



Firm Submitting Proposal: Bluegrass Greensource

Complete Address: 835 National Ave. Lexington Ky 40502

Street City Zip

Contact Name: Amy Sunner Title: Executive Director

Telephone Number: 859 266-0264

Email address: amy @ babreensource, org

#### **AFFIDAVIT**

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sworn, sta	- 4		11 11 ESS 10 CONT.					,
	ates under pe	nalty of perjury a	is follows	S:				
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1. His/her name is Amy Sohner						and he/she	is the indivi	dual
submitting	g the	proposal	or	is	the	authorized	representa	ative
of Blu	regrass 1	Greensourc	e			, the	entity submi	tting
the propo	sal hereinaft	er referred to as	"Proposi	er").				
submitting of BU	the	proposal Sveensouvo	or	is	the	authorized	representa	a

- 2. Proposer will pay all taxes and fees, which are owed to the Lexington-Fayette Urban County Government at the time the proposal is submitted, prior to award of the contract and will maintain a "current" status in regard to those taxes and fees during the life of the contract.
- 3. Proposer will obtain a Lexington-Fayette Urban County Government business license, if applicable, prior to award of the contract.
- 4. Proposer has authorized the Division of Central Purchasing to verify the above-mentioned information with the Division of Revenue and to disclose to the Urban County Council that taxes and/or fees are delinquent or that a business license has not been obtained.
- 5. Proposer has not knowingly violated any provision of the campaign finance laws of the Commonwealth of Kentucky within the past five (5) years and the award of a contract to the Proposer will not violate any provision of the campaign finance laws of the Commonwealth.
- 6. Proposer has not knowingly violated any provision of Chapter 25 of the Lexington-Fayette Urban County Government Code of Ordinances, known as "Ethics Act."

Continued on next page

7. Proposer acknowledges that "knowingly" for purposes of this Affidavit means, with respect to conduct or to circumstances described by a statute or ordinance defining an offense, that a person is aware or should have been aware that his conduct is of that nature or that the circumstance exists.

Further, Affiant sayeth naught.

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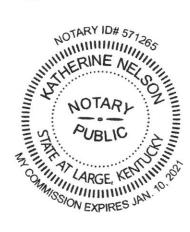
My	Solver		
STATE OF	Kentucky		
COUNTY OF	Fayette		

The foregoing instrument was subscribed, sworn to and acknowledged before me

of Man 2018.

My Commission expires: 1-10-2021

NOTARY PUBLIC, STATE AT LARGE



#### **EQUAL OPPORTUNITY AGREEMENT**

#### Standard Title VI Assurance

The Lexington Fayette-Urban County Government, (hereinafter referred to as the "Recipient") hereby agrees that as a condition to receiving any Federal financial assistance from the U.S. Department of Transportation, it will comply with Title VI of the Civil Rights Act of 1964, 78Stat.252, 42 U.S.C. 2000d-4 (hereinafter referred to as the "Act"), and all requirements imposed by or pursuant to Title 49, Code of Federal Regulations, U.S. Department of Transportation, Subtitle A, Office of the Secretary, (49 CFR, Part 21) Nondiscrimination in Federally Assisted Program of the Department of Transportation – Effectuation of Title VI of the Civil Rights Act of 1964 (hereinafter referred to as the "Regulations") and other pertinent directives, no person in the United States shall, on the grounds of race, color, national origin, sex, age (over 40), religion, sexual orientation, gender identity, veteran status, or disability be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity for which the Recipient receives Federal financial assistance from the U.S. Department of Transportation, including the Federal Highway Administration, and hereby gives assurance that will promptly take any necessary measures to effectuate this agreement. This assurance is required by subsection 21.7(a) (1) of the Regulations.

#### The Law

- Title VII of the Civil Rights Act of 1964 (amended 1972) states that it is unlawful for an employer to discriminate in employment because of race, color, religion, sex, age (40-70 years) or national origin.
- Executive Order No. 11246 on Nondiscrimination under Federal contract prohibits employment discrimination by contractor and sub-contractor doing business with the Federal Government or recipients of Federal funds. This order was later amended by Executive Order No. 11375 to prohibit discrimination on the basis of sex.
- Section 503 of the Rehabilitation Act of 1973 states:

The Contractor will not discriminate against any employee or applicant for employment because of physical or mental handicap.

- Section 2012 of the Vietnam Era Veterans Readjustment Act of 1973 requires Affirmative Action on behalf of disabled veterans and veterans of the Vietnam Era by contractors having Federal contracts.
- Section 206(A) of Executive Order 12086, Consolidation of Contract Compliance Functions for Equal Employment Opportunity, states:

The Secretary of Labor may investigate the employment practices of any Government contractor or sub-contractor to determine whether or not the contractual provisions specified in Section 202 of this order have been violated.

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The Lexington-Fayette Urban County Government practices Equal Opportunity in recruiting, hiring and promoting. It is the Government's intent to affirmatively provide employment opportunities for those individuals who have previously not been allowed to enter into the mainstream of society. Because of its importance to the local Government, this policy carries the full endorsement of the Mayor, Commissioners, Directors and all supervisory personnel. In following this commitment to Equal Employment Opportunity and because the Government is the benefactor of the Federal funds, it is both against the Urban County Government policy and illegal for the Government to let contracts to companies which knowingly or unknowingly practice discrimination in their employment practices. Violation of the above mentioned ordinances may cause a contract to be canceled and the contractors may be declared ineligible for future consideration.

Please sign this statement in the appropriate space acknowledging that you have read and understand the provisions contained herein. Return this document as part of your application packet.

#### **Bidders**

	I/We agree to comply with the Civil Rights Laws listed above that govern employment rights of m Vietnam veterans, handicapped and aged persons.	ninorities,	women,
(	Signature bluer bluerass Greensource Name of Business		

Name of Organization: Bluegrass Greensource

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Administrators	3		3														
Professionals	16	3	12														
Superintendents																	
Supervisors																	
Foremen																	
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Protective Service																	
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Skilled Craft																	
Service/Maintenan																	
Total:																	

Prepared by: <u>Am</u> (	Sohner	Ex. Dir.	Date:	05	17	18
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(Name and Title)

Revised 2015-Dec-15

## GENERAL PROVISIONS

 Each Respondent shall comply with all Federal, State & Local regulations concerning this type of service or good.

The Respondent agrees to comply with all statutes, rules, and regulations governing safe and healthful working conditions, including the Occupational Health and Safety Act of 1970, 29 U.S.C. 650 et. seq., as amended, and KRS Chapter 338. The Respondent also agrees to notify the LFUCG in writing immediately upon detection of any unsafe and/or unhealthful working conditions at the job site. The Respondent agrees to indemnify, defend and hold the LFUCG harmless from all penalties, fines or other expenses arising out of the alleged violation of said laws.

- Failure to submit ALL forms and information required in this RFP may be grounds for disqualification.
- 3. Addenda: All addenda and IonWave Q&A, if any, shall be considered in making the proposal, and such addenda shall be made a part of this RFP. Before submitting a proposal, it is incumbent upon each proposer to be informed as to whether any addenda have been issued, and the failure to cover in the bid any such addenda may result in disqualification of that proposal.
- 4. Proposal Reservations: LFUCG reserves the right to reject any or all proposals, to award in whole or part, and to waive minor immaterial defects in proposals. LFUCG may consider any alternative proposal that meets its basic needs.
- Liability: LFUCG is not responsible for any cost incurred by a Respondent in the preparation of proposals.
- 6. Changes/Alterations: Respondent may change or withdraw a proposal at any time prior to the opening; however, no oral modifications will be allowed. Only letters, or other formal written requests for modifications or corrections of a previously submitted proposal which is addressed in the same manner as the proposal, and received by LFUCG prior to the scheduled closing time for receipt of proposals, will be accepted. The proposal, when opened, will then be corrected in accordance with such written request(s), provided that the written request is contained in a sealed envelope which is plainly marked "modifications of proposal".
- Clarification of Submittal: LFUCG reserves the right to obtain clarification of any point in a bid or to obtain additional information from a Respondent.
- Bribery Clause: By his/her signature on the bid, Respondent certifies that no employee of his/hers, any affiliate or Subcontractor, has bribed or attempted to

bribe an officer or employee of the LFUCG.

- 9. Additional Information: While not necessary, the Respondent may include any product brochures, software documentation, sample reports, or other documentation that may assist LFUCG in better understanding and evaluating the Respondent's response. Additional documentation shall not serve as a substitute for other documentation which is required by this RFP to be submitted with the proposal,
- 10. Ambiguity, Conflict or other Errors in RFP: If a Respondent discovers any ambiguity, conflict, discrepancy, omission or other error in the RFP, it shall immediately notify LFUCG of such error in writing and request modification or clarification of the document if allowable by the LFUCG.
- Agreement to Bid Terms: In submitting this proposal, the Respondent agrees that it has carefully examined the specifications and all provisions relating to the work to be done attached hereto and made part of this proposal. By acceptance of a Contract under this RFP, proposer states that it understands the meaning, intent and requirements of the RFP and agrees to the same. The successful Respondent shall warrant that it is familiar with and understands all provisions herein and shall warrant that it can comply with them. No additional compensation to Respondent shall be authorized for services or expenses reasonably covered under these provisions that the proposer omits from its Proposal.
- 12. Cancellation: If the services to be performed hereunder by the Respondent are not performed in an acceptable manner to the LFUCG, the LFUCG may cancel this contract for cause by providing written notice to the proposer, giving at least thirty (30) days notice of the proposed cancellation and the reasons for same. During that time period, the proposer may seek to bring the performance of services hereunder to a level that is acceptable to the LFUCG, and the LFUCG may rescind the cancellation if such action is in its best interest.

#### A. Termination for Cause

- (1) LFUCG may terminate a contract because of the contractor's failure to perform its contractual duties
- (2) If a contractor is determined to be in default, LFUCG shall notify the contractor of the determination in writing, and may include a specified date by which the contractor shall cure the identified deficiencies. LFUCG may proceed with termination if the contractor fails to cure the deficiencies within the specified time.
- (3) A default in performance by a contractor for which a contract may be terminated shall include, but shall not necessarily be limited to:

 (a) Failure to perform the contract according to its terms, conditions and specifications;

(b) Failure to make delivery within the time specified or according

to a delivery schedule fixed by the contract;

(c) Late payment or nonpayment of bills for labor, materials, supplies, or equipment furnished in connection with a contract for construction services as evidenced by mechanics' liens filed pursuant to the provisions of KRS Chapter 376, or letters of indebtedness received from creditors by the purchasing agency:

(d) Failure to diligently advance the work under a contract for

construction services;

The filing of a bankruptcy petition by or against the contractor;
 or

(f) Actions that endanger the health, safely or welfare of the LFUCG or its citizens.

## B. At Will Termination

Notwithstanding the above provisions, the LFUCG may terminate this contract at will in accordance with the law upon providing thirty (30) days written notice of that intent, Payment for services or goods received prior to termination shall be made by the LFUCG provided these goods or services were provided in a manner acceptable to the LFUCG. Payment for those goods and services shall not be unreasonably withheld.

- 13. Assignment of Contract: The contractor shall not assign or subcontract any portion of the Contract without the express written consent of LFUCG. Any purported assignment or subcontract in violation hereof shall be void. It is expressly acknowledged that LFUCG shall never be required or obligated to consent to any request for assignment or subcontract; and further that such refusal to consent can be for any or no reason, fully within the sole discretion of LFUCG.
- No Waiver: No failure or delay by LFUCG in exercising any right, remedy, power or privilege hereunder, nor any single or partial exercise thereof, nor the exercise of any other right, remedy, power or privilege shall operate as a waiver hereof or thereof. No failure or delay by LFUCG in exercising any right, remedy, power or privilege under or in respect of this Contract shall affect the rights, remedies, powers or privileges of LFUCG hereunder or shall operate as a waiver thereof.
- Authority to do Business: The Respondent must be a duly organized and authorized to do business under the laws of Kentucky. Respondent must be in good standing and have full legal capacity to provide the services specified under this Contract. The Respondent must have all necessary right and lawful authority to enter into this Contract for the full term hereof and that proper corporate or

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other action has been duly taken authorizing the Respondent to enter into this Contract. The Respondent will provide LFUCG with a copy of a corporate resolution authorizing this action and a letter from an attorney confirming that the proposer is authorized to do business in the State of Kentucky if requested. All proposals must be signed by a duly authorized officer, agent or employee of the Respondent.

- 16. Governing Law: This Contract shall be governed by and construed in accordance with the laws of the Commonwealth of Kentucky. In the event of any proceedings regarding this Contract, the Parties agree that the venue shall be the Fayette County Circuit Court or the U.S. District Court for the Eastern District of Kentucky, Lexington Division. All parties expressly consent to personal jurisdiction and venue in such Court for the limited and sole purpose of proceedings relating to this Contract or any rights or obligations arising thereunder. Service of process may be accomplished by following the procedures prescribed by law.
- 17. Ability to Meet Obligations: Respondent affirmatively states that there are no actions, suits or proceedings of any kind pending against Respondent or, to the knowledge of the Respondent, threatened against the Respondent before or by any court, governmental body or agency or other tribunal or authority which would, if adversely determined, have a materially adverse effect on the authority or ability of Respondent to perform its obligations under this Contract, or which question the legality, validity or enforceability hereof or thereof.
- 18. Contractor understands and agrees that its employees, agents, or subcontractors are not employees of LFUCG for any purpose whatsoever. Contractor is an independent contractor at all times during the performance of the services specified.
- 19. If any term or provision of this Contract shall be found to be illegal or unenforceable, the remainder of the contract shall remain in full force and such term or provision shall be deemed stricken.
- 20. Contractor [or Vendor or Vendor's Employees] will not appropriate or make use of the Lexington-Fayette Urban County Government (LFUCG) name or any of its trade or service marks or property (including but not limited to any logo or seal), in any promotion, endorsement, advertisement, testimonial or similar use without the prior written consent of the government. If such consent is granted LFUCG reserves the unilateral right, in its sole discretion, to immediately terminate and revoke such use for any reason whatsoever. Contractor agrees that it shall cease and desist from any unauthorized use immediately upon being notified by LFUCG.

Signature

Date

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#### **Consultant Profile**

Bluegrass Greensource 835 National Ave. Lexington, KY 40502

Primary Contact:
Amy Sohner
Executive Director
amy@bgGreensource.org
859-266-1572

Established: 2001

Current number of employees: 16

John Paul Beard, Community Outreach Intern Ashley Bryant Cheney, Program Specialist, Volunteer Coordinator Kyle Hager, AmeriCorps VISTA Jennifer Lancaster, Communications Specialist Deb Larkin, Environmental Educator 🗸 Lindsie Nicholas, Watershed Coordinator Noel Osborn, Business Outreach Specialist Tammy Patrick, Finance Officer Michelle Patterson, Administrative Assistant Chris Porter, Development Director, Community Outreach Specialist Maxine Rudder, Deputy Director 🗸 Kara Sayles, Environmental Educator, Rain Garden Coordinator 🗸 Amy Sohner, Executive Director ~ Pattie Stivender, Education Coordinator < Shelby Tyree, Environmental Educator 🗸 Danny Woolums, Environmental Educator 🗸

#### Overview:

Bluegrass Greensource (BGGS) is a 17-year old environmental education and outreach organization currently serving 20 Central Kentucky counties. Our mission is to empower the Bluegrass to create a sustainable environment, which we accomplish by providing direct classroom engagement to preK-12th grade youth and by working with adults, businesses, and communities to provide the resources necessary to increase sustainability in the home, office, or community at large. In 2016, we had 108,610 engagements with Central Kentucky residents, and worked directly in 4,658 classrooms.

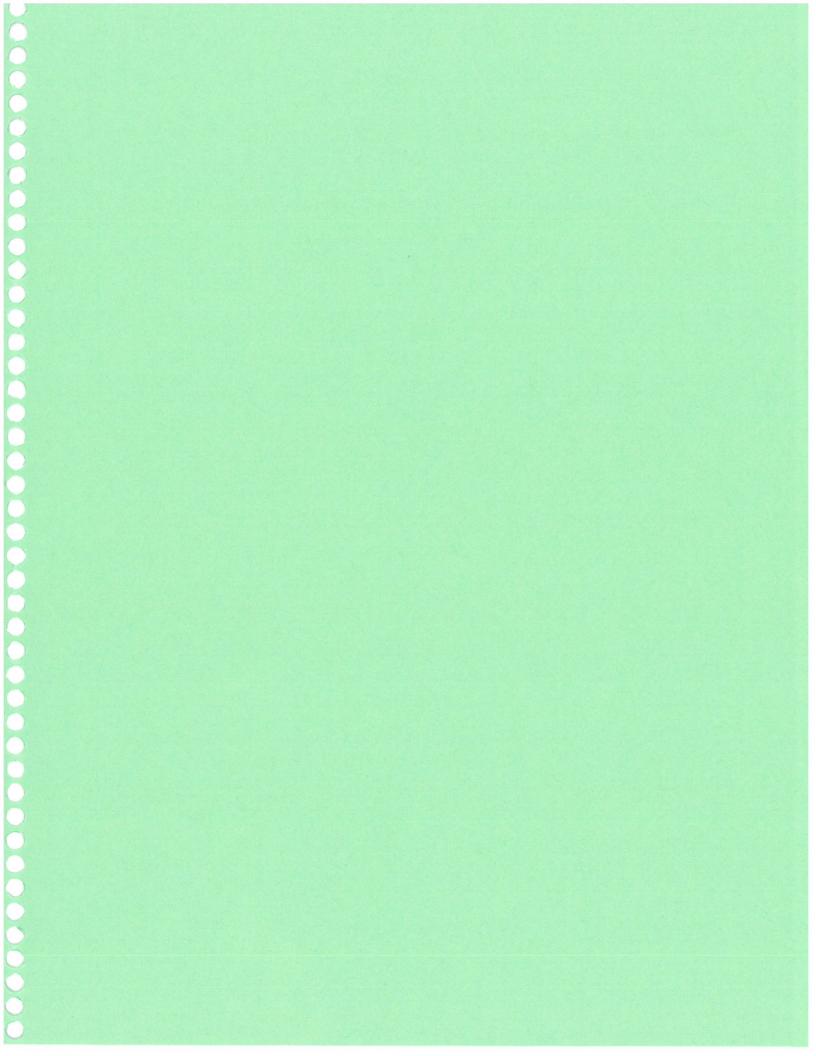
Our core belief is that environmental education does not advocate for a particular position, but instead provides credible, science-based information that provides recipients with a deeper understanding of how natural systems work and are impacted by human activity. Our model of education encourages Central Kentuckians to take small steps in their daily lives that create positive impacts on our shared environment. We focus our work on improving water quality, increasing energy efficiency, and reducing waste (including litter abatement and recycling). We believe that when enough residents take small-scale actions, their efforts create large-scale impacts.

