#### **GRANT AWARD AGREEMENT**

## Fiscal Year 2016 Class A Incentive Grant Program

THIS AGREEMENT, made and entered into on the \_\_\_\_\_\_\_ day of \_\_\_\_\_\_\_, 20 \underset \und

#### WITNESSETH:

WHEREAS, the Government has funds available through the Stormwater Quality Projects Incentive Grant Program to assist qualified applicants in the implementation of projects that meet the goals of the program; and

WHEREAS, the Grantee represents directly or indirectly a group of single-family residences in Fayette County who are fee-payers of the Government's Water Quality Management Fee; and

WHEREAS, the Grantee has proposed a need for the funds requested to develop and implement a proposed project by submitting a valid grant application; and

WHEREAS, the Grantee desires to implement a specific project that meets one or more Incentive Grant program goals to improve water quality, reduce stormwater runoff, and provide public or private education related to stormwater quality for the benefit of its members, community, and the general public; and

**WHEREAS**, the Grantee's grant application has been reviewed and selected for funding by the Government's Water Quality Fees Board in accordance with Sections 16-408 and 16-410 of the Government's Code of Ordinances;

THAT FOR AND IN CONSIDERATION OF THE MUTUAL PROMISES AND COVENANTS HEREIN EXPRESSED, GOVERNMENT AND GRANTEE AGREE AS FOLLOWS:

- (1) The Government hereby grants the Grantee the sum of \$32,820.00 (hereinafter "the Grant"), for use in implementing the project elements as listed in Attachment A which is incorporated herein by reference as if fully set out herein.
- (2) The Grantee agrees to match the Grant with contributions, labor and other services equal to or greater than 20% of the total project cost.
- (3) The Grantee agrees to use the Grant only for the activities set forth in Attachment A.
- (4) The Grantee agrees to perform periodic reporting as detailed in Paragraph 5 herein below, and provide to the Government a Project Final Report, in digital and hard copy, within thirty (30) calendar days of the completion of the project elements following a standardized format to be provided by the Government summarizing all work completed and detailing the total grant expenditures.

- (5) The Grant to the Grantee shall be disbursed in the following manner:
  - (a) The Grantee shall submit, at least once every three (3) months, a *Grant Reimburse-ment Form* and a *Request for Funds*, in standardized format provided by the Government, to the Government's Grant Manager designated by the Director of the Division of Water Quality for the project. The *Request for Funds* shall include documentation that the Grantee has already expended the requested funds or shall be in a position to expend properly the requested funds within thirty (30) days of receipt of the funds. The *Request for Funds* shall include full accounting of all eligible grant-related expenses, as listed in Attachment A. Copies of invoices, purchase orders, or receipts showing vendor, date, amount, and items purchased or ordered shall be provided with the *Request for Funds*.
  - (b) Each *Request for Funds* shall include documentation of all of the Grantee's Match Costs listed in Attachment A and claimed for the prior period. For cash expenditures this shall include receipts, showing vendor paid, date, amount, and items purchased. For volunteer hours this shall include sign-in sheets describing the events with signatures, name, address, time in and time out (or length of event), for each participant (volunteers must be 12 years of age or older). For mileage, this shall include driver name, type of vehicle, location to and from, date, and miles driven.
  - (c) Each *Request for Funds* shall be accompanied by a *Project Status Report*, in a standardized format provided by the Government, describing the progress of the project to date, including a description and schedule of all activities completed, and hardcopy or electronic copies of materials completed and/or used to date. For educational events (if applicable), copies of the class sign-in sheets documenting the number of attendees shall be provided.
  - (d) The Government's Grant Manager shall review each *Request for Funds* and supporting documents for compliance with the terms of this Agreement and the guidelines of the Stormwater Quality Projects Incentive Grant Program. If the Government's Grant Manager finds the Grantee's *Request for Funds* is in compliance with the terms of this Agreement and the Program's guidelines and that the activity progress and management program of the Grantee satisfy the terms of this Agreement, he or she shall approve the *Request for Funds* within 15 days of receipt, and then forward it to the Division of Accounting for payment.
  - (e) Should the Government's Program Administrator determine that the Grantee is not in compliance with the terms of this Agreement and/or the Stormwater Quality Projects Incentive Grant Program, including deficiencies in progress and/or management of the project, the Division of Water Quality shall notify the Mayor's Office and the appropriate district Council person and shall meet with the Grantee on matters that prevent approval of the *Request for Funds*. Failure to resolve any such matters to the satisfaction of the Government may lead to termination of the Agreement for cause pursuant to Paragraph 25 herein below.
  - (f) The Government shall release payment of the final 3% of the Grant only after receipt and acceptance of the Project Final Report. The Government's Grant Manager shall review the Project Final Report and provide comments to the Grantee within 15 calendar days or, if acceptable, forward approval to the Division of Accounting for payment.
- (6) For any project which includes installation of permanent capital infrastructure as listed in Attachment A (not to include individual rain barrels, small rain gardens, and pond equipment), the Grantee agrees to meet all design standards specified in the Government's Engineering Manuals and/or as further described in Attachment A in the design of all Grantfunded improvements. This includes all associated activities including but not limited to erosion and sediment control, traffic control, utility relocations, seeding, etc. The Grantee further agrees to design the facilities in such a way as not to preclude the potential for future water quality/quantity monitoring by the Government.

