



# AGENDA REQUEST FORM

## THE SCHOOL BOARD OF BROWARD COUNTY, FLORIDA

ITEM No.:  
**EE-4.**

MEETING DATE	2018-12-04 12:35 - School Board Operational Meeting
AGENDA ITEM	ITEMS
CATEGORY	EE. OFFICE OF STRATEGY & OPERATIONS
DEPARTMENT	Procurement & Warehousing Services

Special Order Request <input type="radio"/> Yes <input checked="" type="radio"/> No
Time
Open Agenda <input checked="" type="radio"/> Yes <input type="radio"/> No

**TITLE:**  
Recommendation to Approve First Amendment and Renewal - 59-087C - Broward County NatureScape Program

**REQUESTED ACTION:**  
Approve the First Amendment and a Six (6) Month renewal partnership agreement with the Board of Commissioners of Broward County for the NatureScape Program; Contract Term: December 12, 2017 through June 30, 2019; User Department: Applied Learning; Awarded Vendor(s): Broward County; Small/Minority/Women Business Enterprise Vendor(s): None.

**SUMMARY EXPLANATION AND BACKGROUND:**  
This is the first of the four (4) potential renewals. The purpose of this partnership is to continue the NatureScape Program in support of Environmental Stewardship. The term of the agreement commenced on December 12, 2017, and per the agreement, the School Board may elect to renew the agreement for up to four (4) additional, one (1) year terms upon the conclusion of the initial twelve (12) month term. With this amendment, the renewal period is being adjusted to align with SBBC's fiscal calendar; therefore, this renewal period is for six (6) months.  
This Agreement has been reviewed and approved as to form and legal content by the Office of the General Counsel.  
This Agreement will be executed after School Board approval.

**SCHOOL BOARD GOALS:**  
 Goal 1: High Quality Instruction  Goal 2: Continuous Improvement  Goal 3: Effective Communication

**FINANCIAL IMPACT:**  
Funding for this item, \$114,442 (\$57,221 per quarter) is included in the Applied Learning Department budget. This funding was originally included in the Adopted District Educational Facilities Plan (September 5, 2018) Maintenance Transfer from the EH&S LCIF budget for Environmental Sustainability – Water Conservation. The agreement includes a three (3) percent increase for each subsequent term.

**EXHIBITS: (List)**  
(1) Executive Summary (2) Agreement (3) Financial Analysis Worksheet (4) Exhibit 2 -Signed Agreement with SBBC (5) Exhibit 3 - SBBC\_Environmental Partnership Renewal Letter (6) Exhibit 4 - SBBC Environmental Partnership (7) Exhibit 5 - Broward Schools Annual Report

**BOARD ACTION:**  
**APPROVED**  
(For Official School Board Records Office Only)

<b>SOURCE OF ADDITIONAL INFORMATION:</b>	
Name: Susan Cantrick	Phone: 754-321-1859
Name: Mary C. Coker	Phone: 754-321-0501

**THE SCHOOL BOARD OF BROWARD COUNTY, FLORIDA**  
**Senior Leader & Title**

Maurice L. Woods - Chief Strategy & Operations Officer

Signature  
*Maurice Woods*  
11/26/2018, 2:32:46 PM

Approved In Open Board Meeting On: **DEC 04 2018**  
*Shathee P. Burkwood*  
School Board Chair

## EXECUTIVE SUMMARY

### Recommendation to Approve First Amendment and Renewal 59-087C - Broward County NatureScape Program

#### Introduction

##### Responsible: Procurement & Warehousing Services (PWS)

This request is to approve the First Amendment and Renewal of the Partnership Agreement between Broward County and The School Board of Broward County, Florida (SBBC), for the NatureScape Broward Program. The agreement was approved at the SBOM as Item JJ-1, starting December 12, 2017 through December 11, 2018, with a renewal option for (4) four (1) one year periods, and an approved spending authority of \$222,216.

This request is for the approval of the first renewal term, extending the contract for six (6) months through June 30, 2019, with an additional spending authority of \$114,442.

With this amendment, the renewal period in the original Agreement is being adjusted to align with SBBC's fiscal calendar year as detailed below:

Service Goods	Not-To-Exceed Amount	New Renewal Expiration Date
Initial Term (1 year)	\$55,554 quarterly (\$222,216 term total)	December 2018
1 <sup>st</sup> Renewal Term (6 months)	\$57,221 quarterly (\$114,442 term total)	June 30, 2019
2 <sup>nd</sup> Renewal Term (1 year)	\$57,221 quarterly (\$228,884 term total)	June 30, 2020
3 <sup>rd</sup> Renewal Term (1 year)	58,937 quarterly (\$235,748 term total)	June 30, 2021
4 <sup>th</sup> Renewal Term (1 year)	\$60,705 quarterly (\$242,820 term total)	June 30, 2022
<b>Total Services</b>	<b>\$1,044,110</b>	

#### Goods/Services Description

##### Responsible: Applied Learning

The approval of this item will be the first renewal under the third five (5) year NatureScape Broward Program partnership agreement with Broward County. For the past eleven (11) years SBBC, working in partnership with Broward County's NatureScape Broward Program within Environmental Planning and Community Resilience Division (EPCRD), has made substantial progress in implementing measures that promote greater environmental sustainability, including the protection and conservation of water resources, landscape and habitat improvements to SBBC facilities. The NatureScape Broward Program has actively engaged the student population, teachers, and staff by instilling values associated with environmental stewardship and sustainability through classroom lessons, outdoor learning opportunities, training and implementation of best management practices.

Environmental Stewardship Policy 7014 requires environmental stewardship as "an economic, environmental, and social priority to be taught, practiced and implemented throughout the District." The District's Student Progression Plan (Policy 6000.1), Curriculum and Instructor's Character Education are supported by these Broward County services and programs to promote the reduction of greenhouse gas emissions, improve environmental protection, and enhance resource conservation.

**Recommendation to Approve First Amendment and Renewal  
59-087C - Broward County NatureScape Program  
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Through June of 2018, the program has educated more than fifty-six thousand (56,000) students and provided training for more than one thousand and seven hundred (1,700) teachers and SBBC staff. Major accomplishments include the delivery of over two thousand and one hundred (2,100) educational programs, workshops, and staff training. The addition of thirty-eight (38) certified school habitats brings the total of National Wildlife Foundation schoolyard habitats to two hundred and sixteen (216). Broward County public schools are the largest school district in the nation, certified by the National Wildlife Foundation, based on education and training. The annual District/County joint delivery of the County's premier environmental showcase events, Broward Water Matters Day and the annual P3 Eco-Challenge awards ceremony highlights the District's teachers and students for their environmental recognition and achievements. Conservation of water resources involved an evaluation of six hundred and twenty-six (626) existing irrigation systems at two hundred and eighty-five (285) school facilities for efficiencies and recommended improvements. The potential total water savings exceeded 417,500,000 million gallons of water annually. Indoor water audits and improvements were conducted at twenty (20) schools with a potential total water savings exceeding twenty-seven (27) million gallons of water annually.

The overall NatureScape Broward Program effort is guided by SBBC's Applied Learning and Environmental Conservation/Utility Management departments and the EPCRD's team of two point five (2.5) FTEs (Full Time Employees) and is supported by additional Broward County technical resources, as needed.

**Procurement Method**

**Responsible: PWS**

Pursuant to the Department of Education, Rule 6A-1.012, 11(b), Florida Administrative Code as authorized by Section 1010.04(4)(a), Florida Statutes, and School Board Purchasing Policy 3320, Section II, H, the requirement for requesting competitive solicitation for commodities or contractual services from three (3) or more sources is hereby waived as for the SBBC's purchase of educational services.

**Financial Impact**

**Responsible: PWS and Applied Learning**

Funding for this item, \$114,442 (\$57,221 per quarter) is included in the Applied Learning Department budget. The original cost was \$55,554, however the new cost includes a three (3) percent increase for each subsequent term as stated in the agreement. This funding was originally included in the Adopted District Educational Facilities Plan (September 5, 2018) Maintenance Transfer from the Environmental Health and Safety Local Capital Improvement Funds budget for Environmental Sustainability – Water Conservation.

Current Spending Authority	\$ 222,216
Cost for six (6) month renewal	\$ 114,442
<b><u>Total spend authority (rounded)</u></b>	<b><u>\$ 336,658</u></b>

Upon approval of this item, the total approved spend will be \$336,658.



**FIRST AMENDMENT TO AGREEMENT BETWEEN BROWARD COUNTY AND  
THE SCHOOL BOARD OF BROWARD COUNTY FOR A  
NATURESCOPE PROGRAM IN SUPPORT OF ENVIRONMENTAL STEWARDSHIP WITHIN THE  
SCHOOL BOARD OF BROWARD COUNTY**

This is the First Amendment to the Agreement ("First Amendment"), made and entered into by and between Broward County, a political subdivision of the State of Florida ("County") and The School Board of Broward County, a political subdivision of the State of Florida ("SBBC") (collectively referred to as "Parties").

**RECITALS**

- A. County and SBBC entered into an Agreement dated December 12, 2017 ("Agreement"), providing for the implementation of a partnership in support of water conservation, including the NatureScape Broward principles for an Initial Term of one (1) year with SBBC able to renew this Agreement for up to four (4) additional one (1) year terms.
- B. The Parties desire to enter into this First Amendment to realign the Agreement term and annual renewals with the SBBC fiscal year calendar to assure the appropriation and availability of funds.
- C. The Parties desire for the payments and services to continue past the Initial Term, otherwise ending on December 11, 2018.
- D. To effectuate the realignment with SBBC's fiscal year, the Parties desire to amend the first renewal to be from December 12, 2018, through June 30, 2019, with SBBC able to elect up to three (3) additional one (1) year term renewals.
- E. The Amendment shows text deletions in strikethrough format and text additions in underline format.

Now, therefore, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties agree as follows:

1. Article 3.1 of the Agreement is amended as follows:

3.1 The term of this Agreement shall begin on December 12, 2017, ("effective date") and shall end on December 11, 2018, ("Initial Term"). SBBC may elect to renew this Agreement for ~~four (4) additional~~ one (1) renewal term from December 12, 2018, through June 30, 2019, and up to three (3) additional one (1) year renewal terms under the terms and conditions set forth herein by providing written notice to County at least ~~sixty (60)~~ thirty (30) days prior to the end of the current term. The continuation of this Agreement beyond the end of any fiscal

year of the Parties is subject to both the appropriation and the availability of funds in accordance with Chapter 129, Florida Statutes.

2. Article 3.2 of the Agreement is amended as follows:

3.2 Unless otherwise agreed by the Parties in writing, all duties, obligations, and responsibilities of the Parties required by this Agreement shall be completed no later than December 11, 2018, extendable for four (4) additional renewal terms consisting of one (1) term from December 12, 2018, through June 30, 2019, and up to three (3) additional one (1) year renewal terms as provided for in Section 3.1, above. Time is of the essence in performing the duties, obligations, and responsibilities required by this Agreement.

3. The table contained in Article 4.1 is amended and REPLACED as follows:

Services/Goods	Not-To-Exceed Amount
Initial Term	\$55,554 quarterly (\$222,216 term total)
1 <sup>st</sup> Renewal Term (December 12, 2018 through June 30, 2019)	\$57,221 quarterly (\$114,442 term total)
2 <sup>nd</sup> Renewal Term (July 1, 2019 through June 30, 2020)	\$57,221 quarterly (\$228,884 term total)
3 <sup>rd</sup> Renewal Term (July 1, 2020 through June 30, 2021)	\$58,937 quarterly (\$235,748 term total)
4 <sup>th</sup> Renewal Term (July 1, 2021 through June 30, 2022)	\$60,705 quarterly (\$242,820 term total)
Total Services	\$1,044,110

4. Exhibit "B" (Fees to be Paid to County for Services) is amended as shown in the attached Exhibit "B-1".
5. SBBC hereby elects to renew the Agreement for the 1<sup>st</sup> Renewal Term as revised through this First Amendment and to extend the term of the Agreement from December 12, 2018 through and including June 15, 2019 (approximately 6 months).
6. Except as expressly provided herein, all other terms and conditions of the Agreement remain in full force and effect.

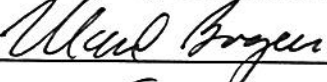
IN WITNESS WHEREOF, the Parties hereto have made and executed this First Amendment: BROWARD COUNTY, through its BOARD OF COUNTY COMMISSIONERS, signing by and through its Mayor or Vice-Mayor, authorized to execute same by Board action on the 8 day of January, <sup>2019</sup>~~2018~~, and SBBC, signing by and through its Chair, duly authorized to execute same.

COUNTY

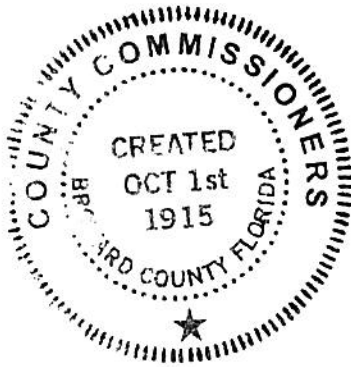
ATTEST:

  
Broward County Administrator, as  
Ex-officio Clerk of the Broward County  
Board of County Commissioners

BROWARD COUNTY, by and through  
its Board of County Commissioners

By:   
9 day of January, 201~~8~~<sup>9</sup>

Approved as to form by  
Andrew J. Myers  
Broward County Attorney  
Governmental Center, Suite 423  
115 South Andrews Avenue  
Fort Lauderdale, Florida 33301  
Telephone: (954) 357-7600  
Telecopier: (954) 357-7641



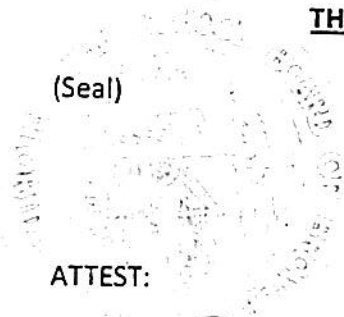
By:   
Michael C. Owens (Date)  
Senior Assistant County Attorney

By:   
Maite Azcoitia (Date)  
Deputy County Attorney

FIRST AMENDMENT TO AGREEMENT BETWEEN BROWARD COUNTY AND THE SCHOOL BOARD  
OF BROWARD COUNTY FOR A NATURESCAPE PROGRAM IN SUPPORT OF ENVIRONMENTAL  
STEWARDSHIP WITHIN THE SCHOOL BOARD OF BROWARD COUNTY

THE SCHOOL BOARD OF BROWARD COUNTY, FLORIDA

(Seal)



ATTEST:

A handwritten signature in cursive script, reading "Robert W. Runcie", written over a horizontal line.

Robert W. Runcie  
Superintendent of Schools

THE SCHOOL BOARD OF BROWARD  
COUNTY, FLORIDA

By A handwritten signature in cursive script, reading "Heather P. Brinkworth", written over a horizontal line.

Heather P. Brinkworth, Chair

Approved as to Form and Legal Content:

A handwritten signature in cursive script, reading "M. Ormeny", written over a horizontal line.  
Office of the General Counsel

Exhibit "B-1"

Fees to be Paid to County for Services

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County shall be paid according to the Rates and Fees listed below:

Total Cost of Services

For the initial twelve (12) month term of this Agreement, County shall provide services described in the Statement of Work at the flat rate fee of Fifty Five Thousand Five Hundred and Fifty Four Dollars (\$55,554.00) per quarter year, paid in arrears.

Following the initial twelve (12) month term, SBBC shall have the option of extending this Agreement for ~~four (4) additional years~~ one (1) renewal term from December 12, 2018, to June 30, 2019, and up to three (3) additional one (1) year renewal terms. Rates established for each additional year of implementation are as follows which includes a three percent (3%) increase per ~~annum~~ renewal term except for the 2<sup>nd</sup> renewal terms being at the same rate due to the shortened 1<sup>st</sup> renewal term.

~~Year 1 renewal~~ 1<sup>st</sup> Renewal Term (12/12/18 through 6/30/19): A not-to-exceed fee of Fifty Seven Thousand Two Hundred Twenty One Dollars (\$57,221.00) per quarter, paid in arrears.

~~Year 2 renewal~~ 2<sup>nd</sup> Renewal Term (1 year): A not-to-exceed fee of Fifty Seven Thousand Two Hundred Twenty One Dollars (\$57,221.00) per quarter, paid in arrears.