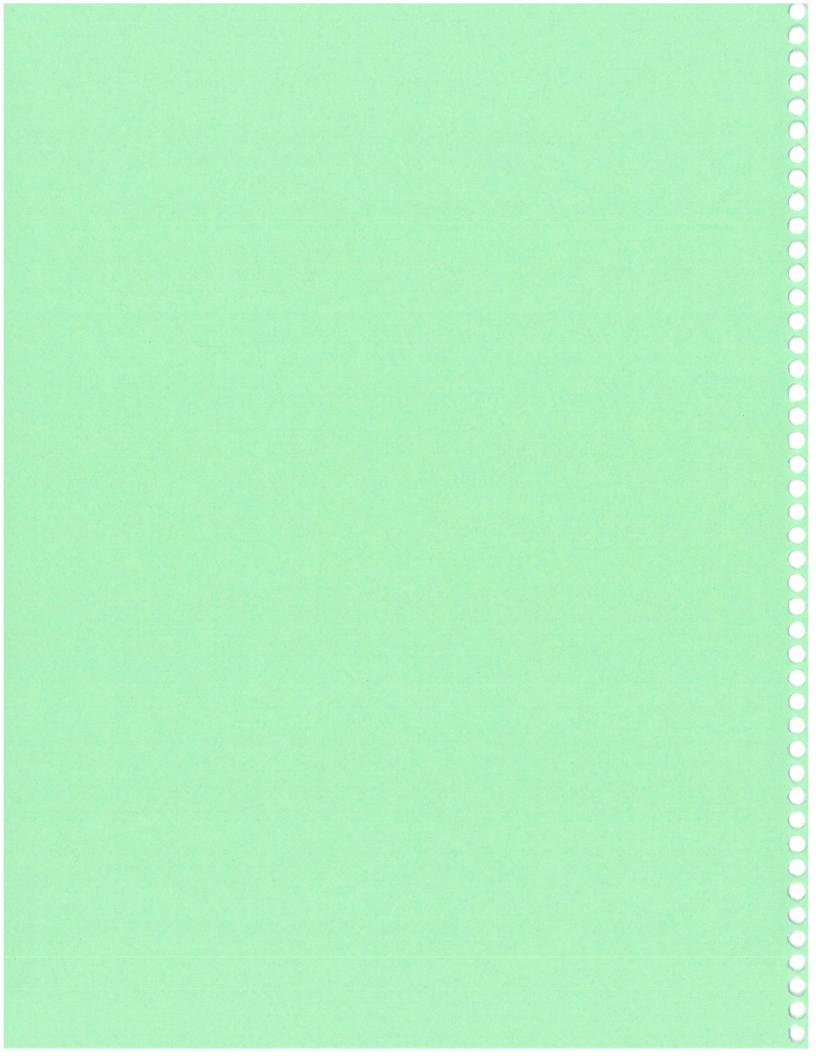
Bluegrass Greensource has worked under a contract with the City of Lexington since 2006. For the last 12 years, BGGS staff have worked closely with LFUCG employees to further Lexington's goals to reduce recycling contamination, improve water quality, and expand energy efficiency initiatives county-wide. The majority of that work has been done in the public and private schools throughout Lexington.

#### **Bluegrass Greensource Officers and Board of Directors**

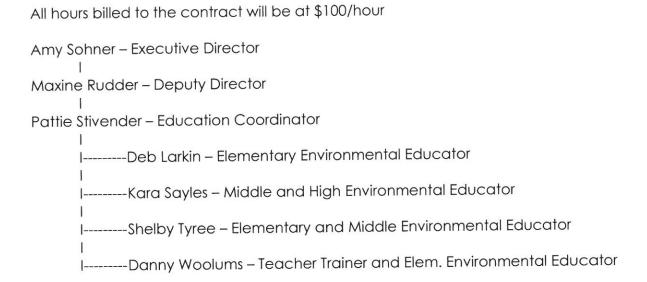
#### Board

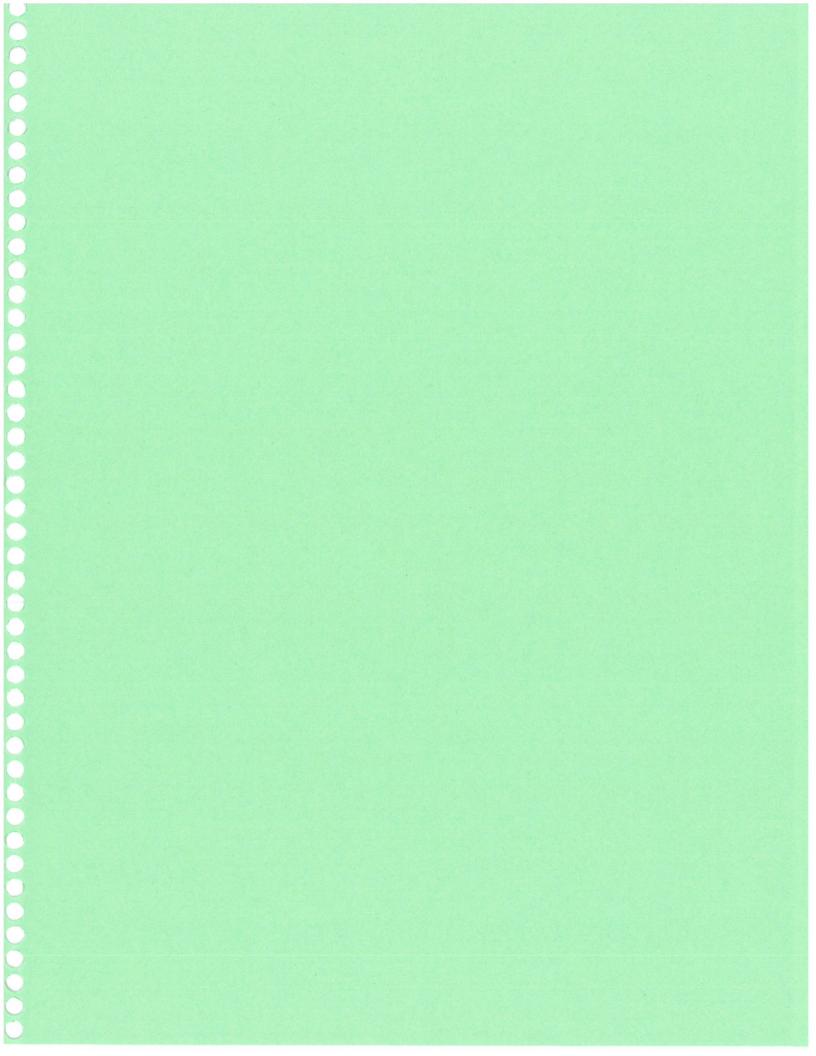
- Ken Gish; Chair; Attorney, Stites and Harbison, PLLC; 859-226-2300; kgish@stites.com. Board member since 2012
- 2. Tresine Logsdon; **Vice Chair**; Energy & Sustainability Curriculum Coordinator, Fayette County Public Schools; 859-619-6472; Tresine.Logsdon@fayette.kyschools.us. Board member since 2013.
- 3. Jacob Walbourn; **Secretary**; Attorney, McBrayer Real Estate Law; 859-231-8780; jwalbourn@mmlk.com. Board member since 2016.
- 4. Keleigh Arnett; **Treasurer**; VP Treasury Management Officer, PNC Bank; 859-221-2492; keleigh.arnett@pnc.com. Board member since 2016.
- E. Paulette Akers; Director, Division of Compliance Assistance, Kentucky Energy and Environment Cabinet; 502-782-6300; Paulette. Akers@ky.gov. Board member since 2017
- 6. Greg Butler; Municipal Relationship Manager, Republic Services; 859-619-3851; gbutler@republicservices.com. Board member since 2014.
- 7. John Gagel; Corporate Manager, Sustainability, Lexmark International, Inc.; 859-232-6462; jgagel@lexmark.com. Board member since 2015.
- 8. Dorothy Rader; Manager, Water Quality & Environmental Compliance, Kentucky American Water; 859-268-6317; Dorothy.rader@amwater.com. Board member since 2017.
- 9. Chris Thomason; Director of Health Promotion and Disease Prevention, Bluegrass ADD, 859-269-8021, cthomason@bgadd.org. Board member since 2016.
- 10. Elizabeth Bennett; Events/Communications Specialist, Commerce Lexington; 859-226-1615; Ibennett@commercelexington.com. Board member since 2016.
- 11. Debbie Smith; CPA/Partner, MCM CPAs & Advisors; 859-514-7773; Debbie.Smith@MCMCPA.com. Board member since 2017.
- 12. Fernie Williams; Manager, Resource & Renewables Planning, East Kentucky Power Cooperative; fernie.williams@ekpc.coop. Board member since 2017.

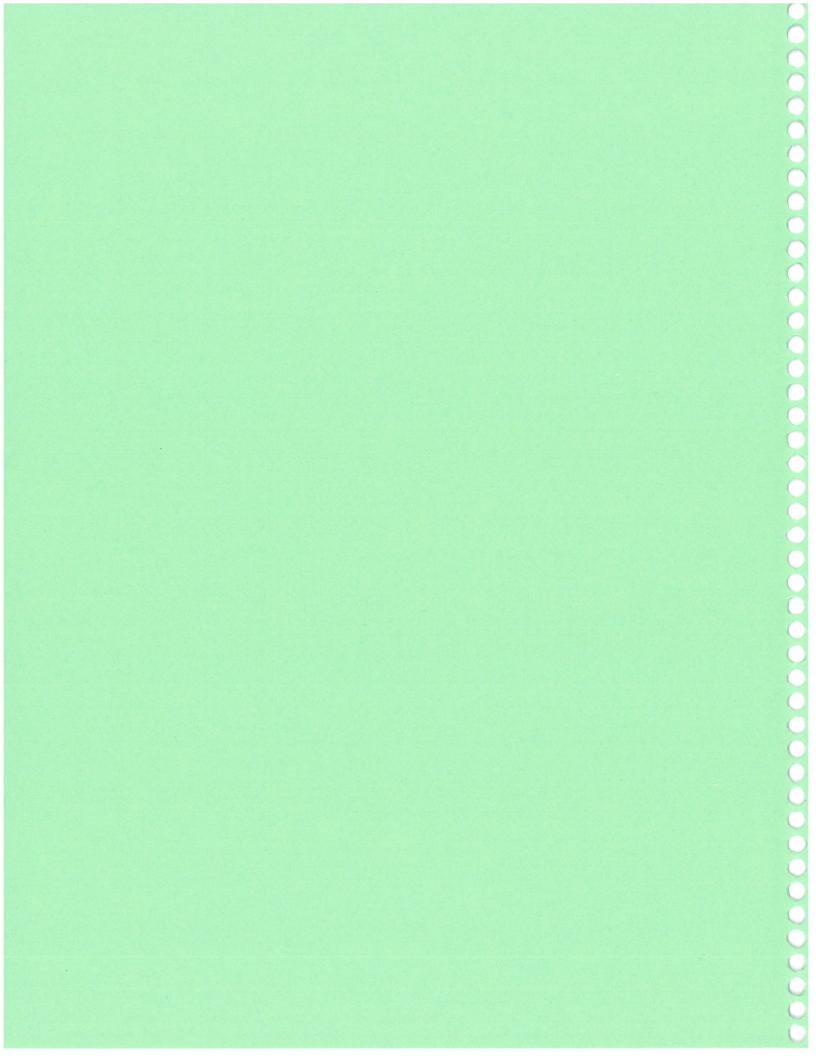




## Organizational Chart







#### Staff Profile

Amy Sohner

Amy Sohner has been with Bluegrass Greensource since its inception, and became director in 2006. She has a background in environmental education, and a degree in Natural Resource Conservation and Management from UK. Amy is a Certified Environmental Educator, a graduate of the Leadership Lexington Program, and a board member of: Bluegrass Tomorrow, Women Leading Kentucky, America in Bloom and the chair of the Keep Lexington Beautiful Commission.

Maxine Rudder

Maxine Rudder has been with Bluegrass Greensource since 2004. She was the Education Coordinator for two years before taking on the role of Education Director, then Deputy Director. Before joining Greensource, Maxine was a teacher in London, Kentucky for 28 years. She attended Eastern Kentucky University where she earned a teaching certificate in Biology and Chemistry. She also has certifications in Supervision K-12 and Secondary Principalship. Maxine's responsibilities at Greensource are to oversee compliance with contracts and grant funding, develop new environmental programs, and organize activities with the county liaisons in our service area. Maxine has two grandchildren and a cat.

Pattie Stivender

Pattie Stivender is the Education Coordinator working with preK – 12 schools and coordinating community outreach activities and volunteer opportunities. Pattie attended Eastern Kentucky University where she majored in Occupational Therapy. Pattie nationally-accredited Environmental Educator and has over 22 years of experience working with students. Prior to Bluegrass Greensource, Pattie worked for the UK Cooperative Extension Program as a 4H youth development program assistant and Fayette County Public Schools as afterschool program director. The Crying Indian PSA developed by Keep America Beautiful opened her eyes to the negative impact that humans can have on the earth. She is a certified facilitator for Population Education and has lead workshops for formal and non-formal educators alike.

Deb Larkin

Deborah Larkin joined Bluegrass Greensource in March, 2010, as an Environmental Educator. Deb holds a B.S. in Horticulture from the University of Kentucky College of Agriculture. Before coming to Greensource, she was the Horticulturist for the Shaker Village of Pleasant Hill, near Harrodsburg, KY. During her 27 year tenure there, she researched and re-established the 19th century apple orchard, herb garden and heirloom seed industry. Her current responsibilities at Bluegrass Greensource include serving as educator for the non-traditional schools in Fayette County, as liaison with Girl Scouts - Kentucky's Wilderness Road Council, and as outreach educator for several surrounding counties.

#### Kara Sayles

Kara Sayles is an Environmental Educator and Rain Garden Project Coordinator. Her background is in Environmental Science and she holds a B.A. with a focus on Ecological Design and Sustainable Agriculture from The Evergreen State College. Kara chose to become an Environmental Educator because of her love of the natural world. She is a nationally-accredited Environmental Educator and has been in the field for more than a decade. In her free time, Kara enjoys spending time with her family, listening to music, cooking and hiking.

#### Shelby Tyree

Shelby Tyree is an Environmental Educator at Bluegrass Greensource. She graduated from Eastern Kentucky University with a Bachelors of Science in Wildlife Management. After college she spent six months working at the Blue Ridge Outdoor Education Center in Georgia taking students on stream walks and observing macroinvertebrates. It was there that she discovered her passion for environmental education and wanted to continue inspiring others in the same way the outdoors had inspired her. After Georgia she worked at Haw River State Park in North Carolina before finding her way to Bluegrass Greensource.

#### Danny Woolums

Danny Woolums serves Bluegrass Greensource as an Environmental Educator. Danny graduated from Transylvania University with a Bachelors degree in Philosophy, with minor concentrations in Spanish and Political Science. Danny has served on Transylvania University's President's Council for Sustainability, the Transylvania University Garden Association Council, the Board of Directors for Bluegrass Greenworks, the Board of Directors for the Kentucky Association for Environmental Education, and currently sits on the LFUCG Environmental Commission. He is a nationally-accredited Environmental Educator and facilitates workshops in 6 of the nation's leading environmental education curriculum guides.

