

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

ELIGIBILITY CERTIFICATIONS

School and District's Certifications

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

1. The school has some configuration that includes grades Pre-K-12.
2. The school has been evaluated and selected from among schools within the Nominating Authority's jurisdiction, based on high achievement in the three ED-GRS Pillars: 1) reduced environmental impact and costs; 2) improved health and wellness; and 3) effective environmental education.
3. Neither the nominated public school nor its public school district is refusing the U.S. Department of Education Office of Civil Rights (OCR) access to information necessary to investigate a civil rights complaint or to conduct a district wide compliance review. The Department of Defense Education Activity (DoDEA) is not subject to the jurisdiction of OCR. The nominated DoDEA schools, however, are subject to and in compliance with statutory and regulatory requirements to comply with Federal civil rights laws.
4. OCR has not issued a violation letter of findings to the public school district concluding that the nominated public school or the public school district as a whole has violated one or more of the civil rights statutes. A violation letter of findings will not be considered outstanding if OCR has accepted a corrective action plan to remedy the violation.
5. The U.S. Department of Justice does not have a pending suit alleging that the public school or the public school district as a whole has violated one or more of the civil rights statutes or the Constitution's equal protection clause.
6. There are no findings of violations of the Individuals with Disabilities Education Act in a U.S. Department of Education monitoring report that apply to the public school or public school district in question; or if there are such findings, the state or public school district has corrected, or agreed to correct, the findings.
7. The school meets all applicable federal, state, local and tribal health, environmental and safety requirements in law, regulations and policy and is willing to undergo EPA on-site verification.

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

Public Charter Title I Magnet Private Independent Rural

Name of Principal: Mrs. Lori C. Masterson

Official School Name: Surfside Elementary School

Official School Name Mailing Address: 475 Cassia Boulevard, Satellite Beach, Florida 32937

County: Brevard State School Code Number: 6061

Telephone: (321) 773-2818 Fax: (321) 777-1841

Web site/URL: http://www.edline.net/pages/Surfside_Elementary_School/

E-mail: masterson.lori@brevardschools.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)

Date: 1/9/2017



Name of Superintendent: Dr. Desmond Blackburn

District Name: Brevard

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

Date: 1-12-17

(Superintendent's Signature)

Nominating Authority's Certifications

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

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

Name of Nominating Agency: Florida Department of Education

Name of Nominating Authority: Commissioner Pam Stewart

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

A handwritten signature in blue ink that reads "Pam Stewart".

Date: 1/24/17

(Nominating Authority's Signature)

SUMMARY AND DOCUMENTATION OF NOMINEE'S ACHIEVEMENTS

Provide a coherent summary that describes how your school is representative of your jurisdiction's highest achieving green school efforts. Summarize your strengths and accomplishments in all three Pillars. Then, include concrete examples for work in every Pillar and Element. Only schools that document progress in every Pillar and Element can be considered for this award.

SUBMISSION

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

OMB Control Number: 1860-0509

Expiration Date: March 31, 2018

Public Burden Statement

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

Surfside Elementary Highlight Report

Surfside Elementary is a small community school with innovative outdoor learning spaces, creative environmental education programs and active community involvement. Organic school gardens, school-wide incubation and farm animal husbandry, and community outreach programs are just a few things that make this beachside school a model for saving the planet through personal responsibility.

Pillar I: Reduced Environmental Impact and Cost

Environmental impact is a central focus of Surfside's operations. Over the last five years, we have reduced greenhouse gas emissions by 45%, according to analysis of our district utility bills. Approximately 15% of our solid waste is diverted from landfill/incineration through our recycling compacting dumpster and through having our students feed daily vegetable scraps to the chickens, ducks, geese and turkeys; the manure from the poultry run is used to fertilize fruit trees.

We have also taken measures to ensure water-efficient, Florida-friendly landscaping. A certified Florida Master Gardener has landscaped with Florida native plants. There is a large grove of live oaks near the bike racks, a sensory garden near the office, a native butterfly garden across the entire front of the campus, and numerous butterfly gardens with host and nectar plants for different species throughout the interior of the school grounds. Irrigation is from 10 rain barrels, with temporary drip irrigation used only when necessary. The few paved areas (sidewalks, physical education court and a parking area) are surrounded by gardens that help to soak up rain water. All other areas are permeable.

School-wide recycling and conservation happens daily in the classrooms, offices and cafeteria. Our Recycled Art Club, Green Team and 4-H Club all utilize recycled materials, spread awareness, and help to keep the campus clean and green.