~~Year 3 renewal~~ 3<sup>rd</sup> Renewal Term (1 year): A not-to-exceed fee of Fifty Eight Thousand Nine Hundred Thirty Seven Dollars (\$58,937.00) per quarter, paid in arrears.

~~Year 4 renewal~~: A not to exceed fee of Sixty Two Thousand Five Hundred Twenty Seven Dollars (\$62,527.00) per quarter, paid in arrears.

4th Renewal Term (1 year): A not-to-exceed fee of Sixty Thousand Seven Hundred Five Dollars (\$60,705.00) per quarter, paid in arrears.





# PROCUREMENT & WAREHOUSING SERVICES

## FINANCIAL ANALYSIS WORKSHEET

BID INFORMATION			
New Bid # (Ex: 10-004R):	N/A	Preparation Date:	November 13, 2018
Previous Bid # (Ex: 10-004R):	59-087C	Buyer/PA:	Karlene Grant
New Bid Award Total:	\$336,658	Bid Title:	Broward County NatureScape Program
Previous Award Total:	\$222,216		
Bid Type:	Agreement		
Previous Bid Term (Start Date):	12/12/2017	New Bid Term (In Months):	18
Previous Bid Term (End Date):	12/11/2018	# of Months Into Bid:	12

SPEND REPORTING	
Purchase Order(s) Spend:	\$222,216
P Card Purchases:	\$0
<b>Total Invoiced-to-Date Amount (PO + Pcard Purchases):</b>	<b>\$222,216</b>
Average Monthly Expenditure:	\$18,518
Unused Authorized Spending:	\$0
<b>Est. Forecasted Spend (For Entire Bid Term):</b>	<b>\$333,324</b>

VENDOR INFORMATION		
Awarded Vendors:	M/WBE Status (If applicable):	Spend:
106208 BROWARD COUNTY BOARD OF COUNTY COMM		\$ 222,216
	PO VENDOR SPEND:	\$ 222,216
	P-CARD SPEND:	\$ -
	<b>TOTAL SPEND:</b>	<b>\$ 222,216</b>

**NOTES (Type Below):**

Default Funding Source*		Department/School & Sign-off Information*	
Cost Center	2770098160	Name (First & Last)	Susan Cantrick
Fund	1000	Title	Director
Functional Area	6301000000000000	Department/School Name	Applied Learning
Commitment Item	56820000	Sign-off provided by	Jeffrey Whitney

\*To ensure accuracy, please type in or select from the menu for the Default Funding Source and Department Information (No hand written information)

Data Source: SAP and Works (Bank of America system)	Prepared on:	11/13/2018
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All information included in this summary is based on the preparation date listed above and may change at any time beyond that date.

## EXHIBIT 2

### AGREEMENT BETWEEN BROWARD COUNTY AND SCHOOL BOARD OF BROWARD COUNTY FOR A NATURESCAPE PROGRAM IN SUPPORT OF ENVIRONMENTAL STEWARDSHIP WITHIN THE SCHOOL BOARD OF BROWARD COUNTY

This is an Agreement ("Agreement"), made and entered into by and between Broward County, a political subdivision of the State of Florida ("County") the School Board of Broward County, a political subdivision of the State of Florida ("SBBC") (collectively referred to as the "Parties").

WHEREAS, the purpose of this Agreement is to implement certain terms of this partnership between the County and SBBC, as described herein and in the Exhibits hereto; and

WHEREAS, a high quality and adequate water supply is key to the current and continued support of urban and natural systems in Broward County; and

WHEREAS, consumptive use water demands county-wide are projected to increase significantly by 2025, resulting in a potential water deficit of over 100 million gallons per day based on current rates of consumption and permitted pumping from the Biscayne Aquifer; and

WHEREAS, the County-wide Integrated Water Resource Plan seeks to optimize the beneficial uses of local water resources by effectively and efficiently managing water to make our water resources go further; and

WHEREAS, the conservation of water quality and quantity is a principle objective of the integrated Water Resource Plan and is demonstrated to be one of the most cost effective and immediate means of producing water for meeting future water supply needs; and

WHEREAS, successful implementation of the integrated Water Resource Plan as a strategy for protecting the quality and quantity of local water resources is dependent upon community-wide participation; and

WHEREAS, it is estimated that twenty-five to fifty percent (25-50%) of total water consumption in Broward County is due to outdoor irrigation, and landscape runoff associated with over-irrigation and poorly maintained irrigation systems have been identified as primary sources of surface water pollution; and

WHEREAS, as part of the Integrated Water Resource Plan, the NatureScape Broward initiative is designed to assist property managers and landscape professionals in the implementation of environmentally sound landscape practices that serve to reduce total irrigation demands, improve the efficiency of irrigation systems, provide education regarding proper fertilizer and pesticide application, and create native habitat; and

WHEREAS, the County and SBBC have previously committed to a partnership in support of water conservation, including the NatureScape Broward principles; and

WHEREAS, this Agreement provides a third five (5) year agreement period that focuses on creating sustainable schools in a holistic approach that brings the County's efforts, resources, and programs under an umbrella initiative, thereby maximizing access and the use of various tools; and

WHEREAS, this Partnership Agreement provides for the implementation of a Green Schools Recognition Program that acknowledges and rewards schools and teachers for participating/implementing environmentally sustainable measures and green initiatives within their schools; and

WHEREAS, this Partnership Agreement provides for coordinated access and delivery of environmental resources and programs to support the SBBC's educational and sustainability goals; NOW, THEREFORE,

IN CONSIDERATION of the mutual terms, conditions, promises, covenants, and payments hereinafter set forth, the Parties agree as follows:

#### ARTICLE 1. DEFINITIONS

- 1.1 **Board**. The Board of County Commissioners of Broward County, Florida.
- 1.2 **Contract Administrator**. The Director of the Environmental Planning and Community Resilience Division.
- 1.3 **County Administrator**. The administrative head of County appointed by the Board.
- 1.4 **County Attorney**. The chief legal counsel for County appointed by the Board.
- 1.5 **Services**. All work required by Parties under this Agreement, including without limitation all payments, deliverables, consulting, training, project management, or other services specified in Article 2 and Exhibit A.

#### ARTICLE 2. SCOPE OF SERVICES

2.1 The Parties shall perform all work identified in this Agreement including without limitation the Scope of Services described in Exhibit A. The Scope of Services stated in this Agreement is a description of the Parties' obligations and responsibilities and is deemed to include preliminary considerations and prerequisites, and all labor, materials, equipment, and tasks which are such an inseparable part of the work described that exclusion would render performance by the Parties impractical, illogical, or unconscionable. The Parties shall meet or

exceed all applicable federal, state, and local laws, ordinances, codes, rules, and regulations in performing the Services.

2.2 The Parties acknowledge that the Contract Administrator has no authority to make changes that would increase, decrease, or otherwise modify the Scope of Services to be provided under this Agreement except as expressly set forth in this Agreement.

### ARTICLE 3. TERM AND TIME OF PERFORMANCE

3.1 The term of this Agreement shall begin on December 12, 2017, ("effective date") and shall end on December 11, 2018, ("Initial Term"). SBBC may elect to renew this Agreement for four (4) additional one (1) year terms under the terms and conditions set forth herein by providing written notice to County at least sixty (60) days prior to the end of the current term. The continuation of this Agreement beyond the end of any fiscal year of the Parties is subject to both the appropriation and the availability of funds in accordance with Chapter 129, Florida Statutes.

3.2 Unless otherwise agreed by the Parties in writing, all duties, obligations, and responsibilities of the Parties required by this Agreement shall be completed no later than December 11, 2018, extendable for four (4) additional one (1) year terms as provided for in Section 3.1, above. Time is of the essence in performing the duties, obligations, and responsibilities required by this Agreement.

### ARTICLE 4. COMPENSATION

4.1 SBBC will pay County up to a maximum amount as follows:

Services/Goods	Not-To-Exceed Amount
Initial Term	\$55,554 quarterly (\$222,216 term total)
1 <sup>st</sup> Renewal Term	\$57,221 quarterly (\$228,884 term total)
2 <sup>nd</sup> Renewal Term	\$58,937 quarterly (\$235,748 term total)
3 <sup>rd</sup> Renewal Term	\$60,705 quarterly (\$242,820 term total)
4 <sup>th</sup> Renewal Term	\$62,527 quarterly (\$250,108 term total)
Total Services	\$1,179,776

Payment shall be made only for work actually performed, completed, and invoiced pursuant to this Agreement, as set forth in Exhibit B (Payment Schedule), which amount shall be accepted by County as full compensation for all such work. County acknowledges that the amounts set forth herein are the maximum amounts payable and constitute a limitation upon SBBC's obligation to

compensate County for its work under this Agreement. These maximum amounts, however, do not constitute a limitation of any sort upon County's obligation to perform all items of work required under this Agreement.

#### **ARTICLE 5. GOVERNMENTAL IMMUNITY**

Nothing herein is intended to serve as a waiver of sovereign immunity by any Party nor shall anything included herein be construed as consent to be sued by third parties in any matter arising out of this Agreement or any other contract. Parties are state agencies or subdivisions as defined in Section 768.28, Florida Statutes, and shall be fully responsible for the acts and omissions of its agents or employees to the extent permitted by law.

#### **ARTICLE 6. INSURANCE**

County and SBBC are entities subject to Section 768.28, Florida Statutes, and shall furnish each other with written verification of liability protection in accordance with state law prior to final execution of said Agreement.

#### **ARTICLE 7. TERMINATION**

7.1 This Agreement may be terminated for cause by the aggrieved party if the party in breach has not corrected the breach within ten (10) days after receipt of written notice from the aggrieved party identifying the breach. This Agreement may also be terminated for convenience by either of the Parties. Termination for convenience by the Board on behalf of County or by SBBC shall be effective on the termination date stated in written notice provided to the other Party, which termination date shall be not less than thirty (30) days after the date of such written notice. This Agreement may also be terminated by the County Administrator upon such notice as the County Administrator deems appropriate under the circumstances in the event the County Administrator determines that termination is necessary to protect the public health, safety, or welfare. If County erroneously, improperly, or unjustifiably terminates for cause, such termination shall, at County's sole election, be deemed a termination for convenience, which shall be effective thirty (30) days after such notice of termination for cause is provided.

7.2 Notice of termination shall be provided in accordance with the "NOTICES" section of this Agreement except that notice of termination by the County Administrator, which the County Administrator deems necessary to protect the public health, safety, or welfare may be verbal notice that shall be promptly confirmed in writing in accordance with the "NOTICES" section of this Agreement.

7.3 In the event this Agreement is terminated for convenience by any Party, County shall be paid for any services properly performed under the Agreement through the termination date specified in the written notice of termination. The Parties acknowledge that each have received good, valuable, and sufficient consideration, the receipt and adequacy of which are hereby acknowledged, for the right to terminate this Agreement for convenience.

## ARTICLE 8. EEO COMPLIANCE

8.1 No party to this Agreement may discriminate on the basis of race, color, sex, religion, national origin, disability, age, marital status, political affiliation, sexual orientation, pregnancy, or gender identity and expression in the performance of this Agreement.

8.2 By execution of this Agreement, County represents that it has not been placed on the discriminatory vendor list as provided in Section 287.134, Florida Statutes. The Parties hereby materially rely on such representation in entering into this Agreement.

## ARTICLE 9. MISCELLANEOUS

9.1 Rights in Documents and Work. Any and all reports, photographs, surveys, and other data and documents provided or created in connection with this Agreement are and shall remain the joint property of County and SBBC, and, if a copyright is claimed, County grants to SBBC a non-exclusive license to use the copyrighted item(s) indefinitely, to prepare derivative works, and to make and distribute copies to the public. In the event of termination of this Agreement, any reports, photographs, surveys, and other data and documents prepared by County, whether finished or unfinished, shall be the joint property of County and SBBC.

9.2 Public Records. To the extent County is acting on behalf of the Parties as stated in Section 119.0701, Florida Statutes, County shall:

- a. Keep and maintain public records required were SBBC performing the services under this Agreement;
- b. Upon request from SBBC, provide SBBC with a copy of the requested records or allow the records to be inspected or copied within a reasonable time and at a cost that does not exceed that provided in Chapter 119, Florida Statutes, or as otherwise provided by law;
- c. Ensure that public records that are exempt or that are confidential and exempt from public record requirements are not disclosed except as authorized by law for the duration of the Agreement and following completion of the Agreement if the records are not transferred to SBBC; and
- d. Upon completion of the Agreement, maintain at County, at no cost to SBBC, all public records in possession of County upon termination of this Agreement or keep and maintain public records required were SBBC performing the service. If County transfers the records to SBBC, County shall destroy any duplicate public records that are exempt or confidential and exempt. If the County keeps and maintains public records upon completion of the Agreement, County shall meet all applicable requirements for retaining public records.

All records stored electronically must be provided to SBBC upon request in a format that is compatible with the information technology systems of County.

A request for public records regarding this Agreement may be made directly to any Party, who will be responsible for responding to any such public records requests.

**IF SBBC HAS QUESTIONS REGARDING THE APPLICATION OF FLORIDA STATUTES CHAPTER 119 TO COUNTY'S DUTY TO PROVIDE PUBLIC RECORDS RELATING TO THIS AGREEMENT, CONTACT THE CUSTODIAN OF PUBLIC RECORDS, NORMA ELLISON AT (954) 519-1466, nellison@broward.org, 115 S. ANDREWS AVE., SUITE 329H, FORT LAUDERDALE, FLORIDA 33301.**

9.3 Truth-In-Negotiation Representation. County's compensation under this Agreement is based upon representations supplied to SBBC by County, and County certifies that the information supplied, including without limitation in the negotiation of this Agreement, is accurate, complete, and current at the time of contracting.

9.4 Public Entity Crime Act. The Parties represent that each is familiar with the requirements and prohibitions under the Public Entity Crime Act, Section 287.133, Florida Statutes, and represents that its entry into this Agreement will not violate that Act. In addition to the foregoing, each Party further represents that there has been no determination that it committed a "public entity crime" as defined by Section 287.133, Florida Statutes, and that it has not been formally charged with committing an act defined as a "public entity crime" regardless of the amount of money involved or whether it has been placed on the convicted vendor list. Notwithstanding any provision in this Agreement to the contrary, if any representation stated in this paragraph is false, each Party shall have the right to immediately terminate this Agreement and be paid for all services delivered through the date of termination.

9.5 Independent Contractor. County is an independent contractor under this Agreement. In providing Services under this Agreement, neither County nor its agents shall act as officers, employees, or agents of Municipalities. County shall not have the right to bind SBBC to any obligation not expressly undertaken by County under this Agreement.

9.6 Third Party Beneficiaries. The Parties do not intend to directly or substantially benefit a third party by this Agreement. Therefore, the Parties acknowledge that there are no third party beneficiaries to this Agreement and that no third party shall be entitled to assert a right or claim against any Party based upon this Agreement.

9.7 Notices. In order for a notice to a Party to be effective under this Agreement, notice must be sent via U.S. first-class mail with a contemporaneous copy via e-mail to the addresses listed below and shall be effective upon mailing. The addresses for notice shall remain as set forth

herein unless and until changed by providing notice of such change in accordance with the provisions of this Section.

FOR COUNTY:

Broward County Environmental Planning and Community Resilience Division  
Attn: Dr. Jennifer Jurado, Director and Chief Resilience Officer  
Governmental Center, Room 329H  
115 South Andrews Avenue  
Fort Lauderdale, Florida 33301  
Email address: [jjurado@broward.org](mailto:jjurado@broward.org)

SBBC:

Robert Runcie, Superintendent  
Broward County Public Schools  
600 S. E. Third Ave.  
Fort Lauderdale, FL 33301  
Email address: [r.r@browardschools.com](mailto:r.r@browardschools.com)

Leo Bobadilla,  
Chief Facilities Officer  
Broward County Public Schools  
600 SE 3<sup>rd</sup> Avenue  
Fort Lauderdale, FL 33301  
Email address: [leo.bobadilla@browardschools.com](mailto:leo.bobadilla@browardschools.com)

9.8 Assignment and Performance. Neither this Agreement nor any right or interest herein may be assigned, transferred, subcontracted, or encumbered by any Party without the prior written consent of the other Party. If any Party violates this provision, the other Party shall have the right to immediately terminate this Agreement. County represents that each person and entity that will provide services under this Agreement is duly qualified to perform such services by all appropriate governmental authorities, where required, and is sufficiently experienced and skilled in the area(s) for which such person or entity will render services. County agrees that all services under this Agreement shall be performed in a skillful and respectful manner, and that the quality of all such services shall equal or exceed prevailing industry standards for the provision of such services.

