses (e.g., playgrounds, outdoor spaces designed and used regularly for social interaction, athletic or recreational areas, walking or running trails)?**

93%, Our school is built on 150 acres. Over 140 acres are natural woodlands with multiple outdoor classrooms and 3 miles of trails.

**Q 1D5: This concludes Pillar 1. Please describe any other accomplishments or progress your school has made towards reducing/eliminating environmental impacts or improving your energy efficiency. (Maximum 200 words)**

Every student and staff member planted a pine tree for a total of 1700 trees. Students planted a large butterfly garden and a native prairie covering over 1 acre. They regularly tend to a 4,000 plant hydroponic garden and 9 ground gardens. We also have the first Urban Peach Orchard in Florida. Students planted 29 specially grafted Peach Trees. They learn the importance of growing and buying locally and how that affects freshness and saves energy by eliminating transportation costs. Our students raised money through garden vegetable sales for donation to the Arthur R. Marshall Foundation in support of the Everglades Restoration Program. Students campaigned to save a large natural bee hive from extermination. The hive was relocated by local bee keepers to a safer location on campus. This active hive is now constructed with glass a viewing wall which provides curricular enrichment for our students and pollinators for our gardens. Our partnership with Florida Atlantic University/Pine Jog Environmental Education Center provides environmental literacy lessons during the day and through the afterschool program which they coordinate. Every year, we purchase environmentally focused books for each classroom to read and discuss.

## 11. Page Eleven

**Q2A1: Which of the following practices does your school employ with regards to pest management? (Please check all that apply)**

Our school has an integrated pest management plan in place to reduce and/or eliminate pesticides.  
Pest control policies, methods of application, and posting requirements are provided to parents and school employees.  
Copies of pesticide labels, copies of notices, MSDS and annual summaries of pesticide applications are all available and in an accessible location.  
Our school prohibits children from entering a treated area for at least 8 hours after the treatment or longer if required by the pesticide label.

**Q2A2: Which of the following practices does your school employ to improve contaminant control and ventilation? (Please check all that apply)**

Our school has a comprehensive indoor air quality management program that is consistent with Indoor Air Quality (IAQ) Tools for Schools.  
Our school meets ASHRAE Standard 62.1-2010 (Ventilation for acceptable indoor air quality).  
Our school has installed one or more energy recovery ventilation systems to bring in fresh air while recovering the heating or cooling from the conditioned air.  
Our school has eliminated mercury-containing thermometers, chemical compounds, art chemicals, etc. and elemental mercury.  
Our school disposes of any unwanted mercury laboratory chemicals, thermometers and other devices in accordance with federal, state, and local environmental regulations.  
Our school has Carbon Monoxide alarms that meet the requirements of the National Fire Protection Association code 720.  
There are no wood structures on school grounds that contain chromate copper arsenate.  
Our school has an asthma management program that is consistent with the National Asthma Education and Prevention Program's (NAEPP) Asthma Friendly Schools guidelines.  
Our school visually inspects all structures on a monthly basis to ensure they are free of mold, moisture and water leakage.  
Our school's indoor relative humidity is maintained below 60%.  
Our school has moisture resistant materials/protective systems installed (i.e., flooring, tub/shower, backing, and piping).  
Our school has a chemical management program that includes: chemical purchasing policy (low or no-VOC products), storage and labeling, training and handling, hazard communication, spills (clean up and disposal), and selecting EPA's Design for the Environment approved cleaning products.  
Our school prohibits smoking on campus and in public school buses.  
All of the ground contact classrooms at our school have been tested for radon within the last 24 months.  
If your school has combustion appliances, is there an inventory of them and are they annually inspected to ensure they are not releasing Carbon Monoxide? (yes/no/no combustion appliances): No combustion appliances

## 12. Page Twelve

**Q2B1: Which practices does your school employ to promote nutrition, physical activity and overall school health? (Please check all that apply)**

- Our school participates in the USDA's Healthier School Challenge or another nutrition program.
- Our school participates in a Farm-to-School program or other program to utilize local food in our cafeteria.
- Our school has an onsite food garden.
- Our school garden supplies food for our cafeteria.
- Our students spend an average of at least 120 minutes per week (over the past year) in school supervised physical education.
- At least 50% of our students' annual physical education takes place outdoors.
- At least 50% of our students have participated in the EPA's Sunwise program or other equivalent UV protection and skin health education program.

