



# 2017 Nominees

*Fifth P<sub>3</sub> Eco-Challenge  
Awards Ceremony*

# STUDENT NOMINEES

## Elementary School Category:

### Keira Fahy, North Andrews Gardens Elementary



Keira is involved in numerous volunteer organizations & projects. Keira volunteers in her classroom garden. She helps with mulching, weeding, watering, and caring for the plants with TLC. Through her volunteer time, Keira is learning about proper gardening techniques. She has stayed after school with her teacher, brought in plants for the garden, & is interested in helping her class to get a certification for the garden. As a member of the Gardening Club committee, Keira is able to promote environmental stewardship outside of the classroom. She represented her school at the Earth Day event organized by the County, at Plantation Lucky's Market. Keira is a member of the Guy Harvey Hammerhead Nation. The group promotes awareness & conservation of sharks & "a life full of adventure and exploration balanced by a keen interest in conserving the marine environment". Keira is also an 'honorary New River Middle School shark', she regularly attends and participates in New River outreach and education events. At these events she is always keen to talk to others about the love that her whole family has for the marine environment!

### Kenneth Hardemon-Pace, Orange Brook Elementary

Kenneth is in fifth-grade and a driving force behind his school's Green Team. Initially somewhat shy and behind the lines, Kenneth quickly became a passionate, proactive and vocal advocate of environmental issues. He generously volunteered his time as a member of the Green Team – Recyclable Collection unit, where he leads a group of students in a school-wide twice-weekly collection of recycle materials. He then transitioned into being a member of the WOBE morning announcement team, where he tracks and announces the air quality status as part of the Air Quality Flag Program with the Broward County. Kenneth was very involved in a peaceful protest challenging the removal two healthy trees for the installation of a new electronic marquee on the west side of the school. He wrote a passionate speech and led a rally offering concerns and alternatives to the other 3rd- 5th grade classes. Kenneth's contagious enthusiasm to learn more about environmental issues is also demonstrated by his attendance at afterschool extracurricular events, such as Water Matters Day, the Gardening Project on a Teacher Planning Day and actively participates in the maintenance of the burrowing owl habitat, watering and weeding the school's vegetable and butterfly gardens, assembling measuring instruments for the school's weather station and cleaning up of the school grounds. He also had an instrumental role in writing and producing a water conservation video for the PSA contest.



## Ranveer Patel, Gator Run Elementary School



Ranveer is a 6-year old boy in 2nd grade gifted. He is passionate about the environment and loves Robotics Club. He has a natural ability using computers and computer programming. Ranveer started his Going Green project which is an “environmentally friendly” plant growing effort that he started at home and now would like to share his experiences and research with other kids so they can do the same. He is hoping that every kid plants trees for his family so that there will be enough trees to produce clean air and oxygen in the future for everyone on earth. He feels with some technology improvements planting trees will be easy, fun, cheap and quick. He designed his "Smart Pots" for everyone to plant saplings at home with efficient use of time, money and water and has patented the design. Ranveer started Growing Green as a summer project in summer of 2016 by doing the research and planting 45 trees for his extended family of 17 members. Then he thought of planting 120 more trees for his friends at school. As of January 11TH, 2017, he has about 200 trees (*Swietenia mahogani*) growing in his back yard.

## Middle School Category:

### Carolina Campos, Lyons Creek Middle

Carolina has been a member of the LCMS Eco Club for the past 3 years. She is now in 8th grade and will soon be leaving but wherever she goes, she will be a "green" force to be reckoned with. Carolina is passionate about the environment, helping others, her academics, and about life! To meet Carolina, your first impression may be that she is a very quiet and polite student that is conscientious and completes her work on time. If you have the opportunity to really get to know her, you will find out she is a quiet force and champion for the environment. Carolina does not ask for recognition, in fact she is a very quiet and shy person. She gets things done, because she cares. Carolina is a dedicated, 3 year member of the LCMS Environmental Leadership Club. Being a middle school student, her volunteerism is commendable. There is rarely a meeting, activity or event that Carolina has not attended. Carolina has taken a leadership role in the club this year helping plan meetings and often brings sweets to share with the members. She has attended clean-ups, festivals and tree-givaways. Being a part of the LCMS Environmental leadership club, Carolina is an active member who volunteers in the community, solicits local businesses to donate goods and services to our club and stands out as an environmental leader among the sea of students who attend LCMS. She genuinely cares about the environment and does everything she can to share her love for the environment with her classmates.

### Jose Manuel Mendez III, Apollo Middle

Jose has been deeply involved in promoting environmental stewardship for Apollo's school and community garden. Jose wanted to inspire students in eating healthier by choosing fruits and vegetables that would increase student interest in choosing wiser snacks. Jose led the planting of Pineapples, Tomatoes, Collard Greens, Green Peppers, Potatoes, Lettuce, and Peanuts. Jose also started an "Apollo Orchard" and the "Apollo Vineyard". This differentiates the types of gardening and interests in fruits and vegetables of high interest to students. Through the garden, Jose feels empowered of making positive changes in the local school environment. Jose used the Apollo morning announcements to create a motivational segment which he encouraged student participation in the garden. Jose has spoken at SAC meetings to generate funds for school activities such as our garden. Jose and his peers developed the concepts on how to better till the ground, plant seeds, water plants, fertilize, and harvest crops. Jose is a debating champion. He has won 6 different debates in extemporaneous speaking which he spoke about the Kyoto treaty among other issues with the environment.



## Jetty Porter, Forest Glen Middle

Jetty is a very intelligent and eco-conscious student. She participates in the annual Port Everglades Shipshape event where she helps paint metal drums previously used for oil and so that they can be used as trash/recycling receptacles. She has been involved with her school's Ocean Guardians club that is sponsored by NOAA. She participates in beach cleanups to help rid the sand of any plastic bags, bottles, and cigarette butts. She designed the Ocean Guardians logo, which has been used on water bottles and t-shirts. This has helped her club significantly by raising hundreds of dollars for her club, which has been partially donated to conservation organizations. She volunteered at the Marine Flea Market for 14+ hours over two days. There, she helped educate the public on the dangers and effects of marine debris in our oceans. She also recovered a fishing net that was donated to Planet Love Life. Jetty passed out portable monofilament recycling bins to fishermen and boaters. Earlier that year she helped make full size PVC monofilament recycling containers for piers and marinas with the Florida Fish and Wildlife Association and the Sea2Shore alliance. They were sent out to local marinas and docks as well as to places in South America.



## Gabriel Valensin, New River Middle



Gabriel has been involved in marine conservation and stewardship prior to joining New River Middle School's Marine Science Magnet Program this year as a 6th grader. Gabriel is a leader and continues to lead even as one of the youngest in the Marine Science Club, but one of the hardest workers. As an elementary schooler, Gabriel attended was involved in planting on campus, digging burrows for owls, and an integral part of their ecology corp. As a New River "Shark," Gabriel has not slowed down, he is part of the Marine Science Club and helped created the PSA for water conservation contest and create awareness on campus about taking care of the environment. He participated at International Coastal Clean up, Waterway Clean up, and Water Matters Day. Gabriel won 1st place in the Waterway Essay contest sponsored by Marine Industries Association of the South Florida. Gabriel shares his passion through not only his environmental stewardship efforts, but through his creativity and writing stories to educate others about the

marine conservation. He shares his passion for environmental conservation and education by modeling and getting his friends and family involved in all his endeavors.

## Ethan Wigutow, Nova Middle

Ethan is leading the sustainable garden project by sharing what he learned about worms in his award winning Science Fair Project. Ethan leads students in the following ways: collected fruit and vegetables in the school cafeteria, and stored them for the purpose of composting. Ethan added soil and worms to the compost container. The Planet Patrol will use the soil to plant a small box of tomatoes, then the Planet Patrol will continue to add on to our sustainable garden each marking period. Ethan is a member of our Smile Group and has participated in the 5 (five) Hollywood Beach Clean Up Activities, he has helped with our 1,000 Bottle Collection Goal, and he has spearheaded our Spring Project. Ethan Demonstrates awareness of the natural environmental through his participation with our Hollywood Beach Sweep activities and is currently the leader of Sustainable Garden Spring Project. Ethan built an award winning Worm Project for our school Science Fair, proving his knowledge of natural environments. Ethan understands environmental concepts involving recycling, water conservation, and the impact it has on issues, feelings, values, and attitudes toward sustainability of environmental issues through his involvement with Boy Scouts of America.



## High School Category:

### Sofia Cabrera, McArthur High



Sofia has demonstrated exemplary behavior in times of testing and situations. She has participated in practically every event scheduled by our club McArthur FFA. Sofia has added a dimension to the program that has actually brought others into the program. Sofia has taken on the task of working with Students with Varying Exceptionalities on a project involving those students planting seeds and tracking their germination so that once they sprout two leaves those students, with Sofia's guidance will transplant those seed pods to another major growth area so that those seedlings can propagate and grow into full grown harvestable plants. The SVE students will track and measure their growth. Sofia enjoys working with the challenged students. She has been the bulwark of our after-school program as well. Sofia has volunteered for every event that involved presentations to adults visiting our school program. She is an excellent spokesperson and has showed a genuine concern for the academically challenged as well as the environment. Sofia is also undertaking the Industry Certification process for Horticulture Professional for the Florida Nursery Growers Landscape Association (FNGLA). As a future member she is also seriously being considered for an officer position with in the Future Farmers of America (FFA). She is expected to attend officer meetings as well as general meetings as an Officer in Training. Besides Water Matters Day and the Orange Blossom Festival in Davie, She has participated in the Tropical Plant Industry Exhibition, at the Broward Convention Center and the South Florida fair in West Palm Beach. Sofia has demonstrated a skill and ability that has exceeded her age level. She has also participated in the US Southeast Regional Envirothon where the Topic of discussion was the Reservoir construction south of Lake Okeechobee. Her latest effort was attending the Climate Sports Summit where she interfaces with various students and guests that spoke about Climate Change.