9.9 Materiality and Waiver of Breach. Each requirement, duty, and obligation set forth herein was bargained for at arm's-length and is agreed to by the Parties. Each requirement, duty, and obligation set forth herein is substantial and important to the formation of this Agreement, and each is, therefore, a material term hereof. Any Party's failure to enforce any provision of this Agreement shall not be deemed a waiver of such provision or modification of this Agreement. A waiver of any breach of a provision of this Agreement shall not be deemed a waiver of any subsequent breach and shall not be construed to be a modification of the terms of this Agreement.



9.10 Compliance with Laws. The Parties shall comply with all applicable federal, state, and local laws, codes, ordinances, rules, and regulations in performing the duties, responsibilities, and obligations pursuant to this Agreement.

9.11 Severability. In the event any part of this Agreement is found to be unenforceable by any court of competent jurisdiction, that part shall be deemed severed from this Agreement and the balance of this Agreement shall remain in full force and effect.

9.12 Joint Preparation. This Agreement has been jointly prepared by the Parties hereto, and shall not be construed more strictly against either Party.

9.13 Interpretation. The headings contained in this Agreement are for reference purposes only and shall not in any way affect the meaning or interpretation of this Agreement. All personal pronouns used in this Agreement shall include the other gender, and the singular shall include the plural, and vice versa, unless the context otherwise requires. Terms such as "herein," "hereof," "hereunder," and "hereinafter" refer to this Agreement as a whole and not to any particular sentence, paragraph, or section where they appear, unless the context otherwise requires. Whenever reference is made to a Section or Article of this Agreement, such reference is to the Section or Article as a whole, including all of the subsections of such Section, unless the reference is made to a particular subsection or subparagraph of such Section or Article.

9.14 Priority of Provisions. If there is a conflict or inconsistency between any term, statement, requirement, or provision of any document or exhibit attached hereto or referenced or incorporated herein and any provision of Articles 1 through 9 of this Agreement, the provisions contained in Articles 1 through 9 shall prevail and be given effect.

9.15 Law, Jurisdiction, Venue, Waiver of Jury Trial. This Agreement shall be interpreted and construed in accordance with and governed by the laws of the state of Florida. The Parties agree that the exclusive venue for any lawsuit arising from, related to, or in connection with this Agreement shall be in the state courts of the Seventeenth Judicial Circuit in and for Broward County, Florida. If any claim arising from, related to, or in connection with this Agreement must be litigated in federal court, the Parties agree that the exclusive venue for any such lawsuit shall be in the United States District Court or United States Bankruptcy Court for the Southern District of Florida. **BY ENTERING INTO THIS AGREEMENT, THE PARTIES HEREBY EXPRESSLY WAIVE ANY RIGHTS EACH PARTY MAY HAVE TO A TRIAL BY JURY OF ANY CIVIL LITIGATION RELATED TO THIS AGREEMENT. IF A PARTY FAILS TO WITHDRAW A REQUEST FOR A JURY TRIAL IN A LAWSUIT ARISING OUT OF THIS AGREEMENT AFTER WRITTEN NOTICE BY ANY OTHER PARTY OF VIOLATION OF THIS SECTION, THE PARTY MAKING THE REQUEST FOR JURY TRIAL SHALL BE LIABLE FOR THE REASONABLE ATTORNEYS' FEES AND COSTS OF THE OTHER PARTIES IN CONTESTING THE REQUEST FOR JURY TRIAL, AND SUCH AMOUNTS SHALL BE AWARDED BY THE COURT IN ADJUDICATING THE MOTION.**

9.16 Amendments. No modification, amendment, or alteration in the terms or conditions contained herein shall be effective unless contained in a written document prepared with the same or similar formality as this Agreement and executed by the Parties or others delegated authority or otherwise authorized to execute same on their behalf.

9.17 Prior Agreements. This Agreement represents the final and complete understanding of the parties regarding the subject matter hereof and supersedes all prior and contemporaneous negotiations and discussions regarding that subject matter. There is no commitment, agreement, or understanding concerning the subject matter of this Agreement that is not contained in this written document.

9.18 Payable Interest

9.22.1 Payment of Interest. The Parties waive, reject, disclaim and surrender any and all entitlement each has or may have to receive interest in connection with a dispute or claim arising from, related to, or in connection with this Agreement. This paragraph shall not apply to any claim for interest if such application would be contrary to applicable law.

9.22.2 Rate of Interest. If, for whatever reason, the preceding subsection is determined to be invalid or unenforceable by a court of competent jurisdiction, the annual rate of interest payable by any Party under this Agreement, whether as prejudgment interest or for any other purpose, shall be, to the full extent permissible under applicable law, 0.25% (one quarter of one percent) simple interest (uncompounded).

9.19 Incorporation by Reference. Any and all Recital clauses stated above are true and correct and are incorporated herein by reference. The attached Exhibits are incorporated into and made a part of this Agreement.

9.20 Representation of Authority. Each individual executing this Agreement on behalf of a Party hereto hereby represents and warrants that he or she is, on the date he or she signs this Agreement, duly authorized by all necessary and appropriate action to execute this Agreement on behalf of such party and does so with full legal authority.

9.21 Counterparts and Multiple Originals. This Agreement may be executed in multiple originals, and may be executed in counterparts, each of which shall be deemed to be an original, but all of which, taken together, shall constitute one and the same agreement.

9.22 Use of County Logo. SBBC shall not use County's name, logo, or otherwise refer to this Agreement in any marketing or publicity materials without the prior written consent of County.

9.23 Contract Personnel Screening. County agrees to comply with all requirements of Sections 1012.32 and 1012.465, Florida Statutes, and that County and all of its personnel who (1) are to be permitted access to school grounds when students are present, (2) will have direct contact with students, or (3) have access or control of school funds will successfully complete the

background screening required by the referenced statutes and meet the standards established by the statutes. This background screening conducted by SBBC must be completed in advance of County or its personnel providing any services under the conditions described in the previous sentence. County will bear the cost of acquiring the background screening required by Section 1012.32, Florida Statutes, and any fee imposed by the Florida Department of Law Enforcement to maintain the fingerprints provided with respect to County and its personnel. The Parties agree that the failure of County to perform any of the duties described in this section shall constitute a material breach of this Agreement entitling SBBC to terminate immediately with no further responsibilities or duties to perform under this Agreement.

(Remainder of page intentionally blank.)

IN WITNESS WHEREOF, the Parties hereto have made and executed this Agreement: County through its BOARD OF COUNTY COMMISSIONERS, signing by and through its Mayor or Vice-Mayor, authorized to execute same by Board action on the 12 day of December, 2017, and SBBC, signing by and through its chair, duly authorized to execute same.

COUNTY

ATTEST:

*Bertha He*  
Broward County Administrator, as  
Ex-officio Clerk of the Broward County  
Board of County Commissioners

BROWARD COUNTY, by and through  
its Board of County Commissioners  
By: *Bea...*  
12 day of December, 2017

Insurance requirements approved by  
Broward County  
Risk Management Division:

By: *Tim...*  
Name: *Tim...*  
Title: *Property Specialist*

Approved as to form by  
Andrew J. Meyers  
Broward County Attorney  
Governmental Center, Suite 423  
115 South Andrews Avenue  
Fort Lauderdale, Florida 33301  
Telephone: (954) 357-7600  
Telecopier: (954) 357-7641

By: *Michael C. Owens* 11/14/17  
Michael C. Owens (Date)  
Senior Assistant County Attorney

By: *Maite Azcoitia* 11/14/17  
Maite Azcoitia (Date)  
Deputy County Attorney

MCO/gmb  
School Board Partnership Agreement.doc  
11/1/17  
#17-057.01



AGREEMENT BETWEEN BROWARD COUNTY AND SCHOOL BOARD OF BROWARD COUNTY FOR A NATURESCAPE PROGRAM IN SUPPORT OF ENVIRONMENTAL STEWARDSHIP WITHIN THE SCHOOL BOARD OF BROWARD COUNTY

SCHOOL BOARD OF BROWARD COUNTY, FLORIDA

Attest:



Robert W. Runcie  
Superintendent of Schools

By Abby M. Freedman  
Abby M. Freedman, Chair  
9<sup>th</sup> day of November, 2017

Approved as to form and legal content:

By M. Conroy  
Office of the General Counsel  
24<sup>th</sup> day of October, 2017

**Exhibit "A"**  
**STATEMENT OF WORK**

**Scope of Services for Broward County's NatureScape Broward Program  
in support of  
Environmental Stewardship within the School Board of Broward County**

**1.0 INTRODUCTION**

During the past ten years, The School Board of Broward County, Florida (SBBC), working in partnership (the Partnership) with Broward County's (County) NatureScape Broward program, a program of the County's Environmental Planning and Community Resilience Division (EPCRD), has made substantial progress in implementing measures that promote greater environmental sustainability throughout SBBC, including the protection and conservation of water resources, landscape and habitat improvements, and energy conservation. Concurrent with physical improvements to SBBC facilities, NatureScape Broward has actively engaged the student population, teachers, and staff by instilling the values associated with environmental stewardship and sustainability through classroom lessons and outdoor learning opportunities, and through trainings and the implementation of best management practices.

NatureScape Broward has also worked hand-in-hand with SBBC to further foster a culture of environmental stewardship and sustainability through coordination with a number of other Broward County agency initiatives. In addition to NatureScape's educational offerings, both inside and outside of the classroom and advancement of sustainable practices at SBBC facilities, other support includes services and programs provided by EPCRD's Beach and Marine Resources and Climate and Energy Programs, as well as the County's Environmental Engineering and Permitting Division's Air Monitoring and Outreach and Water and Solid Waste and Recycling Services. All of these efforts promote the reduction of greenhouse gas emissions, environmental protection, and resource conservation and directly support Curriculum and Instruction's Character Education embedded in the District's Student Progression Plan (District Policy 6000.1) which states that:

*The concepts and practices of environmental stewardship are embedded into the current character traits and should be reinforced throughout the Character Education curriculum (SBBC Policy 7014).*

School Board Policy 7014 recognizes environmental stewardship as "an economic, environmental, and social priority to be taught, practiced, and implemented throughout the District."

Further support for many of the Partnership activities is found in Title XLVIII of the Florida Statutes which provides that State-required instruction be taught within prescribed courses of study through mandated standards and benchmarks including "Conservation of natural resources" (F.S. 1003.42(2)(m))

Currently, the District's operations are driven by the 2016-2019 Strategic Plan, which builds upon the earlier 2012-2015 Strategic Plan. SBBC's Strategic Plan for 2016-2017 includes three goals – High Quality Instruction, Continuous Improvement, and Effective Communication. The Partnership efforts support these goals through numerous tasks embodied in the current and proposed Agreement.

**High Quality Instruction:** Per the SBBC Strategic Plan, High-Quality Instruction requires:

- standards-driven content;
- a commitment to teacher development;
- effective teaching practices;
- appropriate learning environments and experiences;
- appropriate monitoring of performance; and
- ongoing professional learning at all levels.

While providing education to students at all grade-levels, the NatureScape partnership has historically focused on middle school students, which best aligns with many of the curriculum standards found in the Next Generation Sunshine State Standards for Science that address natural resources, the environment, and the impact that humans have had on Earth. Initially, in order to provide greater exposure to South Florida's natural environment, learning gardens were installed in conjunction with SBBC horticulture programs at all but one middle school. Since that time, and in the absence of dedicated funding or support for students and landscape materials, NatureScape Broward has been instrumental in identifying additional funding as opportunities become available to improve landscaping on campus environments (see summary below). Along with these physical improvements, NatureScape staff have worked closely to provide outdoor classroom experiences for students as well as training to teachers and other school personnel to enhance their level of understanding of our environment and how best to care for it. It has been observed by NatureScape staff that both teachers and students greatly appreciate the outdoor classroom experience as it helps address, at least in part, the growing problem of "nature deficit disorder" as first described by Richard Louv in his 2005 book "Last Child in the Woods".

With a focus on the application of learning and skills with projects and problems that integrate prior knowledge and extend understanding through new experiences, the Partnership has evolved to be organized around project- and problem-based interdisciplinary learning.

Additionally, the Partnership promotes careers in the environmental fields and exposes students to opportunities in environmental fields by regularly participating in school career days and helping to organize attendees for these events, as well as the annual Water Matters Day, in which students are exposed to a wide variety of professionals in environmental careers.

**Continuous Improvement:** The Partnership between the District and the County helps better leverage scarce public resources. In particular, the NatureScape staff provides the SBBC with access to numerous experts who participate in training opportunities for teachers and staff, as well as securing venues at Broward County Parks and Recreation facilities for school meetings and events. Additionally, the Partnership has been able to identify and successfully secure grants to enhance the sustainability of school facilities (see summary below).

NatureScape staff, working with SBBC staff at Environmental Conservation/Utility Management Department, have realized efficiencies to improve the work order and maintenance costs associated with irrigation systems and indoor water fixtures. Ultimately, these efforts will result in both water and energy savings, with associated cost avoidance. Additionally, the Partnership, through development and implementation of the P3 Eco-Challenge, has provided resources to further engage all facets of the school community.

**Effective Communication:** Through the Partnership, NatureScape has always sought to enhance communication and engagement with students, teachers, schools, and the communities in which they work and live. NatureScape has brought numerous outside resources to help forge partnerships that support SBBC students, schools, and programs. For example, the NatureScape partnership has been able to coordinate the delivery of environmental programming from various agency and non-profit groups, as well as bringing in municipal utility personnel to share their jobs and work experiences with teachers and students. As another example, through NatureScape's close association with the National Wildlife Federation, the Partnership was able to capitalize on an opportunity for teachers and students to work with counterparts in Taiwan on shared projects via the Internet. Several SBBC teachers were able to travel, at no cost to themselves or SBBC, to Taiwan to learn firsthand about sustainability education in that country and in turn, teachers from Taiwan were able to visit Broward schools and see what we are doing. Moving forward, NatureScape intends to work closely with SBBC staff on improving website communications, including revising the P3 Eco-Challenge application process to make it more user-friendly.



## 2.0 THE NATURESCOPE/SCHOOL BOARD ENVIRONMENTAL PARTNERSHIP

Since May of 2007, Broward County's EPCRD has partnered with the SBBC in an Environmental Partnership Agreement, with benefits being realized not only in "greener" school campuses, but in education, economics, and the strengthening of the environmental community. These activities have resulted in significant cost avoidance to the SBCC, while educating more than 50,000 students, and providing training for more than 1,000 teachers and SBBC staff.

Originally, with a focus on 7<sup>th</sup> grade students, targeted programming was delivered in all middle schools in an annual cycle which focused on 7-8 schools per school year. At each of these schools, learning gardens were installed, professional development and training was provided to teachers and staff, and students received education promoting environmental stewardship and sustainability through lessons on water conservation, the Everglades, and native flora and fauna. As the students trained through the Partnership move through the grades, the importance of returning to these schools and to new students, and often, new teachers and administrators, cannot be underestimated. Maintaining a strong environmental foundation with a focus on conservation of natural resources and environmental stewardship requires these types of continuous intervention efforts.

Additionally, given the number of properties managed and acreage owned by the School Board, the District serves as a critical partner with the County in working to achieve sustainability and promote conservation through appropriate management of District properties and staff training.

Through March of 2017, the following are highlights of the major accomplishments of the Environmental Partnership with NatureScape:

- Delivery of 1,779 educational programs and workshops and staff training directly benefitting over 53,000 students and 57 trainings for 1,061 teachers and SBBC staff. These include classroom and outdoor programs, teacher in-service training, custodial and facility maintenance training, and Habitat Steward training.
- Creation of 35 learning gardens, with a total of 164 schoolyard habitats certified by the National Wildlife Federation.
- Certification of the Broward School District as the largest certified school District in the nation by the National Wildlife Federation based on the education and trainings provided through the Agreement, the percentage of students receiving instruction using the schoolyard habitats, and commitments by SBBC to environmental education.

