## Broward Schools/NatureScape Broward Environmental Partnership Agreement Return on Investment July 2013-June 2014

This past school year saw implementation of the second year of the new partnership agreement between the School Board of Broward County and the NatureScape Broward program. This agreement builds upon the progress and achievements realized during the original agreement and focuses on enhancing sustainability measures within schools in a holistic approach that brings all of the County's efforts, resources, and programs under an umbrella initiative, thereby maximizing access and the use of various tools. Among the most notable program accomplishments of the year are:

- The delivery of the Second Annual P<sub>3</sub> Eco-Challenge, a school-wide competition that entails demonstrating participation in or implementation of different sustainability metrics based on a rubric composed of 6 comprehensive categories: School Grounds Enhancement; School Sustainability; Curriculum Integration; Community Involvement; Administrative Support; and Innovation. The P<sub>3</sub> Eco-Challenge Recognition Awards Ceremony, which was held in May encourages, recognizes, and rewards schools, teachers, students, administrators, and volunteers for their efforts in addressing the challenge.
- In November, the County hosted the 5<sup>th</sup> Annual Southeast Florida Regional Climate Leadership Summit and invited participation from the Broward School District to provide an opportunity to expose students to climate change issues and policy development. Students and teachers were given the opportunity to either attend in person or watch live from their classrooms. Working in coordination with the STEM and Instructional Resources staff, NRPMD invited schools to attend and provided an online weblink to the Summit for those unable to attend in person. Over forty students from New River Middle School, along with teachers attended a portion of the event and were able to participate in several sessions and to be present during the keynote address. Other members of the school community also attended a number of the Summit's sessions.
- Water audits conducted at four Broward schools identified \$28,425 worth of potential savings that could be made by retrofitting/replacing various fixtures within the schools and, in addition, save over 6,000,000 gallons of water annually.
- The development of new curriculum resources for teachers to utilize in presenting Climate Change education to students.

During the past year of program implementation, reimbursement paid to Broward County for delivery of program services per the terms of the Agreement averaged \$49,009 per quarter for a total annual cost of \$196,036. Funding provides for the dedicated support of 2.5 FTEs and program operational expenses (e.g., print materials, office supplies, vehicle expenses, etc.).

Program staff dedicated to implementing the Environmental Partnership with Broward Schools include:

1 FTE – Delivering environmental programming and teacher training (Victor Suarez)

- 1 FTE Providing NatureScape Irrigation System Assessments, Indoor Water Audits, and Facilities Management Training (Maena Angelotti)
- 0.5 FTE Providing NatureScape Broward program and office support (Kimberly Mayo)

Additional personnel providing program management and administrative support include:

- Director, Natural Resources Planning and Management Division (NRPMD) (Dr. Jennifer Jurado)
- Water Resources Manager, NRPMD (Barbara Powell)
- Water Policy and Planning Program Manager, NRPMD (Robert Rudolph)
- NatureScape Outreach Coordinator, NRPMD (Diana Guidry)
- NatureScape Irrigation Service Coordinator, NRPMD (Robert Carew)
- Administrative Support, NRPMD (Norma Ellison/Andrew Tucker)
- GIS/Technical Support, NRPMD (Katie Lelis)
- Other, NRPMD (Samantha Baker)

This additional program support represents the additional dedication of 0.8 FTEs provided as a Broward in-kind cost share. In addition to this in-kind cost share, annual operational cost savings, grant awards, funding secured for the P<sub>3</sub> Eco-Challenge awards and ceremony, and volunteer hours provided by NatureScape volunteers for school projects provides a return-on-investment (ROI) of \$1.20. The following provides additional detail for the year.

Description	School District Funding	Return-on-Investment
Staffing	\$175,330	\$86,541 (Additional County in- kind)
Operational	\$ 20,706	\$93,824 (generated cost savings)
P <sub>3</sub> Eco-Challenge Awards and Ceremony		\$31,698 (secured sponsorships)
Other Grants		\$5,000 (awarded)
Volunteer time (NatureScape volunteers)		\$17,228
Annual Total	\$196,036	\$234,561

Other program accomplishments for the past school year include:

- The delivery of 232 educational programs and workshops and staff training to directly benefit 5,297 students, teachers, and school district staff. These include classroom and outdoor programs, teacher in-service training, facility maintenance training, and Habitat Steward.
- 67 Irrigation system evaluations conducted at 39 schools to achieve a total water savings of 55,315,539 gallons of water.
- Cost savings derived from irrigation system evaluations and associated reductions in water usage is estimated at:
  - An additional \$88,716 annually in reduced water utility fees for potable water systems which accounted for 95% of the demand reduction (cost is estimated based on average fee for two inch supply line and varies with tier of water usage)
  - \$5,108 annually in reduced energy costs and pump operations for groundwater withdrawals from irrigation supply wells which accounted for 5% of the demand reduction.
- \$49,686 in grant awards and other funding secured by Broward County on behalf of the Broward School District, including:
  - \$31,968 in cash and in-kind prizes to support the P<sub>3</sub> Eco Challenge awards and ceremony.
  - \$1,000 in South Florida Water Management District grant funding for native plantings at Broward schools as part of the NatureScape Partnership Agreement.
  - \$2,000 in Whole Kids Foundation grant funding for the installation of a tropical fruit garden at McNicol Middle School.
  - \$2,000 in JM Family Enterprises grant funding for the installation of a tropical fruit garden at Gulfstream Middle School.
  - \$17,228 for 764 hours of NatureScape solicited volunteer time to help with school landscaping improvements and projects.