- (7) For any project which includes installation of permanent capital infrastructure as listed in Attachment A, the Grantee agrees to provide in hard copy and electronic format the following deliverables as they become available, each sealed by a Professional Engineer licensed in the Commonwealth of Kentucky (or Registered Landscape Architect when allowed by Kentucky Revised Statutes 323A.010):
  - Design calculations;
  - Final construction plans, including erosion and sediment control plans, traffic control plans, grading plans, etc.;
  - Final specifications and bidding documents (if applicable);
  - Detailed engineer's construction cost estimate including quantities;
  - Inspection, Operation, and Maintenance Plan laying out the plan for regular inspection and maintenance of each proposed facility for design performance and safety in accordance with manufacturer's specifications and the Government's Stormwater Manual.
  - Copies of all federal, state, and local permits, approvals, encroachments, etc. obtained for the project.
  - Record Drawing showing all field changes, and signed and sealed by the professional of record certifying the project as shown meets all original design intent.
  - Photo documentation of site conditions and improvements before, during, and after construction.
- (8) For any project which includes installation of permanent capital infrastructure listed in Attachment A, the Grantee shall provide, by the end of the design phase, certification by a Professional Engineer or Registered Landscape Architect licensed in Kentucky that all stormwater control facilities proposed for this project are feasible and viable Best Management Practices (BMPs) for controlling stormwater quality and/or quantity and are appropriate for the project site.
- (9) The Grantee agrees that any and all stormwater control facilities, including equipment and infrastructure, constructed or purchased with Grant monies shall remain the property of the Grantee, or the current property owner, or his successors and assigns, unless otherwise noted in Attachment A.
- (10) The Grantee agrees that all stormwater control facilities, including equipment and infrastructure shall remain in service and maintained by the Grantee or its representatives for at least the Service Life listed in Attachment A. For capital infrastructure, this shall include following the Inspection, Operation, and Maintenance Plan developed for each facility referenced in Paragraph 7 above. For capital infrastructure, the Grantee further accepts and agrees to enter into the "Agreement to Maintain Stormwater Control Facilities for Class A Incentive Grant Projects" attached hereto as Attachment B and which is incorporated herein by reference as if fully set out herein.
- (11) The Grantee agrees, and all individual property owners with grant-funded improvements installed on their properties shall agree, to allow the Government access to perform monitoring of the project elements for compliance with this Agreement.
- (12) The Grantee agrees to comply with all applicable local, state, and federal rules, regulations, ordinances, and laws in implementation of the project.
- (13) The Grantee agrees to obtain all necessary local, state, and federal permits and approvals in a timely manner and prior to the start of any work requiring such permits or approvals.
- (14) The Grantee agrees to obtain written approval from the Government's Grant Manager or Program Administrator for any proposed changes to the Project Team or Project Plan as listed in Attachment A prior to implementing the changes. Failure to gain written approval prior to making changes may lead to termination of the Agreement for cause pursuant to Paragraph 25 herein below.
- (15) The term of this Agreement shall be from the date of this Agreement until completion of the project outlined herein. The Grantee agrees to complete the project within <u>18</u> months from the date of this Agreement. The Grantee agrees to obtain written approval from the

Government's Grant Manager or Program Administrator for any time extensions beyond the grant period. Failure to gain written approval prior to making changes may lead to termination of the Agreement for cause pursuant to Paragraph 25 herein below.