### Keyla Correia, South Broward High

Keyla is the Co-Founder of the Plastic Free Mermaids whose primary mission is to spread awareness about plastic pollution through education, outreaches, and cleanups. We teach how to live a plastic free lifestyle and show alternatives to use instead of plastic. Keyla has spoken to middle and elementary schools spreading awareness about plastic pollution and creates arts and crafts with the students. She creates flowers made from plastic water bottles and jumps ropes made from plastic bags. Keyla participates at summits across the country (Youth Ocean Conservation Summit in FL, the Plastic Ocean Pollution Solution Summit in CA, the Breaking Down Summit in SC) and is a presentation speaker and mentor to participants. She is an ambassador to one of her sponsor, Green Contributors, where she takes international students around America showing them the Colleges and Universities as well as the Conservation projects she is doing with the Plastic Free Mermaids. She is also an ambassador to the 5 Gyres Organization. Last year she worked alongside of the Girls Get IT Club and wrote grants to receive her high school's first refillable water fountain that counts the amount of plastic water bottles eliminated as a person fills up their reusable bottle. Keyla has hosted multiple cleanups, such as a kayaking, paddle boarding, and snorkeling cleanups. During these cleanups she ties in marine biology to expose the participants to the animals that must live within or surrounded by plastic every day. Keyla has spoken to the Hollywood City Mayor, Dania Beach Mayor and the Ft. Lauderdale Sustainable Commissioners about passing a resolution to ban plastic bags.



## Kimberly Correia, South Broward High



Kimberly is a purposeful leader and finds the joy in solving world issues. A major environmental issue with detrimental effects is plastic pollution. Plastic waste causes natural resource depletion, loss of biodiversity, and high death rates for people due to carcinogens within plastic. Therefore, she has focused solely on plastic pollution. To bring our community to understand the harmful effects of plastic pollution and influence alternatives to plastic, she has created a nation-wide known organization called the Plastic Free Mermaids. She involves the community by coordinating paddle-boarding, kayaking, and waterway cleanups with our partner, The Surf Rider Foundation. In addition, she contacts environmental protection specialists like Mr. Victor Suarez to be involved in community events like Water Matters Day. Also, she annually contacts another one of our partners, The Big Blue and You, to help the Plastic Free Mermaids to be a part of another ocean awareness event called Art Sea. Along with monthly cleanups, Kimberly educates at middle and elementary schools, the future generations, about plastic pollution and ways to bring about a plastic free lifestyle. We educate about alternatives to use instead of plastic and present innovative ways to use plastic when it can't be recycled like plastic bags and straws. Kimberly

teaches how to make art out of plastic like flowers, jump ropes, and marine life which engages the community and brings about plastic pollution awareness. Not only does Kimberly organize community events, cleanups, and educational meetings, but she wants to learn more about plastic pollution and applies for summits state-wide and nationally. She has been a part of the Plastic Ocean Pollution Summit in Dana Point, California and the Youth Ocean Conservation Summit in Sarasota, Florida. She has also made partners recently with the Zero Waste organization and is planning to attend the environmental summit in Sacramento, California. During these summits, global partners have been made. Kimberly has exceptional social skills and has made contacts with organizations in Kenya, the Bahamas Plastic Movement, Cambodia, and Lebanon. Kimberly has also wanted to become more involved in other environmental issues and has participated in Science Fair where she presented about eutrophication and how it affects freshwater ecosystems.

## Oleysa Malakhova, South Broward High

It has been Oleysa's passion to learn about our environment, especially about the local marine ecosystems and Everglades. She spent her childhood in the dirt and sand and she knows that is where she belongs. She wishes to pursue Environmental Science as a major in university and to go onto graduate studies. She is actively involved in school and community activities that involve environmental awareness. Her hardworking personality has granted her many opportunities to achieve great things and to teach her peers along the way, to excite everyone about saving our environment. She has applied environmental aspects to all parts of her life, from the things she learned in school to extracurricular activities and her social group. Her job also revolves about environmental awareness. She believes that everyone should have a knowledge and understanding of our environment and the effects we have on it, because ignorance of the masses has driven our species extinct and has destroyed our valuable ecosystems.



Although we cannot reverse the harm we have done she hopes we can learn from our mistakes and make wiser, more environmentally friendly choices in the future. Oleysa's summer job in 2016 was being a member of the Youth Green Team of Hallandale Beach, where three days a week the team cleaned the 2 mile stretch of Hallandale Beach, one day a week was dedicated to our education of various environmental topics, and the last day was a community outreach about various environmental awareness for the public where we spoke to beach goers. She has applied again this year because she really enjoyed the job and believes it will be useful for her future goals. She attended EcoAction days at the Secret Woods Nature Center to clean up among the mangroves and occasionally help remove invasive species in the area like the tropical almond.

# EDUCATOR NOMINEES

## Elementary School Category:



### **Giovanni Bonelli, Bethune Elementary School**

Mr. Bonelli has demonstrated a strong interest in climate change, recycling, and clean, renewable energy. In 2015, he participated in a Climate Reality Leadership Corps Training in Miami, FL, where he joined a network of activists and leaders, including former U.S. Vice President Al Gore, to discuss these environmental issues. At his school, he created Terracycle, a waste collection program for difficult to recycle materials. Items earned an average of two cents each, which benefitted the Bethune Elementary School Fund.

### **Kelly DeVarona, Davie Elementary School**

Ms. DeVarona was concerned that paper wasn't being recycled at Davie Elementary School. She contacted the recycling company regarding what items and materials they collected and ordered extra recycling bins for her entire school. By coordinating with administration, the custodial staff, and fellow teachers, her Davie Green Team club of students have incorporated a consistent recycling routine throughout their school.



### **Tara Dukanauskas, North Andrews Gardens Elementary School**



Ms. Dukanauskas established an interactive learning school garden where visitors can scan unique QR barcodes that link to student-researched websites that provide information about the various plants. With various grants and community support, she incorporated interdisciplinary curriculum that included Farm to Table, Gardening for Nutrition, Harvest of the Month, and Nutrients for Life through hands-on STEAM activities such as designing bird feeders, planters, creative garden signs, and watering cans. Master gardeners and nutritionists were invited to share their knowledge of sustainable, organic gardening and composting, and harvesting food to take home as a healthy and greener choices.

## **Monika Moorman, Orange Brook Elementary School**

Ms. Moorman is a 5<sup>th</sup> Grade gifted/high achiever teacher who organized a Peaceful Protest by her students to save some large, resident trees from being cut down to make way for a new, electronic school marquee sign. Students, other classes, and faculty/staff were encouraged to wear green, have green heart face paintings, and posted paper hearts to the trees. Known as the “Recycling Queen” at Orange Brook Elementary, Ms. Moorman started a Green Team to encourage recycling initiatives at school and around the community. Inspiring open discussion, debate, and problem-solving, has allowed her students to make real-life connections with Social Studies/U.S. Constitution lessons that defend the rights of citizens to peaceful protests.



## **Beatrice Morin, Orange Brook Elementary School**



Ms. Morin is a 2<sup>nd</sup> Grade teacher who is passionate about environmental issues and sustainable lifestyles. As a National Wildlife Federation Habitat Steward, her dedication and hard work helped designate Orange Brook Elementary the coveted distinction of becoming a NWF Certified Wildlife Habitat and eco-friendly school. Through her leadership and volunteer work experiences, the school released many butterflies of various species from their indoor butterfly habitats and became permanent homes to two burrowing owl families on school grounds through the Project Perch program and Hillcrest HOA donations. Ms. Morin took students to Water Matters Day at Tree Tops Park to expose them to eco-friendly practices and hands-on green activities.

Environmental literacy and educational experiences are the cornerstones of transforming Orange Brook to a greener, healthier, and more sustainable school.

## **Middle School Category:**

### **Mitchell Comiskey, Forest Glen Middle**

Mr. Comiskey is a science educator at Forest Glen Middle who currently teaches Marine Science Honors. He is a passionate advocate for marine conservation. Serving as an academic representative for the Southeast Coral Reef Initiative (SEFCRI) and as an academic representative for Our Florida Reefs (OFR), Mitch brings the latest research based marine conservation news and ideas back to his students. Mr. Comiskey’s marine science class has been identified by NOAA as an official “Ocean Guardian” classroom. Mitch participates in different environmental activities with his students including and not limited to coordinating a booth at the Pompano beach nautical flea market where they had an amazing educational display on marine debris (NOAA would be proud!), gave away monofilament recovery and recycling containers, and raised \$335 of donations for their class. These donations will be used for further outreach and education, such as a planned visit to the Coast Guard Auxillary to talk to them about coral reef awareness.





## **Elizabeth Fahy – New River Middle School**



Elizabeth Fahy has worked as a science and marine science teacher at New River Middle School for the past twelve years. She incorporates her long fostered passion to promote conservation and awareness in her students. Some of the projects that Elizabeth has been involved with this past year with her students include: public outreach and education of NautilusLIVE, Project L.I.F.E, and Marine Art for Conservation in her own classroom and for several local and national contests. The Marine Art projects start with clean ups and using that debris to create art and awareness with their class projects. Last year Ms. Fahy participated as a Science Communication Fellow on the E/V Nautilus with Dr. Robert Ballard and the Ocean Exploration Trust and this year she has been selected again to join the team as

Science Communication Fellow Lead. Ms. Fahy never misses an opportunity to share her experiences and passion in the education, the environment, and research to get her students excited and involved in the marine environment.

## **Tamara Lobban – Lyons Creek Middle School**

Tamara Lobban has been our LCMS Environmental Leadership advisor for the past three years. Her award winning environmental club has been a "green" force on our campus. She dedicates many hours to helping her students fulfill their desire to keep our campus green and help out whenever they can in the community. She has been recognized by the leaders in the community as the "go to" person at Lyons Creek to help promote environmental conservation efforts in Coconut Creek. Her students sponsor a booth every year at the Coconut Creek Butterfly Festival, volunteer at the Coconut Creek Arbor Day Tree Giveaway and participate in local clean-up events. Her students work to maintain our many outdoor learning labs, including our edible schoolyard, butterfly garden and natural wetlands/tree area.