# **Amy Liberty Sohner**

#### **Experience**

#### **Executive Director**

2006 to present

Bluegrass Greensource (formally Bluegrass PRIDE)

Lexington, KY

- Establish strategic direction and plan execution of annual and long-range plans
- Develop program budget and oversee fiscal responsibility of organization
- Manage yearly budget in excess of \$1 million
- Develop, implement and promote programs related to Bluegrass Greensource's mission
- Plan, organize, direct, coordinate and evaluate the day-to-day activities
- Supervise up to 18 staff and multiple interns
- Pursue partnerships that aid BGGS in working towards its mission
- Management of grants and contracts from federal, state and private sources
- Awards to Bluegrass Greensource:
  - Bluegrass Tomorrow Vision Award, 2014
  - LFUCG Environmental Commission Environmental Award, 2014
  - The Garden Club of KY Enrichment Award, 2013
  - Kentucky Association of Environmental Educators President's Award, 2011
  - KNN Innovative Nonprofit Award, 2010
  - Commerce Lexington Green Business Award, 2010
  - Kentucky League of Cities Enterprise City Award (with LFUCG), 2010
  - Environmental Quality Commission Earth Day Award, 2009
  - LFUCG Environmental Commission Environmental Award, 2007
  - Kentucky Association of Environmental Educators, Excellence in Education award, 2008

#### **Program Manager/Deputy Director**

2002 to 2006

Bluegrass Greensource

Lexington, KY

- Develop, implement and promote programs to improve water quality, solid waste management and environmental education in Central Kentucky.
- Establish partnerships with organizations in Central Kentucky with similar goals.
- Represent BGGS at community meetings and events in the 20 county service area.
- Administer Education and Community Grants and assist in their selection.
- Supervise part time staff, volunteers and interns.
- Organize community events and environmental education outreach activities.

# **Amy Liberty Sohner**

## Interim Conservation Education Program Leader

2001-2002

Kentucky Department of

Frankfort, KY

Fish and Wildlife Resources

Designed educational programming and interpretive displays for the Salato Wildlife Education Center.

Conducted outreach programs for Kentucky schools and other nature centers on wildlife habitat and birds of prey.

Led interpretive tours of the seven live animal exhibits and the three habitat areas within the education center.

Created a walking tour for the center as well as volunteer information packets.

#### Education

1999

University of Kentucky

Lexington, KY

Bachelor of Science, Natural Resource Conservation and Management: Science Option Emphasis: Resource Ecology and Wildlife Biology

1995-1996

Napier University

Edinburgh, Scotland

One-year study-abroad program

#### Conferences

- Presenter: Governor's Conference on the Environment, Lexington, KY
- Presenter: Non-Point source Tele-Conference, Lexington, KY (2004)
- Presenter: North American Association of Environmental Education, Anchorage, AK (2003)
- Presenter: Kentucky Science Teacher Association, Lexington, KY
- Non-Point Source and Stormwater Pollution Education Programs, Chicago, IL (2005)
- Non-Point Source Pollution Conference, Chicago, IL (2002)
- Kentucky Association of Environmental Education (2002-2007)

#### **Affiliations**

- Keep Lexington Beautiful Commission member, 2009-present, Vice Chair, 2009-2012, Chair, 2016- present
- Bluegrass Tomorrow Board Member, 2013 to present
- Women Leading Kentucky Board Member, 2014 to present
- America In Bloom Steering Committee Member, 2015 to present
- Kentucky River Basin Team, 2004 to present
- Kentucky Association of Environmental Education Board Member, 2004 to 2006, Vice President, 2005-2006
- Kentucky River Watershed Watch Steering Committee, 2004—2007
- Empower Lexington, 2009 to present, Co-chair 2012-2013
- Lexington Fayette Urban County Government Environmental Commission, 2003 -- 2005

# **Amy Liberty Sohner**

#### Certifications

- Leadership Lexington Graduate (2012)
- Certified Non-formal Environmental Educator (2005)
- Certificate of Training in Fundamentals of Erosion Protection and Sediment Control (2004)
- Project Wet, Certified Facilitator (2002)
- Project Wild, Certified Facilitator (2003)
- Project Wild Aquatic, Certified Facilitator (2003)
- Project Learning Tree, Certified Facilitator (2003)
- Certified Backyard Wildlife Habitat Gardener (2001)

## Maxine Rudder

4501 Mandeville Way Lexington, Ky 40515 Phone: 859-533-5455 E-mail: mbrudder4501@gmail.com

#### **Education**

Rank I (1993): Eastern Kentucky University, Richmond, Kentucky

- Rank I
- Endorsement for Secondary School Principal, 7-12
- Endorsement for Supervision of Instruction, K-12
- 1992 Approval for Teaching Gifted Education

M.A. Ed in Biological Science Education (1979): Eastern Kentucky University, Richmond, Kentucky

**High School Certification for Biology and Chemistry** (1975): Eastern Kentucky University, Richmond, Kentucky

**B.S. in Biology with a Minor in Chemistry** (1972): Eastern Kentucky University, Richmond, Kentucky

A. A. in Science (1970): Sue Bennett Junior College, London, Kentucky

#### **Experience**

Deputy Director (2010 - Present)

Bluegrass Greensource (835 National Avenue, Lexington, Ky 40502)

- Supervise the LiveGreen Lexington Partners Program
- Supervise development of curriculum material for the Kentucky Chapter of The Nature Conservancy
- Member of the Kentucky Green and Healthy Schools Advisory Committee
- Member of the PLT, Project Wet, and Project Wild Steering Committees for Kentucky
- Facilitator for Project Wild, Project Learning Tree, Project Wet, Flying Wild, and Population Connections
- Member of USGBC Green Schools Advocacy Team
- Member of Ky Environmental Literacy Plan Implementation Advisory Team
- Member of Ky Environmental Education Council's Master Plan III Task Force

- Coordinate the activities of the Bluegrass Greensource County Liaisons
- LFUCG Greenspace Commission
- LFUCG Corridors Commission
- Supervise the Bluegrass Greensource Vista Volunteer position
- Responsible for reporting/invoicing on all grants and contracts
- Responsible for developing new environmental education partnerships and programs

## **Education Coordinator** (2004-2010)

Bluegrass Greensource (835 National Avenue, Lexington, Ky 40502)

- Develop curriculum
- Organize education programs
- Member of Lexington Learning Cooperative
- Developed PRIDE in Parks (PIP) Activity booklet
- Designed Educational Unit on Waste Reduction
- Alignment and presentation of educational activities for Reforest the Bluegrass, 2006
- Planned and conducted teacher workshops on Outdoor Classrooms, Conducting Solid Waste Audits, and Waste Reduction
- Organized fieldtrips
- Organized activities for Cub Scouts, Boy Scouts and Girl Scouts
- Developed the Solid Waste Inventory for Green and Healthy Schools
- Designed Environmental Education Units (Elementary and Middle School) for Toyota Motor Manufacturing of Kentucky

## Adjunct Faculty (2005-2007)

Bluegrass Community and Technical College (470 Cooper Drive, Lexington, Ky)

#### Adjunct Faculty (1990-2005)

Eastern Kentucky University (521 Lancaster Drive, Richmond, Ky)

#### Adjunct Faculty (2000-2004)

Somerset Community College (100 University Drive, London, Ky)

## Director of the Bentley Alternative School (2000-2004)

Laurel County Board of Education (710 North Main Street, London, Ky 40741)

#### Teacher (1976-2000)

Laurel County Public Schools (201 South Main Street, London, Ky 40741)

#### Laboratory Technician (1973-1976)

Kentucky State TB Hospital (South Main Street, London, Ky 40741)

## **Laboratory Technician** (1972-1973)

Vanderbilt University Hospital (Nashville, Tenn)

## Pattie Stivender

3813 Forest Green Dr. Lexington, KY 40517 (859)321-3298

#### **Education**

CERTIFIED ENVIRONMENTAL EDUCATOR – Frankfort, KY Kentucky Environmental Education Council, 2010

EASTERN KENTUCKY UNIVERSITY – Richmond, KY Pre Occupational Therapy, 1987 - 1989

CARROLL COUNTY HIGH SCHOOL - CARROLLTON, KY HIGH SCHOOL DIPLOMA, 1985

#### **Awards**

2011 YMCA Child Development Volunteer of the Year

#### **Work Experience**

BLUEGRASS GREENSOURCE—LEXINGTON, KY Education Coordinator, August 2012 to present

Duties - Oversee education staff. Plan and align school curriculum and activities. Plan and schedule outreach events. Serve on the Kentucky Environmental Education Council Certification Advisory Committee and FCPS Sustainability Council.

BLUEGRASS PRIDE – LEXINGTON, KY Environmental Educator, July 2007 to Aug. 2012

Duties – Plan and schedule programs with schools and community event coordinators. Main programs currently involved in - WasteBuster Program, Gainesway Pond Project, Millcreek Stream Restoration.

FAYETTE COUNTY PUBLIC SCHOOLS – Lexington, KY Activity Director for CAPS, August 2004 to June 2007

Duties - Director of after school program. Plan activities for CAPS, oversee staff, work with parents and students to develop a creative, active after school program.

Summer Camp Director – Oversee all aspects of summer camp. Registration, activities, food service, oversee staff, field trips.

UK COOPERATIVE EXTENSION OFFICE – Lexington, KY Program Assistant for 4-H/Youth Development, April 1996 to August 2004

Duties – Plan and schedule programs with schools in southeast Fayette County, plan community events, summer camp counselor, work with extension staff to implement new programs

#### Deborah Larkin

360 Gwinn Island Rd. Danville, KY 40422 859-516-1775 deb@bggreensource.org

## **Professional Experience**

March 2010 - present Bluegrass Greensource, Lexington, KY: Part-

time Environmental Educator through June, 2010; Full-time Seasonal Environmental Educator through June, 2011; Full-time

Environmental Educator through June, 2015.

2007-2009 Herb Consultant/sales person at Flower Power,

Lexington, KY

1997-2009 Proprietor of The Stillroom, offering wholesale

herb plants, dried herbs, essential oils and educational workshops/presentations on 21st century herbals, aromatherapy and heirloom

plants, Danville, KY

1977-2003 Herbalist/Horticulturist for Shaker Village of

Pleasant Hill, Harrodsburg, KY. I researched and re-established the 19th Century Medicinal Herb Garden, Apple Orchard and Seed Industry at the museum. Responsibilities included managing the garden and orchard, conducting an annual heirloom produce fair, set-up and interpretation of related museum exhibits, supervision of staff, and leading tours and

workshops.

#### **Education**

B.S. in Horticulture, University of KY College of Agriculture, 1975

International Certification in Aromatherapy, Pacific Institute of Aromatherapy, San Rafael, CA, 1997



## **EDUCATION**

EVERGREEN STATE COLLEGE Olympia, WA 2005 Bachelor of Arts in Environmental Studies, focusing on Ecological Design and Sustainable Agriculture.

BLUEGRASS COMMUNITY & TECHNICAL COLLEGE Lexington, KY 1999 Environmental Technology

## **CONTACT**

420 HOLLYWOOD DRIVE LEXINGTON, KY 40502

(859) 629-8362

Ka2ben@aol.com

# KARA SAYLES ENVIRONMENTAL EDUCATOR

## PROFESSIONAL PROFILE

Environmental Educator for the past 10 years, adept to a fast-paced workplace with the ability to offer a wide variety of educational outreach opportunities. Trained as a Certified Professional Environmental Educator and skilled in providing PowerPoint presentations, workshops, waste audits, creating displays, inputting data, as well as organizing events. Strong leadership and interpersonal skills, with a commitment to customer service. Resourceful and creative with the capabilities to spearhead projects or work as part of a team. Project oriented with the ability to meet and exceed objectives in a timely manner.

## **WORK EXPERIENCE**

## BLUEGRASS GREENSOURCE AUGUST 2008 – CURRENT

Serving as an Environmental Educator and Rain Garden Project Coordinator; managing and facilitating a variety of educational programs within multiple counties throughout Central Kentucky.

## JESSAMINE COUNTY PUBLIC SCHOOLS AUGUST 2007 – AUGUST 2008

Serving as a Substitute Teacher for Jessamine County Public Schools; managing a variety of classrooms.

# THE LIVING ARTS AND SCIENCE CENTER MAY 2007 – AUGUST 2007

Serving as a Field Trip and Guest Teacher; educating the community about the current displays and creating curriculum.

## **Shelby Tyree**

180 Hudnall Lane, Carlisle, KY, 40311 859-473-1681 | Shelbytyree57@gmail.com

#### Education

# **Eastern Kentucky University College of Arts and Science**

521 Lancaster Ave, Richmond, KY 40475 B.S in Wildlife Management, 2016

## Maysville Community and Technical College

1755 U.S. Highway 68, Maysville, KY 41056 Associates in Science, 2012

## Special Skills

Cared for and handled reptiles, amphibians and mammals, recorded logs for each animal, and was able to teach classes while handling the animals and keeping them safe and calm.

Belay for high ropes

## **Certifications**

Project WILD, September 20, 2017 Georgia Adopt a Stream, September 19, 2017 First Aid and CPR, September 6, 2017

## **Experience**

# Bluegrass Greensource April 2018- present

835 National Ave, Lexington, KY 40502

Environmental Educator.

I went to different schools in the county and taught students about water quality and recycling.

# Haw River State Park February 2018- March 2018

339 Conference Center Drive, Browns Summit, NC 27214

Seasonal Outdoor Educator. I worked with school groups at the park, mostly fifth graders. Common classes include soils, wetlands, bats and animal adaptations.

### Blue Ridge Outdoor Education Center March 2017 - November 2017

237 Camp Mikell Ct, Toccoa, GA 30577

Seasonal outdoor educator. I worked with children ranging from third grade to high school. Common classes included aquatic ecology, team building, forest ecology, and sustainability.

#### Paris Animal Welfare Society. June 2017- August 2017

6 Legion Rd, Paris, KY 40361

Kennel care associate. Dispensed medication to animals, cleaned caged and provided enrichment.

#### Wal-Mart. January 2010- March 2017

240 Wal-Mart Way, Maysville, Ky., 41056

606-759-5040

Cashier. Duties included communicating with customers, handing money, and keeping the register area clean.

*Baker.* Worked in the bakery, stocked the floor, baked breads, made donuts, and decorated cakes when needed. Communicate with customers.

# Danny Ray Woolums Jr.

(859)913-0418 dannyr.woolumsjr@gmail.com

Education

Bachelor of Arts in Philosophy. Transylvania University, Lexington, KY Political Science and Spanish Minors

August 2013

## Relevant Experience

Environmental Educator, Bluegrass Greensource, Lexington, KY February 2015 - Present

- Guide students and educators through activities inside and outside the classroom surrounding various environmental topics (eg: waste reduction, energy conservation, water quality, etc.)
- Facilitate workshops for the public based on national environmental education curricula
- Lead workshops for community members on topics as needed (eg: How to create and install a rain barrel)
- Develop programs designed to educate targeted populations through partnerships with community partners (eg: school assembly programs, community engagement programs, etc.)

District 4 Resident, Lexington-Fayette Urban County Government Environmental Commission, Lexington, KY

February 2017 – Present

- Collaborate with fellow commissioners to provide outreach to citizens of Lexington regarding environmental issues
- Re-establish networking and public information events (eg: Green Drinks Program)
- Represent City County District 4 environmental concerns on the commission

Member, Board of Directors, Kentucky Association for Environmental Education, Lexington, KY September 2014 – September 2016

- As Co-Chair of Education Committee, determine and develop necessary programs for expanding environmental literacy across the state. Additionally, secure funding for any programs necessary by grant-writing.
- Collaborate with fellow board members to strategize goals and objectives for the upcoming year.

Learning Coach, The Sphinx Academy, Lexington, KY January 2014 - December 2014

- Develop lesson plans and assignments for students taking courses taught by myself.
- Revise student papers/assignments before submission to other instructors.
- Partner with other Learning Coaches and Director of Education to find/develop new programs for
- Create week-long day-camps geared for middle and high school students and facilitate activities.

Waste and Recycling Coordinator, Transylvania University, Lexington, KY August 2010 - May 2012

- Managed alternative waste services (Ink Cartridge, Battery and Electronic Recycling; Terracycle) offered through school sustainability office.
- Programmed across campus to ensured that students were aware of waste services on campus
- Assisted Director of Sustainability when necessary. Tasks included data collection/research, poster/sign making, and any additional functions as needed.

*Secretary*, Board of Directors, Bluegrass Greenworks, Inc., Lexington, KY February 2010 - August 2012

- As secretary, recorded minutes of all meetings and distributed to members via email after meetings had ended.
- Collaborated with fellow board members on development of annual Green Expo.

## **Relevant Certifications**

Kentucky State Certified Environmental Educator, May 2015

Project WILD Facilitator, June 2014

Project Flying WILD Facilitator, June 2014

Project Underground Facilitator, June 2014

Leopold Education Facilitator, June 2014

Project Learning Tree K-8 and Secondary Modules Facilitator, June 2014

Project WET 2.0 Facilitator, June 2012

## **Portfolio of Similar Projects**

Since 2001, Bluegrass Greensource has worked directly in classrooms and with educators of preK-12th grade youth to deliver credible, standards-based environmental educational resources. We also engage adults through workshops that educate about water quality and water conservation; waste, litter, and recycling; and energy efficiency. In 2016 alone, Bluegrass Greensource taught 179 people how to build rain barrels and invested \$105,610 in water quality projects for homeowners along sensitive watersheds. Through a highly-competitive grant from the US Environmental Protection Agency, Bluegrass Greensource is reaching 300 adults to make their homes more energy-efficient.

Following is a listing of major programs Bluegrass Greensource has worked on in partnership with the LFUCG and other agencies. Additionally, our staff have developed environmentally-themed units with teachers and worked to align them to the Kentucky Academic Standards. Samples of grade-banded lessons and units developed for teachers can be found below as a reference to our work.

## Specific preK-12 programs from the past 5 years:

**Lexington Recycle Challenge:** Bluegrass Greensource staff worked directly with the three schools involved with the 2016-2017 Recycle Challenge. Our educators completed classroom lessons, neighborhood recycling walks, and middle-of-the-night checks on residential recycling bins.