- (16) The Grantee understands that the **Grant shown herein in Paragraph 1 is a not-to-exceed amount**, and any additional funding needed to complete the project elements listed in Attachment A is the responsibility of the Grantee. If it becomes apparent to the Grantee or the Government that the Grantee will be unable to complete the project either in the manner or for the amount described in this Agreement, then the Grantee must immediately notify the Government's Grant Manager and Program Administrator by providing a complete and detailed written explanation of its inability to comply with the terms of the Agreement. The Grantee must further provide the Government's Grant Manager and Program Administrator with a complete and detailed written explanation of any proposed changes, and the reasons for those changes.
- (17) The Grantee asserts that it is an incorporated organization registered in active status with the Commonwealth of Kentucky Secretary of State, and is in full compliance with all applicable provisions of the Lexington-Fayette Urban County Government's Code of Ordinances Chapter 5 Buildings and Building Regulations, Chapter 7 Finance and Taxation, Chapter 12 Housing, and Chapter 16 Sewage, Garbage, Refuse, and Weeds, or in compliance with Kentucky Department of Housings Buildings and Construction rules and requirements as is appropriate for those state institutions, parcels, or buildings which are subject to state regulations and oversight as opposed to local ordinances and regulations. If the Grantee becomes out of compliance with any of these provisions, it will contact the Government's Program Administrator immediately. Failure to resolve any such matters to the satisfaction of the Government may lead to termination of the Agreement for cause pursuant to Paragraph 25 herein below.
- (18) This Agreement may not be modified except by written agreement of the Government and the Grantee.
- (19) In any advertisement of the grant-funded project, whether oral or written communications, the Grantee agrees to identify the Lexington-Fayette Urban County Government as the source of the above referenced funds; the Grantee shall not specifically identify any individual or elected official as being responsible for the funds donated by the Government.
- (20) The Grantee agrees to allow the Government to publicize the Grantee's project through the Government's website and other media.
- (21) The Grantee agrees to reference the Lexington-Fayette Urban County Government's Water Quality Management Fee and the Stormwater Quality Projects Incentive Grant Program as a source of funding for the project on any permanent signage or educational brochures, presentations, websites, etc. produced using grant monies.
- (22) The Grantee is solely responsible for assuring that adequate and appropriate insurance or other necessary coverage is maintained during the term of this Agreement.
- (23) The Grantee shall provide equal opportunity in employment as required by applicable federal, state, and local laws, regulations and ordinances.
- (24) The Government assumes no responsibility whatsoever in the Grantee's project activities. Grantee shall defend, indemnify, and hold harmless the Government from and against any and all liability, claims, damages, losses, actions, costs, expenses, obligations, fines, and assessments of whatever kind, including defense costs and attorney's fees that are in any way incidental to or connected with, or that arise or are alleged to have arisen, directly or indirectly, in whole or in part, from or by Grantee's or its contractor(s), agents, or assigns, negligent acts or misconduct, or errors or omissions, or in any way connected with the activities carried out pursuant to this Agreement, the Grant award or the Stormwater Quality Projects Incentive Grant Program.
- (25) If, through any cause, the Grantee shall fail to fulfill in timely and proper manner its obligations under this Agreement, or if the Grantee shall violate any of the covenants, agree-

ments or stipulations of this Agreement, the Government shall provide the Grantee thirty (30) calendar days to address the deficiency or violation. If the Grantee does not, after the thirty (30) days, come into compliance with this Agreement, the Government shall thereupon have the right to terminate this Agreement by giving written notice to the Grantee of such termination and specifying the effective date thereof, at least five (5) calendar days before the effective date of such termination. In that event, all finished or unfinished documents, receipts and reports prepared by the Grantee shall, at the option of the Government, become its property and the Grantee shall immediately repay to the Government all monies received pursuant to this Agreement less any amount representing just and equitable compensation for the Government's share of any satisfactory work completed pursuant to the Agreement.