Our small neighborhood school has no buses. Encouraged by our new bike rack and 3 crossing guards, over 75% of our students walk or ride their bikes to school, as do many of our teachers. Our annual Walk to School Day has a huge turnout and is made successful through major community involvement. A new car loop system this year has reduced idling time by over 50% and allows pickup now to flow smoothly and efficiently.

Pillar II: Improve the Health and Wellness of Students and Staff

At Surfside, we make every effort to ensure a safe and healthy environment. Our school has a robust Integrated Pest Management plan, and currently the entire school is organic and pesticide free; all our cleaning products are green-certified. We proactively address pest problems with the help of the Brevard County Extension office. Recently the Green Team formed an innovative Zika Mitigation Plan to ensure that our school could keep rain barrels, tadpole habitats and birdbaths full without promoting the spread of the Zika virus.

We also enforce a policy prohibiting all tobacco use including e-cigarettes on school property or at school-sponsored events. We adhere to the Asbestos Act, and our chemical management program includes a purchasing policy for less toxic products. Our kitchen uses natural gas, a fuel source that generates no carbon monoxide emissions and approximately 50% less carbon dioxide than electricity derived from coal.

Each classroom has large doors and windows that open to the outside, providing fresh air and natural light. Our open campus ensures that every classroom and student space has views of trees, sky, flowers and darting butterflies.

A monthly campus clean up and inspection by teachers and students is done during “Clean Up Your Corner Fridays.” Environmental health or safety issues are documented and resolved by the School’s Green Team or referred to the proper authority.

We understand at Surfside that physical and emotional health are just as important as academics if students are going to achieve their full potential. In health education class, all students learn to make informed decisions about their health, including physical activity and nutrition, which are celebrated during activities such as the Jog-a-thon and Organic Soup and Salad celebration. Students learn the skills to remain physically active for a lifetime through physical education, as well as activities such as Walk to School Day, Panther Pacers and Morning Mile. Our principal leads Walking Wednesday during which staff are encouraged to walk and brainstorm together. Staff members also have monthly healthy food celebrations. These activities are shared with parents through class and school newsletters.

Pillar III: Effective Environmental and Sustainability Education

Our school is located just one mile from both the Atlantic Ocean and Indian River Lagoon, and it is vital that our students understand their role in protecting the water and the planet. A Marine Science Agent conducts workshops with our students so they can better understand their roles as stewards of the waterways. Field trips, including the Brevard Zoo, Indian River Lagoon, Sea World’s One World One Ocean Program, Kid Power Nutrition, and the Barrier Island Sanctuary, plus special events such as Make a Difference Day, Dr. Seuss Lorax Week, Run for Shade 5K and Earth Day celebrations all contribute to our students’ motivation, awareness and commitment to helping our school and our planet. Project Learning Tree and 4-H help to shape our Environmental Education curriculum and policies.

A unique feature of our school is our extensive campus gardens and poultry coop. On every grade level, our teachers integrate environmental and sustainability concepts across subjects and in a variety of contexts. Our grade level gardens allow teachers to combine academic achievement, nutrition, garden science, physical activity, food preparation and fresh vegetable tastings to improve the health and wellness of children, families, and the school community. Students work in the gardens and are engaged in hands-on life science projects with insects and poultry that are supported through not just curriculum and lesson plans but with community volunteers, business partners and technology resources. Our entire campus is an outdoor learning experience that brings all of us together.

Surfside Elementary School

School Contact Information:

Principal: Lori Masterson
321-773-2828
masterson.lori@brevardschools.org
475 Cassia Boulevard, Satellite Beach, Florida 32937

Lead Applicant:

Erika Maier
321-773-2818
maier.erika@brevardschools.org

Website:

http://www.edline.net/pages/Surfside_Elementary_School/

District name:

Brevard County

School Type:

Public/Suburban

Level:

Elementary

Does your school serve 40 percent or more students from disadvantaged households?

No

Attendance Rate:

97%

Total Enrolled:

472

Percent of students receiving Free or Reduced Price Lunch:

22%

List your school's participation in a local, state or national school programs or others which ask you to benchmark progress in some fashion, such as EPA ENERGY STAR Portfolio Manager, Eco-Schools, USDA Fuel for Schools, USDOE Wind for Schools, Project Learning Tree, etc.

Program(s):

Project Learning Tree – Green School

Brevard County Fantastic Farm 4-H Club – Active Club 2013-2016

List your staff or student body awards for facilities, health or environment.