- Collaboration in the joint delivery of the County's premier annual environmental showcase event, Broward Water Matters Day, which has evolved to include prominent recognition of teachers and students in the Water Matters Day literary contest, participation by numerous schools as exhibitors, and volunteer opportunities for dozens of students. In addition, hundreds of students attend the event annually, all of which enhances the environmental education of students while also providing a unique exposure to the diversity of environmental careers locally and regionally. In 2017, a record 4,320 residents, including students, teachers, and their families attended Water Matters Day. School Board Member Nora Rupert presented the Literary Contest winners and their teachers with prizes solicited by NatureScape staff.
- In the past five years, over \$100,000 in cash and in-kind prizes awarded to schools, teachers, students, and school staff through the annual P3 Eco-Challenge awards ceremony.
- A total of \$324,687 in grant awards and sponsorships secured by Broward County on behalf of the Broward School District, including:
  - \$160,262 in sponsorship fees and in-kind prizes to support the P3 Eco-Challenge Awards program.
  - \$55,500 in Broward County Tree Trust Grant Funding to provide trees to increase tree canopy and habitat connectivity at Broward schools.
  - \$40,157 in Community Foundation of Broward grant funding (\$11,520) along with matching funds (\$28,637) to create butterfly gardens at 48 schools as part of Broward County's Centennial Anniversary activities.
  - \$47,768 in Community Foundation of Broward grant funding (\$28,759) along with matching funds (\$19,009) to create tree canopy and wildlife habitat at 7 Broward schools.
  - \$11,000 in South Florida Water Management District grant funding for native plant installations at Broward schools.
  - \$10,000 in other grant funding associated with the installation of learning gardens at two Broward middle schools and the creation of three tropical fruit gardens at three middle schools.
- Evaluation of 580 existing irrigation systems at 266 school facilities to determine system efficiencies and provide recommended improvements to

support water conservation, as well as overall consistency with NatureScape principles. Staff provided recommendations and reports to schools and administration. The total water savings exceeded 375 million gallons of water annually. Cost avoidance in annual water utility fees and energy savings are estimated at over \$750,000. Additional annual cost avoidance of over \$440,000 were identified through indoor water audits at 13 schools.

### **3.0 SCOPE OF WORK – PHASE III IMPLEMENTATION**

The proposed scope of work for a third 5-year agreement period continues to build upon the efforts and achievements to date. The new agreement focuses on continued implementation of tasks designed to instill the values of environmental stewardship throughout the entire school community as well as providing a new opportunity for greater student involvement through a student-driven project-based learning initiative to develop a Climate Action Plan for SBBC. Complementing this new proposed task is the continuation of the successful P<sub>3</sub> Eco-Challenge which acknowledges and rewards schools, teachers, students, and support staff for implementing environmentally sustainable measures and green initiatives within their schools. This program recognizes that educational enhancement and fostering of sustainability as a core value provides students with critical life skills that jointly support economic, environmental, and social priorities – the foundation for success and measured performance in the public and private sectors – and is fundamental to future planning, business practices, and personal behaviors in support of long-term economic competitiveness, preservation of vital resources, and our quality of life. In addition, this scope of work promotes the delivery of an approach focused on problem-solving, discovery and exploratory learning, and one which requires that students actively engage in a situation in order to find solutions.

The new agreement continues to provide access to delivery of the County's environmental resources and programs that support the SBBC's educational and sustainability goals, inclusive of services offered by Solid Waste and Recycling, Air Quality, and Environmental Planning/NatureScape programs.

For its part, EPCRD proposes to continue to provide education and outreach through its Water Matters, NatureScape Broward, NatureScape Irrigation Services, Know-the-Flow, and Energy and Sustainability initiatives to achieve greater awareness of the connections between students and their environment, to achieve significant cost avoidance, and to support an overall greater environmental stewardship ethic within the facilities owned and operated by SBBC. This effort will be guided by a collaboration of both SBBC and Broward County staff.

The development and delivery of educational programs will aim to support science instruction through increasing students' knowledge about ecosystem sustainability, water

conservation, climate change, the Everglades, water quality protection, and the importance of environmental stewardship. South Florida's fragile ecology is an especially relevant topic for middle school teachers to discuss with their classes. This provides a wealth of possible topics for classroom discussion about such matters as the balance between environmental and economic concerns, as well as the global challenge of climate change, and how local initiatives can be part of the solution. Middle school students confronting these issues will develop a capacity for critical thinking. All programs will be developed and delivered to meet state and SBBC educational standards. Many of the lessons shared in the classroom will be reinforced on school properties throughout the County as native tree canopy and Florida-friendly landscaping is utilized to provide hands-on-educational opportunities on resource sustainability.

Additionally, continued facility improvements through introduction of native landscaping, accompanied with sustainable landscaping practices, such as those promoted by NatureScape Broward, will remain an important component of the new agreement, although funding availability will continue to dictate the extent of new landscaping improvements. EPCRD will continue to seek funds for landscape improvements through various grant opportunities and will work with SBBC staff and NatureScape's volunteer base to install appropriate trees and plant material. Along with these efforts, continued training of SBBC staff will ensure that sustainable practices are the norm and not the exception. All of these efforts are designed to improve water and energy conservation and reduce resource demands throughout school facilities, thereby resulting in documented operational cost avoidance.

The overall effort will be guided by the SBBC's Applied Learning and Environmental Conservation/Utility Management Departments and the EPCRD's program team of 2.5 FTEs, supported by additional County technical resources as determined to be beneficial to the overall goals of the Partnership.

#### **4.0 WORK BREAKDOWN SCHEDULE:**

The Scope of Work in support of this new Partnership Agreement between SBBC and the EPCRD will be undertaken through the following series of tasks.

**Task 1**      **P<sub>3</sub> Eco-Challenge Program.** Five years after the inaugural P3 Eco-Challenge Recognition Ceremony, this task is designed to continue the successful implementation of the recognition program that acknowledges and rewards schools, teachers, students, and school staff for participating/implementing environmental measures and green initiatives within their schools.

Schools are eligible for points based on certain indicators which fall under each of these broad rubric categories, depending on their level of implementation. The indicators include:

- Outdoor learning labs/structures
- Habitat improvement/restoration
- Energy
- Water
- Solid Waste
- Transportation
- Interdisciplinary Approach
- Environmental Topics Issues
- Field Studies
- Partnerships within the School Building
- Service Learning Projects
- Community Partnerships in School Activities
- School Philosophy and Culture
- Professional Development
- Planning
- Sharing Success and Lessons Learned

Historically, teachers have had to demonstrate how their school and students meet the rubric criteria by entering their application information on the SBBC P<sub>3</sub> Eco-Challenge website. This has been a challenge for some individuals as they find the process difficult and the application "times-out" if not in use for a period. Moving forward, it is proposed that the application process be simplified to encourage entries by alternative methods such as smartphones and tablets. This will be coordinated with the Information Technology Department at SBBC.

Under this Task, NatureScape will coordinate fundraising efforts for the P<sub>3</sub> Eco-Challenge Awards program; assist in maintenance and enhancement of the rubric; solicit and review submissions for the P<sub>3</sub> Eco-Challenge; and develop the awards package, secure the venue, and host the annual ceremony.

**Task 2      Development of new programs, tools, and Teacher Trainings.**

Under this task, EPCRD will work with SBBC staff to develop programs, resources, and trainings to promote environmental education and stewardship throughout the school system. Curriculum materials will be developed by SBBC staff to ensure consistency with academic standards and EPCRD will provide assistance to identify resources to enhance lessons, with a focus on providing an interdisciplinary learning experience designed to produce a new generation of scientists, engineers, policy makers, advocates, inventors, entrepreneurs, and problem solvers. In particular, EPCRD staff will work with SBBC staff to provide assistance in the development and refinement of the new Environmental Science curriculum, including the modules that address Water Resources and Management and Global Climate Change. While NatureScape's primary involvement will continue to focus on middle grades learning (see Task 3), additional involvement with the high schools is expected to occur based on the subject matter.

The NatureScape Education Specialist will provide teachers with resources that can be utilized over the course of the school year. Educational programs that support NatureScape and environmental stewardship will be incorporated in the resources and will include a number of "hands-on" activities, including, where resources are identified, the planting of additional native landscaping at schools.

Additional technical resources (e.g., local governments, Parent Teachers Organizations, businesses, non-profit groups, volunteers, etc.) will be identified by NatureScape to support the overall program. The County will maintain a list of environmental professionals that can be made available to promote student engagement in environmental issues across Broward County. Upon request and based upon availability, opportunities will be identified for mentoring by business, industry, and research organization leaders.

Teacher trainings will be offered during the school year to teachers from the selected middle schools as well as other schools as space allows. An

intensive one-week Summer Teacher Habitat Steward Workshop will provide training on lessons to be brought into the classroom and to introduce and refine curriculum. Fundamental to the teachers' education will be incorporating lessons and activities from established resources, as well as others identified by the NatureScape team.

NatureScape will offer its "Know the Flow" workshop, a comprehensive course in local water management developed in conjunction with the South Florida Water Management District that can be presented in four one-hour parts or as a single abbreviated one-hour presentation. The abbreviated version of the course will be available on request by teachers for classroom presentations as well as being offered in teacher education trainings for National Wildlife Habitat Steward certification and in-service trainings.

Periodically, County and SBBC representatives will review the year's progress and discuss opportunities for refinements and program improvement.

Additional supporting services and tools will be identified and/or made available to effectively deliver these programs, as needed. These might include Powerpoint presentations, instructional videos, software, and use of various Smartphone applications that might be useful in engaging students in science.

In addition, the County will also work closely with SBBC to continue identifying grant opportunities that further support these programs.

### **Task 3**

**NatureScape presentations in the schools.** This task provides for the continuation of NatureScape-based presentations in the classroom that are supportive of environmental stewardship. Under this task, County will work with the SBBC, school administration, teachers, and other environmental professionals to deliver and coordinate environmental programming.

Partnership activities will be organized to provide engagement and delivery of programming across all middle schools within the 5-year timeframe of this agreement. Prior to the start of the school year, the NatureScape Education Specialist will coordinate with SBBC to identify middle schools for focused programming during the school year and seek contacts with representative(s) from each school, to discuss expectations and to describe the resources available. As opportunities and requests arise, other schools, including elementary and high schools, will be included in programming.

EPCRD will assist in the development and delivery of a variety of lesson plans based on the interactions of living things, cycles in nature, water resources, Florida's Everglades, climate change, and caring for Florida's environment in a sustainable manner.

Programs prepared under this task include a series of approximately one hour/period programs that will focus on different environmental issues and themes (e.g., climate change, invasive plants, native landscaping, ecology, nonpoint source pollution, water resource management in South Florida). All presentations will be developed to promote the connections between individuals and their environment and to promote an ethic of environmental stewardship. Where appropriate, NatureScape staff will utilize the school campus as an outdoor classroom.

Over the years that the Partnership has been in effect, a number of teachers and schools have taken advantage of having NatureScape staff present to their students on a regular annual basis, ranging from a single classroom presentation to presentations for an entire grade level.

#### **Task 4**

**Youth Climate Summit.** Climate change is becoming a topic of increasing concern, destined to have a greater influence on many aspects of society moving forward. Despite a lack of direction/guidance from the State on how Climate Literacy should be taught in our schools, the importance of its implications to South Florida's environment, economy, and people justifies a greater understanding and involvement by our teachers, future student leaders, and community in general. This new task will be for the County to serve as the overall coordinator to guide the development of an initial Youth Climate Summit in which students will have the major role in developing their own forum and climate action plans for their schools. The Youth Climate Summit will be based on the Adirondack Youth Climate Summit format and will be modified to address the challenges facing Southeast Florida/Broward County. This effort will eventually result in youth-developed Climate Action Plans, providing opportunities for youth to learn through project and real-world problem learning. The Summit is intended to be an empowering experience which will require the development of teams to serve in different capacities including development of a format, budgeting, fundraising, securing a venue, identification of speakers, and execution of a major youth-based event and action plan. Depending on the success of the initial Youth Climate Summit, additional summits may be held.

To introduce students to what a Climate Summit is about, approximately 30-50 students will be invited to participate in the 9<sup>th</sup> Annual Southeast Florida



Regional Climate Leadership Summit in December 2017 at the Broward County Convention Center. Although this two-day summit will primarily involve participation by local and state elected officials, city managers, agency partners, academia, private industry, nonprofit representatives, and other community leaders, and include high-level discussions centered around the business of resilience, there will be several opportunities for student participation. At the end of the second day of the summit, students may participate in an open discussion to talk about what they have learned and how they might approach planning for and implementing a Youth Climate Summit and creating their own Climate Action Plan.

Planning for the Youth Summit will involve a number of steps including County staff, School Board staff, interested teachers, and others. Steps include, but are not limited to, the following:

- Work with SBBC to create steering committee with students, teachers, post-secondary institutions, and community members
- Define audience including number of students and age group(s) to be reached
- Identify venue
- Event Planning Logistics
- Develop budget and fundraising
  
- Plenary and Workshop Presenter Planning
- Communications
- Post Summit follow up/progress report
- Develop Climate Action Plans with tasks and timelines

It is envisioned that the initial Youth Climate Summit will be held in either the second or third year of this agreement. This will provide for the time to promote the concept and identify the support of teachers, administration, and community resources, including funding, necessary to successfully deliver the Summit.

**Task 5**      **Staff training for custodial staff, facilities managers and support personnel.** This task is intended to provide for trainings for custodial staff, facilities managers, and school support personnel. Under this task, NatureScape staff will work with SBBC staff to provide both classroom and hands-on training in water conservation, including landscaping maintenance, irrigation system repairs, and indoor plumbing repairs and

retrofitting. As part of the classroom portion of these trainings, NatureScape will provide the abbreviated version of the "Know the Flow" workshop.

Trainings for any maintenance/custodial staff involved in managing irrigation systems will also, in conjunction with appropriate SBBC facilities staff, include exposure to a hands-on section on irrigation system repairs and landscape maintenance fundamentals.

New to this scope of work, this task also proposes the development of training videos on best management practices for custodial, maintenance, and facilities staff, including an introductory video on who NatureScape is and the services provided by NatureScape to SBBC. The NatureScape Irrigation Service staff will also provide for SBBC staff training on any smart irrigation systems that may be installed on SBBC properties.

#### **Task 6**

**Environmental Recognition/School Certifications.** The primary goals of this task are to: a) work with schools to achieve recognition for various environmental initiatives and achievements and, b) to maintain certifications, as required, through various programs such as National Wildlife Federation's Schoolyard Wildlife Habitat certification and Eco-Schools USA programs. While the P<sub>3</sub> Eco-Challenge Awards program will remain the primary opportunity to recognize environmental stewardship achievements amongst peers, other recognition programs such as the County's Emerald Awards program, will be considered as well for awards.

In July 2012, during the initial implementation period of the Partnership Agreement, NatureScape was instrumental in helping to achieve certification of the School Board of Broward County as a Schoolyard Wildlife Habitat by the National Wildlife Federation, the first school district in the nation to receive this recognition. Through the implementation of NatureScape principles, additional school facilities will be eligible for recognition by both the County's NatureScape Broward program and the NWF's Schoolyard Wildlife Habitat certification program. Maintaining the NWF certification requires the submittal of various documentation on an annual basis. NatureScape staff will work with SBBC to ensure that this certification is maintained.

The Foundation for Environmental Education developed the Eco-Schools program in 1994, which was recognized by the United Nations Environment Program in 2003 as a model initiative for Education for Sustainable Development. In 2008, the National Wildlife Federation was granted host status for K-12 schools in the United States. Through Eco-Schools USA,

the National Wildlife Federation has supported the registration and certification of 50 Eco-schools in Broward County. Through school-based action teams of students, administrators, educators and community volunteers, Eco-Schools combines effective "green" management of the school grounds, facilities and the curriculum. The program currently provides recognition for completion of each of ten pathways to Sustainable Development: Biodiversity, Climate Change, Consumption and Waste, Energy, Healthy Living, Healthy Schools, Schoolyard Habitats, Sustainable Food, Transportation, and Water. Two new pathways are being developed currently. NatureScape staff will work with schools to help them achieve recognition, in particular, for the Water, Schoolyard Habitats, and Climate Change pathways.

The County shall work with schools and SBBC staff to evaluate school facilities, programs, and provide recommendations for achieving various certifications/recognition as appropriate. These recommendations will be reviewed and discussed with school staff and SBBC and plans and schedules will be developed to achieve these certifications, along with necessary follow-ups and re-assessments. The ultimate goal of all of these recognition efforts is to create a culture that values the incorporation of sustainable practices, recognizes these achievements, and serves as a model for adjacent communities and neighboring school districts.