**Please list your school's USDA HealthierUS School Challenge award level or describe other nutrition program. (Maximum 100 words)**

Our school has received the Bronze Level of the USDA Healthier School Challenge Award and received the Asthma Friendly Schools Award. We hosted the last two annual Slow Foods Conferences and featured our garden vegetables. We use Growums as one of our fundraisers. The Growums fundraiser brings the benefits of fresh vegetables to the home of nearly every child in our school. Students learn how to care for their plants by receiving periodic emails from Growums and can chart the growth of their plants from seedling to harvest. We teach lessons on how fresh vegetables have a positive impact on the human body using Organ Wise Guys and lessons that promote healthy eating. Students experience healthy foods through planting in our garden, monitoring plant growth, harvesting and tasting fresh vegetables. As an extension of our classroom gardening lessons, we also have a fresh green market every morning in our front office where students, staff and community members select freshly harvested vegetables. Donations from local farmers and produce from our garden are on display at our annual Strawberry Festival. We distributed green information at the South Florida Fair to 500,000 people.

**Please describe the type of outdoor exercise opportunities and nature-based recreation available to students. (Maximum 200 words)**

Pine Jog is located on a 150 acre campus with over 3 miles of trails. Students routinely hike to the preserve and learn science outside. Classes can be found reading, writing and creating art throughout our school grounds. Our 4,000 plant hydroponic garden provides many outdoor activities. Many nature based recreation opportunities such as attending the Everglades Youth Conservation Camp. All 4th graders attended overnight camp at Everglades Youth Conservation Center, participating in canoeing, fishing, hiking, archery, dip netting and evening literacy based activities. Backpack labs provide inquiry based activities in the forest. Other opportunities include our Litter Action Patrol (LAP). The LAP program consists of taking laps around the school picking up litter, classifying and weighing it, then recording the type. Our school has more field experiences than most other elementary schools. Our students participate in NASA Train Like an Astronaut Program where students experience rigorous outdoor physical activities that are linked to the curriculum. Students explore the mental and physical requirements of astronaut training. Families participate in our annual Strawberry Festival's Green Market and rock wall climbing. Enchanted Forest provides nocturnal adventures.

**Q2B2: What percentage (by cost) of food purchased by your school is certified as "environmentally preferable" (e.g., Organic, FairTrade, Food Alliance, Rainforest Alliance)?**

50%

**Q2B2.5 Does your school implement the coordinated school health model?**

Yes

**Q2B3: This is the end of Pillar 2. Please describe any additional progress your school has made in terms of the school's built and natural environment (including unique community and/or business partnerships) to promote overall student and staff health and safety. (Maximum 200 words)**

Staff participates in a weight loss challenge, Breast Cancer Awareness walks and runs. Our PE area has many outdoor learning games printed on the play courts. One of our play areas is called the Human Sun Dial. Students enter the green top and locate the day of the month and raise their hand to estimate the time of day. We also have many family oriented outdoor activities such as our Enchanted Forest and Strawberry Festival. The Enchanted Forest is held in October and families are invited into our candle lit forest. During these nights, the animal characters come to life and talk to the parents and students about their life in the forest, what they eat and where they live. We host the annual Slow Foods Conference where some of our vegetables are featured and garden tours are provided. Slow Foods is an organization that focuses on foods that are good for them, good for those who grow it, and good for the earth. This is a great partnership for our green school. Students are working on a

cookbook that will encourage healthy cooking.

## 14. Page Fourteen

**Q3A1: Which practice(s) does your school employ to help ensure the environmental and sustainability literacy of your graduates? (Please check all that apply)**

Environmental and sustainability concepts are integrated throughout the curriculum.

Environmental and sustainability concepts are integrated into classroom-based and schoolwide assessments.

Professional development opportunities in environmental and sustainability education are provided for all teachers.

**Please describe your school's environmental or sustainability literacy graduation requirement. (Maximum 200 words)**

**Please describe your classroom-based or schoolwide assessments in environmental and sustainability concepts and include what percentage of students scored "proficient" or better. (Maximum 200 words)**

Students are formally assessed in grades 3-5, comparing their scores with district peers, using the PBC Fall and Winter Diagnostic Assessments. An analysis of the environmentally-based questions show that in all three grade levels, in seven out of the nine concepts tested, our students scored at or above their district peers. The percent correct of the targeted items reached as high as 90% of third graders, 70% of fourth graders and 70% of fifth graders. The Florida Comprehensive Achievement Test in science is administered to all 5th graders. Out of 107 elementary schools in our county, we had the largest increase in science scores from 2009 to 2010, a 22% gain. Our students also outperformed the district average in 2010 and 2011. We also scored above the county, district and state average in 2009, 2010 and 2011. Students outperformed similar neighboring schools by 18% and 21%. In authentic assessments, we have noted a significant increase in the recycling rate among our students. During a recent visit by Philippe Cousteau, he informally quizzed our students on environmental literacy and global issues. Our students answered all questions correctly.