Award(s) and year(s)

Keep Brevard Beautiful – County winner 2015-2016 and numerous “School of the Month” awards during the last five years

Melbourne Eco School winner 2015-2016

National Wildlife Federation Certified Wildlife Habitat 2013-Present

Pillar I: Reduced Environmental Impact and Costs

Can your school demonstrate a reduction in greenhouse gas emissions? Yes

Percentage reduction:

Approximately 45%

Over (mm/yyyy - mm/yyyy):

08/2008-08/2016

Initial GHG emissions rate (MT eCO₂/person):

495.4/440

Final GHG emissions rate (MT eCO₂/person):

272.0/440

How did you calculate the reduction?

District utility bills

Has your school reduced its total non-transportation energy use from an initial baseline?

Yes

Current energy usage (kBTU/student/year):

150.5/467/2015

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

78/50,000 /2015

Percentage reduction:

2.5

Over (mm/yyyy - mm/yyyy):

08/2010-08/2015

How did you document this reduction?

District utility bills

What year was your school constructed:

1963

What is your school's drinking water source?

Municipal

What is the average baseline water use (gallons per occupant):

FY 2009/2010 December 65,700 by 440 =149.31 gallons per occupant

Current water use (gallons per occupant):

FY 2015/2016 December 65,500 by 573=114.31 gallons per occupant

Percentage reduction in domestic water use: 23% $((149.31 - 114.31) / 149.31)$

Time period measured:

12/2010-12/2015

How did you document this reduction (i.e., ENERGY STAR Portfolio Manager, utility bills, school district reports)? District utility bills

Please describe if your school's landscaping is considered water-efficient and/or regionally appropriate (e.g., Florida-friendly certified professional, percentage of your water-efficient landscaping, sources used for irrigation, etc).

All our school's landscaping is water-efficient and regionally appropriate. A certified Florida Master Gardener has designed and overseen the installation of all landscaping with Florida native plants such as Simpson stopper, fire bush, muhly grass and live oaks. Around each corner of the open campus is a new environmentally friendly garden to delight the senses. There is a large grove of live oaks near the bike racks, a sensory garden near the office, a native butterfly garden across the entire front of the campus, and numerous butterfly gardens with host and nectar plants for different species throughout the interior of the school grounds. Irrigation is through use of rain barrels, and when this is not sufficient, temporary drip irrigation is used.

What percentage of the school grounds are devoted to ecologically beneficial uses?

Almost 100% of the school is devoted to ecologically beneficial uses, (excluding parking lots, one of which is porous). Shade trees help children cool off in the hot Florida sun, rain barrels catch water for irrigation, portable classrooms are surrounded by native plants that help to welcome children, birds and butterflies.

Describe any efforts used to reduce storm water runoff and/or reduce impermeable surfaces.

There are over 10 rain barrels throughout the campus that help catch water run-off. Sidewalks and one parking lot are surrounded by gardens that help to soak up rainwater. All other areas are permeable.

What percentage of solid waste is diverted from land filling or incinerating due to reduction, recycling and/or composting?

Approximately 15%. We have a large (40 yard) compacting recycling dumpster that is emptied every 2-3 months. Students feed daily vegetable scraps to the chickens, ducks, geese and turkeys and then the manure from the poultry run is used to fertilize fruit trees.

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

4 yard x 8 x 100% = 32 yards

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

40 yards x .50 (every other month) x 100% = 20 yards

C - Monthly compostable materials volume(s) in cubic yards (food scrap/food soiled paper dumpster size(s) x number of collections per month x percentage full when emptied or collected):

1.25 yards x 4 times a month x 100% = 5 yards

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

((20 + 5) / (32 + 20 + 5) x 100 = 43 .86

Monthly waste generated per person = (A/number of students and staff): .06

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?

100%

Describe measures taken to reduce solid waste and eliminate hazardous waste.

School-wide recycling happens daily in the classrooms and cafeteria. Teachers and students use both sides of paper, art projects frequently focus on recycled materials, and the school participates in a printer cartridge recycling program. Our Recycled Art Club, Green Team and 4-H clubs all utilize recycled materials and help to keep the campus clean and green.

What percentage of cleaning products used at your school is green certified?

100%

What percentage of your students walk, bike, bus, public transportation, or carpool to/from school? (Indicate if your school does not use school buses.)

We do not have school buses. Of the 471 students, less than 20% drive to school. Most students walk or ride their bikes.