## **Gabriela McCauley – Apollo Middle School**



Mrs. McCauley's project started as a work task in her classroom. Having a classroom with students of varying exceptionalities gives students the opportunity to learn different skills throughout the day. During the year 2016-2017, she was given the sponsorship of the "Agents of Change" - a very selective group of students that belong to 21st. Century Before and After School program that is geared to helping students achieve academically. Their job is to transmit a message of peace in the school "Choose Peace - Stop Violence". While looking at the impending need for sustainability, Mrs. McCauley is currently working on Aquaponic Gardening as well, as a way of teaching students about alternative sources of food grown in an environmentally friendly way.

This approach combines the best of aquaculture and aquaponics to grow plant and fish as food sources. She teaches students how to monitor the plant's health by using scientific measurements of humidity, pH, soil health, nitrogen levels and maintaining nutrition, and how to do it in a sustainable way.

## Patricia Pascatore, Driftwood Middle School



Patricia "Paddy Cunningham" Pascatore has been a Naturalist in South Florida for 35 years. She worked 20 years as professional Park Naturalist II for Broward County and Miami-Dade County Parks managing Fern Forest, Secret Woods, and other Nature Centers. She won numerous national awards including Environmental Educator of the Year by the FRPA by servicing 5,000 students each year. She restored natural areas including: 50 acre wetlands, 8 acre hammock and 35 acres wading bird rookery winning national awards for these projects. She is the Coordinator for Everglades Birding Festival and Birding Festival of the Keys

attracting birders from 38 states. S.F. Audubon Field Trip Coordinator, CBC Coordinator and Compiler, Bonnet House Birding Classes.

## Carolyn Sant Angelo – Tequesta Trace Middle School

Carolyn Sant Angelo has been the lead organizer of Tequesta Trace Middle School's theme of Eco-Partners and eco-activities. She has engaged every classroom with recycling, organized by the weekly Eco-Partners Club. She has done a skillful job at inviting other teachers to be involved with many projects like the school wide Planting Day, Cambridge Herb Pallet Garden and Caps for Love, a bottle cap charity. Ms. Sant Angelo attended a National Science Teacher Association Conference to learn things like climate change activities from NOAA. She attended the World Happiness Summit and Mindfulness Based Stress Reduction training with MindfulKidsMiami. Carolyn is engaged in the science Professional Learning Community & shares with other teachers regularly. Her commitment to lifelong learning will continue informally & indefinitely. Her environmental activism took her to Miami for political rallies/marches to make sure voices on behalf of our planet are heard.



## Scott Savett - Parkway Middle School



Mr. Scott Savett has developed the school's STEM Horticultural program and his students have transformed the STEM courtyard into a certified wildlife habitat. Mr. Savett's curriculum is unique and ever changing in response to student needs and trends in the field. This includes installing solar panels to power hydroponic pumps, using LED grow lights to produce fresh produce, using O<sub>2</sub> and CO<sub>2</sub> probes to experiment with plants, just to name a few. Mr. Savett actively participates in all Broward County agricultural workshops. He has also presented "Hydroponics in the Classroom" at the Gardening Symposium in Tallahassee, Florida. He attended a week long National Agriculture in the Classroom workshop in Phoenix, Arizona.

## **Leaha Widrowicz-Perl, Pines Middle School**

Leaha is the epitome of sustainability. She influences the students, faculty, and staff of Pines Middle School by emphasizing the importance of healthy lunches made with sustainable foods from local sources, and she is an advocate for reducing the carbon foot print. Leaha not only teaches sustainability, she models it. She volunteers at Treehugger's Organic Farm in Davie and is affiliated with SEED (Plant-Based) Food & Wine Festival and Green Planet Festival & Veg Fest. She attended the Arizona State University Sustainability Teachers' Academy in Montana during the summer of 2016. Leaha also collaborates with the leadership class for Earth Day activities and maintenance of the school's garden. Leaha made community contacts with local leaders, such as the creator of Green Planet & Vegfest and Goldin Solar, that visited the school's campus to speak with the students about sustainability.



## **High School Category:**



## **Debra Hixon, South Broward High School**

Ms. Hixon works as a Marine Science Magnet Coordinator and has been involved in a variety of school and environmental projects, serving her students, staff, and community. As a sponsor of many clubs that provide outreach and education, she has implemented a culture of change when it comes to reducing/recycling plastics to protect all ecosystems (Plastic Free Mermaids), installing bottle fillers at water fountains (Change for Change), and raising funds to purchase wheelchairs for needy children through plastic bottle cap recycling (Caps of Love). Other environmental initiatives include a tilapia farm aquaculture and garden program, as well as trips to study and tag

Florida's native shark population alongside scientists and conservationists. Ms. Hixon's passion for solving problems fosters real-life critical thinking opportunities for her students.

## **Vincent Newman, McArthur High School**

Mr. Newman engages his students in and out of the classroom through after school camps and educational programs. Through a partnership with the YMCA, his Aquaponics Camp nurtures fish (tilapia, catfish, and brim) and the plants that they fertilize. His students work towards certification by taking the Florida Nursery, Growers and Landscape Association (FNGLA) Horticulture Professional Examination. To prepare students for possibilities in the water resource industry, Mr. Newman also instructs them in the identification and maintenance of invasive species in waterways, displaying landscaping entries at regional exhibitions (South Florida Fair in WPB, Tropical Plant Industry, Orange Blossom Festival, Water Matters Day in Davie), and entering speech and essay contests (Florida Farm Bureau, Water Matters Day in Deerfield Beach, Climate Sports Summit in Miami). By promoting the concepts and goals of the EPA, USDA, and Everglades watershed restoration, his students become more aware of the impacts made by human involvement with climate change and global warming.





## **Keri Porter, Wingate Oaks Center**

Ms. Porter is a talented high school educator and artist who inspires environmental awareness and responsibility with special needs students who have significant cognitive and/or physical sensory deficits. From exterior art installations to mural paintings to sensory gardens, she encourages interaction with the outdoors, since her students often have difficulties functioning in unstructured environments. Through her continued community involvement, Ms. Porter shares her knowledge to teachers and students alike about environmental issues and horticulture through school recycling programs, water conservation,

repurposing items to make pet toys, beach cleanups, and wheel-chair accessible herb and vegetable gardening. These visual and textural elements provide an incredible multisensory experience for her students.

## **Sean Simpson, Stoneman Douglas High School**

Mr. Simpson is an Environmental Science and Astronomy instructor who leads a cross-curricular initiative called “Major’s Garden”, which incorporates biology, environmental science, engineering, culinary, art, business, and more in the creation of a sustainable green space at their school. Once an area occupied by dilapidated portable classrooms, he cleared and leveled the land (10,000 square feet in all) through a generous loan from Bobcat of Broward. This garden provides a platform for teaching students environmental stewardship, green energy through the installation of solar panels, and water usage efficiency. Mr.

Simpson also attends many professional workshops and presentations, and works in collaboration with other educators to offer students telescope viewing nights, small group/paired projects, and model construction of green energy production.



## **Gregory Wisner, Lauderdale 6-12 STEM-MED Magnet School**



Mr. Wisner led an environmental movement aimed at making a greener school campus by reducing the effects of pollution, habitat destruction, and climate change. Through sustainable behaviors and community stewardships, an environmental action plan was adopted to include programs like “How Low Can You Go?” (sponsored by the Miami Heat to reduce electrical and water consumption), AP Environmental Science Classes, schoolwide recycling collections in partnership with Thoroughbred Waste Management, Student Teaching Students Day with NHS environmental members visiting classrooms discussing sustainable best practices, building of an Outdoor Learning LAB through volunteer recruitment that included an edible and butterfly/hummingbird garden, creation of an Air Quality Index flag program, launch of a Citizen Science project for plant and wildlife identification, participation in the Cheerios “Save

Our Bees” campaign, and other related activities. Through the Outdoor Learning LAB, Mr. Wisner guides students to grow confidently and appreciate what healthy food tastes like.

## NON-INSTRUCTIONAL NOMINEES

### Monica Chavakula, Orange Brook Elementary School



Monica Chavakula is an Educational Support Professional working in an ESE classroom. She collaborates with the lead teacher and provides one on one support for students in grades K-2 with special needs. When Ms. Chavakula heard about Principal O’Neal’s interest in beautifying the school, she approached him and asked if he would be open to the idea of creating a used plastic cap mural on the wall in the cafeteria. When she was given the green light, she engaged the community in collecting plastic caps of any color and stressed the environmental importance of her endeavor. She placed collecting stations in various locations throughout the school including the cafeteria, teachers’ lounge, and the front office. Cap collecting ads have been added to the school’s website, Twitter account and the school’s newsletter. Ms. Chavakula inspired all members of the community including students, parents, teachers, other schools and even the school board members to stop by Orange Brook Elementary and donate containers of plastic caps. Due to the very time-

consuming nature of the mural, which includes sorting the caps, creating the design, and gluing the caps to the wall, Ms. Chavakula spent (and continues to do so) countless hours after work and during the weekend to complete it. Her work has an immeasurable impact on the students. They are mesmerized by the fact that a simple container cap can turn into a work of art. They are also able to firsthand experience the power of reusing recyclable and non-recyclable materials.

### Hazel Williams, Wingate Oaks Center

Hazel Williams has had a big impact on the environment at Wingate Oaks Center in the two years that she has been an educational support professional. As a gardener she has helped to start and maintain many student “back door” gardens. Any unplanted area near students rapidly becomes filled with emerging plant life. Her work as an education support professional at Wingate is informed by the content she learned while getting her Associate’s Degree in Home Economics in Jamaica. A vital part of that curriculum was learning to plant small crops, and she shares her knowledge with students and staff daily. Hazel adapts gardening to the needs of her students, all of whom have multiple disabilities. If you need to find Hazel at 7:10 AM, as her students are arriving, just look outside and she will be guiding a student to observe what has happened to the classroom gardens overnight. She shares her wisdom from living in the Caribbean as well as South Florida by sharing techniques and information.



She has also participated in trainings locally, including the National Wildlife Association Habitat Training this fall which was preparing our community for the installation of trees to increase food and refuge for migratory birds.