**Please describe professional development opportunities available in environmental and sustainability standards. Include the percentage of teachers who participated in these opportunities over the past two years. (Maximum 200 words)**

100% of our teachers were certified in the Florida Fish and Wildlife Federation's Project Wild Curriculum designating us as a Charter Member of the Florida Project Wild Schools Program. All teachers received training in NSTA Picture Perfect Science and the Science IDEAS/NSF literacy programs. Florida Atlantic University/Pine Jog Environmental Center provided training to all staff on how to connect meaningful cross curricular instruction through forest walks. 100% of teachers participated in a book study on Last Child in the Woods, by Richard Louv. Mr. Louv visited Palm Beach County and Teachers, Administrators and Students were invited to interview and visit with the author. Philippe Cousteau visited Pine Jog and spoke to the entire faculty on critical environmental issues. Pine Jog Elementary Teachers attend and present at county, state and national green schools conferences. In addition, we have also trained numerous teachers in hydroponic gardening techniques. As a result of our model and mentoring, there are now over 12 similar systems in our county schools. At staff meetings, we incorporate environmental and sustainability lessons. Teachers attended a professional development day at the Palm Beach Zoo and Platinum level LEED Certified Animal Hospital.

**Q3A2: If your school serves grades 9-12, please provide the following information:**

**Q3B1: Do your school's science courses frequently use sustainability and the environment as a context for learning science (e.g., asking questions, developing and using models, planning and carrying out investigations, analyzing and interpreting data, using mathematics and computational thinking, constructing explanations, and engaging in argument from evidence when exploring environmental and sustainability issues)?**

Yes

**Please describe. (Maximum 200 words)**

Our green school culture and devotion to environmental science is deeply entrenched among our faculty, staff and students. Teachers plan with teams and share strategies for environmental integration. K-5 students are exposed to environmental science in science class and in weekly science lab classes. Lab activities are conducted indoors and in our "outdoor classroom," through hands-on inquiry activities based on the 5 E model. Using science process skills, students engage in activities, such as plant and pollinator observations, bird watching, and nocturnal animal scat/track identification. Classes on water conservation,

composting, energy, and interdependence are conducted in various locations throughout the campus. We hosted a STEM Family Night, bringing 427 students and families together for an evening of exciting activities. Teachers and members of our science community facilitated the 25 STEM stations. Great care was taken to use minimal consumable station materials. Parents and students used models, investigated, analyzed and interpreted data, used math skills, engaged in computer technology, and viewed the Earth through 3-D glasses to observe the planet's environmental systems. A focus of the night, was also to model ways to reuse and recycle materials while showcasing our commitment to sustainability.

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**Q3B2: If your school is a high school, does your school curriculum make connections between classroom and college and career readiness, in particular post-secondary options in environmental and sustainability fields (e.g., CTE Green Sustainable Design and Technology course)?**

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**Please describe these college and career connections. (Maximum 200 words)**

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**Q3C1: Do students conduct an age-appropriate, self-selected, civic/community engagement project at every grade level?**

Yes

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**If not in all grades, please specify which grades.**

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

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**Please provide the following information:**

What percentage of these projects focus on environmental or sustainability topics? : 100% of students in grades 3, 4 and 5

What percentage of students completed such a project last year? : 100% of students in grades 3,4 and5

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**Q3C2: Do students have meaningful outdoor learning experiences (experiences that engage students in critical thinking, problem solving and decision making) at every grade level?**

Yes

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**If not in all grades, please specify which grades.**

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**Please share how outdoor learning is used to teach an array of subjects in contexts, engage the broader community, and develop civic skills. (Maximum 200 words)**

The peaceful, natural beauty of our campus inspires local authors and poets to share their expertise with writing classes. Local TV and Radio Green Earth's frequently broadcast our students' interviews and knowledge of the environment to a larger audience. Student-lead tours of our LEED facility and outdoor learning labs inspire visitors from all over the world. Our student leadership club, the OWL Team (Our World LEEDers) manage our 4000 plant hydroponic garden from seed to harvest, using observation, measurement, researching and writing skills. They provide weekly broadcasted green tips and create YouTube videos about our green school featured on the National Green Cup Challenge website. Invitations to speak at school board meetings, green award ceremonies and luncheons provide the stage for our students to impact others. ACTIVELY Green, our environmental drama club, promotes environmental messages through plays about our green school. They create all scenery and costumes from reusable materials from Resource Depot. Neighboring Title 1 schools attend our free plays. Every class participates in Food for Families, and we provide our fresh vegetables to our local food pantry. We planted Florida's first urban peach orchard.