How is the above-referenced data calculated?

We calculate by tabulating cars that come through car loop and counting bikes in the bike area.

Our school has implemented the following:

- ✓ Vehicle loading/unloading areas that are at least 25 feet from buildings, air intakes, doors and windows.
- ✓ Safe pedestrian routes to school and safe routes to school.
- ✓ A "walking bus" program in which adults accompany groups of student as they walk to school along a given route.
- ✓ Secure storage is provided to encourage human-powered modes of transportation to school.

Additional information for above-referenced items.

We received Department of Transportation funds to install a new bike rack and skateboard rack system in 2012. We have three crossing guards who help students get safely across intersections. Last year a new car loop system was introduced, which included barriers to help keep students out of traffic lanes. This new system reduced car loop idling time by over 50%. Traffic patterns and pick-up now flow smoothly and efficiently. Our annual Walk to School Day has a huge turnout and is made successful through major community involvement. Our beautiful Florida weather and community involvement make our school a perfect destination for walking or biking.

Describe how your school transportation use is efficient and has reduced its environmental impact. Focus on innovative or unique practices and partnerships.

Our unique, small neighborhood school has no buses and over 75% of our students walk or ride their bikes to school every day. Additionally, many of our teachers ride their bikes to school. The strong sense of community contributes to parents' feelings of well-being and safety. Although it is not a formal program, many of our students utilize a walking school bus system that continues through middle and high school levels. A shared parking lot with the neighboring preschool also contributes to decreased driving and safe pick-up and drop-off times.

Pillar II: Improve the Health and Wellness of Students and Staff

If you have an Integrated Pest Management (IPM) plan, describe your efforts to reduce use and identify your school contact.

Our school has in place a robust Integrated Pest Management plan, and currently the entire school is organic and pesticide free. Our school contact is Erika Maier, a certified Master Gardener, who works with the University of Florida/Institute of Food and Agricultural Sciences Brevard County Extension office to proactively address pest problems. Our Florida-friendly landscaping requires no pesticides and little hands do a great job of tackling bugs in the school's extensive organic vegetable gardens. Tomato hornworms don't stand a chance! All pests are documented by our Green Team. Recently the Green Team formed an innovative Zika Mitigation Plan, with the help of Extension Office experts, to ensure that our school could keep rain barrels, tadpole habitats and birdbaths full, without promoting the spread of the Zika virus. Our efforts were applauded at the District level for our proactive approach.

Our school employs the following practices to minimize exposure to hazardous contaminants.

- ✓ Our school enforces a policy that prohibits all tobacco use by students, staff and visitors on all school-owned property and at school-sponsored events.
- ✓ Our school enforces a policy that prohibits smoking by students, staff and visitors on all school-owned property and at school-sponsored events.
- ✓ Our school has identified and properly removed sources of elemental mercury and prohibits its purchase and use in the school.
- ✓ Our school has a chemical management program that includes: a chemical purchasing policy (low- or no-volatile organic compounds (VOC) products), storage and labeling, training and handling, chemical inventory, hazard communication (clean-up and disposal), purchasing policy for less toxic products including less toxic art supplies, and selecting third-party-certified green cleaning products.

Specific examples of actions taken for practices referenced above.

We enforce Brevard Public School Policy 3215 which prohibits the possession or use of any tobacco product, including e-cigarettes, on any BPS property.

Our school prohibits the use of mercury containing thermometers (see *BPS Safe Science Manual* on page 22).

We have cooking appliances that operate by burning natural gas in the school's kitchen. Natural gas is seen by many US government entities and utility companies as a clean burning fuel source as it generates no carbon monoxide emissions and emits approximately 50% less carbon dioxide emissions than coal burning utility sources.

From the July 1, 2016, *Asbestos Notification to Building Occupants and Their Legal Guardians*, no asbestos removal activities or any other type of asbestos response actions were taken between July 1, 2015, and June 26, 2016. From the *BPS Environmental Health and Safety Plan*, School Board of Brevard County employees may encounter asbestos in materials that they work with during maintenance, repair or demolition activities. Since long-term exposure to high levels of asbestos fibers can cause serious chronic illnesses, it is important that a program to reduce or eliminate employee exposures is implemented. Employees involved in the removal of materials containing asbestos must follow the guidelines shown in the School Board's General Asbestos Removal Specification.

From the *BPS Environmental Health and Safety Plan*, "In order to provide for the safety of employees who may be exposed to hazardous chemicals, safe work procedures for chemical use as well as an overall Hazard Communication Program has been developed by the School Board of Brevard County."