Working with schools and teachers to increase the amount of native and drought-tolerant landscaping at school facilities can serve as a starting point for many schools. As landscaping improvements are made, students will be engaged in the process by applying lessons learned in the classroom to providing assistance in the planting of landscaping on their campuses. Plant materials for new landscaping/landscaping renovations will be sought through grant opportunities and planted and maintained in accordance with sound NatureScape landscaping principles, designed to minimize the usage of unnecessary irrigation, fertilizers, and other chemicals, while providing opportunities that can be used as part of class instruction and encouraging student participation in healthy, outdoor activities.

**Task 7**      **Water Matters Day partnerships.** Broward Water Matters Day, the County's premier environmental event, is a unique opportunity for students to interact with a full range of environmental professionals representing federal, state, and local agencies and to explore career options in the environmental field. This task is intended to provide opportunities for schools and students to participate in various aspects of Water Matters Day. Under this task, and based on NatureScape staff recommendations, a

limited number of schools will be invited to host a booth/display at the event to showcase their environmental programs or bring attention to environmental issues. In addition, the County will solicit interested students and those seeking to earn volunteer hours to participate in and/or volunteer at the County's annual Water Matters Day event. This could include assisting in the tree giveaway area, conducting participant surveys, assisting in staffing a booth, etc. The County reserves the right to limit the number of volunteer students to those that are necessary for successful management of the event. Extra credit forms will also be made available for other students that visit all exhibitor booths. In 2017, there were over 55 exhibitors providing information and education on various environmental programs that are offered throughout the County.

Additionally, the County will continue to solicit entries from middle and high school students for essays, poems, and written works as part of the Water Matters Day Literary Contest and that relate to an environmental theme associated with either the annual event or the P<sub>3</sub> Eco-Challenge. Students that submit winning entries, along with their teachers, will be eligible for prizes donated by one or more Water Matters Day co-sponsors.

The County shall provide all support services related to the execution of Water Matters Day, including fundraising, planning, administration and coordination of activities and participants in advance of and during the event. The County shall develop promotional materials for the annual Water Matters Day, including such items as posters, programs, multi-media advertisements, and t-shirts, as well as appropriate promotional spots for Water Matters Day for radio and/or television. The County shall prepare a summary of the annual Water Matters Day event including information on attendance, survey results, and overall success in providing outreach to the community in the Annual Report prepared under Task 10. The County will provide SBBC with a summary of Water Matters Day school-related activities, including number of volunteers and student participation.

#### **Task 8**

**Irrigation System Design & Operational Evaluations.** This task is intended to implement and provide for irrigation system evaluations to improve efficiency and reduce water usage outdoors. Landscape irrigation accounts for up to 50% of the potable water usage in Broward County. As an entity that manages significant acreage within Broward County, the SBBC is a major water user. Reducing irrigation demands by adjusting irrigation systems to operate more efficiently has proven to be effective in realizing water savings, reducing energy costs, and reducing runoff and its adverse effects, while still meeting plant needs. In this task, County,

through its Water Conservation Specialist, will work closely with Environmental Conservation/Utility Management staff to thoroughly evaluate the efficiency of the irrigation systems at each school facility.

County's Water Conservation Specialist will work with Environmental Conservation/Utility Management staff to develop schedules for evaluation of the irrigation systems, based primarily on usage, with priority given to those systems that are using municipally-sourced potable water. Recommendations will be provided to Environmental Conservation/Utility Management staff, and improvements will be scheduled/provided as manpower and budgets allow. In addition, EPCRD staff will be available to train new and existing SBBC staff in proper irrigation system maintenance. This task will be undertaken on a continuous basis throughout the term of the agreement.

**Task 9**      **Water Audits within Schools.** Under this task, the County's Water Conservation Specialist will work with Environmental Conservation/Utility Management staff to conduct a minimum of three (3) water audits annually within the schools using the South Florida Water Management District's audit guidelines as found in "A Water Efficiency Improvement Self-Assessment Guide for Commercial and Institutional Building Facility Managers".

County will work with Environmental Conservation/Utility Management staff to schedule indoor water audits of plumbing fixtures and water-using appliances. Recommendations will be provided to SBBC, and improvements/retrofits will be scheduled as manpower and budgets allow (as determined by appropriate SBBC staff).

**Task 10**      **Coordination/Administration.** Under this task, the County will meet with appropriate SBCC personnel to establish joint protocols, contacts, tools, and educational programs that best integrate environmental stewardship and sustainability principles within the District. This effort will include a commitment of County's Environmental Planning and Community Resilience Division, and appropriate SBBC Divisions, as well as other identified individuals to convene on an as-needed basis.

This task also includes overall administration of the agreement, including financial and annual reporting. Quarterly summary reports will be provided with invoices and summarize the major activities for the quarter under each of the task areas. An Annual Report will be provided to SBBC that will include additional information, including an estimate of annual avoidance in

water and energy costs based on the documented water savings achieved at each facility, number of students taught, and number of staff trained through the program.

(Remainder of page intentionally blank.)

## Exhibit "B"

### Fees to be Paid to County for Services

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County shall be paid according to the Rates and Fees listed below:

#### Total Cost of Services

For the initial twelve (12) month term of this Agreement, County shall provide services described in the Statement of Work at a flat fee of Fifty Five Thousand Five Hundred and Fifty Four Dollars (\$55,554.00) per quarter year, paid in arrears.

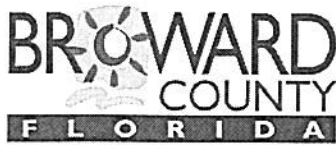
Following the initial twelve (12) month term, SBBC shall have the option of extending this Agreement for four (4) additional years. Rates established for each additional year of implementation are as follows which includes a three percent (3%) increase per annum.

Year 1 renewal: A not-to-exceed fee of Fifty Seven Thousand Two Hundred Twenty One Dollars (\$57,221.00) per quarter, paid in arrears.

Year 2 renewal: A not-to-exceed fee of Fifty Eight Thousand Nine Hundred Thirty Seven Dollars (\$58,937.00) per quarter, paid in arrears.

Year 3 renewal: A not-to-exceed fee of Sixty Thousand Seven Hundred Five Dollars (\$60,705.00) per quarter, paid in arrears.

Year 4 renewal: A not-to-exceed fee of Sixty Two Thousand Five Hundred Twenty Seven Dollars (\$62,527.00) per quarter, paid in arrears.



**ENVIRONMENTAL PROTECTION and GROWTH MANAGEMENT DEPARTMENT**  
**ENVIRONMENTAL PLANNING and COMMUNITY RESILIENCE DIVISION**  
Mailing Address: 115 S. Andrews Avenue, Room 329H • Fort Lauderdale, Florida 33301  
954-519-1270 • FAX 954-519-1496

September 18, 2018

Ms. Susan M. Cantrick  
Director, Applied Learning Department  
Broward County Public Schools  
KC Wright School Board Building  
600 SE Third Avenue  
Fort Lauderdale, Florida 33301

**RE: Renewal of Partnership Agreement in Support of NatureScape Broward  
Programming in Broward Schools**

Dear Ms. Cantrick,

Over the past year, we have continued to make great progress in implementing NatureScape Broward and other environmental stewardship programs in Broward County Public Schools under the terms of our Environmental Partnership Agreement (copy attached). To date, we have facilitated the certification of 216 landscapes at school facilities, delivered over 1,850 classroom educational programs, trained approximately 700 District teachers and almost 1,000 custodial/facilities staff in School Board-endorsed training sessions, and provided valuable environmental information to an additional 2,000 teachers, administrators, custodial staff and other School Board employees through personal contact. This year saw the implementation of the Sixth Annual P<sub>3</sub> Eco-Challenge, an event that strengthens the ties between our agencies and encourages students, teachers, and support staff to actively engage in sustainability measures.

During this past school year, we saw continued growth in the number of students that directly received educational lessons intended to raise their consciousness on the importance of water conservation, native landscaping, and environmental stewardship, and which are grounded in STEM-based skills. To date, over 56,000 students have participated in classroom and outdoor environmental activities directly related to our partnership agreement. The P<sub>3</sub> Eco-Challenge Awards Ceremony and Broward Water Matters Day events which we have jointly collaborated on have been a great success, enjoyed by students, teachers, and members of the community. These ongoing achievements and program opportunities are promoted through the semi-annual *SchoolScapes* newsletter that outlines our partnership activities over the past year as well as quarterly status reports, and the attached Annual Progress Report.

As you know, the evaluation of irrigation systems on school properties is another important component of the partnership. This past school year, the NatureScape Broward Water Conservation Specialist conducted 38 irrigation system evaluations at 17 school facilities, resulting in almost 36 million gallons of annual water savings and cost savings of \$150,000 annually in reduced potable water

Broward County Board of County Commissioners  
Mark D. Bogen • Beam Furr • Steve Geller • Dale V.C. Holness • Chip LaMarca • Nan H. Rich • Tim Ryan • Barbara Sharief • Michael Udine  
[www.broward.org](http://www.broward.org)



NatureScape Broward Agreement  
September 18, 2018  
Page 2 of 2

fees. Since initiating the NatureScape Broward irrigation evaluations within the schools, over 285 school campuses have been evaluated with over 417 million gallons of annual water savings. In addition, water audits addressing indoor water conservation were conducted at three schools this past year and have provided recommended improvements for an additional 6.7 million gallons of annual water savings. These efforts collectively provide real water, energy, and cost savings to the School Board of Broward County, which are reflected on the attached Return on Investment documentation showing a realized ROI of 1.14 or 114%.

We hope you concur that through our partnership agreement, we have realized great success in implementing the NatureScape Broward initiative in our public schools. As such, the County would very much like to continue providing these services for an additional five-year period, and kindly requests the School Board consider renewal through approval of this Agreement, to become effective at the end of the current term on December 11, 2018.

We look forward to continuing our partnership in this very important initiative. Should you have questions or need additional information, please contact Robert Rudolph at (954) 519-0328.

Sincerely,



Jennifer Jurado, Ph.D., Director and Chief Resilience Officer  
Broward County Environmental Planning & Community Resilience Division

cc: Rob Jindracek, Manager, Environmental Conservation/Utility Management  
Roger Riddlemoser, Director, Environmental Health & Safety Department  
Lisa Mikenkovic, Supervisor, STEM+Computer Science

Attachments

**Broward Schools/NatureScape Broward Environmental Partnership Agreement  
Return on Investment  
July 2017 - June 2018**

This past school year (2017-2018) saw implementation of the first year of the third partnership agreement between the School Board of Broward County and the NatureScape Broward program. This agreement continues to build upon the progress and achievements realized during the original two agreements 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 during the reporting period were:

- The delivery of the Sixth 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 six comprehensive categories. The P<sub>3</sub> Eco-Challenge Recognition Awards Ceremony, which was held in May 2018, encourages, recognizes, and rewards schools, teachers, students, administrators, and volunteers for their efforts in addressing the challenge. Over \$35,000 in cash and in-kind prizes were received in sponsorships and awarded to schools, teachers, students, and support staff this year.
- Irrigation Service evaluations resulting in actual water savings of almost 36,000,000 gallons of water annually and approximately \$150,000 in annual cost savings\* Water audits conducted at three Broward schools identified an additional \$71,667 worth of potential annual cost savings that could be made by retrofitting/replacing various fixtures within the schools and, in addition, save over 6,700,000 gallons of water annually.
- The implementation of new climate change training and curriculum resources for teachers to utilize in presenting Climate Change Science and Water Resources Management education to students.
- Bringing increased support from NatureScape Broward's partner, the National Wildlife Federation, to provide environmental training and landscaping materials for several schools as part of the Broward Habitat Connectivity Project as well as sponsoring additional climate change training for teachers.
- The implementation of the Junior Sustainability Stewards program to introduce at-risk students to STEM/environmental citizen science, mentoring, scholarships and a career path toward environmental science or advocacy/policy making.

During the past year of program implementation, reimbursement paid to Broward County for delivery of program services per the terms of the Agreement averaged \$54,553.50 per quarter for a total annual cost of \$218,214. Funding provides for the dedicated support of 2.5 FTEs and program operational expenses (e.g., print materials, educational resources, office supplies, vehicle expenses, etc.).

*\*Additional funds that would be incurred annually in the absence of changes made as a result of irrigation evaluations.*

Environmental Planning & Community Resilience Division (EPCRD) program staff dedicated to implementing the Environmental Partnership with Broward Schools include:

- 1 FTE – Delivering environmental programming to students, teacher trainings, and securing sponsors for the P<sub>3</sub> Eco-Challenge Recognition Ceremony (Victor Suarez)
- 1 FTE – Providing 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 EPCRD personnel providing program management and administrative support include:

- Director, Environmental Planning and Community Resilience Division (EPCRD), (Jennifer Jurado, Ph.D.)
- Water Resources Manager, EPCRD (Carolina Maran, Ph.D., P.E.)
- Water Planning Program Manager, EPCRD (Robert Rudolph)
- NatureScape Broward Outreach Coordinator, EPCRD (Rose Bechard-Butman)
- NatureScape Broward Irrigation Service Coordinator, EPCRD (Robert Wanvestraut)
- Administrative Support, EPCRD (Andrew Tucker/Carole Wilschke/Norma Ellison)
- GIS/Technical Support, EPCRD (Katie Lehis)
- Assistant Director, EPCRD (Samantha Danchuk, Ph.D., P.E.)
- Natural Resource Specialist, EPCRD (Jill Horwitz)
- Junior Sustainability Stewards Program Manager, EPCRD (Nancy Metayer)

This additional program support represents the additional dedication of 0.8 FTEs provided as a Broward in-kind cost share.

Other measurable program accomplishments for the past school year include:

- The delivery of 236 educational programs and workshops (exclusive of Water Matters Day) and staff training to directly benefit 5,830 students, 42 teachers, and 60 facilities managers. These include classroom and outdoor programs, teacher in-service training, Habitat Steward training, and facility maintenance training.
- 38 Irrigation system evaluations conducted at 17 schools to achieve a total water savings of 35,820,939 gallons of water. Along with this, an estimated annual additional cost savings of \$149,743 derived from irrigation system evaluations and associated reductions in energy and water usage.
- \$154,367 in grant awards and other funding and in-kind services secured by Broward County on behalf of the Broward School District, including:
  - \$50,000 in foundation funding to support the Junior Sustainability Stewards program
  - \$38,841 in cash and in-kind prizes to support the P<sub>3</sub> Eco Challenge awards and ceremony.
  - \$46,987 for 2,014 hours of NatureScape Broward-solicited volunteer time to assist with environmental programming and school landscaping improvements and projects.

- o \$36,955 in grant funding to support, climate change training for teachers and students, and miscellaneous equipment for Broward schools

In addition to the in-kind cost share provided by other EPCRD staff, 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 Broward volunteers for school projects, a return-on-investment (ROI) of 1.14 or 114% was realized this reporting period.

There are other benefits provided by the Partnership Agreement as well which are more difficult to quantify. On the academic side, these include opportunities for students to learn about their natural environment through outdoor classroom experiences; exposure to career opportunities in various environmental fields; and, the development of a strong foundation in environmental stewardship to be shared at home and in the communities in which we live. On the physical side, benefits of improved irrigation efficiency include improved resiliency of our aquifer system to saltwater intrusion, reductions in use of fertilizers, fungicides, and other landscape care chemicals, as well as development of more resilient school landscapes.

The following provides additional details on the return-on-investment for the 2017-2018 school year:

Description	SBBC Funding	Return-on-Investment
Staffing	\$197,972	\$91,527 (Additional County in-kind)
Operational	\$20,302	\$149,743 irrigation savings \$71,667 water audit savings (actual and potential annual cost savings)
P <sub>3</sub> Eco-Challenge Awards and Ceremony		\$38,841 (secured sponsorships)
Other grants and services provided external to agreement		- \$50,000 in grant funding to support the Junior Sustainability Stewards program -\$3,600 from NWF to support climate education training for teachers \$10,000 for landscaping and materials from various grants - \$3,400 deferred meeting room fees - \$639 Water Bottle filling station for Low Water Challenge winner – Orange Brook Elementary School -\$900 Smart irrigation controllers
Volunteer time (NatureScape-solicited)		\$46,987 (2,014 hours @ \$23.33/hr) ( <a href="https://www.independentsector.org/volunteer_time">https://www.independentsector.org/volunteer_time</a> )
Annual Total	\$218,214	\$467,304



11<sup>th</sup> Annual Progress Report  
NatureScape Broward/Broward Schools Environmental Initiative  
Covering the Period July 1, 2017 – June 30, 2018



## Executive Summary

This is the eleventh annual progress report prepared under the Partnership Agreement to implement the terms for support of the NatureScape Broward program within the Broward County School District areas as originally approved by the School Board of Broward County (SBBC) in May 2007 and by the Broward County Board of County Commissioners in June 2007. NatureScape Broward is a program of the Environmental Planning & Community Resilience Division (EPCRD). A second five-year agreement was executed in December 2012. The current five-year agreement was executed in December 2017.