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**Q3C4: Please describe your partnerships with the local community (e.g., academic, business, government, nonprofit and informal science institutions) to help advance your school, other schools (especially schools with fewer resources) and the greater community toward the 3 Pillars. Include both the scope and impact of these partnerships. (Maximum 300 words)**

Our school was created out of a partnership between our school district, Florida Atlantic University, and Pine Jog Environmental Education Center. We maintain multiple partnerships throughout our community. Our partnership with South Florida Water Management District provided teacher and student training in Geographic Information Systems and Geographic Positioning Systems. Students used GPS units to set coordinates of our environmental features and transferred data to GIS. Extension activities included how GPS/GIS is used in the Everglades to monitor exotic species movement such as tracking invasive pythons. Field scientists brought in various examples of the exotics that have been tracked by these technologies. A partnership with a local law firm has provided guidance and business plan development with our students for our hydroponic

garden. Students harvest fresh vegetables to sell in our front office. These funds sustain the gardens and improve environmental areas on campus based on the business plan. An Environmental Lawyer meets monthly to advise students on public speaking and sound business practices. Our All Pro Dad's program meets monthly to bring fathers into school for a free breakfast with their child. This program connects fathers with their child's education while increasing our community partnerships. All food, guest speakers, and door prizes, such as signed NFL footballs and fishing gear are donated. Local farmers donate plants, supplies and advice to make our children successful urban farmers. Local TV Anchors annually visit during Literacy Week to read environmentally themed books to classes and frequently feature our unique green school on the news. Palm Beach Zoo, Busch Wildlife, Science Museum, Arthur Marshall Foundation routinely visit our school to present programs. We provided guidance, plants and seeds and reasonably priced garden systems to schools with fewer resources.

**Q3C5: This is the end of Pillar 3. Please describe other methods and measurements your school uses to ensure matriculating students are environmentally and sustainability literate. (Maximum 200 words)**

Through partnerships with Florida Atlantic University and the Pine Jog Environmental Center, Environmental Literacy Programs were created for our after school program servicing over 230 students on a daily basis. All grade levels participate in Environmental Literacy programs. These programs were created using the North American Association for Environmental Education's Guidelines for Learning. These lessons are reviewed by the Environmental Education Center and FAU. The programs were written by our classroom teachers to ensure connections to our curriculum. Backpack programs were created to provide appropriate grade level field experience for each child. The teachers pick up the backpack as they are going out to the forest. Everything for the specially tailored program, is located in the backpack including equipment, tools and measuring devices. As students graduate from Pine Jog, they leave with a change in attitude and behaviors toward the environment and sustainability. By the time they exit our program, they have participated in beach clean ups, tree plantings, overnight environmental experiences, canoed the Everglades, written to politicians - including the President and First Lady, given green tours and speeches about the environment in school and the community.