Describe actions your school takes to control moisture from leaks, condensation and excess humidity and promptly cleans up mold or removes moldy materials when found.

Rooms have humidity meters to measure humidity in the room. Mold is reported to the custodial staff and cleaned up immediately. Custodians then report to the Brevard County School District (BCSD) so that custodial services can pinpoint the source of the problem. Air conditioners are routinely inspected by BCSD, and filters are changed regularly.

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.

Gauges are used to measure air pressure across filters, and filters are changed as needed.

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

Ventilation systems bring in outside air, and each classroom has large doors and windows that open to the outside.

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.

A monthly campus clean up and inspection is done during “Clean Up Your Corner” Fridays at the beginning of every month. All teachers and students clean up their classrooms and the landscaping around their classrooms to make sure there are no environmental health or safety issues. Any environmental or safety issues are reported to grade level Green Team representatives. Issues are then documented and resolved by the Green Team or referred to the proper authority.

The following indoor environmental standards are employed at our school.

- ✓ The classrooms in our school have good acoustics (less than 45 dBA).
- ✓ The classrooms in our school have good day lighting and high-quality electrical light when needed.
- ✓ The classrooms in our school have good relative humidity control (ASHRAE 30-60%).
- ✓ The classrooms in our school have views of trees and nature.

Specific examples of actions taken for the above-referenced practices:

Our beautiful open campus ensures that every classroom and student space, including the cafeteria and front office, have views of trees, sky, flowers and darting butterflies. Large open windows at the back of each class and smaller windows on the south side of the building provide natural light. Most classrooms have both a front and back door that open to the outside. Many classrooms have vegetable gardens directly outside the front door, and safe play spaces out the back door.

Describe other steps your school takes to protect outdoor environmental quality such as planting trees, etc.

Trees, shrubs and flowers are planted around the campus. The 4-H Club, students and teachers come together to help maintain these plantings. New portables are quickly given a “housewarming” present of a new garden. Many trees were damaged during the recent hurricane and these are being replaced through a joint effort between the PTO, school Green Team, 4-H club and the County Extension Office.

If your school implements the coordinated school health model, describe highlights in each of the component areas: Health Education; Physical Education; Health Services; Nutrition Services; Counseling, Psychological and Social Services; Healthy School Environment (physical building and social/emotional); Health Promotion for Staff; Parent and Community Involvement Related to Wellness.

Our school implements a coordinated school health model that is highly effective in facilitating the creation of a school environment that provides students and staff the opportunity to reach their personal potential by removing health related barriers to academic success. Our Green Team staff members have completed the “Implementing Coordinated School Health” section of the *Florida Healthy School District* training and focus on implementation of activities in the eight component areas.

In Health Education, all students learn to make informed decisions about their health. Physical activity and nutrition are embedded in our health standards and celebrated during activities such as the Jog-a-thon and Organic Soup and Salad Celebration. In Physical Education, students learn the skills to remain physically active for a lifetime, through Walk to School Day, Panther Pacers and Morning Mile. These celebrations include educational activities for students and community members about the importance of lifelong nutrition and physical activity. Our principal leads the way with “Walking Wednesday” during which staff members are encouraged to walk and brainstorm with each other. Staff members have monthly healthy food celebrations and take turns bringing a feast. In the area of Counseling, Psychological and Social Services our staff has adopted the Mindset approach and incorporates powerful positive social-emotional activities for the students and the staff. These activities are shared with parents through class and school newsletters. Classroom and school pets are used therapeutically to help children focus and increase self-confidence.

At Surfside, we understand that physical and emotional health are just as, if not more, important than academics and that students must be healthy inside and out if they are going to achieve their full potential. Our school wellness team works together to provide innovative ways for students, faculty and the community to be their personal best.

If your school has a healthy school team, describe the team membership (e.g. administrator, parent, teacher, student, food service professional, school nurse, counselor), meeting frequency, goals and successes.

Our school has a Green Team that includes teachers from each grade level, administration and custodial staff. Other team members include student officers from the 4-H Club and Garden Gurus and the volunteer parents and grandparents that help assist teachers with their grade level gardens. Our partners at the Brevard County Extension Office are some of our most important team members. The Agriculture Extension Agent helped us to formulate and implement our Zika mitigation plan which Brevard County School District officials called proactive and comprehensive. The 4-H and Youth Development Agent helped us to locate grant funding and training for one of our most ambitious and unusual projects to date - the acquisition of three dairy goats that will be housed at Wickham Park and brought to the school monthly to help with eco-friendly brush removal and landscaping. The Marine Science Agent conducts workshops with our students so they can better understand their roles as stewards of the waterways. Our school is located just one mile from both the Atlantic Ocean and Indian River Lagoon, and it is vital that our students understand their role in protecting the water and the planet.