The scope of work focuses on creating sustainable 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. A key component of this Agreement is the P<sub>3</sub> Eco-Challenge, which acknowledges and rewards schools and teachers for participating/implementing environmentally sustainable measures and green initiatives within their schools. Other tasks within the Partnership Agreement as discussed herein include: Development of tools and trainings to enhance curriculum; NatureScape presentations in schools; Trainings for facilities managers; NatureScape learning gardens/certifications; Water Matters Day partnerships; Irrigation system evaluations; Water audits; and Coordination/Administration.

Primary support for implementation of the Partnership Agreement during the reporting period included the following:

- Jennifer Jurado, Ph.D., Division Director, EPCRD
- Carolina Maran, Ph.D., Water Resources Manager, EPCRD
- Robert "Rudy" Rudolph, Water Planning Program Manager, EPCRD
- Victor Suarez, NatureScape Broward Education Specialist, EPCRD
- Maena Angelotti, NatureScape Broward Water Conservation Specialist, EPCRD
- Kimberly Mayo, NatureScape Broward Program Assistant, EPCRD
- Susan Cantrick, Director of Applied Learning Department, SBBC
- Lisa Milenkovic, PhD, Supervisor, STEM+Computer Science, SBBC
- AnnMargareth Marousky, STEM+Computer Science, Instructional Specialist, SBBC
- Merilyn Johnson, PhD, Science Supervisor, SBBC
- Rob Jindracek, Manager, Environmental Conservation/Utility Management, SBBC
- Ed See, Environmental Conservation/Utility Management, SBBC

A review of task progress under the current renewal period follows. This report covers the period July 1, 2017 through June 30, 2018.

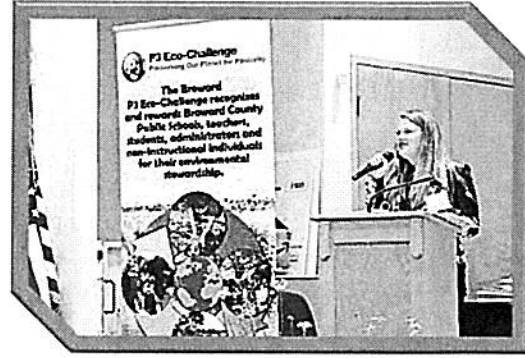
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## Task 1 – P<sub>3</sub> Eco-Challenge Program

This task supports SBBC's efforts to educate its community and engage in environmental practices within the schools through a Green Schools Sustainability/Recognition Program that acknowledges and rewards schools, teachers, and students for implementing environmental measures and green initiatives within their schools and communities. The task consists of four subtasks.



## Coordinate Fundraising Efforts

Working with the SBBC's STEM + CS Department staff, NatureScape Broward staff within the County's Environmental Planning and Community Resilience Division (EPCRD), made approximately 50 solicitations to agencies, public and private companies (local, national and international), financial institutions, and nonprofit groups to seek funds for a Green Schools Recognition Awards program - P<sub>3</sub> (Preserving Our Planet for Posterity) Eco-Challenge. These solicitations were made in person, by phone, by letter, and by email. Sponsors were provided the opportunity to participate at five different levels of sponsorship. Each sponsorship level provided for increasing levels of recognition based on the amount of contribution. These solicitations resulted in approximately \$36,000 in cash, prizes and in-kind items for the P<sub>3</sub> Eco-Challenge Awards Ceremony and have provided a foundation for continued support and future sponsorships.

PLATINUM	GOLD SPONSOR	SILVER	BRONZE SPONSOR
<p>Platinum Sponsor</p> <ul style="list-style-type: none"> <li>• Whole Foods Market</li> <li>• Wacky Wild Science</li> </ul>	<p>Gold Sponsors</p> <ul style="list-style-type: none"> <li>• National Wildlife Federation</li> <li>• JM Family Enterprises</li> <li>• Hazen &amp; Sawyer</li> <li>• Everglades Holiday Park</li> </ul>	<p>Silver Sponsors</p> <ul style="list-style-type: none"> <li>• Marine Industries Association of South Florida</li> <li>• FIU SEAS Program</li> <li>• South Florida Audubon Society</li> <li>• Broward County Drone League</li> <li>• Diamond Del's Gem Mining Adventure</li> <li>• Betrock Information Systems</li> <li>• Florida Ag in the Classroom</li> </ul>	<p>Bronze Sponsors</p> <ul style="list-style-type: none"> <li>• Calvin Giordano &amp; Associates Inc.</li> <li>• Curriculum Associates</li> <li>• Allstate Resource Management</li> <li>• Alexander's Plant Farm</li> <li>• Educational Resource Solutions</li> <li>• Explore Learning</li> <li>• Museum of Discovery &amp; Science</li> <li>• Broward County Parks and Recreation Division</li> <li>• Broward Sierra Group</li> <li>• Advanced Roofing</li> </ul>
<p>+9 Eco Friends</p>			



Once again, Whole Foods Market was a Platinum Sponsor for the awards ceremony. Their contribution/sponsorship was funded through the “Donate Your Dime” promotion at all Broward County Whole Food Markets and both NatureScape Broward and SBBC staff provided information on the P3 Challenge at several of these stores. NatureScape Broward staff also provided a booth at the Citrix Earth Day event to support the Challenge. Gold sponsors for the Awards Ceremony remained the same as in previous years as well, although Wacky Wild Science, a former Gold sponsor increased its in-kind sponsorship and this year became a Platinum level sponsor. Their prize is an in-school field trip bringing a museum experience to the whole school for 2 days. In addition, Broward County Drone League became a Silver sponsor, having been a Bronze sponsor last year. They donated drone presentations and trainings. Florida Ag in the Classroom also increased their contribution from Bronze to Silver level. Advanced Roofing returned this year as a Bronze (cash) sponsor.

### Maintain and Enhance the Rubric

During the first year of the current agreement, a matrix or rubric was developed through extensive coordination with County agencies and SBBC staff in order to recognize schools, teachers, and students that are implementing sustainable environmental practices. Each year, the rubric is reviewed and modified to reflect changes in programs and comments from teachers and administration. The rubric is currently being reviewed once again to identify what modifications need to be made to reflect existing opportunities for the school community to showcase environmental stewardship within their schools and communities and how it might be modified to increase its use amongst teachers and schools. Work is underway to make changes to the P<sub>3</sub> Eco-Challenge on-line application process for implementation in the 2018-2019 school year.

### Coordinate Solicitation and Review of Submissions

NatureScape Broward staff actively promoted the P<sub>3</sub> Eco-Challenge throughout the school year and encouraged participation from the teachers and schools. The P<sub>3</sub> Eco-Challenge was featured in the *SchoolScapes* e-newsletter as well as being promoted on the SBBC’s environmental and STEM web pages. While School Board staff was directly responsible for collecting submissions, NatureScape and other County staff met regularly with them to help identify and encourage schools and teachers that should apply, review submissions, as well as discuss other issues. The County staff also identified environmental professionals to serve as judges for the P<sub>3</sub> submissions.

### Develop Awards Package and Host Ceremony

The P<sub>3</sub> Eco-Challenge is promoted as a contest offering a prize of \$2,000 to the top school, \$500 to the top teachers, and \$250 for winning students. However, as in past years, NatureScape Broward staff was extremely successful in soliciting significant sponsorship funds, which allowed for additional cash awards and prizes to all the applicants of the P<sub>3</sub> Eco-Challenge. By the time of the Awards Ceremony on May 9, over \$35,000 in cash, materials, and in-kind prizes and services had been secured for the event.



NatureScape Broward staff arranged for the Broward County Park Division's Long Key Nature Center in Davie to serve once again as the venue for the Awards ceremony. Multiple P<sub>3</sub> Eco-Challenge Committee planning meetings were held with EPCRD, SBBC, and the Environmental Conservation Organization (ECO) staff to develop the Awards Ceremony Program. SBBC staff was able to arrange for Charles Webster, Broward County Public Schools (BCPS) Legislative Affairs, to serve as Master of Ceremonies. NatureScape Broward staff arranged for Ms. Delaney Reynolds, a freshman at the University of Miami and the founder and CEO of the Sink or Swim Project, a non-profit organization active in political advocacy and seeking solutions to advance climate change recognition and solar power to serve as the Keynote Speaker.



School Board Member Laurie Rich Levinson presents checks and plaques to the winning students.

On May 9, 2018, Broward County Mayor Beam Furr and School Board Member Laurie Rich Levinson, along with 200 attendees, congratulated prize winners. Overall winner Orange Brook Elementary School won \$2,000 and runner-up Beachside Montessori Village won \$1,000. Thirty-eight other cash prizes ranging from \$50 to \$500 were awarded to schools, teachers, custodians and students. In addition, numerous schools and teachers received certificates for in-classroom programming by professional environmental educators. Guests took home decorations, including native wildflowers.

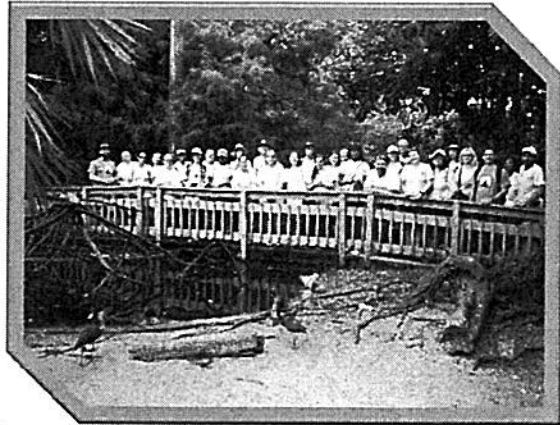


Orangebrook Elementary School was the overall winner of the P<sub>3</sub> Eco-Challenge. In addition, Orange Brook's Monika Moorman won the Educator category and Poovini Illankovan won the student category for elementary schools. Here, they were recognized with Superintendent Runcie at a School Board meeting with winning participants in the "How Low Can You Go" Challenge.

## Task 2 - Development of new programs, tools and teacher trainings

Under the partnership agreement, EPCRD is continually exploring opportunities for new curriculum, programs, tools, and trainings to offer to students, teachers, and staff to improve programming within the school community.

Trainings remain an integral part of the Environmental Partnership. Thirty-nine teachers received a NatureScape-based training during the reporting period; one-day teacher training workshop was held on August 1, 2017. Teachers who completed the training and their follow-up assignments were eligible for in-service points.



Day Four 2018 Habitat Stewards class: teachers remove invasive plants and plant new dunes at Hollywood Beach

During this reporting period, the NatureScape Broward staff also hosted a National Wildlife Federation Habitat Steward five-day training for 28 teachers (June 2018). Habitat Steward and P<sub>3</sub> Eco-Challenge winners Elaine Fiore from Beachside Montessori Village and Linda Gancitano from Driftwood Middle School, spoke about environmental opportunities within the school district and "greening" campuses. Elaine and Linda also

shared their experiences with projects at Beachside Montessori Village and Driftwood Middle schools and offered suggestions for similar projects on the new stewards' campuses.

NatureScape Broward frequently updates its Educator Resource List which is provided to teachers and includes local, state and national environmental educational resources that can assist them in enhancing their curriculum. New resources are added to the list as they are identified.

EPCRD staff worked with School Board staff to create Water and Climate Change Curriculum modules for an Environmental Science CANVAS Course. This was used by approximately two dozen high school and middle school teachers to provide real world correlations to next generation science standards. Staff also provided presentations to students of Ms. Habenicht, a Habitat Steward teacher at Pioneer Middle School, who was teaching this course.

Per the direction of SBBC staff, NatureScape Broward trainings have continued to include additional resources to help teachers inform their students about Climate Change. This includes references to climate change concepts and lessons that can be shared in the classroom as well as science-based referenced websites.

In September, National Wildlife Federation (NWF) invited SBBC and EPCRD staff to attend the Climate Education and Opportunities Collective Impact Summit in Sundance, Utah. The Summit was an opportunity to network with climate change educators throughout the country from federal, state, and local governments, non-profit organizations, and academia. The Summit provided an opportunity to discuss the possibility of teacher training on climate change with Carey Stanton, the senior Director for Education at National Wildlife Federation. This ultimately resulted in Ms. Stanton coming to Broward County to provide a two-day teacher training in June. Ms. Stanton shared insights into how to effectively teach climate change utilizing a number of NWF's educational resources including those specifically geared towards middle and high schoolers. Videos and lesson plans to support climate education can be found at <http://climateclassroom.org/>. A second website, <http://climateclassroomkids.org/>, is focused on grades 3-6.

In addition, with the inclusion of Citizen Science as the Special Projects/Innovation category in the P<sub>3</sub> Eco-Challenge, EPCRD staff has prepared a list of popular Citizen Science websites, where teachers and students can provide information from their mobile devices or laptops to assist researchers in scientific data gathering. One excellent source to help get teachers started can be found at <https://scistarter.com/>.

Staff shared information with teachers about the free Global Learning and Observations to Benefit the Environment (GLOBE) program for Eco-Schools USA offered through NWF. This training provides learning opportunities that are scientifically rigorous while allowing students to address sustainability through service learning.

A Climate Change game, "Game of Floods", adapted to Broward County by EPCRD staff, was also introduced to students this year. The game fosters a collaborative dialogue and deeper understanding of the environmental, economic and social choices that communities will face in preparing for sea level rise.

NatureScape Broward staff along with NWF Habitat Stewards from around the country completed the "new" National Wildlife Federation (NWF) Habitat Steward Host Training over a three-month period. Host training enhances delivery of the Habitat Steward Training for teachers that support our schools and provides new resources.

NatureScape Broward staff helped the Math and Science Departments to secure venues for their department meetings at multiple County Parks. During this reporting period, staff at Anne Kolb Nature Center provided programming to all of the science teachers where they met parks staff and learned about programs offered and field trip venues.

At the Gifted and Talented Symposium held at Pompano Beach High School, 160 teachers received NWF Butterfly Kits for their students which contain native milkweed seeds, gardening tips and directions to grow and expand habitat gardens.

### Task 3 - NatureScape presentations in the schools

NatureScape Broward maintained an active presence in the schools, providing presentations and support throughout the year. During the reporting period, 223 programs were delivered to 6,132 students.

#### June to August 2017

Presentations at libraries and summer camps:

- Coral Springs Elementary School- "Summer Break Spot" hosted by the Coral Springs Police Department (Title I students);
- Hallandale Green Team Youth Summer Program (toured Ingalls Park, discussed habitat certification, container gardens);
- Additional programs and booths at Walter C Young Library, Hollywood Library, Boulevard Gardens, Lauderdale Lakes, and Atlantic Tech College; and
- Environmental Science and Everglades Restoration Magnet Camp at South Plantation High School: General 9<sup>th</sup> grade orientation, environmental field day and magnet program orientation.



#### Presentations/Events/Activities

Much of September was spent responding to clean-up activities associated with Hurricane Irma- staff surveyed the damage to landscapes at various schools. A Science Night was held at Challenger Elementary School: 500 students and parents learned about water and energy conservation, habitat certification and other County programs.



Water Tower Competition judging

In October, multiple campus tours are held throughout the school year for elementary, middle, and high schools students; many campus tours are scheduled by teachers attending NatureScape Broward trainings. Campus tour programs were presented at Driftwood and Pines Middle Schools and South Plantation High School. Other activities included participation in the Gifted and Talented Symposium for 160 teachers; the STEM and Computer Science Education Resource Fair for 150 participants; a Human Water Cycle presentation at Quiet Waters Elementary School; and judging for the American Water Works Association's Water

Tower Competition, a science-oriented competition introducing high school and middle school students to engineering and professions in the water industry fields.

During November and December, campus tours were conducted at Walter C Young and Plantation Middle Schools and Dillard and Hollywood Hills High Schools. Staff participated in Science Curriculum Night at Challenger Elementary School for over 400 participants and, presentations at after-school eco clubs.