**16. Page Sixteen**

**Email Confirmation**



**U.S. Department of Education**  
***Green Ribbon Schools***  
**TECHNICAL REVIEW**

<b>Nominee</b>	Pine Jog Elementary School, K-5, 6315 Summit Blvd., West Palm Beach, FL, 33425, School District of Palm Beach County		
	<b>Evaluation Issues</b>	<b>Approvable</b>	<b>Special Notes</b>
	Florida Department of Environment Protection: Checked all records available regarding environmental violations for this school. Reviewer Name and Title: <b>Greg Ira, Director DEP-OEE</b> <b>Cristina Llorens, Public Relations Manager FL-DEP</b>	Yes <input checked="" type="checkbox"/> X No <input type="checkbox"/> —	None
	U.S. Department of Labor: Occupational Safety & Health Administration (OSHA) Checked referred database for compliance with OSHA regulations at Federal and state levels. <a href="http://www.osha.gov/pls/imis/establishment.html">http://www.osha.gov/pls/imis/establishment.html</a> Listed by: <b>Ms. Rivera, Officer on duty, OSHA Fort Lauderdale</b> Reviewer Name and Title: <b>Romina Sola, Coordinator Florida Green School Network</b>	Yes <input checked="" type="checkbox"/> X No <input type="checkbox"/> —	None
	Florida Department of Agriculture and Consumer Services: Checked compliance with regulations related to National School Lunch Program Reviewer Name and Title: <b>Linda Miles, Program Administrative Team Director, Food, Nutrition and Wellness</b>	Yes <input checked="" type="checkbox"/> X No <input type="checkbox"/> —	None
	Florida Department of Education: Checked compliance with USDOE Individuals with Disabilities Education Act (IDEA) Reviewer Name and Title: <b>Patricia Howell, Program Director of Monitoring and Compliance, Bureau of Exceptional Education &amp; Student Services</b>	Yes <input checked="" type="checkbox"/> X No <input type="checkbox"/> —	None



**FLORIDA**  
GREEN SCHOOL NETWORK

**U.S. Department of Education**  
***Green Ribbon Schools***

**NOMINATION SCORE SHEET**

The following score sheet is to be completed for each nomination submitted to the Florida Department of Education for the U.S. Department of Education Green Ribbon Schools program.

**Introduction**

The U.S. Department of Education's Green Ribbon Schools (ED-GRS) award is intended to recognize those schools that are taking a comprehensive approach to greening their schools. A comprehensive approach incorporates and integrates environmental learning with maximizing positive environmental and health impacts.

The National Green Ribbon Schools program focuses on three pillars:

- Pillar I: Environmental Impact and Energy Efficiency
- Pillar II: Healthy School Environments
- Pillar III: Environmental and Sustainability Education

This is a two-step process. The first step is to complete and submit an application to the Florida Department of Education to be selected as a state nominee. The second step is for the Florida Department of Education to review the judges' scores and select up to four nominees to be forwarded to the U.S. Department of Education.

All public and private K-12 schools are eligible to apply for the Green Ribbon Schools designation. Schools are to be evaluated based on their progress towards a wide variety of green benchmarks, including zero greenhouse gas emissions, food that is locally sourced and sustainable, and curriculum that ensures all students are environmentally and sustainability literate.

As you review the nominees, please keep in mind:

1. These are ambitious goals and few, if any, schools are expected to have achieved all three, or even 100% of any one of the Pillars.
2. Schools demonstrating exemplary achievement in all three Pillars should receive the highest ranking.
3. It is important that nominees demonstrate concrete achievement, using quantified measures, whenever possible.

The score sheet parallels the nomination form. Each section has a highest point potential already identified. Based on the information provided, you may award up to the maximum number of points in each element within each pillar.

<b>Nominee</b>	
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For this nominee, please use this table to score each Pillar and its Elements.

<b>Cross Cutting Questions - 5%</b>	<b>Points</b>	<b>Score</b>
Participation in Green School Programs and/or awards for environmental and sustainability efforts, along with commitment of school organization	5 points	

<b>Pillar I Environmental Impact and Energy Efficiency 30%</b>	<b>Points</b>	<b>Score</b>
Element IA: Improved energy conservation/energy-efficient building(s)	15 points	
Element IB: Improved water quality, efficiency, and conservation	5 points	
Element IC: Reduced waste production and improved recycling and composting programs	5 points	
Element ID: Use of alternative transportation to, during, and from school	5 points	
<b>Subtotal</b>		

<b>Pillar II - Healthy School Environment -30%</b>	<b>Points</b>	<b>Score</b>
Element IIA: An integrated school environmental health program	15 points	
Element IIB: High standards of nutrition, fitness, and quantity of quality outdoor time	15 points	
<b>Subtotal</b>		

<b>Pillar III Environmental and Sustainability Education 35%</b>	<b>Points</b>	<b>Score</b>
Element IIIA: Interdisciplinary learning about the key relationships between dynamic environmental, energy, and human systems	20 points	
Element IIIB: Use of the environment and sustainability to develop Science, Technology, Engineering, and Mathematics (STEM) content, knowledge, and thinking skills	5 points	
Element IIIC: Development and application of civic engagement knowledge and skills	10 points	
<b>Subtotal</b>		

Cross Cutting Questions	
Pillar I – Subtotal	
Pillar II - Subtotal	
Pillar III - Subtotal	
<b>Grand Total</b>	

<b>Name</b>		<b>Signature</b>