Our school employs the following practices to promote nutrition, physical activity, and overall school health.

- ✓ Our school participates in the USDA's HealthierUS School Challenge.
- ✓ Our school participates in a Farm-to-School program to use local, fresh food.
- ✓ Our school has an on-site food garden.

- ✓ Our school garden supplies food for our students in the cafeteria, a cooking or garden class, or to the community.
- ✓ Our school promotes physical activity opportunities above and beyond physical education (e.g., running clubs, archery, golfing).
- ✓ At least 50 percent of our students' annual physical education takes place outdoors.
- ✓ Our school implements a Comprehensive School Physical Activity Program (CSPAP).
- ✓ Health measures are integrated into assessments.
- ✓ At least 50 percent of our students have participated in the EPA's Sunwise (or equivalent program).
- ✓ Our school provides staff, students, and families information on nutrition education and/or programs.
- ✓ Our school provides all students with opportunities to receive instructional time in a school garden.

Specific examples of actions taken for above-referenced practices including innovative or unique practices and partnerships:

A unique feature of our school is our extensive campus gardens and poultry coop. Every grade level has its own large vegetable garden and spends time using the garden as an outdoor cross-curricular learning space. All grade levels incubate and hatch a variety of poultry, which then are raised on campus so students can learn about the life cycle hands-on.

All PE classes take place outside on the blacktop, pavilion or field unless we are experiencing severe weather.

The goal for Physical Education at Surfside Elementary is to provide students with a standards-based, balanced, sequential and progressive educational activity program. Our program includes basic movement concepts and skills that are age and developmentally appropriate. This in turn leads to the development of motor skills, knowledge and values necessary to establish and maintain a healthy and physically active lifestyle. All lessons and activities are based on Florida's Next Generation Sunshine State Standards for Physical Education, the Elementary Physical Education Curriculum Guide, and the Adapted Physical Education Resource Guide.

The goal of the elementary health program at Surfside Elementary is to develop a health consciousness in all students utilizing a standards-based, developmentally appropriate curriculum aimed at enriching their wellbeing. Lessons and activities that are aligned with the Florida Next Generation Sunshine State Standards for Health and the K-8 Health Curriculum Guide are used in the PE curriculum.

FITNESSGRAM is the physical fitness assessment program used at our school. Individual FITNESSGRAM report cards are available to all students.

All students are taught the importance of protecting their bodies from the harmful rays of the sun. The use of the pavilion is a great way to get the students warmed up and out of the sun for part of the PE class. All standards that address sun safety are taught in the beginning of the school year and reinforced throughout the year.

Proper nutrition is discussed with all grades, and the older students have the opportunity to make a nutrition log to track their eating habits.

Describe the type of outdoor education, exercise and recreation available.

All physical education classes take place outside. Physical education classes spend the first part of every class under a covered pavilion doing a warm-up. The class then moves to the field or blacktop depending on the standards-based exercise, game or activity. We have basketball hoops, a baseball field, a running

track, a playground complete with a rock climbing wall and numerous forms of physical education equipment for the students to use.

Pillar III: Effective Environmental and Sustainability Education

School or District Policies - Our school or district has implemented the following:

- ✓ A written definition of environmental literacy and/or a definition of environmental learning outcomes including knowledge, skills, positive attitudes, and civic responsibility.
- ✓ A Partnership Agreement with a non-formal education provider in the community that supports environmental sustainability literacy.
- ✓ An environmental or sustainability literacy requirement.
- ✓ A set of policies to promote environmental education and sustainability.
- ✓ A policy that is consistent with relevant elements of the Florida Environmental Literacy Plan.

Specific examples of actions taken for above-referenced practices.

As a Project Learning Tree Green School, we share the following goals with that organization – Environmental Education Goals -

- Provide students with the awareness, appreciation, skills, and commitment to address environmental issues.
- Enable students to apply scientific processes and higher order thinking skills to resolve environmental problems.
- Help students acquire an appreciation for and tolerance of diverse viewpoints on environmental issues and develop attitudes and actions based on analysis and evaluation of the available information.
- Encourage creativity, originality, and flexibility to resolve environmental problems and issues.
- Inspire and empower students to become responsible, productive, and participatory members of society.