## Susan Kepsch, Eagle Point Elementary School



Susan Kepsch has a passion for gardening with varies groups of children at Eagle Point Elementary. She found that growing flowers and vegetable gardens has been a therapeutic way to reward ESE students for completing work and using the garden for behavior modification when students have been able to learn that controlling behavior leads to the reward of either watering in the vegetable garden or starting new plants from seeds. She is also working with two Pre Kindergarten classrooms to show children how to start and maintain vegetable and sunflower seeds the goal is to grow enough vegetables to make a soup by the end of the year. Susan spend a great deal of after school time maintaining garden grounds. She found that stress can be easily released when you create something special in nature, and have worked to show students that growing plants can bring a lifetime of happy and health memories. The best part of growing vegetables with students is seeing their happy faces pull out a carrot and saying "I never knew I could grow something to eat" or "I had no idea that carrots grew in the ground." She believes that the school garden is giving students the ability to make better choices about

more then just eating, it is showing students how to be good stewards of the environment. She has attended both Flamingo Garden Nursery plant seminars on butterfly and vegetable gardening and Alexander's Nursery on Florida friendly gardens.

## Carol Rowe, Whispering Pines School

Ms. Carol Rowe is a paraprofessional at WPS who is tasked with providing support to students with emotional/behavioral disabilities. Ms. Rowe has worked in a variety of classrooms at WPS; however, she has truly found her niche within the horticulture program. Ms. Rowe uses the horticulture program to help students work through their emotional struggles, find stress relief and learn a healthy lifestyle. Ms. Rowe is responsible for the school wide recycling program. Through this program, Ms. Rowe works with students to sort through the recycling items and properly dispose of them. She helps students develop communication skills as they go room to room and make corrections to how various classes are recycling. Ms. Rowe also works with the art program to "up cycle" plastic bottles, colorful



paper, etc. so that students learn to lower their environmental footprint. Ms. Rowe can always be found in the garden tending to the plants alongside her students. She models how to care for the plants and teaches the students to truly love gardening. Ms. Rowe is ALWAYS smiling when she is in the garden. Ms. Rowe brings vegetables, fruits and herbs to the staff with the students in an effort to sell items as part of the school based enterprise. Ms. Rowe also loves to cook using the vegetables and herbs from the garden. This year students have learned many recipes typical in the cuisine of the tropical islands. Students truly loved the bean soups she shared with them. Ms. Rowe always shares samples with students and staff of vegetables and herbs. She helps to increase awareness of the healthy benefits of the foods grown in the garden.

## CUSTODIAL STAFF NOMINEES

### Elizabeth Feddeler, Driftwood Middle School



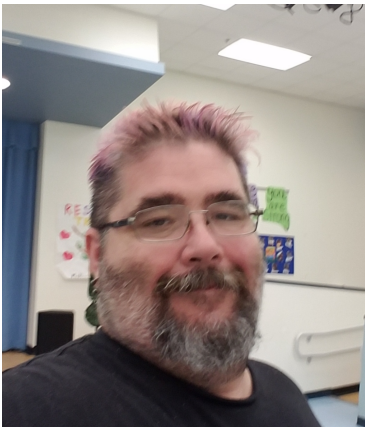
Ms. Feddeler is an integral part of the brainstorming and execution team. As head of the custodial staff, she is always available to lend a hand whenever necessary to ensure that the school is running efficiently and at eco-friendly levels, as well as promotes majority participation in the 'Green Team' recycling program. Nominee takes the initiative to monitor for plumbing, electrical, and chiller units concerns so as to provide intervention measures for potential repair prior to an actual custodial incident. What is more, nominee ensures that all department infrastructures are running effectively, yet energy efficient. As a result, the program has experienced large-scale success as the nominee provides support on a school-wide level. Ms. Feddeler is the personification of these activities. She maintains efficient energy levels through the timely monitoring of electrical and chiller units, reduces waste by flushing and testing plumbing pipes and ensuring efficient water drainage and flow and reduced plumbing leakage.

### Aaron Jackson – McNicol Middle School

Mr. "AJ" Jackson has tremendously improved the McNicol campus through his dedication. He listens to teachers and staff, and he is very detail oriented. He spends a lot of time on campus; he is on school grounds before and after most people. He should be recognized for the P3 challenge because of his dedication and involvement with the environment. He is always concerned on how to improve the aesthetic of the building. Mr. Jackson has attended custodial irrigation training by NatureScape. This training ensures that water conservation are practiced on campus and Mr. Jackson has certainly applied what he has learned in this training by being aware of ways to conserve water. He is aware of the issues to look for to save water on campus and is vigilant in reporting any problems. Mr. Jackson does work above and beyond his job. For example, he has helped with the Whole Foods fruit garden grant to plant fruit trees on campus. He was very much involved in the entire process, which resulted in over 19 fruit trees around the school.



### Greggory Lockwood - Lakeforest Elementary School



Greggory has been a force to be reckoned with when it comes to environmental activities at Lake Forest Elementary. He participates in all aspects of our outdoor learning experiences, including instruction on the life cycles of the varied species in our National Wildlife Federation habitat, assistance in creating raised garden beds, maintenance of our grounds and our growing crops, and overall upkeep of our butterfly garden and sensory garden for our students with autism. He collaborates with all faculty and staff and participates in school beautification days with our school faculty, administrators, students and families, and the Pembroke Park city council and other shareholders from our local community. Greggory promotes eco-friendly practices around the school by assisting in conservation activities. He helps reduce waste by helping in weekly recycling collection, and instructs students on sound landscaping practices and is a founding member of our school's Green Team.

# SCHOOL NOMINEES

## All Categories:

### Beachside Montessori

At Beachside Montessori Village, it is their intention to create an environment that inspires children to take ownership of their surroundings and act for change towards a more peaceful and sustainable world. To reduce their environmental impact, promote health and wellness, and integrate sustainability education, Beachside participated in the Miami Heat's How Low Can You Go Energy Efficiency Challenge, partnered with Recycle Across America to place labels on all bins throughout the school to reduce contamination, worked with Progressive Waste conducting school-wide assemblies, recycling audits and art contests, and with support from On Air Schools-Clean Air Campaign, collected data to measure the amount of CO<sub>2</sub> and air pollutants produced each week. Students visited classrooms to read and discuss environmentally themed picture books, use reusable manipulatives, and kicked off a No-idling program by educating parents and having them sign a No-Idle pledge. By offering a Sustainability Elective for students through a partnership with ASU Sustainability Teacher Academy, being a Northwest Florida certified wildlife habitat, through classroom gardens and weekly gardening club, by hosting an annual Food Drive/Turkey Trot Walk and even a community 5K, we prove that partnerships and extracurricular activities support our "cosmic education" to help students understand the connections between the world's biodiversity and themselves through environmental and sustainability literacy. Finally, we empower students with groups such as Off the Canvas, which cultivates sustained awareness using art/craft and socially responsible practices and opportunities for school leadership and service learning with The Warriors of Rainbow student green group, which was chosen to attend Algalita International Youth POPS Summit to present plastic ocean pollution solutions and resulted in working with the Montessori Model United Nations to offer solutions for global environmental issues that were later presented to the Secretary General. The Montessori philosophy coupled with strong partnerships and a passionate school community has created a unique environment that inspires Beachside Montessori students to become protectors and guardians of our planet.

### Dania Elementary School

As a Title I Public School with one of the largest Special Program in the district, Dania Elementary is a great example of hard work, collaboration, and effort for the environment. What started as a green initiative by a few teachers in gardening and recycling has become a proud schoolwide philosophy with Green Initiatives Teachers sharing their best practices and working with administration to encourage and support a school-wide green mindset. Classroom teachers incorporate environmental issues in their lessons, participating in challenges, and completing special projects with their students. Through indoor field trips with the Museum of Discovery and Science, helping scientist classify data through Serengetti.org and PenguinWatch.org, and incorporating curriculum from Gardening for Nutrition and Agriculture in the Classroom, we demonstrate that it is possible to attend to all Florida Standards through hands-on activities, while helping students learn compassion and kindness towards the Earth and others. But, Dania Elementary is not done and continues on the path of wellness, awareness, and community connections. We are in the process of developing National Wildlife Federation pathways to become a Green Ambassador School and already provide a NWF Schoolyard Habitat featuring non-invasive plants and a butterfly haven for Monarch Butterflies as well as other migrating insects. Moreover, during Professional Development, teachers are becoming GLOBE Teachers so our school can become a scientific data collection location. It has been an amazing journey to see students own their learning and feel proud of school accomplishments. As our student pledge says: "We can become anything we wish to become with hard work and dedication. We take delight in education and we will succeed this day." We live by this motto every day and continue to grow and thrive.



## **Lauderhill 6-12 STEM MED Magnet School**

This year Lauderhill 6-12 STEM MED Magnet School adopted an Environmental Mission Statement to create a vision for a greener campus with aims to reduce the effects of habitat destruction, pollution, and climate change on the campus, community, and planet by training students and faculty to adopt sustainable behaviors as environmental stewards. Our environmental action plan included participating in schoolwide and academic endeavors. Schoolwide we participated in the “How Low Can You Go?” challenge to reduce water and electrical consumption, worked with Thoroughbred Waste Management to start a school wide recycling program, organized a “MLK Day of Service” that recruited community volunteers to beautify the campus, make care packages, and building our Outdoor Learning LAB of 21 Raised Concrete Beds with over 26 species of edible plants and dozens of species of flowers that feed butterflies and hummingbirds along with a composting area and a soil testing site. We participated in the “Air Quality Index” flag program to raise awareness about our campus air quality, created an Air Quality Plan to reduce student exposure to vehicle emissions from idling buses and parents pick up areas and participated in the Cheerios “Save Our Bees” campaign.

Academically, we started an AP Environmental Science Class to create a higher standard for environmental education, inducted a National Honor Society as a base of scholarly environmental steward project leaders, organized a “Student Teaching Students” Day for NHS members to discuss sustainable practices with every middle school and high school class and hosted tours of the Outdoor Learning LAB for middle schools students to become more educated on identifying and distinguishing edible and native plants. Our students decorated the school with sustainable practice posters and launched a Citizen Science project that upload pictures of plants and wildlife to the iNaturalist database for identification and cataloging. Finally, we utilized students’ game designing skills to create environmentally conscious video games. As one of only two combination secondary public schools in our district with an enrollment of approximately 95% minority and 94% free and reduced lunch, Lauderhill 6 -12 STEM MED Magnet School represents the ethnic and cultural diversity within the community and is proud of our students and their commitment to the environment.