**Rain Garden Construction:** Through a grant with the Kentucky Division of Water from 2013 - 2016, BGGS's Rain Garden Coordinator has worked with 50 homeowners, schools, and community groups to install and maintain rain gardens that are used to teach about water quality and provide a general grounding for STEM education. This meant touring demonstration rain gardens and educating the general public on maintenance and how to apply for funding.

Junior Nature Explorers: Observation, documentation and exploration are skills needed by students throughout their education career. In 2017, with funding from Norfolk Southern, Bluegrass Greensource developed a program specifically for preK learners to help them develop these skills. The Junior Nature Explorers program works with preK students and teachers to encourage the use of the outdoors as a teaching tool. This program uses a highly adaptive approach to outdoor learning, even if only a play ground or parking lot is available.

**Kentucky Energy for Youth:** Since 2016 with funding from the KY Department of Energy Development and Independence, BGGS staff have worked with 4<sup>th</sup> and 5<sup>th</sup> graders across Central Kentucky to teach the environmental, cultural, and economic impacts of coal production. Our educators work all year long with students, and the program culminates with a trip to Harlan County to directly experience an underground mine, converted coal company bath houses and schools, as well as the affects of surface mining. The experience includes an interactive session with Mary Knight, the author of Saving Wonder, a novel that explores coal mining from an adolescent's perspective.

**Dupree Days**: Each year since 2013, BGGS takes hundreds of students to The Nature Conservancy's Dupree Nature Preserve in Garrard County. Students are led through various stations that help them understand how humans interact with natural systems. Lessons are focused on STEM activities, but use the local flora and fauna as the integrating context.

# Mary Queen of the Holy Rosary 4th Grade

2017 - 2018 Schedule

September 19th

EnviroScape (Landfill) - The activity educates the audience on how a modern landfill is set up and functions.

October 17th

**Topographic Legos** - Students will learn to read Topographic maps with the help of Legos. Students connect the 2D image with a 3D object. Students will then describe the characteristics of a watershed by interpreting topographic maps. Students will locate their homes or school using area topographic maps. Students will explain how activities, stormwater and land use practices contribute to nonpoint source water pollution and how they can adversely affect water quality and the plants and animals within a watershed area.

November 14th

**EnviroScape (Watershed) -** The enviroscape is a table-top model that introduces students to watersheds and point/nonpoint source pollution. Students see how litter, oil, pesticides, chemicals, animal wastes and other items move through the watershed when it rains.

December 12th

**A-Maze-ing Water Project** - Students build their own maze of a storm drain system. Students then guide a drop of water through a maze of "drainage pipes" to learn how action in the home, yard, and paved surfaces affect water quality.

January 23rd

Wetland in a Pan - Students construct a wetland in a pan to create a model of how wetlands help to protect communities from flooding.

February 13th

**Wind Turbines** - Students discuss finite and renewable energy sources, kinetic and potential energy, wind as a renewable energy source and the parts of a wind turbine. Then they are asked to design blades for a wind turbine and attach them to the rotor on the turbine in the study kit.

March 13<sup>th</sup>

Water Wheels - Students research water wheels, designing their own, and then testing their designs. They learned about renewable sources of energy and advantages and drawbacks these forms have.

April 10th

**Solar Cars** - Students are given a car that runs off a small solar cell and rechargeable battery. Students test the cars to see how to get the most power out for the small solar panel. Students learn about the importance of the angle of the sun with solar power.

**Solar Ovens** - Students learn how the sun can be used as a source of heat energy. In this activity students have the opportunity to use the solar oven to make a snack.

May 8th

**Luscious Landfill** - In this piled high activity, students investigate landfills built in the past and compare models of modern landfills of today and how stormwater and groundwater sources near modern landfills are protected.





## Ms. Patriquin's 3<sup>rd</sup> Grade Class Water: An 8-Week Unit, 2015-2016

#### Week 1: The Essentials of Life

Activity – The Life Box (3-LS4-4) Activity – Animal Pelts (2-LS4-1)

Students are given a box with 4 essential factors for life. Can they figure out what those four items are and how they are related?

Students get to touch and explore animal pelts (animal furs). All the pelts brought in will be animals that can be found here in Kentucky. Students will learn how water quality impacts those animals and what we can do to help keep them healthy.

## Week 2: Water Conservation 101

Reading – All the Water in the World, by George Ella Lyon (RL.3.4) Activities – Blue Planet, A Drop in the Bucket

Students are given a reading of this award-winning book and talk about how much water there is in the world and why it's important to conserve it.

## Week 3: The Water Cycle

Reading – Water Dance, by Thomas Locker (RL.3.4) Activity – The Incredible Journey (2-ESS2-3)

Students are given an opportunity to listen to this book of poems about the way that water moves and then participate as water droplets in the water cycle!

#### Week 4: Water Quality

Activity – Habitat Who Dunnit (3-LS4-4)

In this habitat murder mystery, students must determine the cause of death for the beloved river turtle. They are given a habitat scene with different suspects and ultimately discover that sometimes humans have the biggest impact.

#### Week 5: The Watershed

Activity - The Watershed EnviroScape

Students participate in this tabletop model of a community and discuss ways that pollution affects our waterways. Then, they are challenged to find BMPs to help improve the water quality of their community.

## Week 6: Water Filtration

Reading – Henry Goes Underground (SL.3.2) Activity – Water Filtration Model

Students read a story about Henry who is...going underground! They create their own groundwater model and then see the large demonstration model in action!





## Week 7: Adaptations to Survive

Activity – Macro Mania (3-LS4-3) Activity – Alligators, Epiphytes, and Water Managers (3-LS4-2)

Students participate in an interactive game where they learn about the importance of macroinvertebrates in assessing water quality.

Students participate in a team short guessing game that helps them learn some of the adaptations some animals have evolved to help them survive to use less water.

Week 8: Culminating Event

At the end of Week 7's activity, students will discuss how they want to best affect change in their environment. They will use all that they have learned and choose how their culminating activity. Suggestions (if allowable by various factors) include but are not limited to:

- A Litter Clean Up
- A Water Quality Campaign
- A Classroom Story
- School Water Audit





## **Bluegrass Greensource**

## Environmental Education Program Elementary

## **Kindergarten**

**Bears Barge In:** As development encroaches on animal habitats, the animals begin to encroach on the human habitats. A boy named Zach helps the city to find a solution on sharing habitats. Discussion following the story helps remind students that we share our earth with animals and must do our part. (K-LS1-1)

**Biodegradable Flowerpots/Paper Pots:** Students will use paper to create a flowerpot. Students may plant flowers, vegetable, or grass (depending on season) to take home or leave at school. Students will learn about seasons of plants and what plants need to survive, while recording daily observations about their plants. (K-LS1-1)

**Fish is Fish:** Students learn about aquatic habitats and the needs for fish and animals to survive. Students discuss the different needs of humans and wildlife. (K-ESS3-1)

**Fish Print:** Students roll paint onto a fish replica and press the replica onto a poster sheet of paper, creating a stream habitat. Students will then add plants, rocks, other animals to represent a living stream system. (K-ESS3-1)

"Garbage Monster": This book is about a young girl named Jo who does not want to take out the garbage. One day the garbage comes alive until Jo discovers that it is not garbage at all, but items that can be reused or recycled. (K-ESS3-3)

"Michael Recycle": In this children's book, the super hero Michael Recycle comes to Abberdoo-Rimey, a town filled with litter, and teaches them not only to clean up their "garbage" and take pride in their home, but to reduce the amount of trash by recycling their paper, plastic and cans and reusing clothing, utensils, etc. (K-ESS3-3)

**School Grounds Energy Walk:** Students use an aerial photo or map of school grounds and a digital laser thermometer to record temperatures of school building in full sun compared to shaded areas. Students make recommendations of where deciduous trees and/or awnings should be placed to shade full sun areas. (K-PS3-1, K-PS3-2)

**Stormdrain Gang:** Students have a chance to participate in a play narrated by a student or educator about 5 storm drains along a street. The story details human pollution that enters the storm drains as litter and ways we can help protect our streams. (K-ESS3-3)

"The Day the Trash Came Out to Play": The book shows that even one piece of litter can cause a problem and emphasizes the impact of litter on animals as well as people. Students are then asked to think about all that litter and what would happen to animal and people if the litter made its way into our watersheds. (K-ESS3-3)

**The Giving Tree/Tree Cookies:** The Giving Tree story describes how much trees give to all of us throughout their life. Students will discover the importance of trees. Students will





explore Tree Cookies to identify the life and age of the tree samples. Discussion will follow of how recycling could help to reduce the destruction of natural resources to make new materials from trees. (K-ESS3-1, K-ESS3-3)

**Water Address:** Using photos of different ecosystems, plants and animals, students identify plants and animals and their habitats by analyzing clues that describe water related adaptation of aquatic and terrestrial organism. Students then discuss ways that water pollution and litter can impact the lives of animals and plants and their habitats. (K-LS101)

**Web of Life:** Students will take a close look at a forest ecosystem and discover ways that plants and animals are connected to each other and the environment by simulating a food web. Each student plays the part of an animal, plant or insect in a stream and the students create an actual web with yarn. When various factors are removed from the ecosystem, students will brainstorm ways their organism can adapt and survive. (K-ESS2-2, K-ESS3-1)

**Warming up to Worms:** Students will carefully explore red wiggler worms up close and personal. Students will be invited to touch and feel worms as they make observations about how the worm feels, how it moves, what color the worm is, and more. Students will also learn the basic physical structure of the worm and how worms create compost to improve our soils, and how the compost can be beneficial to plants and the environment. (K-ESS2-2, K-ESS3-3)

**Waste Audit:** Students will help go through their trash pulling out any recyclable material. Students will weigh each recyclable material separately and come up with a total percent of recycling found in trash. Results of the waste audit will be shared with students and staff. (K-ESS3-3)

Who Lives in a Tree?: This interactive poem activity connects listening skills with learning about trees as a habitat. (K-LS1-1)





#### **Fourth Grade**

**Enviroscape (Watershed):** The Enviroscape is a table-top model that introduces students to watersheds and point/nonpoint source pollution. Students see how litter, oil, pesticides, chemicals, animal wastes and other items move through the watershed when it rains. Students then brainstorm best management practices to improve the quality of the watershed. (4-ESS2-1, 4-ESS3-2).

**Oh Deer!:** Students will identify and describe food, water, and shelter as three essential components of habitat. Students will also discover how pollution impacts the necessary components of the deer habitat. The results of each round of the game will be charted to monitor fluctuations of deer population over time. (KAS 4.MD.B.4)

**Perc thru the Pores:** By pretending to become soil particles and water droplets, students simulate soil particle sizes and their pore space (4-LS1-1)

**Silt, a Dirty Word**: Students will create a model to simulate changes to a stream and its water flow when silt, sand or both are added to the system. Students brainstorm solutions to the problems created by erosion to streams. (4-ESS2-1)

**Stream Table:** Students learn about the flow of water in a stream and how runoff changes with more or less rain. The stream table shows how the land around the stream can be altered during flood events. Students can also see how erosion makes a stream more turbid. (4-ESS2-1, 4-ESS3-2)

**Topo Legos:** Students will describe the characteristics of a watershed by interpreting topographic maps. Students will locate their homes or school using area topographic maps. Students will engage in a hands-on activity using legos to better understand topographic maps and how 2D objects can represent 3D objects. Students will make connections between topography and human environmental impact including watershed management and the impact of erosion. (4-ESS2-2)

**Wetland in a Pan:** Students construct a wetland in a pan to create a model of how wetlands help to protect communities from flooding. Students learn about the interrelationships among precipitation, runoff, and wetlands while also learning the importance of wetlands and wetland functions in their daily lives. (4-ESS3-2)





## Family and Consumer Science

Academic Expectations 2.30 Students evaluate consumer products and services and make effective consumer decisions. 2.33 Students demonstrate the skills to evaluate and use services and resources available in their community. 4.4 Students demonstrate the ability to accept the rights and responsibilities for self and others. 5.4 Students use a decision-making process to make informed decisions among options.

**Eco Shopping** - Students learn to make eco friendly choices when shopping for groceries and cleaning products. They fill out a chart on brand names, eco benefits, and costs, and comment on which items appeal to them.

**From Fiber to Fashion** – Students study clothing labels, research fabric production, and evaluate consumer options for their clothing.

**Household Hazardous Waste Bingo** - This activity is designed to show that simple, safer alternates for household hazardous products do exist and can often be just as effective. By applying the scientific process, the students will test and compare an alternative to an ammonia based window cleaner. Students will also play Toxic-Free Bingo.

**Household Hazardous Waste Presentation** - Students will be introduced to the term "hazardous" and come up with a common definition for the class. Students will survey their own homes for hazardous products and learn what makes each of these products hazardous.

**Treasures of Trash** - Students will play the role of a trash expert sorting trash as they learn about waste and ways to reduce it.





#### **Proposed Approach**

#### Overview

In regards to educating students, Bluegrass Greensource adheres to the best practices available to the field of environmental education while also following the Kentucky Academic Standards (KAS).

In 1976, the United Nations Educational, Scientific and Cultural Organisation (UNESCO) worked to develop the Belgrade Charter. This charter adopted a goal statement for what environmental education should offer:

"The goal of environmental education is to develop a world population that is aware of, and concerned about, the environment and its associated problems, and has the knowledge, skills, attitudes, motivations and commitment to work individually and to collectively solve current problems and prevent new ones."

Bluegrass Greensource follows this same goal statement in our approach to our own environmental education and outreach. This is evidenced in the way that we build our lessons over time and the way we reinforce attitude changes as an integral part of an informed and engaged citizenry (see reference documents on pages 47-50). However, we've also discovered that directly teaching students isn't the only way that they can benefit from our field of knowledge. Over time, we have learned that the best approach to environmental education is to work with the entire school, whether that means training teachers to do our lessons, helping custodians find best solutions to sustainability related issues, giving resources to office personnel, or helping child nutrition specialists. All of these things are highlighted throughout this response.

## **Teacher Trainings**

Bluegrass Greensource has staff members who are certified to facilitate many different workshops in established environmental education curricula and/or develop workshops specifically tailored to a topic of interest. Using this skill, we propose the following as a way to meet the goals laid out by the City of Lexington.

## Sustainability Coordinator Training

Bluegrass Greensource has a strong, established relationship with Tresine Logsdon, Fayette County Public School's (FCPS) Energy & Sustainability Curriculum Coordinator. At the beginning of each year, Ms. Logsdon gathers the 50 sustainability coordinators from each school for a half-day of professional development. She has invited Bluegrass Greensource to use the second half of the day to further their familiarity with waste management, water quality and energy education.

To further our reach, Bluegrass Greensource will work with these 50 educators to invite additional teachers from their school for the second half of the day. We anticipate a total of 75 teachers would be a part of the Lexington-sponsored teacher training.

After lunch, the educators will be split into three groups of 25. Each group will have a focus on either Energy Conservation, Waste Management, or Water Quality. Teachers will first be shown grade appropriate, KAS-aligned lessons related to that topic. After the classroom portion of the training, each group will be taken on a field trip to learn more about the topic from a real-world perspective. Examples of these field trips include the Material Recovery Facility for the Waste Management track, McConnell Springs or the wastewater treatment plant for the Water Quality track, and an energy efficient model building or a local power generating station for the Energy Conservation track.

## Early Childhood

Bluegrass Greensource believes very strongly in preK education. We have seen firsthand that students who start kindergarten without significant exposure to quality education and environmental experiences are much harder to reach. Because of this, Bluegrass Greensource would like to use our strong relationship with the Fayette County Public Schools Office for Early Childhood Education to put on an environmental education focused teacher training.

We have worked with this office in the past and the training we offered was very well received. We propose to offer a full-day professional development training focused on one of the standard environmental education curricula (i.e. Growing Up Wild, PLT's Environmental Experiences for Early Childhood, Getting Little Feet Wet, etc.) that focus on preschool lessons for these teachers. We estimate being able to train 20 of these educators, based on the numbers of past years.

## School-Based Teacher Trainings

Bluegrass Greensource often works with schools on programs such as Ashland Elementary's "FACT Friday." "FACT Friday" programs invite outside educators to offer lessons to all of the students of a certain grade each Friday. During these programs, BGGS educators will work with the students to learn about waste management and water quality while we offer their teachers a professional development covering the three topics outlined in the RFP. This model will be repeated throughout the year, and with different schools with similar programs depending on the need.

## **Promotion**

Because we are relying on our established relationships with schools, educators, and district officials, we do not believe that promotion of these workshops will be substantial. Additionally, because these are working with existing programs, only Fayette County educators will be reached by these means. Bluegrass Greensource will use approved city branding on all materials used for promotion or developed for handouts. Similar workshop agendas for past work can be found on the following pages.



June 15, 2015 9 am - 4:30pm **McConnell Springs** 

**Facilitator: Danny Woolums** 

# Agenda!

Sign In and Introductions 9:00-9:15

Are You Me? (Aquatic, pg 2) 9:15-9:30

**9:30-10:00** The Great Migration Challenge (Flying, pg 165)

10:00-10:30 Aqua Words (Aquatic, pg 29)

10:30-10:45 Oily Problems (Flying, pg 271)

10:45-11:00 Break

11:00-11:30 Dragonfly Pond (Aquatic, pg 198)

11:30-12:00 Council Consensus (Flying, pg 143)

**12:00-12:30** Fashion a Fish (Aquatic, pg 56)

12:30-1:30 Lunch Break

1:30-2:30 Pass Out Guides, Hike/Swim through the Guides!