A select number of students were invited to participate in the 9<sup>th</sup> Annual Southeast Florida Regional Climate Leadership Summit which was held at the Fort Lauderdale Convention Center. EPCRD and SBBC staff organized student participation and held a round-table discussion on various climate issues with special guests and presentations by:

- Broward County Mayor Beam Furr
- City of Hollywood Mayor Josh Levy
- Delaney Reynolds, Youth Speaker at the Regional Climate Summit/Founder of the Sink or Swim Project
- Erik Neugaard, Port Everglades
- Dr. Carolina Maran, EPCRD Water Resources Manager
- Katie Lelis, EPCRD GISP

EPCRD staff also sought student input on what types of presentations and activities they would like to include in a potential Youth Climate Summit.



School and County staff, along with guest speakers participated in a round-table discussion with students at the 9<sup>th</sup> Annual Southeast Florida Regional Climate Leadership Summit.

### **Career Days**

NatureScape Broward staff participated in Career Days at Forest Hills, Royal Palm, and Oriole Elementary Schools. In addition, staff connected multiple schools with Florida Agriculture in the Classroom, Broward County Air Quality, local municipalities, Florida Forest Service, the South Florida Water Management District, South Florida Audubon Society, and the South Florida Public Archaeology Network for Career Day presentations. EPCRD staff also participated in the STEM Girls United Conference at McArthur High School in June, a conference for 5<sup>th</sup> grade girls to learn about the exciting world of STEM jobs.



### Regional Envirothon for High School Students

NatureScape Broward staff assisted School Board staff and members of the Environmental Conservation Organization in hosting this annual event in February. The Envirothon is a field-oriented program. Students, working in teams of five, use critical thinking, problem-solving, and communications to answer questions and conduct hands-on investigations about environmental issues. These inter-related and broad study areas teach a holistic approach to natural resource conservation and can easily be incorporated into a teaching curriculum.

### Young Southeast Asian Leaders Initiative Program – Year Four

EPCRD's visiting Fellow from Malaysia made a presentation to Nova Eisenhower Elementary School in May where the Fellow compared and contrasted local habitats in her native Malaysia with the flora and fauna of the Everglades.

### PSA Water Conservation Contest for Elementary, Middle and High School students

Students created a 30-second PSA video with the focus *#watermatters – a day without water?* The contest was designed to inspire and empower students to educate others about the importance of water conservation. The videos had to show water conservation at schools and include what a day without water looks like to the students. The winning school was Orange Brook Elementary School which was recognized at the P<sub>3</sub> Eco-Challenge Awards Ceremony and won a water bottle filler for their entry "Newsflash, No Water....". Other top finishers won vertical grow bags and composters.

### "How Low Can You Go Contest"

NatureScape Broward staff helped school to monitor and reduce their water consumption for a new Water Conservation category.

"How Low Can You Go" partners with the Miami Heat Basketball franchise; the winning school get tickets to a Heat home game and other prizes.

Nine schools sought to reduce water consumption during an approximately three-month period. Driftwood Middle School won for reducing the most water and was recognized during a Miami Heat game. The How Low Can You Go Ceremony was held at American Airlines Arena; EPCRD provided t-shirts for the winning students and staff.



Winners of the "How Low Can You Go" water challenge at the Miami Heat basketball game

**“An Inconvenient Sequel”**

In celebration of Earth Day, Campus Climate Corps partnered with BCPS to present students with a private screening of this movie at the Savor Theater in Fort Lauderdale. Broward Mayor Beam Furr and Commissioner Nan Rich provided opening remarks discussing the issue of climate change and climate resiliency. After viewing the film, Dr. Jennifer Jurado provided additional remarks and led a question and answer session with the students.



Students attended “An Inconvenient Sequel” screening with Broward Mayor Beam Furr

### Community Foundation of Broward and the Funders Network Grants - Junior Sustainability Stewards at Dillard High School



Junior Sustainability Stewards and mentors

EPCRD received grant funds to introduce at-risk students to STEM/environmental citizen science, experimentation, mentoring, scholarships and a career path toward environmental science or advocacy/policy making. The Junior Sustainability Stewards program, along with YMCA afterschool STEM and Robotics Programs at Dillard High School, aimed to give students the skills and professional connections for them to 1) become “climate sustainability stewards” and advocate on behalf of their neighborhood’s

environmental issues, and 2) identify potential environmental/sustainability career pathways. Junior Stewards received support from mentors who worked with them to dig deep into regional environmental issues and challenges facing their community and develop their own scientific solutions and research. At the end of the school-year, students presented their final Capstone projects to a panel of environmental judges and then competed for paid summer internships. Five summer internships were completed, and the summer program took students on three off-site field trips to local regional parks and natural recreation areas.

### Ongoing Classroom Programs Offered to Teachers and Students

#### Everglades Food Web activity

Students play the role of different flora and fauna in the Everglades and learn about adaptation, habitat and interdependence, as well as human impacts to that fragile ecosystem.



### Container Garden Program for Elementary and Middle School Students

Students learn about plant structures and create their own container gardens. This program also incorporates and explains the concepts of reduce, reuse and recycle and presents action steps that students can take to incorporate sustainable behaviors into their daily lives.

### EnviroScape Model

Staff continue to use this demonstration model to teach about non-point source pollution and water quality through a visual, hands-on interaction.

### Task 4 – Youth Climate Summit

A new task, planning is currently underway for a Youth Climate Summit. A meeting to discuss the scope of the Summit, possible venues, and speakers was held in July. The Summit is tentatively planned for January 2019 in Fort Lauderdale.



### Task 5 -Staff Training for Custodial Staff, Facilities Managers, and Support Personnel



During the reporting period, NatureScape Broward's Water Conservation Specialist organized three custodial irrigation training sessions (October, March, and June) at McArthur High School which allowed for actual field repair lessons. Custodial staff were able to identify and fix minor repairs on McArthur High's campus, as well as being given an opportunity to do some planting, mulching, and pruning. A total of 40 facilities staff attended these trainings. During the six-hour trainings, NatureScape Broward and SBBC staff provided

information on improving the efficiency of school irrigation systems to save water and money, along with maintenance fundamentals. Additionally, training on indoor water conservation best management practices is provided to BCPS staff which are also reminded about the high rates of water consumption in the schools, retrofits available for faucets, toilets, and kitchen use, including Somat machines and pre-rinse spray valves. Staff stressed the importance of reporting water

leaks and items that need repair to appropriate SBBC personnel, as well as ways to combat high water use at the schools.

The trainings also introduce the NatureScape Broward program, an overview of the County's "Know the Flow" outreach program, and information on landscaping best management practices. NatureScape Broward plans on continuing to host these trainings at various schools to enable the hands-on experience for the staff as well as providing landscape improvements at the same time.

## Task 6 – Environmental Recognition/School Certifications

### **Broward Habitat Connectivity Project - Year Two**

The Broward Habitat Connectivity Project, a partnership between NatureScape Broward, National Wildlife Federation, and the Community Foundation of Broward seeks to provide habitat for migrating songbirds, increase tree canopy within urban Broward County communities where existing canopy is lacking, and engage residents in environmental stewardship and habitat restoration. During the first year of the project, native trees and plants were installed at six Broward schools - Lauderdale Lakes

Middle School, Oriole Elementary School, Silver Lakes Middle School, North Lauderdale PK – 8, Wingate Oaks Center, and Larkdale Elementary School. In this second year of the project, NatureScape staff continued to work within the school and neighboring communities, providing training to teachers as well as labor and plant materials for supplemental bird and butterfly gardens. Additional landscaping tools, garden hoses and mulch were provided to schools, teachers, and students at these schools.

**Tree giveaways** were held in the communities where these schools are located to encourage greater participation in the Habitat Connectivity project. (Lauderhill, Lauderdale Lakes, North Lauderdale - 150 trees.) After Hurricane Irma, NatureScape staff replaced trees at each of the schools affected by the storm.

**Other landscape installations and National Wildlife Federation's Schoolyard Habitats®** were provided by NatureScape Broward staff during the reporting period:





Memorial tree planting at Piper High School to honor victims at Marjory Stoneman Douglas High School

NatureScape Broward staff arranged for the planting of a Memorial tree at Piper High School to honor the victims of the Marjory Stoneman Douglas shooting along with pollinator garden and a butterfly and lady beetle release.

Challenger Elementary School was awarded a Whole Foods Fruit Garden Grant in conjunction with NatureScape Broward's partnership with South Florida Audubon. Approximately 12 trees were planted on the campus by students in February.

A total of 38 public, public charter schools and centers were certified as **National Wildlife Federation's Schoolyard Habitats®** during the reporting period. Also see Map **Appendix A**.

Boyd Anderson High School	Challenger Elementary School
Chapel Trail Elementary School	Everglades Elementary School
Hawkes Bluff Elementary School	J.P. Taravella High School
Liberty Elementary School	Oriole Elementary School
Panther Run Elementary School	North Lauderdale PK-8
Pine Ridge Education Center	Piper High School
Rock Island Elementary School	Sandpiper Elementary School
Sawgrass Elementary School	Village Elementary School
Welleby Elementary School	Sheridan Technical High School
Hollywood Central Elementary	Hollywood Park Elementary
West Hollywood Elementary	Orange Brook Elementary School
Mirror Lake Elementary School	Parks Lakes Elementary School
Pines Lakes Elementary School	Lakeside Elementary School
Atlantic Technical College & Magnet High School	Charles R. Drew Elementary School
Seagull Alternative High School	C. Robert Markham Elementary
Davie Elementary School	Central Charter School
Franklin Academy Pembroke Pines (K-8) Campus	Pembroke Pines Charter Elementary - West Campus
Renaissance Charter School at Pines Charter school	RISE Academy Schools of Science and Technology
Somerset Pines Academy	Somerset Academy Pompano

## Task 7 – Water Matters Day Partnerships

The Sixteenth Annual Broward Water Matters Day was held on March 10, 2018, with the theme of “*Water Matters ... and Conservation Pays.*” 3,872 Broward County students and residents attended this year’s event. In addition to the large number of students and their parents that attended, numerous water conservation and environmental stewardship activities were directly supported by students. Approximately 80 students from many schools assisted as volunteers with the distribution of 2,300 trees, shrubs, groundcovers and wildflowers in the plant giveaway area.

BCPS STEM+CS hosted booths and numerous schools hosted and/or assisted in booths providing educational activities, displays, games and fundraising. See table below.



### SCHOOL PARTICIPATION IN WATER MATTERS DAY

MONARCH HIGH SCHOOL ENVIRONMENTAL CLUB	Tree Giveaway, Event Surveys
DRIFTWOOD MIDDLE SCHOOL	Tree Giveaway
MIRAMAR HIGH SCHOOL	Tree Giveaway
MCARTHUR HIGH SCHOOL	Agriculture in the Classroom – Tree Giveaway
GRIFFIN ELEMENTARY ECO PATROL	Micro Plastics in Our Environment
SOUTH BROWARD HIGH SCHOOL	Plastic Free Mermaids
SOUTH PLANTATION HIGH SCHOOL	Water conservation and Everglades restoration
EVERGLADES RESTORATION MAGNET PROGRAM	Tree Giveaway
CORAL SPRINGS HIGH SCHOOL	National Wildlife Federation – Ranger Rick
HALLANDALE HIGH SCHOOL	Tree Giveaway
SEAGULL SCHOOL	Tree Giveaway
WESTERN HIGH SCHOOL – LATINOS IN ACTION	Event Parking and Tree Giveaway
MIRAMAR HIGH SCHOOL	Tree Giveaway
HOLLYWOOD HILLS HIGH SCHOOL	Tree Giveaway
CYPRESS BAY HIGH SCHOOL	Tree Giveaway

An estimated 830 students attended the event as well for extra credit. As always, a literary contest for students is part of the event. For the participating schools, the topic for this year’s school literary contest was “*If you were asked to organize a Youth Climate Summit, what kind of topics and presentations would you suggest, what speakers do you think would offer the greatest inspiration and information and where do you think it should be hosted?*” The input provided by

these students, potential participants at the Youth Climate Summit, will be used to help plan the event.



School Board Member Nora Rupert poses with Alec Zamudio of Apollo Middle School, winner of the Water Matters Day Literary Contest.

Live Oak which includes hands-on leadership experience, field trips, environmental projects, and team building opportunities. The top high school winner won four passes for a snorkeling trip from Dixie Divers.

School Board Member Nora Rupert presented the prizes during the opening ceremonies at the event. Winning students and their teachers from Glades Middle, Plantation Middle, Apollo Middle, McArthur High, Western High, and South Plantation High Schools were awarded tickets to educational venues, natural area attractions and airboat tours. The prizes were solicited by NatureScape Broward staff with assistance from the outreach coordinator for the Central Broward Water Control District.

The top middle school winner won a week of "Teen Eco Experience" day camp from Camp

Promotions for Water Matters Day were extensive and included a press release distributed to local media through Broward County's public information office; radio and newspaper advertisements; Facebook and Twitter; and posters in both English and Spanish that were distributed to public libraries, parks, and all of the Broward County Public Schools. Additional promotions for the event included a feature on the Broward County website and mention at numerous events hosted by the EPCRD that led up to Water Matters Day. An article promoting the event also appeared in the *SchoolScapes* newsletter prior to the event.

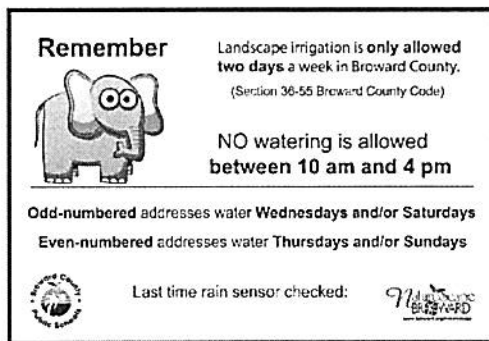
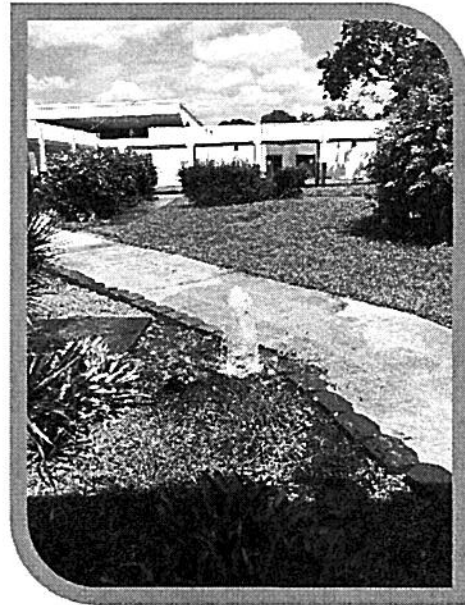


Cindy Griffin and Rebecca Malones from the STEM+ Computer Science Program (bottom, second and third from left) received the 2018 Water Matters Day partner proclamation on behalf of SBBC.

Partners and sponsors of the 2018 Water Matters Day event, including the School Board, were recognized by the Broward County Board of County Commissioners in a proclamation ceremony on February 27, 2018.

## Task 8 – Irrigation System Design and Operational Evaluations

During the reporting period, 38 irrigation evaluations were conducted at 15 school facilities (including two follow-up evaluations) with 35,820,939 gallons saved. NatureScape Broward's School Water Conservation Specialist encourages the school's custodial staff to be present during the evaluation and when feasible, to make repairs as the evaluation takes place. This provides an opportunity to provide information regarding best management practices for the irrigation system as well as reminders regarding efficient irrigation. In addition to assessing the irrigation system, landscaping advice is often requested. Resource materials to enhance the school's landscaping are also provided as available. Evaluations were conducted at West Hollywood, Central Hollywood, North Lauderdale, Lake Forest, Peters, and Westchester Elementary schools; Nova (2) and Indian Ridge Middle schools; Lauderdale 6-12; Coral Springs, Dillard, and Nova (2) High Schools; and, Atlantic Technical College and Sheridan Technical Center.



New stickers were prepared for all irrigation controllers at schools to remind staff of Broward County's Irrigation Ordinance.

June 2009 is providing an annual estimated cost savings of over \$923,244 and over 417,847 gallons of water saved. (*See Appendices B and C*)

A number of this year's evaluations were on systems utilizing municipal water supplies as their irrigation source. These evaluations produce considerable cost savings for the School District, especially when settings are modified to comply with the Mandatory Year-Round Landscape Irrigation Rule. To date, irrigation evaluations have been conducted at over 200 schools on their irrigation systems. Annual water savings realized through irrigation system evaluations conducted at all schools since

Through coordination of joint training workshops and sharing of information, NatureScape and site-based school custodial staff, along with SBBC staff have developed an excellent working relationship. Information developed during evaluations has been made available to staff at each facility and to School Board management. This year, NatureScape Broward staff along with SBBC personnel began videotaping the training to create a refresher video training tutorial for custodial

staff that have taken the class previously to stay current on any updated information regarding water conservation.