## **Orange Brook Elementary School**

Orange Brook Elementary, a Title 1 school, is a National Wildlife Federation Certified Wildlife Habitat, a Project Perch (burrowing owl shelter) partner and promotes a sustainable lifestyle with vegetable, fruit and butterfly garden beds. Because four teachers are National Wildlife Federation Habitat Stewards, we have a comprehensive green program with a variety of educational activities in all areas of the curriculum that promote a healthy lifestyle and environmental awareness. Activities include but are not limited to participating in Florida sanctuary distance learning sessions, conducting water filtration science experiments, creating animal habitat dioramas, designing musical instruments constructed with recycled materials, and writing fictional stories and science reports inspired by butterfly lifecycle observations. In the past year, grades 2-5 students have tended to two raised garden beds, second and third grade teachers have successfully created portable butterfly habitats releasing more than 25 butterflies during the first semester alone, and students in 1-5 grade have been actively involved in a design and research challenge to create a more permanent outdoor butterfly garden as well as a weather station for all to enjoy.

We provide many environmentally-friendly learning opportunities and focus on inspiring our students to continue to explore and embrace an eco-friendly lifestyle. For example, while the Green Team manages the recycling program and educates via a green topics bulletin board, the morning announcement team participates in the Broward County’s Air Quality Flag Program. Thanks to a generous donation from the Hillcrest HOA for two fabricated owl homes, students are provided a unique first-hand experience to observe a protected species as they clean and monitor the protected site. Working with community partners like the 4H Club, we expose students to STEM technologies used to solve environmental problems and plans to present topics related to healthy habits and eco-friendly lifestyle. Students have been collecting and sorting container caps under the direction of the school’s paraprofessional who then adds them to a plastic container cap mural in the school’s cafeteria promoting the importance of reusing readily available materials. Finally, Orange Brook Elementary students are active, passionate and vocal environmental advocates. Upon learning about the possibility of tree removals due to the installation of a new marquee, students researched and wrote persuasive essays to convince stakeholders to consider alternative solutions. They organized and led a peaceful protest to express their concerns and even held a local vote, which protected the trees and moved the marquee’s location.

## **South Broward High School**

South Broward High School is a Marine Science Magnet school and standards are met through an integrated and interdisciplinary curriculum approach throughout the school that immerses students in environmental issues that affect our coastlines and oceans. We are dedicated to teaching our students and staff how our impacts affect the environment, especially the oceans. Because of our supportive Administration, teachers are encouraged to incorporate green school projects into the curriculum and extra-curricular clubs, such as Save What's Left and the Alternative Energy Club. We offer AICE Marine Science 1 and 2 and AICE Environmental Management courses engaging students in a variety of opportunities centered on conservation and restoration of both aquatic and terrestrial habitats. Our students learn about alternative energy sources, recycling, how to conserve water and research the quality of our local waters and air.

SBHS uses school grounds as a learning environment in a variety of ways. Our art club designed and created a reading garden near our media to encourage an outdoor learning environment. Teachers use the area to explore local plants, teach land management curriculum, and inspire essay writing and art projects. Students use the area to study, meet friends, socialize, and engage in environmental activities such as Earth Day and Peace Day. Our Maritime technology III classes are designing and installing a solar powered aquaculture facility to learn about water quality, plant production, marine species life cycles, alternative energy sources and the advantages of solar power. The projects we are doing will add oxygen to the earth and food for our culinary classes.

South Broward High Students model and practice successful collaboration and partnership building skills through the implementation of a number of green projects, which have been highlighted in local government meetings, community service events like Waterway Clean ups and Water Matters Day, middle school visitations, national youth conventions and even the local news channel. Students worked together to purchase a water filler station for a fountain on campus and they encourage others to use it through campus PSAs. This fountain tracks the amount of water bottles eliminated as you fill up your water bottle, and since April 2016 South Broward has eliminated about 26,000 plastic water bottles. The Plastic Free Mermaids (PFM) club, founded by students, has a primary mission is to engage our community in a collaborative project to increase awareness about plastic pollution through education, outreaches, and cleanups, not only to reduce the amount of plastic in our oceans, but also reduce the effects plastic has on marine organisms. They educate how to live a plastic free lifestyle and show alternatives to use instead of plastic. They have hosted snorkeling, paddle boarding, kayaking, and park cleanups. It is evident in the many environmental activities the faculty, staff and students participate in on a regular basis and the integration of environmental concerns into our curriculum that we feel South Broward High School is a wonderful representation of a school that P3 - focused on preserving our planet for prosperity.

## **Tequesta Trace Middle School**

Sustainability practices are continually improving at Tequesta Trace Middle School with classroom participation and even more environmental learning! We kicked off the year with our Eco-Partners Schoolwide theme and displayed our Eco-Pledge in almost every classroom. Frequent contests highlight recycling challenges, reusable water bottle usage, turning off lights and more keep students and staff engaged while emails and magazine highlights showcase our goals and accomplishments, such as receiving the NWF Eco-School Bronze Level award and a staff member who was a NWF US-Taiwan Delegate traveling to Taiwan. Our curriculum for environmental topics goes beyond the science classes. For example, Cambridge classes are involved in NWF Eco-school global connections, student opportunities to go to the Everglades as Citizen Scientist measuring water quality and doing fieldwork observations, and Language Arts classes reading outdoors and presenting projects in our new gardens.

Students are the strongest factor in our green environment and their efforts are what keep our program running. 35 students volunteered for Water Matters Day and we had two booths including a mural and writing a Taiwan style wish for the world. It was student-led ideas that initiated our four new Learning Gardens on "Planting Day." Community involvement led to the planning and implementation of our Learning Gardens, Broward's NatureScape was invited to work with classes on gardening and ecology lessons, while the Carbon Capturing Canopy grant and local nurseries' donations provided plants and supplies for our students'

projects and gardens. Native passion vines highlight our indigenous connections and grow on a student made teepee trellis in our Indian Garden. We used recycled materials like wooden pallets for signs that were hammered & painted by students and stepping stones with inspirational quotes for the Reading Garden and heritage flags for the Diversity Garden. Every week the Junior Honor Society Eco-Committee hosts the “Save the World Wednesdays” club where Eco-Ambassadors’ recycled materials are processed and they mulch and water our gardens.

Sustainability includes serious recycling in classrooms by the Eco-partner club every week. Our Eco-Partner Family Activities included 3-D School spirit posters out of recycled materials, Carbon Footprint graphs, upcycling, and Recycle Rally points and materials from PepsiCo to keep our recycling program up and running. Plastic bottle caps are collected for a wheel chair charity and used in two murals. Ms. Andreolas’ Butterfly Garden and Club started working in November with 2 PTA volunteers to clean and maintain garden weekly working several hours in the garden using supplies donated by Home Depot and stones donated by a custodian. Students, as well as hummingbirds and several species of butterflies have enjoyed our garden. However, our newest challenge was to use repurposed wooden pallets for an aromatic herb garden that would incorporate science benchmarks through collaboration in a unique context while invigorating our science program. Parents, teachers, and students met after school to discuss, share ideas, plan, and donate herbs and soil. Ms. Shields’ Cambridge students were challenged to collect, classify and plant the herbs in the garden. They will be responsible for the upkeep as they study the importance of sunlight, shade, and water while while investigating and describing the process of photosynthesis. We anticipate the benefits of growing fresh herbs for the people and flowering plants for the critters, and of course learning for the students in many ways!

## Categories:

### Challenger Elementary School – Category 1

Challenger Elementary School is home to 942 students who are interested in learning about what it means to keep the earth clean and green. With being such a large school, it is evident in different parts of the school where the students have taken charge to beautify the campus and to continue to learn about the plants and animals that call South Florida home. With a Science Special this school year, students in PreK-5th grade have been exposed to curriculum that ties in the Next Generation Sunshine State Science Standards with what already exists on campus. Students have been learning about the parts of a plant, what nutrients a plant needs to survive, and what animals use this plants for survival. Even tying in habitats, food chains, plant fertilization, and germination. Students are observing, hypothesizing, and journaling as they learn. This is even evident in the hallways as you walk through and see animal and habitat projects displayed around the school. With Spring just starting, teachers are getting the students involved in learning more about plants and animals.

With the support of administration, teachers and students work together to green challengers Butterfly Garden, Burrowing Owl Space, and Garden Area. With an open, inviting space for classes to come outside to learn from what plants and animals already live on campus. Students go outside to explore and observe the caterpillars that have called the Butterfly Garden home. Kindergarten classes are now learning about the Life Cycle of Butterflies with the start of Spring and are growing caterpillars of their own. Wanting to release the butterflies when its time in the butterfly garden. Hoping to add to the Monarch Butterflies that currently call it home. Teachers will soon begin taking the Butterfly Hero Initiative and registering their classes as Butterfly Heroes. Wanting to take the learning further for the students and getting more hands on. You will find PreK students exploring the plants and learning about the different parts of a flower out in the garden. With the help of the 2nd and 3rd grade students, the garden has been revitalized with fresh new plants from the Broward Education Foundation grant that was received. Beautifying the school grounds for all to enjoy. To end the school year, Challenger Elementary received the Whole Kids Foundation Fruit Tree Grant. With \$1500 to spend on fruit trees around campus, the 4th grade students who are part of the Challenger Explorers will complete research to create a list of which fruit trees will be planted on campus. Spreading the trees around campus and allowing for future outdoor learning spaces to be built. This will be an exciting opportunity for the students and staff to learn from these plants and use the fruit trees to enhance the curriculum in the classroom. What better way than to learn hands on and right on campus.