2:30-3:30 **Peer Teaching** 

> At this point, educators are to pick an activity not already covered from one of the two guides and give a presentation on the activity. This includes:

- What is this activity about (Overall topic)?
- What grades is the best audience for this topic?
- How long is this activity supposed to last?
- What classroom subjects does this lesson cover?
- How would you teach it? What modifications might you need to consider for your group?

**Workshop Evaluations** 3:30-4:00

Final Question, Pass out certificates and Dismissal 4:00-4:30













# Project Learning Tree: Environmental Experiences for Early Childhood





Jennifer Hubbard-Sánchez, Kentucky State University Danny Woolums, Bluegrass Greensource



#### Welcome and Introductions

PLT Overview – What is Project Learning Tree? Icebreaker – Viewpoints on the Line (From PLT K-8)

## The Shape of Things (pg. 19)

- Make Shape Necklaces!
- Shape Walk (Observing Shapes in Nature)
- Dance with Leaves! (Track 1 on CD)
- Tree Math! Make Twig Shapes
- Snack Time! (Our favorite Food Shapes)

Break - 15 Minutes

## Sounds Around (pg. 26)

- Forest Concert! (Track 4 on CD)
- Listening Walk

Matching Sounds

## We All Need Trees (pg 40)

- "Making Applesauce"
- Smell the Flowers (Track 6 on CD)
- Let's Read a Story! (The Apple Pie Tree by Zoe Hall)

## Why is Early Childhood environmental education Important?

Lunch 12:00 - 12:30

## Evergreens in Winter (pg 56)

- Let's Read a Story! (Night Tree by Eve Bunting)
- Tree Math! Sorting Pinecones
- Paint with Evergreen Brushes

#### Hike Through the Guide

Peer Teaching (Find an activity that you like and teach it to the group!)

#### Wrap Up

Evaluations

Certificate

#### Dismissal!





#### **Reading Connections:**

## The Shape of Things

The Shape of Things by Dayle Ann Dodds What Joe Saw by Anna Grossnickle Hines So Many Circles, So Many Squares by Tana Hoban\*

#### Sounds Around

The Listening Walk by Paul Showers\* Quiet Please by Eve Merriam Rain Song by Lezlie Evans

#### We All Need Trees

Arthur's Nose by Marc Tolan Brown\*
The Apple Pie Tree by Zoe Hall\*
How to Make an Apple Pie and See the World by Marjorie Priceman\*
The Apple Pie that Papa Baked by Lauren Thompson\*

#### **Evergreens in Winter**

Animals in Winter by Henrietta Bancroft\*
Night Tree by Eve Bunting\*
Winter Eyes by Douglas Florian\*
Stranger in the Woods: A Photographic Fantasy by Carl R. Sams\*

#### **Contact Information:**

Danny Woolums, Certified Professional Environmental Educator, Bluegrass Greensource email: <a href="mailto:danny@bgGreensource.org">danny@bgGreensource.org</a> phone: 859-266-1572

Jennifer Hubbard-Sánchez, State Specialist for Sustainable Systems, Kentucky State University email: jennifer.sanchez@kysu.edu phone: 502-597-5813





<sup>\*</sup>Available for Checkout through the Lexington Public Library

# Kentucky Energy for Youth Program Teacher Professional Development

Bluegrass Greensource (859)266-1572



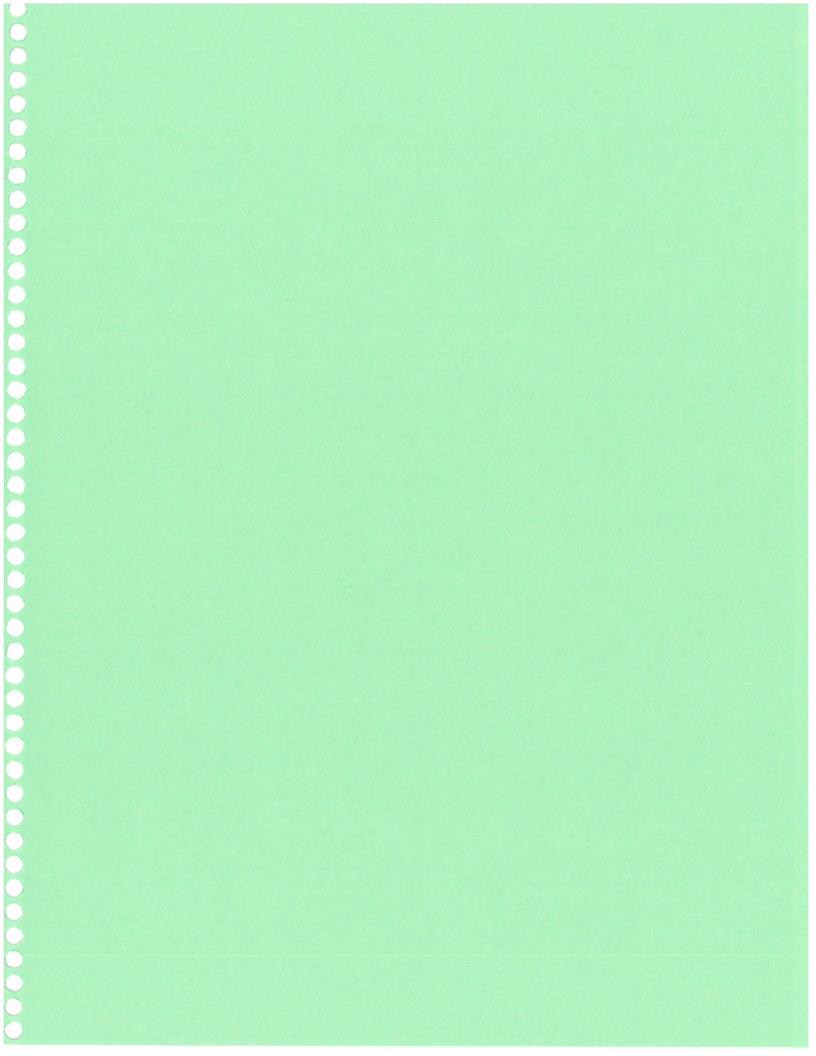
DEM

November 8, 2017

9:00	Meet at Bluegrass Greensource Offices 835 National Ave. Lexington, KY 40502
	<ul><li>Overview of program</li><li>Program planning with educators</li></ul>
10:00	Leave for East KY Power 4775 Lexington Rd, Winchester, KY 40391
10:30	Energy overview with David Crews of East KY Power
11:30	Lunch
12:00	Rotating Tours (50 minutes each)
	<ul><li>Solar farm tour</li><li>Market Operations Center</li><li>Energy Control Center</li></ul>

2:30 Leave for Lexington

Funding for this program is provided by the Department for Energy Development and Independence





#### Lessons

#### Overview

Over the past 17 years of educating students throughout Central Kentucky, Bluegrass Greensource has developed and learned a variety of lessons that well-suit the needs of the students in our region. We constantly research, develop, and learn new lessons to stay abreast of the newest educational trends while also engaging students in how to create a sustainable environment. Bluegrass Greensource will continue this trend while also refining our focus to meet the goals of the City of Lexington.

#### Preparation

BGGS educators will devote a significant portion of the summer to developing the series of lessons to meet the goals of the City of Lexington. We will also work with our established Teacher Advisory Committee to ensure that the lessons in each track are in line with and needed by K-12 classroom teachers in Fayette County.

To allow for flexibility for classroom educators, Bluegrass Greensource will offer a large list of suitable lessons to K-12 educators that match both grade-banded standards and topics required in the RFP. Bluegrass Greensource will develop a minimum of eight tracks for educators to choose from, with at least four being for Water Quality and four being for Waste Management. Each category will have at least one track that meets the needs of Lower Elementary, Upper Elementary, Middle School, and High School students. These tracks may require certain lessons or have a more limited scope with no fewer than 12 lessons in a track.

Bluegrass Greensource may also choose to develop hybrid tracks that include lessons that cover both Water Quality and Waste Management. These tracks will include no fewer than six lessons that focus on Water Quality and six lessons that focus on Waste Management with an overall minimum of 12 lessons in the track. Some lessons in the hybrid tracks may cover content that relates to both Waste Management AND Water Quality (eg: lessons about litter) which will count towards both goals. However, committed groups will still be required to complete a minimum of six lessons that relate to both waste management and water quality.

#### <u>Implementation</u>

Bluegrass Greensource will prioritize opportunities to reach the same population of students multiple times with a focus on groups willing to commit to at least six lessons in a given track. For the benefit of the students and their retention of the subject matter, Bluegrass Greensource will aim to spend two-thirds of our time on groups meeting the six lesson commitment, with an option to offer our own camps or programs in order to

meet that goal. We anticipate working with at least 30 schools to complete the six lessons and related significant project.

Bluegrass Greensource may also teach lessons to and leave lessons with educators so that each participating group still meets the required criteria of six lessons in a given track so as to be recognized (as is outlined later in this response) and to ensure a deeper understanding of the material by the students.

## Sample Series for Upper Elementary – Water Quality

- EnviroScape (Watershed): The EnviroScape is a table-top model that introduces students to watersheds and point/nonpoint source pollution. Students see how litter, oil, pesticides, chemicals, animal wastes and other items move through the watershed when it rains. Students then brainstorm best management practices to improve the quality of the watershed.
- 2. **Sum of the Parts**: Students demonstrate how everyone contributes to the pollution of a river as it flows through a watershed and recognizes that everyone's "contribution" can be reduced.
- 3. **Stream Table:** Students learn about the flow of water in a stream and how runoff changes with more or less rain. The stream table shows how the land around the stream can be altered during flood events. Students can also see how erosion makes a stream more turbid.
- 4. **Wetland in a Pan:** Students construct a wetland in a pan to create a model of how wetlands help to protect communities from flooding. Students learn about the interrelationships among precipitation, runoff, and wetlands while also learning the importance of wetlands and wetland functions in their daily lives.
- 5. **A-MAZE-ing Water**: Students guide a drop of water through a maze of "drainage pipes" to learn how actions in the home and yard affect water quality.
- 6. **Stormwater mapping:** Using satellite maps of the school, as well as observations collected from walking around the property, students create a watershed map of school grounds. They track stormwater patterns, stormdrains, and point/non point source pollutants. Students brainstorm ways to protect local waterways.
- Project: **Stormdrain mural:** Students take initiative to make a positive impact on their own local neighborhood. By designing and painting a stormdrain mural, students leave a lasting mark on their community and alert their neighbors about this important feature along the street's side.

## Significant Projects

To help the students more fully understand the concepts, and to bring in real world examples, Bluegrass Greensource will offer a list of significant projects for schools to complete. These projects will serve as both a way for students to demonstrate what they have learned, and also allow them an opportunity to impact our community. These projects will also be a key element in the recognition program described later in this proposal.

## Sample significant projects:

**Stormdrain mural:** Students take initiative to make a positive impact on their own local neighborhood. By designing and painting a stormdrain mural, students leave a lasting mark on their community and alert their neighbors about this important feature along the street's side.

**Stormdrain stencil:** Students take initiative to make a positive impact on their own local neighborhood. By painting a stormdrain stencil, students leave a lasting mark on their community and alert their neighbors about this important feature along the street's side.

**Stream assessments:** Some schools have fantastic access to nearby bodies of water. To connect the classroom to their surroundings, students will be invited to work on a stream assessment to see first-hand how water quality can be affected in various ways.

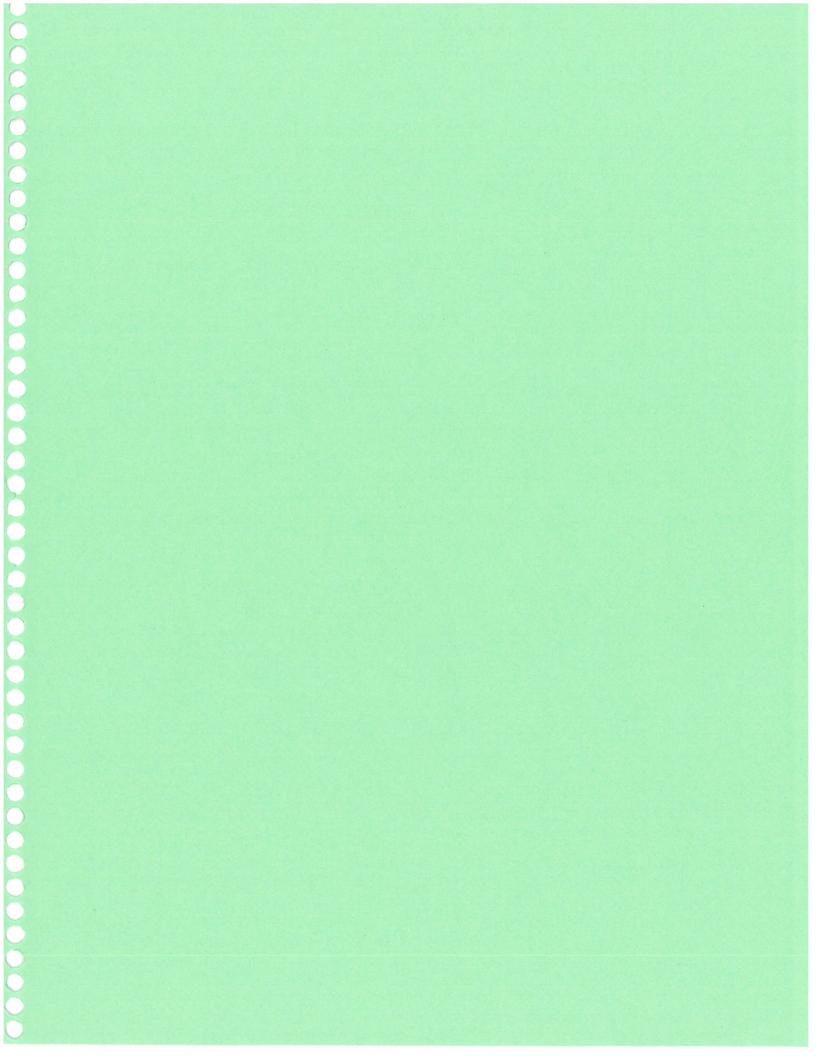
**Rain garden construction/maintenance:** Students learn about the importance of stormwater abatement while also learning about pollinators and plant structure by planting a rain garden. This allows students to create a lasting feature while demonstrating their commitment to helping reduce runoff.

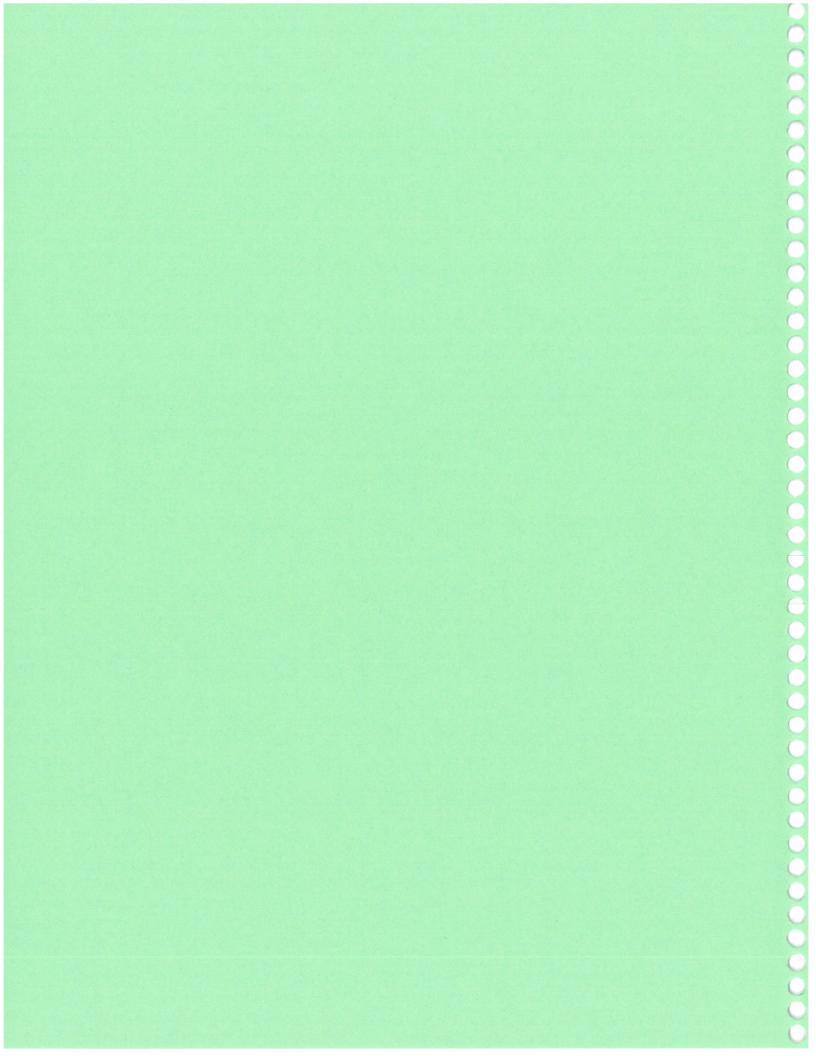
**Litter cleanups:** Students make an impact by helping to clean up their own school grounds. Younger learners pick up trash that they find, while older learners are invited to sort their waste as they pick it up and chart what they find on a map of the school grounds.