Both Project Learning Tree and 4-H help to shape our Environmental Education curriculum and policies. Age-appropriate environmental lessons are taught at every grade level, and grade level field trips include the Brevard Zoo, the Indian River Lagoon, Sea World's One World One Ocean Program, the Kid Power Nutrition show, and the Barrier Island Sanctuary, all supporting our school's goals. Students' daily lessons incorporate their grade level gardens and animals and special events such as Make a Difference Day, Dr. Seuss Lorax Week, Run for Shade 5K and Earth Day Celebrations. These events all contribute to our students' motivation, awareness and commitment to helping our school and our planet.

Our students are immersed in environmental learning on a grass-roots level beginning in kindergarten – with local parents, businesses and volunteers providing support. The following quote from one of our second-grade teachers explains how environmental learning takes place in many areas all over campus.

“We use our outdoor area for the care and feeding of our pet tortoise. We grow vegetables in the garden and harvest his meals for him. We use rainwater for him to drink. He has an outdoor habitat for daytime use. He is visited by many children each day, students and siblings. We use all five senses when gardening and sampling our vegetables. We study life cycles of plants as well as caterpillars and tadpoles, that we find in the garden and rain barrels. We hatch chicks and ducks and learn about their life cycles. We are studying rocks and the rock cycle. We are currently digging in several areas of the playground to see what kinds of rocks are underground here.”

School or District Academic Programs

- ✓ An academic program that integrates environmental and sustainability concepts across the curriculum in a single subject.
- ✓ An academic program that integrates environmental and sustainability concepts across the curriculum in multiple disciplines.
- ✓ A green schoolyard program (e.g., Florida Friendly Landscaping; Gardening, Schoolyard restoration program) that is integrated in the curriculum.
- ✓ A way to assess student environmental and sustainability learning and achievement.
- ✓ Professional development in environmental and sustainability education for all teachers and staff.
- ✓ An environmental or sustainability student club, and/or a school Green Team that includes student representation and/or opportunities for student leadership.
- ✓ Field trips for students to study environmental education at outdoor programs, science museums, zoos, aquariums, parks, etc.
- ✓ A school program that includes service learning projects that incorporate environmental topics.
- ✓ A way to use the buildings, grounds, and neighborhood to teach place-based environmental education and foster local ecological literacy in a hands-on manner.

Specific examples of actions taken for above-referenced practices.

At every grade level our science teachers integrate environmental and sustainability concepts. The gifted student program integrates these concepts across the curriculum using multiple disciplines by following the Project Learning Tree Curriculum and conducting Green School Investigations. The 4-H/Junior Master Gardener Curriculum, Learn, Grow, Eat and Go, which is used with the younger gifted students and in the first-grade classrooms, is an interdisciplinary program that combines academic achievement, nutrition, garden science, physical activity, food preparation and fresh vegetable tastings to improve the health and wellness of children, families, and the school community. The sixth grade and gifted students also learn Florida Friendly Landscaping principles under the direction of a certified Master Gardener.

Professional development is provided for teachers at each grade level to ensure that gardens and hands-on life science projects with insects and poultry are supported through curriculum and lesson plan resources. The after-school 4-H Club gives students an opportunity to determine what school and community environmental projects are accomplished, and officers of the club also serve as representatives on the school's Green Team which includes teachers from each grade level, administration and custodial staff. Grade level field trips including: the Brevard Zoo, the Indian River Lagoon, Sea World's One World One Ocean Program, Kid Power Nutrition show, the Barrier Island Sanctuary and the local beach all support our school's environmental education goals. The gifted classes, the 4-H Club and the Recycle Art Club all include service learning projects that incorporate environmental topics. The school grounds and local beach are both used to teach place-based environmental education and foster local ecological literacy in a hands-on matter. Students study and grow rare heritage breeds of plants and poultry as well as learn culture diversity through specialized plantings like the Three Sisters Gardens and Florida native pollinators and edible plants.

How does your school use sustainability and the environment as a context for learning science, technology, engineering and mathematical (STEM) thinking skills and content knowledge?