## **Crystal Lake Middle School, Categories 1, 2, 3**

Crystal Lake Middle is a school that truly embodies the principles of a P3 ecofriendly organization and consistently represents each category to ensure students understand the importance of supporting our environment. Through a plethora extracurricular activities, the magnet programs, in class curriculum, support from all stake holders, and community projects the school has grown exponentially over the previous and current school year. Over the past three years the students have designated a second area on campus to build another butterfly garden, six raised urban edible garden beds were constructed and are maintained by the students yearly, our screen hours has been refurbished and is being utilized for seed germination, and the students are currently working on developing a pollution website with a public service announcement to present to the student body. All of the projects emphasize the utilization of school grounds to enhance the appearance and educate students when they circulate the campus.

During the current 2016-2017 school year a variety of programs throughout the school have been tracking and monitoring energy usages and devising methods to lower consumption. Additionally, our students have instituted a paper recycling program and recycled 755lbs of paper in just over one month. Over the course of the school year guest speakers from the Pompano Beach Water facility and Pompano Waste Management organization have visited science classrooms to discuss the need to product and conserve the environment. Furthermore, the pollution PSA for the school is focusing on both environmental littering and air quality of the school. Students and staff are diligently working to increase the sustainability of the school and role model habits that will help maintain our planet. However, the engagement from the students would not be as successful if it were not for the new partnerships listed above that provide career based insight and continuing guidance for the students. From developing and implementing a recycling program to building and maintaining edible urban gardens, all of the aforementioned projects and school functions have been a success because of the administrative support for the students. At Crystal Lake Middle our school has been fortunate to begin a unique program called Global Scholars. This innovative curriculum affords students the opportunity to collaborate with peers from around the globe and complete curriculum that is centered on engineering and environmental dilemmas. In this course students have engaged with students from China, India, New York, Spain, and an assortment of other cultures and demographics to create public service announcements about environmental damage occurring in their region and also develop prototype designs to make changes in their own community.

## **Driftwood Middle School, Category 5**

Driftwood Middle School would like to nominate Principal Steven Williams and administrators Rhaela Bello, Gwen Lampkin and Ron Golembieski for the P3 Challenge Administration of the Year. The longer our administrators stay at DMS the more they become invested in our environmental programs. They continue to surprise us with new ideas, such as having the cafeteria painted with an inspiring environmental theme, adding ten more garden beds to enhance our campus, recycled picnic benches for the courtyard and Environmental Wellness class. Mr. Williams is the first principal to raise his hand at a meeting if a company like Siemens or any other environmental company wants to partner up with a Broward School. Administration feels that partnerships are very important in exposing our students to different career pathways so DMS hosted a Green Apple Environmental Career Day of Service. Williams also spent a Saturday working with a landscaping architect from the USGBC and community to enhance our butterfly garden. With Mr. Williams' support and encouragement for the last 7 years, Driftwood Middle has one of the most successful environmental programs in Florida and the first US DOE Green Ribbon School in Broward County!

In addition to the Green Ribbon Award and under his administration Driftwood has been recognized for winning many awards during 2012-2017: P3 Challenge School Award, Sustainability Award, Integrated Curriculum and Community Involvement; Sustainable Florida Leadership, Partnership and Community Project Awards; Emerald Award; Tools for Schools Energy Reduction Awards; Florida Green School of the Year 2014 and 2016; Green Difference Award-Outstanding School Led Project and Sustainability Award; Recycle Rocks District Video Contest; Florida Green Schools Sustainability Award; and Siemen's We Can Change the World. Administration supports the faculty by entrusting the staff to go beyond and create innovative programs:

Energy Conservation-How Low Can You Go Challenge Energy Reduction Initiative. Recycling Program-He supports the recycling program by allowing the Green Team to make morning announcements and recycle after school. Under Mr. Williams watch he implemented a new paper reduction program that had a cost savings of \$5,304 and reduced our paper usage by 200 cases. The school recycles 46% of all paper products. Trash on You Back is anew recycling program that administration is supporting is It's a 5-day campaign driving awareness on reducing on carbon footprint by Carrying the Trash on Your Back wherever you go. You realize how much trash you really produce and enable us to create a zero waste world. Project Perch-Mr. Williams also supports the use of our campus for artificial burrows for protected owls. Driftwood was the 1st school to do artificial burrows for Owls funded by Project Perch, Audubon and National Fly-Aways Coalition. Driftwood installed a professional Live Web Cam on Burrowing owls through a unique partnership with Birding Adventures and Project Perch. DMS is certified by Broward County NatureScape, National Wildlife and the North American Butterfly Association.

## **Griffin Elementary School, Categories 3, 4**

Each year we attempt to make our school more sustainable than the previous year. We are a proud P3 school and have applied every single year, but one. Griffin has an environmental club for 4th and 5th grade students, called Eco Patrol. Our mission is to create a more sustainable campus, while educating our peers, parents, and community on the importance of promoting and living as good environmental stewards. We are very proud of our recycling program, which is managed by our Eco Patrol members. This September, we kicked off our ninth year of school wide recycling of all paper, plastics, cans and bottles. Each Monday and Thursday our Eco Patrol members collect the recycling from each classroom. In addition, to collecting recyclables, we signed up for a third year to compete in a contest with other schools in Florida as to who could collect the most plastic film; i.e., plastic bags, dry cleaning plastic, plastic from paper towel and toilet paper packages. This year we have implemented many new initiatives; however, our previous initiatives are finally paying dividends. Through our Captain Planet grant from 2014, we were able to build artificial burrows for not only our community parks, but also for our school campus. Also, we were able to plant several coontie plants, which are the host plant for the Atala butterfly. Also, to add to our habitat restoration success, our burrowing owls have owlets. We owe these successes to our hard work in restoring their habitats and increasing the biodiversity on our campus.

Some of the new initiatives we adopted this year include our participation in the School Flag Program sponsored by Broward Air Quality. Each morning students log onto the Air Quality website and record the air quality for that date and then report it on the morning news. Also, new this year, is our participation in GLOBE (Global Observation to Benefit the Environment), which is partnering with National Wildlife Federation Eco Schools USA. Our students are recording data for precipitation, soil temperature, and clouds, which in turn gets sent to NASA scientists to help predict weather and climate change. Lastly, this year we were fortunate to book the Agrium Seed Survivor bus. We had the computerized interactive bus here for three days in February. What a great way to reinforce those science standards in plant nutrients and growth. Also, in regards to our energy consumption, we always participate in the district's "How Low Can You Go?" energy challenge. Each classroom is encouraged to assign a student as an "energizer", someone who makes sure the lights are turned off each time the leave the classroom. Also, students placed "Be Bright, Turn off the Light" signs in strategic places around the school as visual reminders.

## **Lyons Creek Middle School, Categories 1, 2**

Lyons Creek Middle School is an anchor in the Coconut Creek Community that serves nearly 2000 students. We are a Title I school who "prides" ourselves on academic excellence, innovative programs, environmental awareness and a top-notch sports program. You could say we are one of the top middle schools in the State of Florida, and according to the State of Florida DOE, we are! At LCMS, we are led by our amazing Principal, Mr. Horace Hamm who is key to our success, especially in continuing our environmental and sustainability efforts to reduce, reuse and recycle. Lyons Creek Middle School is home to several outdoor learning labs that are used by many groups of teachers throughout the year. Our pride and joy is our edible school yard located behind the cafeteria. Every student who attends LCMS is exposed to how fruits and vegetables are grown and the different types of plants that provide nourishment to our bodies just by walking to

the cafeteria every day. We also maintain and add improvements to the Gayle Cox Butterfly Garden every year. Our garden is a massive undertaking and extends the entire length of our main campus. We were also fortunate enough to have a natural wetlands area in front of our campus that is available to science teachers to observe many scientific concepts such as ecology, life cycles, plant reproduction and classification.

Being the large campus that we are, school sustainability and conservation is very important to our staff and students. We have a several recycling programs, encourage water and energy conservation through PSA's made by students. Our LEEO program raised money through their textile recycling program and our Peer Counselors collect recyclable trash every Tuesday and Thursday. We also have several clubs (LCMS Environmental Leadership Club and NJHS) that continue to promote recycling and conservation through their leadership programs. Our award winning LCMS Environmental Leadership Club, led by Tamara Lobban, is the core to educating our students about how they can promote conservation in their school and community. They meet weekly, maintaining our outdoor labs, and plan monthly events that promote the environment. In February, the club sponsored a booth in the Coconut Creek Butterfly Festival. They will be assisting community leaders in this year's 2017 Arbor Day Event in April. They have also participated in community clean-ups, such as the Marine Industries Waterway Cleanup and have taken a trip to the beach to participate in a Kids Ecology Beach Clean-up last fall. These students have been recognized by Coconut Creek Television for their volunteerism and dedication to their community.

## **Margate Middle School, Category 1**

Margate Middle STEM Magnet School has partnered with Comcast to participate in "Comcast Cares Day". This initiative creates a roadmap for Comcast to use their time, talent, and resources to improve the quality of life in the community where they do business. Comcast arrived at Margate on April 22, 2017 to create murals, landscape areas around the school and pressure wash needed areas. The students and staff at Margate will pass this great deed forward by embedding in their curriculum a "Clean Up Campaign" to raise awareness on the environment and community development through their 7th grade Civics class. Students will collect litter, strategically locate recycle bins around the school, and create posters to stress the need of not only having a safe school but a clean one as well. Students have learned to grow vegetables such as lettuce and spinach hydroponically. Students understood while growing crops by means of hydroponics, you will decrease the chances of insects and other predators eating the crops before harvest. While utilizing hydroponics technology the quality and quantity of crops remain consistent regardless of geographic location or conditions. Furthermore, utilization of hydroponics reduces the use of fossil fuels and contamination from soil. The first set of crops was harvested.

## **Marjory Stoneman Douglas High School, Categories 1, 3, 4, 6**

Marjory Stoneman Douglas High School is named, of course, after the famed environmentalist and author of the "River of Grass". Marjory's Garden - We have taken a rocky, weed-covered area of the school and began creating a beautiful green space for our students. We are using innovative and creative ways of getting students involved and of utilizing technology. We are developing hydroponics in the Garden and using solar energy for our power. Our next steps include conserving water in a more efficient way and incorporating aquaponics. A few students are investigating the use of compost and some others are beginning to work on artistic displays using recycled materials (they are collecting empty plastic water bottles for starters). Students have been involved in each and every aspect of this project from the beginning. They have planted every flower, plant, and piece of sod. They mixed the concrete and built the raised beds. They even created the paver sidewalks that go through the area by leveling the ground, putting down weed block, and using leveling sand. They have learned so many skills already, but the biggest lessons will be learned once everything is up and running! Our commitment to making MSDHS a P3 school is still in its first stages, but we're ready for the challenge and feel that we made great strides this year!