**Student PSAs:** Students share what they have learned with their fellow classmates by putting together a PSA. Depending on grade level and school resources, students can put together a video, a poster, or some other demonstration that helps students learn how to best take care of our water or to better recycle.

## <u>Acknowledgement</u>

Throughout all work on behalf of this project and any other funded by the City of Lexington, Bluegrass Greensource will make every effort to communicate that the outreach is a LFUCG provided service. All materials produced as a result of this project will include the city's logo and/or name the City of Lexington as the funding source. This includes the promotion of any teacher trainings or Bluegrass Greensource-developed camps. Promotional materials will be approved by the LFUCG's Project Manager prior to distribution. Any social media promotion will list the city of Lexington (@LiveGreenLex) as a co-host and will allow time for approval prior to publishing.





## **School Recognition Program**

Recognizing K–12 public and private schools for their efforts in sustainability is an important aspect of school environmental education. Recognizing schools and teachers for being leaders in waste reduction and water quality education shows appreciation for teachers and brings additional recognition to these important programs. Bluegrass Greensource proposes a comprehensive recognition program that helps recognize schools while helping to further their understanding of environmental concepts.

## Schools can receive one of three levels of awards:

**Level 1** schools will have completed a minimum of one lesson series in water quality or waste management. We propose to recognize the efforts of these schools with a poster designed by a local artist and support materials that can aid the school in improving recycling (eg: bins, informational posters, etc). We anticipate awarding approximately 20 Level 1 schools.

**Middle Level** schools will have completed the lesson series for both waste management and for water quality. Schools completing these series will be recognized with a poster designed by a local artist, a large recycling container, and support materials that can aid the school in improving recycling (eg: bins, informational posters, etc). We anticipate awarding approximately 30 Middle Level schools.

**Top Performer** schools will have exceptional involvement with the water quality and/or waste management series. Level 3 schools will have multiple groups completing a lesson series and at least one significant school project related to the series. Schools reaching this designation will receive a poster designed by a local artist, a large recycling container, support materials that can aid the school in improving recycling (eg: bins, informational posters, etc), and materials to aid in classroom education or a field trip/day experience. We anticipate awarding approximately 10 schools as a top performer.

## **Timeline**

Beginning in August of the given school year, educators will begin contacting schools and scheduling classroom lessons. Educators will share the recognition levels with teachers and help each school set goals.

Bluegrass Greensource will track schools progress in each area and offer opportunities for the schools to participate in a lesson series. BGGS will also assist in planning and implementing school projects as they relate to waste management and/or water quality.

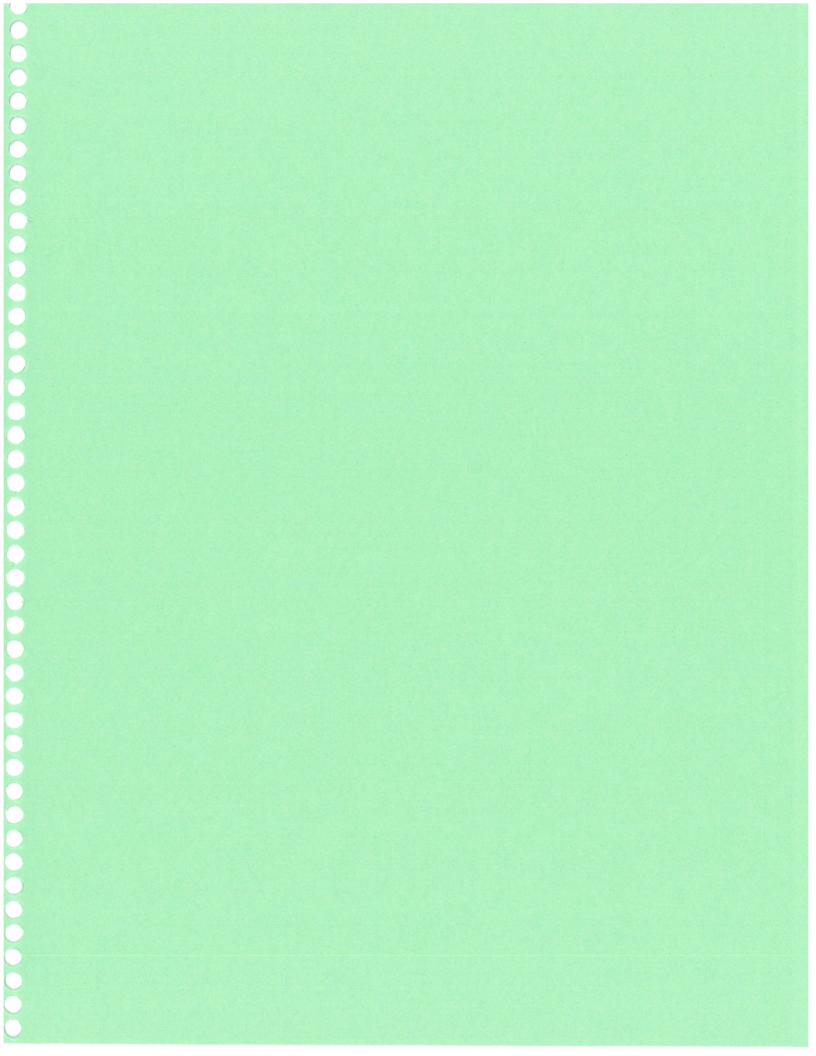
School levels will be identified in March. Schools having already earned, or who are on track to earn, Level 3 status will be contacted to begin planning for the award selected by the school (classroom materials or field trip experience).

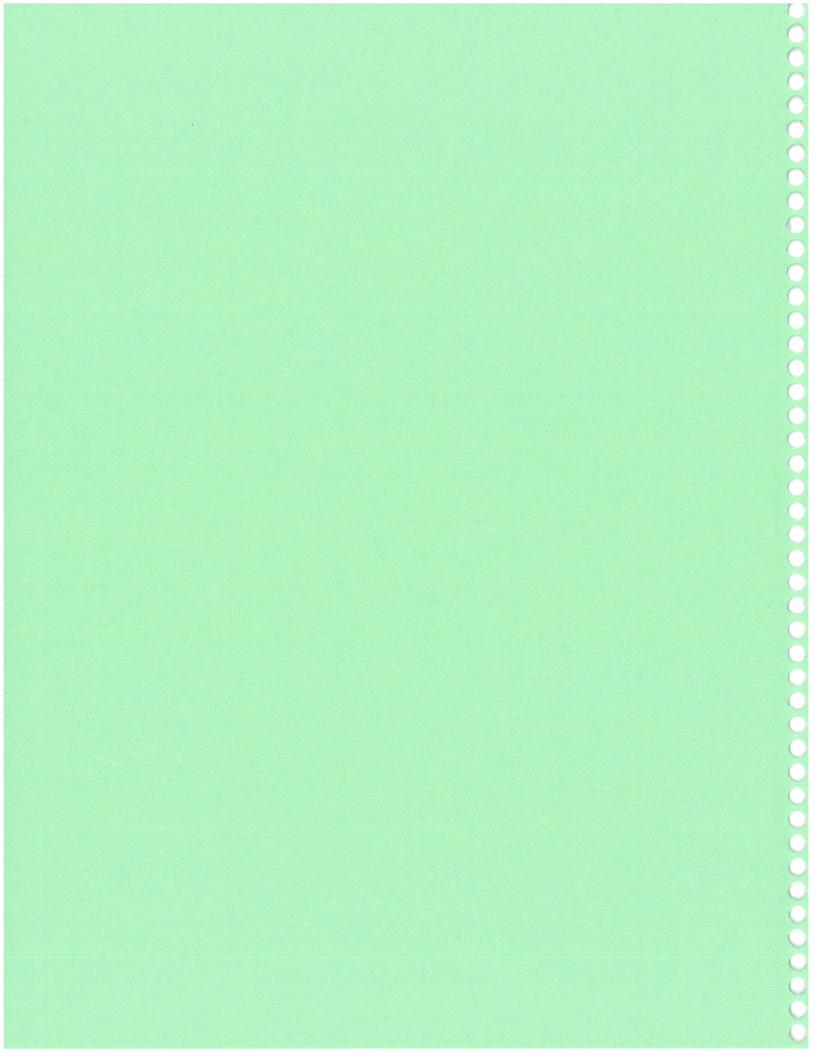
## Field Trip/Field Day

Bluegrass Greensource will work with each school reaching Top Performer level to plan either a field trip or field day experience for a select group of students. BGGS staff will be responsible for planning and scheduling with field trip designation/location. Potential field trip locations could include: Materials Recovery Facility tour (for 4<sup>th</sup> grade and older), waste water treatment center, McConnell Springs, or Flora Cliff Nature Sanctuary. In the event that a school is unable to attend a field trip a field day experience will be offered. Bluegrass Greensource will collaborate with each school and the LFUCG to provide environmentally appropriate activities for the students.

Bluegrass Greensource will manage all aspects of this program:

- Working with schools to schedule activities and lessons.
- Leading lessons or modeling lessons for the classroom teacher.
- Tracking all activities.
- Contacting schools about award designation.
- Planning all aspects of field trip experience including transportation, collaborating with field trip designation personnel, and assisting the school with planning.
- Manage all receipts and invoices.
- Report all pertinent details to the LFUCG.





## **Support Services**

Bluegrass Greensource will continue to work with school personnel in the area of waste management to decrease contamination in recycling. We will continue to build relationships by organizing two different advisory committees. The goal of these committees will be to help resolve recycling issues in individual schools, to improve collection of recycling, and to reduce contamination.

#### **Custodial Staff**

BGGS will share information about the Custodial Advisory Committee while presenting at the summer training for Fayette County Public Schools custodial staff. The Custodial Advisory Committee will meet annually to discuss school recycling challenges and opportunities. Food will be provided during this meeting to encourage participation. In addition, the committee will communicate through email as need arises. We anticipate 10 custodians will serve on this committee.

## **Child Nutrition Managers**

BGGS presents recycling information each fall at the Child Nutrition (Food Service) Cafeteria Manager's meeting. During this meeting, managers complete a recycling survey and the results of the surveys are shared with BGGS educators to be used in their school recycling plans. We propose to share information about the Child Nutrition Managers Advisory Committee during this presentation. The Child Nutrition Managers Advisory Committee will be comprised of 10 cafeteria managers and will meet annually to discuss school recycling and FOG. Food will be provided during this meeting to encourage participation. In addition the committee will communicate through email as need arises. We anticipate 10 cafeteria managers will serve on this committee.

#### Materials Recovery Facility Tour

Bluegrass Greensource will plan and coordinate a trip to the Material Recovery Facility for custodians and cafeteria managers participating in the advisory committees. Additional support staff will be welcomed to attend as space allows. This trip is intended to give school personnel first-hand experience about the recycling process and deepen their understanding of what the recyclable materials are and why contamination is such a problem. Food will be provided during this meeting to encourage participation.

## School Personnel and Student Engagement

Waste audits serve many important functions for our classrooms and schools. Often this is the first point of contact between BGGS educators and students. During an audit the educator provides an overview of recycling and helps students determine how well the

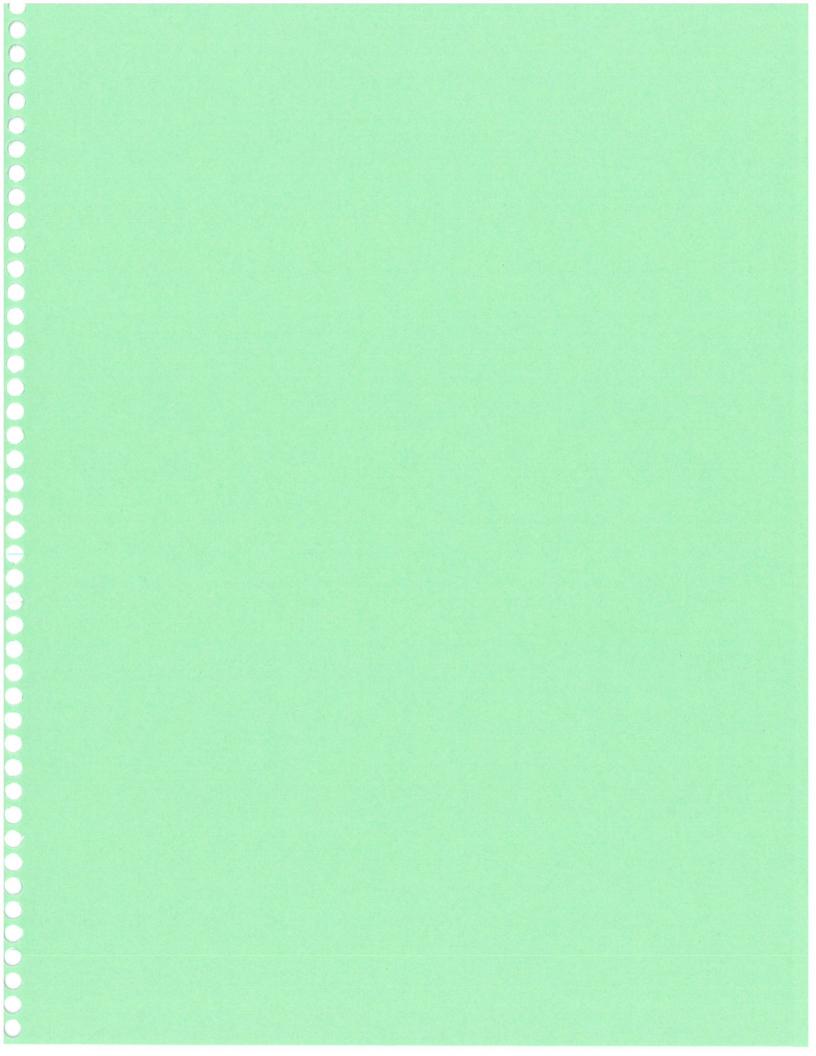
school is recycling. All waste materials are weighed and the results shared with the school.

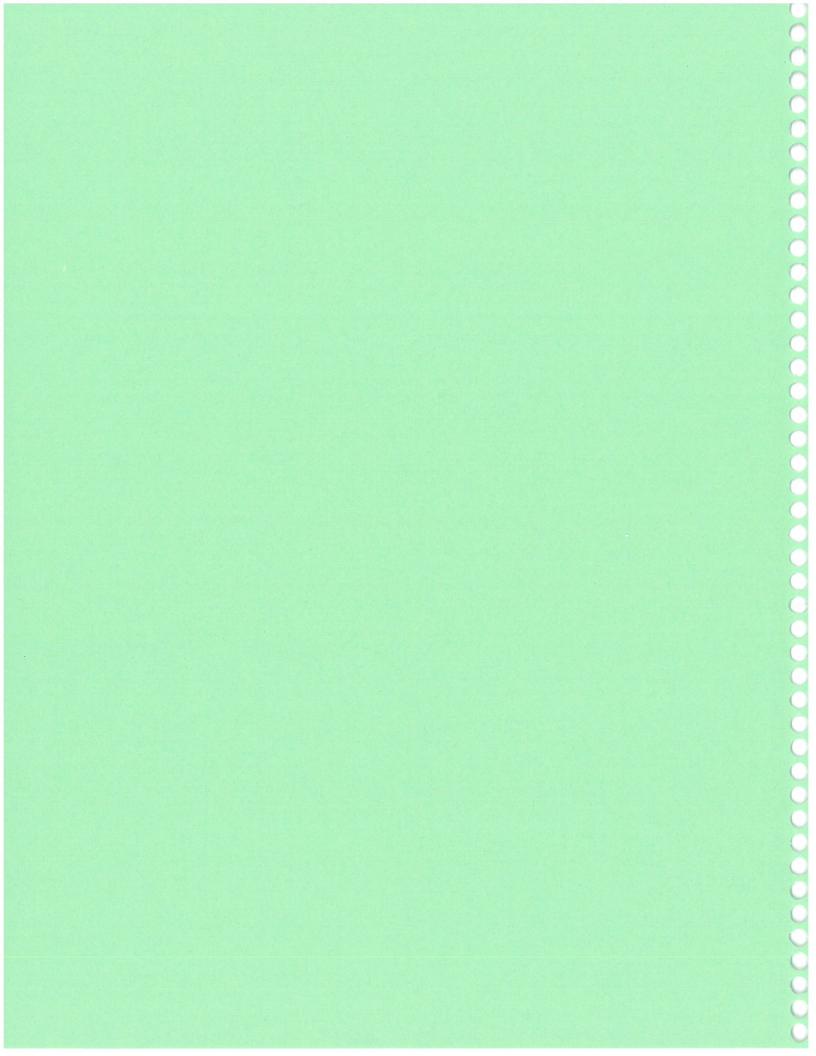
Ideally a waste audit is performed by BGGS staff and students, however not all schools can provide time for a student-led waste audit. In those instances BGGS may perform an informal waste audit which will provide a snapshot of the school's waste stream.