Many of our students' hands-on science lessons use sustainability and the environment as a context for learning. For example, while studying ecosystems, each fifth grade class makes a terrarium and learns about sustainability. The students use recycled materials to make wind chimes for gifts and use old magazines and catalogues to make boxes for gifts for Christmas. In sixth grade, rain barrels are used to teach about gravity pumps, and the students use old wood and pine needles from the playground, and hay and pumpkins left over from holiday displays to maintain the poultry coops. Garden beds are designed and mapped out using recycled materials and seeded with heritage plants that students have researched and purchased from Baker Creek Heirloom Seeds (a school business partner).

Recently, our school received a grant from the Toshiba Corporation for our innovative use of technology and science. Students learn about embryology and poultry genetics with Joe Walter from the Brevard Extension Office, then select one cross-breeding combination that will produce chickens with a sex-linked trait, such as feather color. They experiment with genetics online using the Gizmo Chicken Calculator and then proceed to utilize National Agriculture in the Classroom lessons to incubate and hatch chickens, using fertilized eggs from breeds that they selected during a previous lesson in computerized, state of the art incubators.

How does your school use sustainability and the environment as a context for learning green technologies and career pathways?

Numerous area business partners help our students, not only by assisting with environmental projects, but also by teaching them about career pathways, technology and preparation. Many of our business partners are leaders in local environmental projects, such as Lowes, Ground Tec Landscaping, Sun Harbour Nursery and Baker Creek Heirloom Seeds.

Our relationship with Keep Brevard Beautiful is an exceptionally close one. Not only has our school received numerous Florida Friendly landscape grants, we also have received the School of the Month Environmental Award many times in the last five years.

Extension agents from the University of Florida/IFAS Brevard County Extension Office visit our campus and speak to our students on a variety of topics including careers and current technology including Marine Science and Agriculture.

The fourth-grade students particularly enjoy visits from the Departments of Energy and Water Resources, where they learn about the latest in watershed monitoring, water quality and, most importantly, contamination of the water table and conservation of natural resources.

Describe students' civic/community engagement projects integrating environment and sustainability topics.

Many of our students' sixth grade science projects incorporate environmental topics. Last year, our students received recognition for their projects that found new ways to address pollution in the Indian River Lagoon. The gifted classes, the 4-H Club and the Recycle Art Club all include service learning projects that incorporate environmental topics. Sixth grade students also are very active in the Brevard Zoo Mangrove Restoration project.

Describe students' meaningful outdoor learning experiences at every grade level.

The best way to explain our students' outdoor learning experiences is by sharing this quote from a third-grade teacher.

“In my class, third grade, gardening is one of the outdoor learning experiences that my kids really enjoy. With the help of a retired teacher volunteer, the kids first planned and then planted a raised-bed garden. We had the kids measure out a grid and then use string to create the grid. They discussed which plants would grow taller and planted them so they would not shade the other plants. Then we planted. We chose vegetables that we could eat. Basil is a favorite, because we make pesto and eat it with bread. When we get to geometry, we will go on a campus “field trip” to search for geometric shapes that are found in nature as well as in the architecture of the school facility. The kids like to read outside on nice day. The sun and the beach breeze are calming.”

We also find that many of our special needs students respond extremely favorably to our school's open campus and diversity of both animals and plant life. Through living beings, whether they are plants or animals, students nurture positive emotions and interpersonal skills.

Describe how outdoor learning is used to teach an array of subjects in contexts, engage the broader community and develop civic skills.

On every grade level, our teachers integrate environmental and sustainability concepts across subjects and in a variety of contexts. Our grade level gardens allow teachers to combine academic achievement, nutrition, garden science, physical activity, food preparation and fresh vegetable tastings to improve the health and wellness of children, families and the school community. Students work in the gardens and are engaged in hands-on life science projects with insects and poultry that are supported through not just curriculum and lesson plans but with community volunteers, business partners and technology resources. Our entire campus is an outdoor learning experience that brings all of us together.

Describe your partnerships to help your school and other schools achieve in the three pillars. Include both the scope and impact of these partnerships.

Our school has hosted many other area schools as they begin their journey to incorporate school gardens and environmental education into their school communities. We gladly share our resources and experiences, both positive and challenging, with them so we all can grow.

Numerous area business partners help our students by assisting with environmental projects and teaching them about career pathways, technology and preparation. For example, Ground Tec helped us to plan many of our Florida Friendly Landscape areas, and Lowes has given us both their employee expertise and time as we installed paths to make our gardens more accessible for those who are physically challenged. The Air Force Honor Guard has adopted our school and comes to help us with major projects three to four times a year. They work alongside our students as we plant gardens, maintain existing plantings and build enclosures for our animals.