Marjory's Garden is a unique, innovative, cross-curricular program designed to incorporate many different disciplines and subject areas. Environmental Science – Mr. Simpson and Ms. Teres represent us in this area and are working to ensure that we achieve our goals of teaching students the values of sustainability. In particular, Mr. Simpson has designed and built a huge hydroponics station and we have plans for an aquaponics area as well. Biology / Botany – We have advisors from the community, as well as a few of our teachers, who

educate the students about the various plants we are growing. Engineering – This year has been dominated by the construction of the Garden and our students have literally built the area with their own hands through teaching fundamental building skills to students every week – everything from how to use a drill to how to properly mix concrete. Art – Our National Art Honor Society is creating beautiful “tribute pavers” to honor our benefactors. Each stone will be covered in beautiful colored tiles that spell out the name of the contributor along with a small picture (dragonflies, flowers, etc.). Furthermore, our “Save What’s Left” Club is building a sculpture from used plastic bottles. Culinary – This class operates one of the raised beds and recently harvested their first tomatoes. They were used in the daily luncheon that Culinary provides (tomato soup, in this case). Business – Our award-winning DECA chapter is in charge of the nursery area of the Garden. We built a shade house for them where they are cultivating plants and herbs to be sold. They are hoping to sell their products at the Parkland Farmer’s Market or, perhaps, at a local organic grocery store. Technology – We recently installed solar panels with which we hope to operate the water pumps for the hydroponics area as well as possibly charge our electric mower and weed whacker. We designed the solar mounts ourselves (one of which uses only up-cycled materials recovered from the school’s trash bin) and they are designed to swivel with the Sun’s position in the sky.

## **New River Middle School, Categories 4, 5**

New River Middle School is a Marine Science Magnet Program with a goal of exposing our students to environmental issues and fostering marine stewardship. Our goal is for students to become proactive in their community and on campus to positively impact the environment. We do a number of different green and marine related activities in our community and on campus. Administration supports all of our endeavors to achieve these goals of making a difference on campus and our community. Our principal, Ms. Wessinger, leads by example for our entire faculty, students, and families by actively participating in our marine/green activities on campus and off. She supports all green/marine science activities and helps by seeking out environmental projects and grants that are offered to enhance student learning and engagement. Engaging our students in their community and natural environment happens by involving them in community service projects and field experiences. The administration at NRMS is very active in all the activities that promote stewardship and attends all our functions and participates in our annual International Beach Clean-up and Waterway Clean-up events. They also support and encourage the opportunity for field experiences to various South Florida ecosystems including snorkeling, canoeing, and kayaking where our students learn about the local ecosystems at the same time learning how to preserve and protect what is right in their backyard. Administration encourages green practices on campus by promoting and encouraging teachers and students to take part in all school wide initiatives. Our administration is consist in reminding faculty and students to participate in our school wide recycling program, our energy conservation “Turn Them Off” initiative in turning off lights when not in the room, and reduce our waste in the cafeteria. The administration supports this by use of morning announcements, newsletters, emails, and website reminders.

Administration encourages teachers to implement projects and hands-on learning activities that incorporate environmental awareness and stewardship into their curriculum. This is achieved by allowing teachers opportunities to participate in professional learning communities (PLC) through the year. Our administration also supports and implemented a monthly Grade Level PLC which allows for collaboration and during that time our Marine Science grade level teacher can supporting with lessons, activities, and programs that coincide and enrich with core class curriculum. This is part of our School Strategic Plan for implementing various green education across the curriculum.

## **Northeast High School, Categories 1, 4**

Northeast High School is a work in progress when it comes to P3. Each year we seem to add a bit more to what we are doing for the environment. At first there were only a couple of teachers involved in this endeavor, but some of the teachers in the department are becoming more involved which helps the students to be more involved. The things we have maintained are our school wide recycling run through the Ecology and Weird Science Clubs. We have also maintained our three outdoor gardens, the butterfly garden, edible garden and biotechnology garden. We have taken on some new projects this year, the biotechnology classes have run experiments with outside groups, one class grew peppers and tomatoes for NASA research, another grew

endangered orchids for the Million Orchid Project with Fairchild Tropical Gardens and the AP Environmental class participated in Flat Lorax and shared local environmental issues with classmates around the United States. Currently, we are working with an outside donor to set up an outdoor hydroponics classroom, which will be used by our biotechnology classes and our alternative energy classes (which are contained within our new Alternative Energy Magnet).

## **Nova Middle School, Categories 1, 2, 3, 4**

Nova Middle participated in several activities to make it “greener” school wide. During the 1st marking period, our students participated in a survey of overall environmental awareness. In the months of September-October students joined the initiative via our Edmodo Group Registration. Students and teachers took part in a survey that determined their overall environmental knowledge and what they could possibly do to improve their experiences with conservation and preservation. Students enjoyed playing the interactive game on Edmodo and were able to earn extra credit in their classes when they were able to present the evidence. Students participated in poster contest entitled, "Recycling Education". The top winning posters were reproduced and displayed in classrooms throughout the school. NMS STUDENTS: Students set a goal number for plastic bottle recycled in the name of Nova Middle School and will take an oath to use proper bins to dispose of waste in an effort to save our planet. Garden Spring Project- Student Ethan Wigutow is leading the garden project by sharing what he learned about worms in his award winning Science Fair Project. Students collected fruit and vegetables in the school cafeteria, and stored them for the purpose of composting. Students added soil and worms to the compost container. The Planet Patrol will use the soil to plant a small box of tomatoes first. Then we will continue to add on to our sustainable garden each marking period. Teachers routinely recognize students who consistently and properly dispose of their waste (in the classroom), bring plastic bottles to be disposed of properly, and who are conscious about their waste, at home.

## **Panther Run Elementary School, Categories 1, 2, 4**

Panther Run Elementary is pleased to be a part of the P3 Eco-Challenge. One of Panther Run’s School philosophies is: “Who I am Makes a Difference.” Our focus continues to be to bridge our community and school through efforts that support student learning through hands-on projects that are relevant to the real-world. In the “School Grounds Enhancement” category, we have established a sustainable food garden that was originally a collaboration between our school and West Broward’s High School’s “Project Primal” club. The students continue to make observations year after year and teachers use the garden as an extension to their classroom. Additionally, efforts between the staff, PTA and donations from parents, have given classes the means to maintain a butterfly garden. The butterfly garden was created in an effort to provide a place for butterflies to complete their life cycle. These two garden areas have helped continue to build on student science skills, understanding of different ecosystems and how to maintain a garden. Additionally, this year, we received a grant funded by Lowe's, to develop a common outdoor area for students, teachers and families to read, write, reflect and relax. The area will be known as “Panther Cub Reading Corner.” This opportunity will be a part of integrating curriculum through the learning garden. This common area will be next to the garden under the FPL Solar Array system. The students helped participate in the “How Low Can You Go,” challenge. Teachers assigned classroom jobs for students to participate in such as; lights, computer, sink along with posting signs to encourage everyone to participate. Our school promotes a walk/bike to school day along with carpooling during the year. Panther Run students and staff also participate in community-based projects that promote addressing the needs of animals by recycling through our Paw-it-Forward campaign. The school reaches out to the community to donate items for a local animal shelter. The student council has also reached out to the school, staff and community to help educate and collect recyclable caps for a local organization to use as funding for wheelchairs.

## **Parkside Elementary School, Categories 1, 2, 3**

Parkside Elementary School is representative of a P3 School through the efforts of the Administration, Staff, Educators and student support. Our COMPASS and First grade teachers have outdoor gardens that are used within their teaching curriculums throughout the year. Kathryn McCullough, 2nd Grade educator and NWF Habitat Steward has a butterfly garden as well as a vegetable garden that she, as well as her students give



information and hands-on lessons to all classes from K-5th grades. These gardens have also become a helpful tool for Joan King, the Science Specials teacher as well as the Kindergarten teachers enabling them to connect their science standards through a daily outdoor viewing of completely living specimens, and hands on manner. Teachers hold classes outside for their students that include their science standards as well as math study skills of measurement etc. The school garden is placed in the front of the school, so other grades are included in the amazement of science right at our fingertips -- different types of vegetables/fruits as well as watching two (2) types of Papaya trees flourish and become the breeding habitat for our ladybird beetles! Having the gardens available to the whole school has not only increased the awareness of the students knowledge about living things in nature, but it's also helped our Science teacher, Joan King include the real thing with her outdoor science lessons as well. Our gardens are a wonderful way to help keep our air quality cleaner. We have community partners in Broward County come in every year to hold a lesson on Air Quality and the importance of our students being aware of what causes poor air from nature as well as humans. Ms. McCullough's students this year worked with Hands On Broward and we planted sea oats to help save the beach and build the sand dunes.

## **Silver Ridge Elementary School, Category 6**

Silver Ridge's Ecology Corps began in 2006 in response to the movie, "An Inconvenient Truth." Over the years, this weekly club has involved 4th or 5th graders who have an interest in caring for the planet and are not afraid to get dirty! At least part of most meetings is spent in the gardens – weeding, watering, planting, observing. This year we managed to grow some coontie plants from seeds, as our plants are getting quite eaten by our Atalas. We have also spruced up our front reading garden by spraying a natural weed killer made from vinegar and salt before applying mulch – it worked very well! Funds used to purchase supplies for the gardens continue to come out of the money we received in 2013 for winning the Elementary School P3 Challenge. We have also raised money by selling T-shirts and cloth bags schoolwide, and running a used clothing drive through Fundraising for the Future.