Additionally, three ESP-SMTe irrigation controllers, and three soil sensors from a grant that EPCRD received from SFWMD were deployed at schools to assist in the District's water conservation efforts.

## Task 9 – Water Audits within Schools

During the reporting period, the NatureScape Broward School Water Conservation Specialist, along with interns, conducted indoor water use audits at three schools-Nova Middle School, Nova High School and Sheridan Technical College. Students are asked each year to participate in the water audits. This year, students participating in an internship program at Broward County and a student attending the plumbing apprenticeship program at Sheridan Technical College were trained in doing the audits in the school bathrooms.



The indoor water audit program follows procedures outlined in SFWMD's *Water Efficiency and Self-Conducted Water Audits at Commercial and Institutional Facilities: A Guide for Facility Managers*. This guidebook was prepared by the South Florida Water Management District (SFWMD) based on its own experience assessing water use efficiency at its own facilities.

The water audit is a systematic survey of all water-using fixtures, appliances, equipment, and practices at a campus. The audit can identify leaks, areas of excessive consumption, and other opportunities for efficiency improvements; it can also identify the degradation of previously efficient devices. Audits can form the basis of efficiency improvement and investment planning and provide a benchmark for measuring water efficiency program successes.

Specific recommendations on efficiency improvement measures for most points of water use have been prepared and are provided to these schools as well as SBBC administration. Estimates of their costs, savings, and investment recovery periods have been included whenever possible. Using SFWMD's Guide, data collected during the assessment was entered into water use and savings calculators to generate savings estimates.

SBBC staff work with the NatureScape Broward Water Conservation Specialist to ensure that recommendations are within the framework of what can be accomplished at the School District. The findings of this year's audits are as follows:

The total cost estimate to follow the recommended water-use efficiency improvement measures at Nova High School is \$3,197. The total annual savings potential is estimated at \$19,248 and the potential annual water savings is estimated at 1,974,455 gallons.

The total cost estimate to follow the recommended water-use efficiency improvement measures at Nova Middle School is \$3,792. The total annual savings potential is estimated at \$19,544 and the potential annual water savings is estimated at 2,004,733 gallons.

The total cost estimate to follow the recommended water-use efficiency improvement measures at Sheridan Technical College is \$3,594. The total annual savings potential is estimated at \$32,875 and the potential annual water savings is estimated at 2,746,421 gallons.

In November 2017, the NatureScape Water Conservation Specialist was asked to investigate high water usage at Silver Shores Elementary School in Miramar. In conjunction with District staff, the source of the water loss was discovered, resulting in a District savings of 13,104,000 gallons of water. They were also able to test and obtain a new water meter for the school that was also deemed to be faulty.

Per the request of Environmental Conservation/Utility Management staff, the NatureScape Broward Water Conservation Specialist compiled a comprehensive spreadsheet of District water usage for Fiscal Years 2012 through 2017.

### **Task 10 – Coordination/Administration**

Several formal coordination meetings and conference calls between SBBC and County staff were held to discuss the implementation of the various tasks associated with the Partnership Agreement, as well as to address issues of shared interest.

These meetings included one or more of the following representatives from EPCRD:

- Jennifer Jurado, Ph.D., Division Director
- Carolina Maran, Ph.D., Water Resources Manager
- Robert “Rudy” Rudolph, Water Planning Program Manager
- Victor Suarez, NatureScape Broward Education Specialist
- Maena Angelotti, NatureScape Broward Water Conservation Specialist
- Kimberly Mayo, NatureScape Broward Program Assistant
- Rose Bechard-Butman, NatureScape Broward Outreach Coordinator

Key members of SBBC that attended coordination meetings included:

- Susan Cantrick, Director Applied Learning
- Lisa Milenkovic, PhD, Supervisor, STEM+Computer Science
- AnnMargareth Marousky, Computer Science Instructional Specialist
- Cindy Griffith, Environmental Stewardship Instructional Facilitator
- Merilyn Johnson, PhD, Science Supervisor
- Rebecca Malones, Instructional Facilitator Math, Science, & Gifted Department
- Rob Jindracek, Manager, Environmental Conservation/Utility Management



- Ed See, Environmental Conservation/Utility Management

In addition to this high-level coordination, throughout the reporting period, NatureScape staff coordinated extensively with numerous teachers and other SBBC staff to ensure continued advancement of the partnership goals. During the many visits made by NatureScape staff to the schools, staff took the time to discuss the value of the P<sub>3</sub> Eco-Challenge and encouraged them to participate. Additionally, the NatureScape Broward Education Specialist promoted the P<sub>3</sub> Eco-Challenge at the Broward County Science Fair where he addressed teachers, judges, and fair sponsors about the Challenge and how they can participate and serve as potential event sponsors. These efforts resulted in securing additional P<sub>3</sub> Eco-Challenge funds this year, as well as providing an opportunity to promote Water Matters Day.

EPCRD worked with the National Wildlife Federation and SBBC to prepare a proposal for a major grant from the National Oceanic and Atmospheric Administration through their Environmental Literacy Grants program. The proposal, Building Community Resiliency through Broward County Schools, would help to fund Climate Change education for all middle school teachers. The group also partnered on submitting a grant for a Five Star and Urban Waters Restoration Grant from the National Fish and Wildlife Foundation.

NatureScape Broward staff were also able to identify numerous grant opportunities for teachers interested in identifying funding and improving their campus landscapes, as well as assisting on applications for various competitions and prizes. These included:

- Assisted Driftwood Middle School with the water portion of Green Apple application;
- Shared information on a \$500 grant opportunity from Warner Brothers called “Scooby Doo and the Mystery Machine Inc Doo Good” with teachers;
- Shared information on the “Craig Tufts Educational Scholarship” opportunity which funds youth participation at a week-long summer outdoor educational adventure camp. This scholarship was established in memory of Mr. Tufts, the former Chief Naturalist of the National Wildlife Federation; and,
- Shared information on Aquatic Plant Management Society’s scholarship fund for High School students.

Two editions of the *SchoolScapes* e-newsletter were distributed throughout the school system in January and June. This e-newsletter shares updates on the activities of the Environmental Partnership and is distributed to hundreds of teachers and administrators, as well as school district personnel such as curriculum staff and custodians. It is also sent to school staff after initial meetings have taken place to educate them about the Partnership and activities associated with it and other teachers and staff, upon request. The January 2018 edition of *SchoolScapes* announced the upcoming Water Matters Day and 2018 P<sub>3</sub> Eco-Challenge events, shared professional development training opportunities, programs being done in the schools, and introduced the Habitat Connectivity Project. The June 2018 edition of *SchoolScapes* highlighted the 2018 P<sub>3</sub> Eco-Challenge Awards Ceremony and achievements, Water Matters Day, and the Habitat Connectivity Project.



In accordance with the terms of the agreement, the annual report for the 2016-2017 School Year was provided to SBBC administration in September 2017 along with additional information to support the annual renewal of the current Partnership agreement.

Finally, there were several coordination meetings between EPCRD staff and SBBC staff in advance of preparing the new 5-year agreement that went into effect in December 2017.



## Appendix A – Landscape Installations



### Is your school on the map?

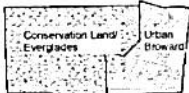
(223 certified schools so far, Jan 2018)

NatureScape recognizes Broward County public schools certified as Schoolyard Habitats™ through the National Wildlife Federation and schools which have been recognized through the Florida Friendly Landscaping Program™.

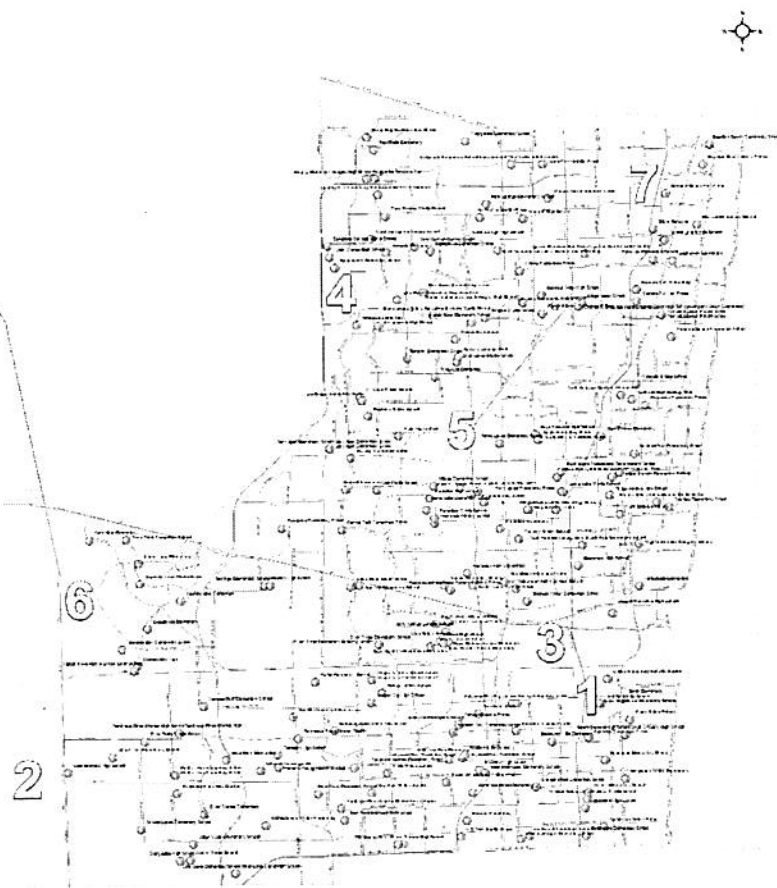
It is our goal for every Broward County Public School Property to become certified as a National Wildlife Federation Schoolyard Habitats®

The Broward County School District is the first in the country to be certified by the National Wildlife Federation

2/3 of Broward County is Conservation Land



85% of Urban Broward County has applied for Community Wildlife Habitat certification, or is already certified



NatureScape Certified School

Certifications per District

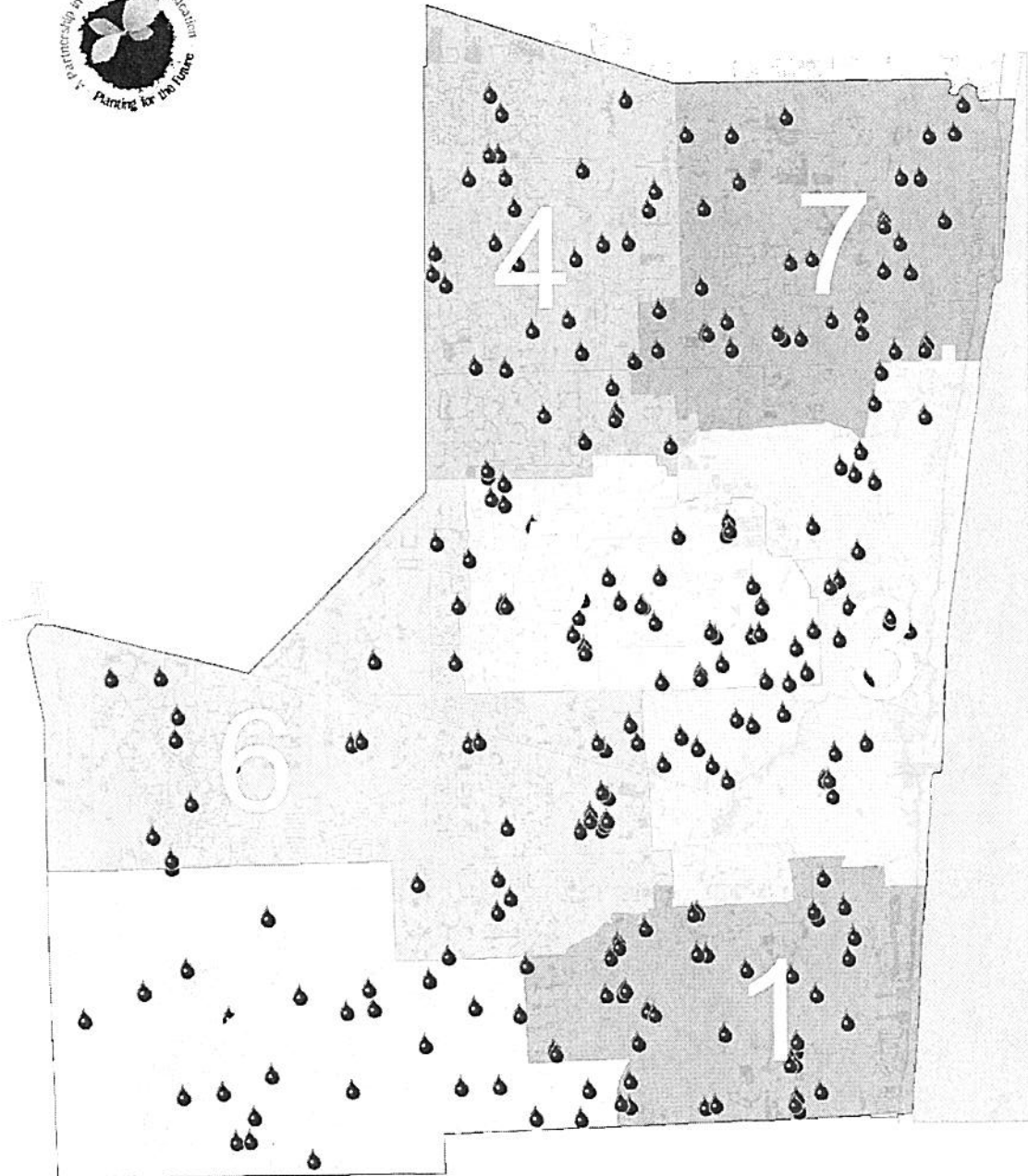
- District 1 - 38
- District 2 - 31
- District 3 - 21
- District 4 - 23
- District 5 - 28
- District 6 - 42
- District 7 - 30
- Total — 223

Source: NatureScape, Jan 2018



### Appendix B – Irrigation Evaluations

#### Environmental Partnership School Irrigation Evaluations Completed (By School District)



## Appendix C – Summary of Activities

### School Programs Summary

Reporting Period Totals	Number of Programs	Number of Students Reached
SY 17-18 School Programs (District wide)	236	5,830
<b>Cumulative Totals</b>		
School Programs (District wide)	1853	56,033
Community Outreach, NatureScape Education Days, and Special Events	44	14,379

### Teacher Training Summary

Reporting Period Totals	Number of Programs	Teachers Trained
Teacher In-service Training	3	42
<b>Cumulative Totals</b>		
Teacher In-service Training	223	494
Reporting Period Totals	Number of Programs	Teachers Trained
NWF Habitat Steward Training	1	28
<b>Cumulative Totals</b>		
NWF Habitat Steward Training	12	217

### Custodial/Facilities Training Summary

Reporting Period Totals	Number of Programs	Custodial/Facilities Staff Trained
Custodial/Facilities Training	3	60
<b>Cumulative Totals</b>		
Custodial/Facilities Training	31	998

### NatureScape Certifications Summary

Reporting Period Totals	Number of Certifications
NWF Habitat Certification	38
<b>Cumulative Totals</b>	
Schoolyard Habitat Certifications	216



### Irrigation Evaluations Summary

Reporting Period Totals		
Irrigation System Evaluations	35,820,939	GPY saved through irrigation evaluations
	17	Schools receiving irrigation evaluations
	38	Irrigation systems evaluated
	\$149,743	Annual Savings
Cumulative Totals		
Irrigation System Evaluations	417,846,758	GPY saved through irrigation evaluations
	285	Schools receiving irrigation evaluations
	626	Irrigation systems evaluated
	\$923,244	Annual Savings

Some schools have received multiple visits through the years.

### Water Audits Summary

Reporting Period Totals		
Water Audits	6,725,609	Potential annual water savings (GPY)
	3	Schools receiving water audits
	\$10,583	Cost of Retrofits/One-time investment
	\$71,667	Identified Potential Annual Savings
Cumulative Totals		
Water Audits	27,150,821	Potential annual water savings (GPY)
	20	Schools receiving water audits
	\$195,150	Cost of Retrofits/One-time investment
	\$558,910	Identified Potential Annual Savings

For more information, please contact:  
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