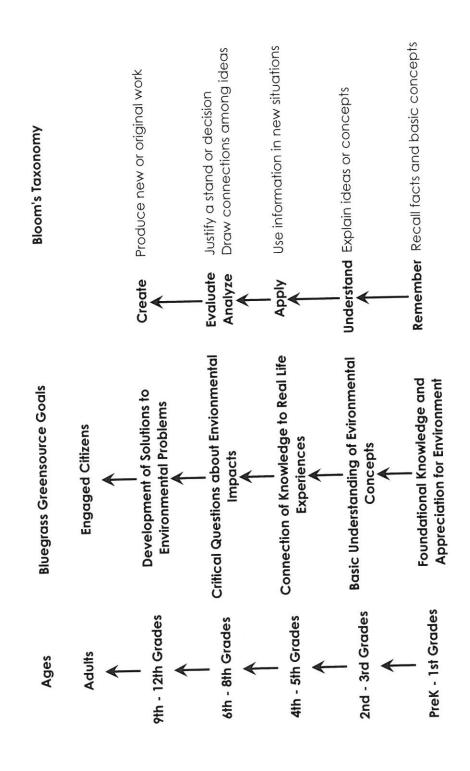
Depending on the results of the waste audit, the school's recycling plan may need to be amended. The plan may include actions such as sharing outreach materials for recycling, making charts and posters of waste audit results, educating teachers and other staff, and/or improving collection of materials.

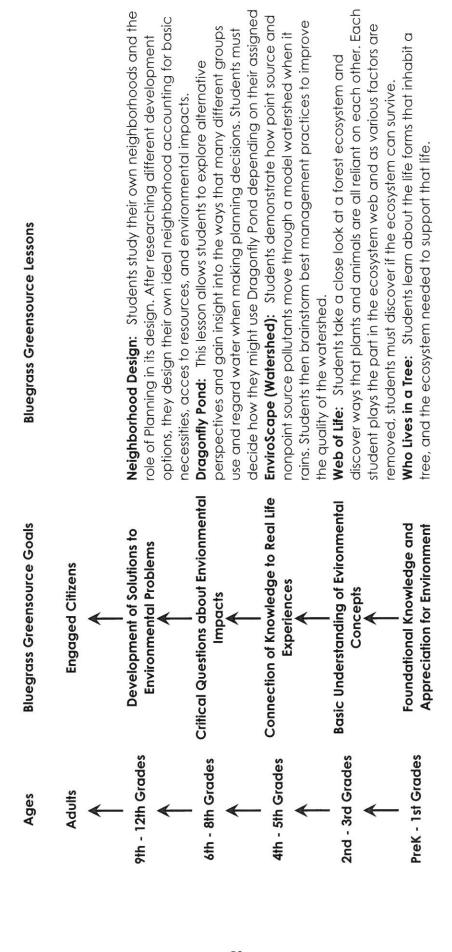
## Special Events/Non School Day Programs

Athletic events, school dances, or marching band practices pose a unique challenge for managing a school's waste. BGGS will work with school officials and students groups to develop instructions and encourage recycling participation while decreasing contamination. Specific protocols for various events and activities will be developed on how to deal with waste streams outside regular school hours. Materials created by LFUCG will be used for all signage at school sporting events.









#### <u>Proposed Modifications to the Scope</u>

Bluegrass Greensource would like to propose a few modifications to the scope of work outlined in the Request for Proposal for Environmental Education Services. We are prepared to offer the services as outlined in the previous section, but would like to offer the following for consideration.

#### **Amended Target Numbers**

The original scope suggests that teacher trainings be limited to 25 teachers. From past experiences, Bluegrass Greensource has found that up to 30 participants can still be involved in a successful workshop and that extra flexibility is important in being able to attract educators. This number is not to be understood as a goal, but simply as an extra allowance should Bluegrass Greensource have the need. This change would not affect the proposed budget, and would not be necessary if either of the alternate models below are chosen.

#### Amended Early Childhood Outreach

In regards to early childhood education, Bluegrass Greensource would like to amend the 80% minimum required for  $1^{st} - 8^{th}$  grade educators to two-thirds, or 67%. Because of recent state budget changes, professional development state wide has been drastically cut, especially for preschool teachers. Additionally, this RFP does not include preschool education, therefore we would like to put an added emphasis on training the preschool teachers.

The City of Lexington has already acknowledged the importance of supporting PreK students through its participation in the First 5 Lex program. This care should be extended in the environmental education professional development that Bluegrass Greensource offers on behalf of the city of Lexington. Quoting research done at Harvard University, the First 5 Lex website reminds us that "the emotional and physical health, social skills, and cognitive-linguistic capacities that emerge in the early years are all important prerequisites for success in school and later in the workplace and community." By establishing the importance and care of the environment early in a child's life, our staff members are better able to build on that care in the later years of the student with increased knowledge of that subject and an increased awareness of how to protect and manage it.

This change would not affect the proposed budget, and would not be necessary if either of the alternate models below are chosen.

#### Alternate Teacher Training Model

Providing a teacher training to 100 unique teachers each year would help Bluegrass Greensource and LFUCG recognize our shared goal of reaching as many new educators as is possible, however we would like propose a change that would focus on repeat or sustained contact rather than large numbers. To make up for the fewer teachers receiving training each year, BGGS will make a concerted effort to reach out to new teachers through our in-class lessons at each Fayette County school.

In the same way that the City of Lexington desires to focus on repeated contact with the same students, Bluegrass Greensource proposes to have a similar option for the professional development workshops. Our goal is to make sure that when educators leave a workshop, they recognize the value of the curriculum and feel confident they can use it in a classroom.

We would like to propose one of two different options described below.

# Teacher Training Option #1: Professional Development Retreat

Bluegrass Greensource would like to offer a multi-day workshop to 25 teachers so that they will receive a very in-depth training regarding one of the topics of focus. The training will be held in an offsite location (such as the 4H Leadership Center in Jabez, KY) to maintain the focus solely on the workshop experience. A retreat workshop of this type may be a combination of (but would not be limited solely to) Project Learning Tree, Project WET, Project Underground, and Population Connection with additional opportunities possible. Additionally, it would be limited solely to educators working at schools within the city of Lexington without option for outside educators paying to join. All participating teachers will be given curriculum and materials, as well as stipends and complimenting materials for them to use in their classrooms. Instead of targeting 100 unique teachers for workshops lasting 3-6 hours, Bluegrass Greensource would be reaching those 25 teachers for a total of 20 hours of professional development each.

#### Teacher Training #2: Teacher Academy

The City of Lexington recently began its own program (The Citizen's Environmental Academy) aimed towards teaching members of the general public about city services and environmental challenges. Bluegrass Greensource would like to reflect on the merit of the program by offering a similar academy for teachers. The selected group of teachers would be required to attend a certain number of professional development workshops and would be given an opportunity to tour city facilities (eg: the MRF, the Compost Pad, the Wastewater Treatment Center). This would focus the number of teachers reached from 100 to 25 and allow for a wider breadth of exposure to topics that most educators may not have learned about in the past. Teachers will be offered a \$200 stipend to participate in the program.

Both of these options would require slight changes to the proposed budget. The Proposed Amended Budget is included in the Finance section.

# Environmental Education Budget Proposal RFP: 12-2018

Add extra rows as needed for multiple staff rates, etc. Please provide rates and antipated unit

#### **General Tasks**

Expense	Unit Rate		# of Units	Line Total	
staff time	\$	100.00	7	2 \$	7,200
transportation	\$	0.45	6	0 \$	27
co-branded gear	\$	125.00		5 \$	625
other:				\$	_

**General Tasks Total** 

7852

**Teacher Trainings** 

reacher trainings								
Expense	Unit Rat	е	# of Units	L	ine Total			
substitutes (half day)	\$	50.00		50	\$ 2,500			
substitutes/stipends (full day)	\$	100.00		50	\$ 5,000			
food	\$500/w	orkshop		4	\$ 2,000			
workshop supplies	\$100/w	THE PARTY NAMED IN COLUMN TWO IS NOT THE OWNER.		4	\$ 400			
teacher supplies (take home)	\$50/ted	CONTRACT OF THE PARTY OF THE PA	10	00	\$ 5,000			
staff time: workshop development	\$	100.00		25	\$ 2,500			
staff time: promotion & registration	\$	100.00		8	\$ 800			
staff time: facilitation	\$	100.00		20	\$ 2,000			
staff time: reporting	\$	100.00		8	\$ 800			
transportation	\$	0.45	2	00	\$ 90			
other:					\$ -			

# **Teacher Trainings Total**

21090

Lessons

LESSOTIS								
Expense	Unit Rate		# of Units	Line Total				
supplies: lessons	\$	20.00	96	\$	1,920			
supplies: projects	\$	27.00	30	\$	810			
staff time: series development (year 1)	\$	100.00	120	\$	12,000			
staff time: promotion & scheduling	\$	100.00	80	\$	8,000			
staff time: lesson planning	\$	100.00	100	\$	10,000			
staff time: teaching, series	\$	100.00	1457	\$	145,700			
staff time: significant projects	\$	100.00	65	\$	6,500			
staff time: teaching, non-series	\$	100.00	355	\$	35,500			
staff time: reporting	\$	100.00	60	\$	6,000			
transportation	\$	0.45	1900	\$	855			
other:				\$	-			

**Lessons Total** 

227285

**Recognition Program** 

Expense	Unit Rate	# of Units	Line Total
LAPCIISC		THE RESERVE THE PERSON NAMED IN COLUMN TWO IS NOT THE OWNER.	

staff time: program development	\$	100.00	16	\$ 1,600
staff time: field trip/day implementation	\$	100.00	110	\$ 11,000
staff time: award distribution	\$	100.00	30	\$ 3,000
staff time: administrative time	\$	100.00	28	\$ 2,800
staff time: reporting	\$	100.00	56	\$ 5,600
transportation	\$	0.45	550	\$ 248
field trip/day: school transportation*	\$	150.00	30	\$ 4,500
field trip/day: substitutes	\$100/day		30	\$ 3,000
field trip/day: admission				
field trip/day: support services fees				
award matertials	\$50/schoo	ol	30	\$ 1,500
other:				\$ -

#### **Recognition Program Total**

33248

#### **Support Services**

Manager Chairman Chai						
Expense	Unit Ra	te	# of Units	Line Total		
staff time	\$	100.00	144	\$	14,400	
transportation**	\$	150.00	2	\$	300	
Food***	\$	15.00	40	\$	600	
other:	\$	0.45	500	\$	225	

### **Support Services Total**

15525

## **Proposal Totals**

Area	Cost
General Tasks	7852
Teacher Trainings	21090
Lessons	227285
Recognition Program	33248
Support Services	15525

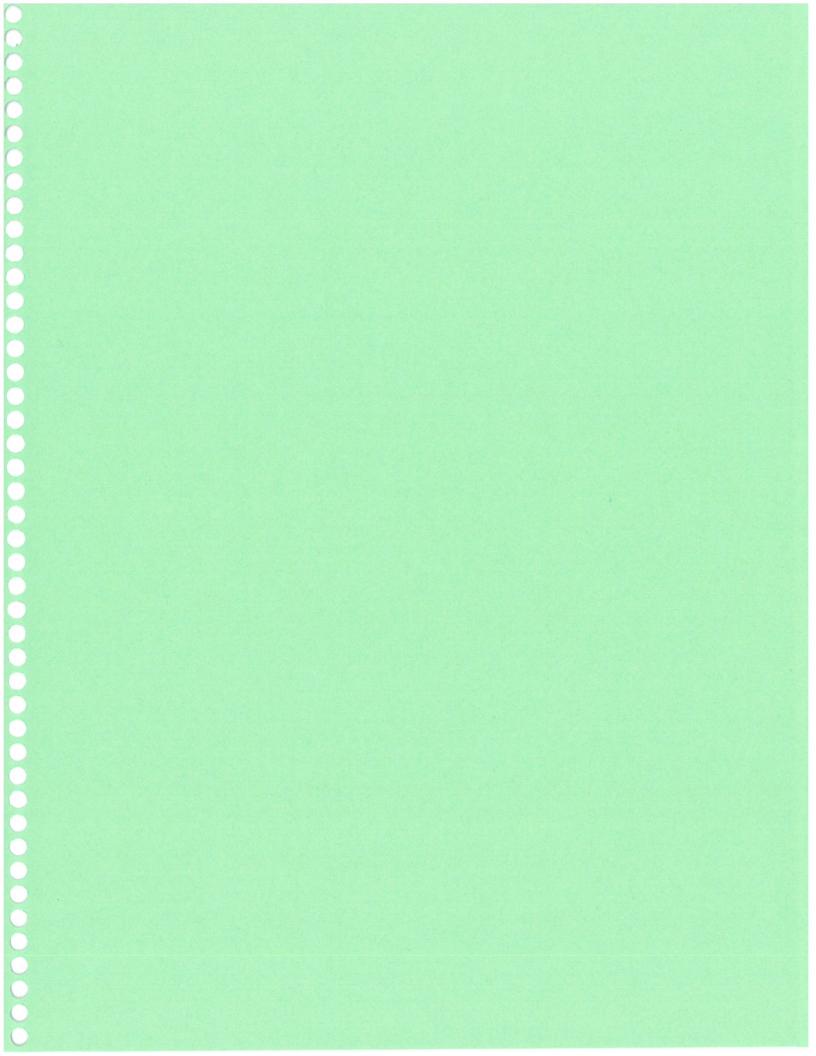
### **Proposal Total**

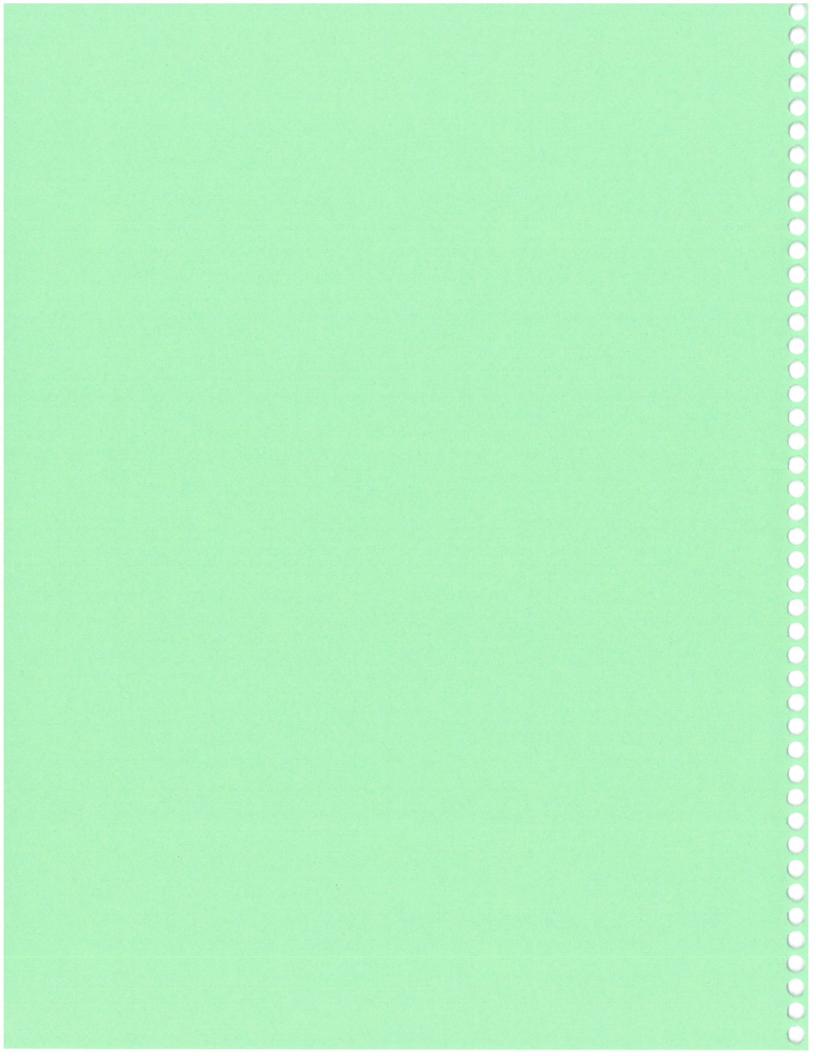
305000

<sup>\*</sup>FCPS cost of in-county field trip \$150/trip

<sup>\*\*</sup>Bus cost for two trips to MRF

<sup>\*\*\*</sup>Lunch for 2 meetings each of Custodial Advisory Board and Cafeteria Advisory Board





# Teacher Retreat Amendment

Tea	Cher Retreat Amend	# of Units	Line Total
Expense	Unit Rate	11 01 011111	0
substitutes	200		25 5000
stipends	115		30 3450
food	500	The second secon	1 500
workshop supplies	100		25 2500
teacher supplies (take home)	100	THE RESERVE THE PERSON NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TWO IS NAMED IN COLUMN TWO I	24 2400
staff time: workshop development			8 800
staff time: promotion & registration	100		55 5500
staff time: facilitation	100	0	90
staff time: reporting	100	0	O
	100	0	1 100
transportation	150	0	1 150
Lodging for 2 nights	150	~	

**Teacher Trainings Total** 

23450

**Teacher Academy Amendment** 

Tout	ther Academy Amend Unit Rate	# of Units	Line Total
Expense	Official		0
substitutes	200	2	5 5000
stipends	300	Name and Address of the Owner, where the Owner, which is the	5 1500
food	500	The second secon	1 500
workshop supplies	100		2500
teacher supplies (take home)	100		3200
staff time: workshop development			8 800
staff time: promotion & registration	100	The same of the sa	550/
staff time: facilitation	100		
	100	0	8 80
staff time: reporting	0.4	5 20	00 9
transportation	0.4	9	\$ -
other:			

**Teacher Trainings Total** 

19890

## **Additional Information**

Following this page are letters of support written by teachers here in Fayette County. These letters represent the outreach that Bluegrass Greensource does to public and private schools and have been collected over the many years we have worked in the district.