Other activities on campus have included public service announcements on WSRN and hanging posters to promote recycling, water or energy conservation. We have small orange or green cards that are used to reward or remind classes about turning off lights. The green cards have been turned in for prize raffles. Winning classes have been rewarded with stickers with eco-friendly statements. This year we created the Water Conservation PSA in just two meetings! Students then spent time before school editing it down to just the right 30 seconds. Perhaps our proudest moment came in the fall of 2014 when our club students welcomed the U.S. Department of Education's Green Strides tour. Ecology Corps students presented information about our school's green efforts with a narrated slide show, followed by a narrated tour of campus. Our atala butterflies woke from their nighttime roost right on schedule, and our students were proud to share their knowledge of Silver Ridge's green efforts. Our involvement often takes us off campus. In years past we've toured Pizza Fusion to learn about their green practices, helped to dig owl burrows for the Town of Davie's relocation project(6), collected air potatoes from Tree Tops Park, and we participate in Davie's Waterway Cleanup every year. This Spring we'll tour Marando Farms again to learn about their organic farm practices and visit with the free-ranging chickens.

## **The Quest Center, Categories 2, 3, 4**

The Quest Center is a very unique school in that we serve students with profound special needs. These include individuals with Down-syndrome, profound autism, medically fragile conditions, and those with multiple physical and mental challenges. Many of our students require wheelchairs for mobility. Most are non-verbal or have limited verbal skills. Despite their difficulties they face on a 24/7 basis, it has not stopped them from participating in a variety of "Green" activities within and without the school. We've designed these "green" activities to maximize student involvement and participation. One of our first endeavors was to beautify the school grounds, while at the same time making these various areas environmentally friendly. One large outdoor area at the school was once a large, empty lot that was basically a dirt field. We planted all a variety of native plants and turned the walkway along the area into a butterfly friendly garden. In the field itself we planted five poinciana trees, one gumbo limbo, and many native plants. This area is a favorite at the school for both staff and students, as it's often filled with butterflies and squirrels running about in the tree limbs. In addition, the trees

provide shade for these walks in nature. Our students were involved in every facet of this outdoor beautification project. We took field trips to local nurseries to learn about the trees and plants and to actually purchase them from these outlets. Once delivered to our campus, our students helped dig the holes and participated in the actual planting of the trees and bushes. Once planted in the ground, our students helped with the watering in the following weeks. Many of our helpers did so right from their wheelchairs.

Every year our school puts on a major musical production that features our students in all sorts of exciting roles. These include actors & actresses, stage-hands, singers, and dancers. Some of our students help with the prop and scenery design. Many of the student participants use communication devices and adaptive instruments to take on these motivational roles in the show. Everyone of our shows has an environmental theme. Throughout the past several years, these themes have been: The Rainforest; Endangered Species; Underwater Reefs, The School Garden, and a few years ago we performed The Giving Tree. At the end of this show our students passed out native plant seeds to the audience. Another awesome "green" project we initiated at the Quest involved our students visiting various businesses in the community to pick up materials for recycling. We would take a bus and first visit various places in the community, encouraging them to recycle rather than simply throw these items into the regular trash. We gave them special bins to recycle. Then once every two weeks, we'd take a trip to these businesses to pick up the items. These would include glass bottles, cans, and other paper goods. We sorted them back at the Quest Center, and then, once sorted, brought them to a couple of recycling centers in Broward County. Seeing our students with profound special needs, and listening to our suggestions for recycling, it was very hard for them to say no! These businesses included a local Publix, a major bank in the area, a clothing store, and even a boxing gym that has since closed down. We are discussing plans to re-implement this exciting project that would benefit both the Quest Center and the community at large.

## **Westchester Elementary School, Category 1**

Westchester Elementary School represents a P3 school. The teachers focus on the students learning; focusing on how students can be better stewards of the environment. As a school we continue to recycle in our rooms. On a weekly basis the students go to each classroom to pick up recycling, then properly dispose of the paper in the proper container. Students also collect bottles that are going to be disposed in order to reuse them for planting in our garden. Many of our students have joined the school efforts in utilizing refillable water bottles into the school in order to reduce the amount of trash we produce. Westchester is unique because we are not only a team, but we treat each other like family. The teachers and students think of different ways they can make the school better. Grade Teams create clean-up projects in order to get rid of the garbage around the school. Teachers of third grade cleared and restored the butterfly garden near their wing of the building. Teachers of fifth and third grade planned and carried out school grounds clean up. When the clean-up was completed the third grade teachers measured the amount of trash they collected. Students brainstorm ideas to bring for the Green team meetings on Fridays. While at the meetings we discuss the projects pending, as well as decide which one we want to start first. We then decide if the green team is capable of completing it on their own, or do we need another team to help in the efforts.

Westchester school grounds is certified as a NWF Wildlife Habitat. The plants in the gardens are mostly Florida Native plants. The exotic plant species are minimal to non-existent within our butterfly gardens. The butterfly garden is used on an ongoing basis. Students observe and describe the stages in the life cycle of butterflies. Based on the amount of each species of butterflies present in the garden the students make the assessment if more plants are needed to support the species identified in the garden. The experience of observing the garden gives students first-hand experience restoring the area affected by the increase in population of the species. In the garden the students describe structures in plants and their roles in food production, support, water and nutrient transport, and reproduction. Students have classified the plants into flowering and nonflowering, as well as have identified plants as larval host plants and the butterfly they attract. The garden is used in addition to science to integrate interdisciplinary lessons within all grade levels. Students are involved in taking care of outdoor plants. The Green Team students take care of the garden in the mornings when they get into school. They identify any new creatures in the garden, then report back to the green captains in order to share their findings on the morning announcements, or through email to the teachers. The butterfly gardens are replenished by the Green Team through planting of new flowers and spreading seeds that are collected or donated.

## **Whispering Pines School, Category 4**

Whispering Pines School (WPS) has many well established relationships within the community which have positively impacted the school's environmental program. Community members are responsible for garden expansion, beautification and in-school field trip experiences. WPS is a center school for students who have been diagnosed with disabilities, which impact their emotional/behavioral functioning. The majority of the students who are at WPS require additional academic, therapeutic and behavioral supports to meet with success. Our school mission is to offer students a wide range of experiences to help them to become increasingly independent and prepared for life beyond Whispering Pines. Development of interpersonal relationships, independent living and vocation skills are always our primary focus as we plan for innovative environment programming and targeted collaborations within the community for our students. As a result, the school horticulture program and the related partnerships are amongst the most integral experiences offered each year.

This year, we would like to focus on one of our most special community partnerships, LFE Riding Institute. The owner of the riding institute, Luisa Escudero, began her collaboration with WPS as a mentor to students who are identified as having autism. Luisa is a certified equine therapist with a passion for students with disabilities. Under Luisa's mentorship, students learned to care for the horses and the interdependence between the animals and agricultural science. Students were fortunate to have Luisa support them after school at the farm and in school, as she attended many activities to show her support of academics. Some of the most noteworthy changes demonstrated by the students were increased confidence, empathy and communication skills. Two of the students were so successful, Luisa offered them part time work at the ranch caring for the animals and working at day camp. Each year Luisa has worked with WPS, her time at the school has increased. Last year, Luisa approached WPS to increase the involvement to include more students at the school. She became part of our School Advisory Council and collaborated to introduce both equine therapy and additional agricultural experiences to the students at WPS.

## **Wilton Manors Elementary School, Category 1**

The courtyard area at Wilton Manors Elementary is an ongoing learning lab. This area is used for individual or whole-group learning activities. Our research demonstrates the tranquil atmosphere increases reading stamina for students. Math computations appear in chalk on the patio areas. Geometry scavenger hunts provide the opportunity for students to recognize curriculum expectations beyond the textbook. Science experiments find their way into the many nooks of the courtyard and art classes sketch real-life landscapes there. Opportunities for learning are never limited to the classroom. Throughout the year students study various life cycles. Life cycles align with school curriculum in the primary grades, but students in all grades find interest in the gardens before and after school, carefully lifting leaves in search of the different phases of life. The addition of our new and improved NatureScape Butterfly Garden has brought the study of the life cycle to a new level this year. The students are finding ways to solve the problem of keeping the caterpillars and chrysalis safe from the native critters who feast on them. Vegetable, herb and flower gardens are maintained by all students. Every grade level does a planting in a 4'x4' garden box. Students assist other grade levels by watering or weeding their boxes to ensure success throughout the growing season. Teachers bring their class to the boxes and measure growth of the plants or size of the vegetables in the gardens. Discussions that require students to predict an outcome take place during the discovery process. Vegetables are harvested and shared by the students and teachers. For some students, this is the first time they are exposed to fresh garden grown vegetables. We have created a Peace Garden in our courtyard. This section contains benches, flowers, plants, a tree with international symbols of peace, a peace pole inscribed in four languages and a mosaic dedicated to the creator of the Passport to Peace, which is our character education program at Wilton Manors. This area is used for reading, reflecting and small group meetings and is maintained by students.

As the recipient of \$2,500 from the 2016 P3 Challenge we decided as a school to invest that money back into the school grounds. Community members from The City of Wilton Manors Special Projects and Grants, NatureScape Broward, Kiwanis and the City of Wilton Manors Community Affairs Advisory Board came together to help with the design. Our vision was to create a NatureScape Courtyard that eliminates the need for heavy watering with native plants and ground coverings. The idea behind this was to continue our commitment to sustainability by reducing water usage in this large space and also to expose our student population to their native Florida habitat. The project was divided into three phases; a Butterfly Garden, an

Urban Garden, and a Food Sustainability Garden. This year we completed the first phase, creating and completing our butterfly garden. After weeks of collaborative planning with experts from NatureScape including an education specialist, a water conservation specialist and local horticulturalist, the plan to create the ideal habitat for native butterflies on our campus was complete. In the following weeks with the help of students, staff, and community members the existing grassy landscape was transformed into an ecofriendly haven that provides the conditions and care needed to keep our native butterflies supported. Currently we are home to 5 different species of butterflies and are able to closely study and observe the life cycle of each one. After completion this space instantly became an integral part of our school community central to our campus. It provides for our students academically by giving them an opportunity to become hands on observers and scientists, studying the eclectic mix of both plant and animal species that occupy the area.