# Mary, Queen of the Holy Rosary Catholic School



A 2011 National Blue Ribbon School

Catholic Values ♥ Academic Excellence ♥ Successful Students

April 30, 2018

#### To Whom It May Concern:

Bluegrass Greensource has been an integral part of our curriculum here at Mary Queen of the Holy Rosary for the past several years. Our Bluegrass Greensource educators have effectively taught lessons that touch on many different subjects including science, math, social studies, language arts, and STEM. Our students are able to make connections between what they are learning in our regular curriculum and what they learn from our Bluegrass Greensource educators. The STEM activities are engaging, hands-on, and help our students practice problem solving skills.

# Some of our favorite activities include:

- Wetland in a Pan: The students have to "protect" their house from flooding, and learn the importance of wetlands in our environment.
- A-Maze-ing Water: The students build a maze out of clay, and guide a drop of water through the maze, attempting to avoid contaminants. They learn about how water picks up all sorts of "problems" as it travels along our city streets.
- Water Quality Testing: Our students have learned how to test the quality of water, and have viewed microorganisms living in pond water.
- Enviroscape: We have done the Landfill version and the Watershed version of this activity. In both, students see a model of a community with common landscapes. They learn how pollution affects our environment, even if we can't see it, and even if the pollution comes from a distance.
- Recycling Activities: The students learn what can and cannot be recycled here in Lexington.
- We have also learned about solar, wind, and water power and the positive effects of these renewable resources.

We have thoroughly enjoyed collaborating with Bluegrass Greensource over the past few years. They are very willing to find a lesson that coordinates with questions that come up in our classrooms. We have even taken Bluegrass Greensource on field trips with us to McConnell Springs!

Thank you for your consideration in further funding for this highly beneficial and engaging program. It truly reaches many student in our community, and they in turn share what they have learned with their families. Thank you for helping to shape our young problem solvers.

Sincerely,

Barb Biega and Michelle Jackson 4<sup>th</sup> grade teachers

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To Whom it May Concern,

I am writing this letter in support of Bluegrass Greensource of Lexington and the wonderful educational outreach programs they offer to supplement the Fayette County science curriculum. I am a 4th grade teacher at Wellington Elementary and have been lucky to utilize BGGS in my classroom once a month for the past 5 years. It is always a highlight of my students' day when they hear that Mr. Danny from BGGS in coming to do a science lesson.

One of the things that I have been most impressed with is the improvement I have seen in the classes offered and the overall program each year I use it. The classroom educators and curriculum developers are always looking for ways to improve and better meet the needs of the teachers and students they serve. When Fayette County adopted the Next Generation Science Standards, BGGS quickly adapted their lessons to match the new content. In addition, they have reached out to me to share with me the lessons they offer and plan them according to the pacing and curriculum maps in Fayette County.

One challenge that many teachers like myself face is finding the time and the resources to do hands-on experiments or learning activities with the students. Kids learn best when they are able to learn by doing, and that is exactly what BGGS does for every lesson they teach. My students have designed and build solar ovens, wind turbines, have created a human chain reaction to show how coal is changed into electricity, and have created what power wheels to name a few.

My students greatly benefit from the engaging, real-world applicable lessons that BGGS teaches in my classroom and they are learning how to be good stewards to their environment. Below I have included statements from my current students about BGGS and why they love it so much:

<sup>&</sup>quot;BGGS teaches students about picking up trash and taking care of our environment"

<sup>&</sup>quot;BGGS makes it fun to learn about how to use wind energy."

<sup>&</sup>quot;The teacher tries to involve everyone in the activities."

<sup>&</sup>quot;BGGS teaches us science in different and fun ways."

<sup>&</sup>quot;It makes me remember more things in science and helps me with what I'm learning in the classroom and on KPREP."

<sup>&</sup>quot;It's special and makes you learn things better. You get to build things and it's special because it only happens once a month."

<sup>&</sup>quot;It's hands-on learning, so it sticks with you better. You get to discover on your own when you are doing things; like the wind turbine activity. I learned a lot of things on my own from doing the experiment."

"Even if you don't like what you are learning about, it is an activity that is fun and you end up liking it anyway."

"The stuff that he (Mr. Danny) teaches us makes you so interested that you want to do research on your own. I go home and research the things he teaches us about."

"It helps me understand the rules of plants and animal life."

It is my hope that his wonderful collaboration between the community and schools continues and that Bluegrass Greensource is something that I can continue utilizing in my classroom for the years to come.

Sincerely, Mrs. Lynne Buchanan 4th Grade Teacher Wellington Elementary School



Tresine T. Logsdon

7 November 2014

Amy Sohner Executive Director Bluegrass Greensource P.O. Box 910384 Lexington, KY 40591

Excitement is teeming among our teachers and students. Anticipation is building.

The authority in environmental education, Bluegrass Greensource continues to inspire our students' hearts, broaden their minds, challenge their habits and motivate them to action. Each year, Bluegrass Greensource enters our classrooms and reaches thousands of our students through stirring activities, compelling ideas and stimulating discussion, capitalizing and nurturing the inherent passion our youth has for sustainability. Bluegrass Greensource has accomplished this with remarkable innovation and outstanding efficiency over the last 8 years. But our teachers and students long for more. They desire an outdoor classroom beyond the confines of their school parking lots and playgrounds. They need an opportunity to understand first-hand and in real-time the soil that feeds them, the plants that provide their air and water they drink. To truly apply the concepts and skills Bluegrass Greensource has so adeptly equipped them with over the last decade, our students need an Environmental Education Center. There is no better organization than Bluegrass Greensource--no better proven leadership or expertise—to offer these opportunities to our students.

And so, there is excitement in the air. For authentic outdoor learning opportunities. For collaborative investigations of native KY landscapes and waterscapes. For a teaching environment that will authentically and powerfully reach every learner, regardless of demographic or life circumstances. You see, our community needs this level playing field for our students.

Bluegrass Greensource is not just a pioneer in environmental education; they have forged unprecedented cooperation among our schools and community partners. Shoulder to shoulder with our students, teachers, parents and community members, Bluegrass Greensource will create a unified community for improved sustainability, where our youth's zeal and city leaders' vision coalesce to inspire lasting change on our school campuses and neighborhoods. Fayette County

Public Schools is delighted to see Bluegrass Greensource poised and equipped to take the natural next step towards making Lexington a national leader in environmental education and capacity building. We look forward to joining your mission to engage our students in extraordinary ways, through standards-aligned, real-world learning in their natural environment.

Sincerely, Tresine T. Logsdon

Energy & Sustainability Curriculum Coordinator Fayette County Public Schools Lexington, KY

Tresine.Logsdon@Fayette.Kyschools.US 859-619-6472 www.sustainability.fcps.net

# Russell Cave Elementary School

3375 Russell Cave Road Lexington, KY 40511 Phone: (859) 381-3571

Fax: (859) 381-3575

http://www.russellcave.fcps.net



November 30, 2014

Amy Sohner Executive Director Bluegrass Greensource P.O. Box 910384 Lexington, KY 40591

The purpose of this letter is to convey my sincere appreciation for Pattie Stivender, Deb Larkin, and the Bluegrass Greensource school programs. I have been lucky enough to work with the program for a few years and have greatly benefited from the expertise, resources, classroom visits, and opportunities that Bluegrass Greensource has provided my students and me.

Bluegrass Greensource has impacted my teaching in many ways. I rely on them for materials. Hands-on, engaging materials, such as the skulls kit, are made available for my use. I can even make special requests. I once emailed Pattie about acquiring a small desktop Rosie recycler model because I wanted to use it as a recycling award in my school. Not only did I receive the recycler but she actually made it into a trophy for me! It was spray-painted gold and mounted on a spray-painted tin can. It was even labeled as "The Golden Rosie." Years later, and classes in my school still compete for this coveted award each week when my Green Team checks and collects their classroom recycle bins.

I also rely on Bluegrass Greensource for engaging lessons. I have been lucky enough to work with both Pattie and Deb Larkin to arrange lessons for my students within my classroom and at the Center for Applied Energy Research's annual energy fair. The lessons are aligned with our required content and always have an interactive component. Two of my students' favorite activities are the dumpster dive/waste audit and the Enviroscape Model lesson. These lessons stress the importance of recycling and water quality in a meaningful and memorable way.

Bluegrass Greensource is a source of knowledge. I appreciate having staff at the center who are always willing to share their expertise. I was even lucky enough to participate in an overnight experience with other teachers on a trip called the energy tour. We visited a model village, a solar farm, an energy-efficient high school, and even took a tour of a coal mine. I learned a tremendous amount and the video footage, pictures, and experiences have become instrumental in teaching energy conservation in my classroom.

I support Bluegrass Greensource's efforts to provide an environmental education facility in Lexington, KY. Having a location where students can see environmental solutions in practice is very important to environmental education. My students would benefit from visiting and engaging in hands-on activities at your proposed new center.

I wish to thank the staff of Bluegrass Greensource and their funders for providing my students with valuable information and helping them to take action to address environmental issues in my community.

Sincerely, Julie Jones, NBCT Science Lab Teacher, K-5 Russell Cave Elementary julierae.jones@fayette.kyschools.us

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# CARDINAL VALLEY ELEMENTARY

Matthew Spottswood Principal

Jennifer Patrick
PGES Coach

**Graciela Pagin** School Administrative Manager

Sherry Howard Counselor

Adonya Boyle

11/18/14

Amy Sohner Executive Director Bluegrass Greensource P.O. Box 910384 Lexington, KY 40591

I am writing to express my love for Bluegrass Greensource school programs and inform you how they have increased students' environmental education.

I have worked with Bluegrass Greensource for the past 7 years. They helped me begin a school wide recycling program at my school, Cardinal Valley Elementary. The following year we introduced many activities such as watershed education and Keep America Beautiful. As the years went on, they brought in more resources to our school. I have had the pleasure of having an environmental educator accompany our school to 4-H camp to conduct a pond study, 2 years in a row.

The biggest impact occurred last year when Ryan Farley helped organize a creek clean-up in our school's neighborhood. With the help of volunteers, we removed over a ton of trash from the creek in 4 hours. We couldn't have done this without his support and Bluegrass Greensource.



I strongly support and praise the work of the environmental education given by Bluegrass Greensource. They help mold our future students into environmentalist that will grow up to provide the answers to the ever-growing problems of the environment we face today. Without their help and dedication I would not be able to contribute as much time to environmental education in my classroom. My students would benefit from visiting and engaging in hands-on activities at your proposed new center.

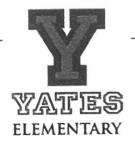
I wish to thank the staff of Bluegrass Greensource and their funders for providing my students with valuable information and helping them to take action to address environmental issues in my community.

Sincerely,

Adonya Boyle Nature Studies Teacher K-5<sup>th-</sup> Cardinal Valley Elementary



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JESSICA SALYERS

Administrative Dean

MONICA EVERSOLE
Principal

Dear Amy,

I wanted to take a few minutes to let you know what a valuable partner Bluegrass Greensource has been for the past ten years that I have taught science at Yates Elementary. As I reflect on my own teaching, and on the changes at Yates over the past decade, I realize how deeply indebted we are to BGGS for many of our most successful school programs.

The Yates school garden got its start years ago with support from Bluegrass Greensource (then "Bluegrass PRIDE"). With your help, we installed our first rain barrel in 2007. We now have a well-established garden featuring vegetable beds, native plantings, and a permanent rain garden. Over the years, BGGS environmental educators have worked with our students in the garden to make connections between their gardening efforts and broader issues of sustainability such as water quality, waste reduction and biodiversity.

Ten years ago, recycling at Yates was haphazard and poorly understood. Bluegrass Greensource was the driving force behind the establishment of a comprehensive recycling program at Yates that now diverts hundreds of pounds of paper, metal, and plastic from the waste stream every week. Your logistic support made the process manageable and your educational efforts (the annual "Dumpster Dives" and classroom visits from Rosie) made the process fun and meaningful for teachers and students alike.

Bluegrass Greensource has also been a key partner in our school-wide efforts to reduce energy consumption. For many years now, BGGS educators have worked with my afterschool "Green Team" club to provide lessons on conservation methods and alternative energy technologies and to assist with school energy audits and education campaigns. Student learning is tremendously enhanced by the unique expertise and materials that the BGGS educators bring. My own understanding of energy issues was certainly enhanced by my participation in the 2013 Energy Tour for educators. And through years of faithful participation in our annual Family Science Night, Bluegrass Greensource has reached many of the Yates families with accessible energy conservation ideas.

Finally, I have to mention one more way that Bluegrass Greensource has impacted my teaching. Through your brilliant and well-managed material loan program, I have been able to bring science to life with tubs of animal skulls, mammal pelts, and other treasures, checked out for two weeks at a time from your impressive materials library. I know that many of my colleagues at other schools have also come to rely on these materials.

So I want to thank you, your staff, and your funders most emphatically for all of these years or multifaceted support for myself, my colleagues, and my students. School life would be much poorer without the worm bins, wind turbines and watershed models that you have introduced us to. I wholeheartedly support Bluegrass Greensource's efforts to establish an environmental education facility in Lexington, KY. Having a location where students can see environmental solutions in practice will fill a critical need in central Kentucky's educational landscape. My students will be first in line for a field trip to this environmental education center.

Sincerely,

Josh Radner Yates Elementary Science Lab 695 E. New Circle Road Lexington, KY 40505

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Melinda Kinsel 930 Jouette Creek Drive Lexington, KY 40509

11-7-14

Amy Sohner Executive Director Bluegrass Greensource P.O. Box 910384 Lexington, KY 40591

I am writing to inform you what a tremendous difference Bluegrass Greensource school programs have made on our school community. I work with this school-based program. I recognize firsthand how your activities and lessons have complimented our curriculum. The school-based programs have aid students with basics understandings of environmental issues.

Bluegrass Greensource school programs have been instrumental in providing engaging activities for students that reinforce our school recycling campaign. The activities and materials provide opportunities for students to take active participation in conservation and energy reduction lessons. The students appreciate the community support of their efforts to build environment sustainability.

For the past eight years, BGGS educators have worked in my classroom, providing lessons in waste reduction. When we first began working with BGGS our school did not recycle. We now recycle in all classrooms and offices. The students have learned the value of personal accountability and stewardship with natural resources. The programs have supported our school effort to save money on waste removal.

Water quality is an important environmental issue. BGGS educators provide my students with activities and lessons that teach the basics of water conservation, water quality, and the benefits of our school's rain

garden.

I support Bluegrass Greensource's efforts to provide an environmental education facility in Lexington, KY. Having a location where students can see environmental solutions in practice is very important to environmental education. My students would benefit from visiting and engaging in hands-on activities at your proposed new center. I look forward to learning how the students of Athens-Chilesburg Elementary could benefit from a dedicated location where more of their needs could be met.

I wish to thank the staff of Bluegrass Greensource and their funders for providing my students with valuable information and helping them to take action to address environmental issues in my community.

Sincerely,

Melinda Kinsel
STEM Lab Instructor
Athens-Chilesburg Elementary

#### Cassidy Elementary 1125 Tates Creek Road Lexington, Kentucky 40502

Kristi Fehr 1125 Tates Creek Road Lexington, Ky 40502

November 9, 2014

Amy Sohner Executive Director Bluegrass Greensource P.O. Box 910384 Lexington, KY 40591

I am writing to inform you that because of Bluegrass Greensource's (BGGS) efforts, students of all ages in the community have been exposed to life-changing lessons and experiences that will forever impact their thinking about the ways they interact with the environment. I have worked with this school-based program for the past 7 years, and know firsthand how your activities and lessons align with the curriculum including the Next Generation Science Standards. Through your efforts my students have learned about waste reduction, water quality, and energy issues. BGGS does a tremendous job connecting these life-long lessons to real-life situations and helps to create improvement projects that students can see and touch right now!

When I taught at Liberty Elementary, BGGS educators worked not only with the science lab, but the entire school and my after school science club. This year I am at Cassidy Elementary where I am recruiting them to help with lessons covering the Next Generation Science Standards and SEEK (Scientist and Engineers Empowering Kids), my after school science club. The students look forward to the visits by the educators and always enjoy the hands-on activities. They also enjoyed a visit by a group that worked with BGGS to do a skit about recycling a few years ago.

When I first began working with BGGS my school did not recycle very consistently. They now recycle in all classrooms and offices. The students have learned the importance of recycling and the school has saved money on waste removal. The Dumpster Dive was a truly telling experience!

Water quality is also an important environmental issue that I strive to teach in the science lab. BGGS educators provide my students with activities and lessons that teach the basics of water and the importance of maintaining clean water. In the past, Patti Stivender has even attended my trout release on a Saturday at Red River Gorge, where we did water quality testing and a stream study. She also helped my science club test a stream within walking distance of my school.

I support Bluegrass Greensource's efforts to provide an environmental education facility in Lexington, KY. Having a location where students can see environmental solutions in practice is very important to environmental education. My students would benefit from visiting and engaging in hands-on activities at your proposed new center.

I wish to thank the staff of Bluegrass Greensource and their funders for providing my students with valuable information and helping them to take action to address environmental issues in my community. The future of our land, air, and water quality is in our children's hands, so it is imperative that we are there to guide them along the way!

Sincerely.

Kristi Fehr

Cassidy Science Lab Teacher