(26) The Grantee's sole remedy for a breach of this Agreement by the Government shall be limited to the amount of the Grant.

**IN WITNESS WHEREOF**, the parties hereto have executed this Agreement at Lexington, Fayette County, Kentucky, this the day and year first above written.

LEXINGTON-FAYETTE URBAN COUNTY
GOVERNMENT

BY:

JIM GRAY, MAYOR

ATTEST:

CLERK, URBAN COUNTY COUNCIL

Grantee Organization: Friends of Wolf Run, Inc.

639 Cardinal Lane

Lexington, KY 40503

NAME: Key Cooke TITLE: Treasurer

The foregoing Agreement was subscribed, sworn to and acknowledged before me by

Ken (ook ), as the duly authorized representative for and on behalf of foregoing Agreement was subscribed, sworn to and acknowledged before me by

My commission expires:

My commission expir

NOTARY PUBLIC

JUSTIN WELCH
Notary Public
State at Large
Kentucky
My Commission Expires June 5, 2018

#### ATTACHMENT A

## to the GRANT AWARD AGREEMENT

# between Lexington-Fayette Urban County Government (LFUCG) and Friends of Wolf Run Inc.

Stream Side Buffer Stewardship Program

**GRANT PROGRAM:** FY2016 Stormwater Quality Projects Incentive Grant Program Class A (Neighborhood) Projects

Funded through the LFUCG Water Quality Management Fee

 Administered by the LFUCG Division of Water Quality (DWQ) in the Department of Environmental Quality and Public Works

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## **PROJECT TEAM AND CONTACT INFORMATION**

Organization: Friends of Wolf Run Inc. (FOWR)

639 Cardinal Lane Lexington, KY 40503

KY Organization #: 0612068

**Organization President:** Lisa Collins, President

859-797-0011

arlobrindle@yahoo.com

**Primary Project Contact** Ken Cooke, Treasurer, FOWR – Treasurer

and Project Manager: 859-940-8234 (phone) ken.cooke@canewoods.com (email)

Will serve as project manager; providing project administration,

grant reporting, and volunteer management.

Secondary Project Contact: Individual Project Key Stewards (see Project Stewards list)

FOWR Board of Trustees: Will provide financial oversight and sponsorship.

Bruce Hutcheson, President Jean Watts, Vice-President

Layton Register

Project Steering Committee: Project operations and support.

Dr. Julian Campbell, Plant Materials Selection Jerome Higgenbotham, Native Plant Propagation

Russ Turpin, Restoration Consultant Ann Bowe, Landscape Designer Laurie Fields, Landscape Designer Will Overbeck, Plant Ecologist Jean Watts, Water Quality Specialist

Amanda Gumbert, Extension Water Quality Liaison Dr. Carmen Agouridis, UK Biosystems and Ag. Eng.

LFUCG Contacts: Demetria Melhorn, Division of Environmental Services: Review and

approve work on LFUCG Greenways

Chris Cooperrider, Parks and Recreation: Approves planting plans on park property, works with LFUCG contractors to protect plantings. Vernon Azevedo, DWQ – Remedial Measures Plans (RMP)

Program Manager: Coordinates plans, reviews, and approves plans for restoration work adjacent to planned RMP/Sanitary Sewer

projects.

LFUCG Streets and Roads: Assist with removal of cuttings.

## **Project Stewards and Cooperating Organizations:**

- 1. Clays Mill Greenway: Layton Register, Spring Meadows Neighborhood
- 2. <u>Deauville Drive Greenway</u>: Jerome Higginbotham, JH Technology Trust, Cardinal Valley
- 3. Eastway Wetland Seep: Eric Spangler, Hill-N-Dale NA with Southland Association
- 4. <u>Vaughn's Branch Versailles Road Corridor:</u> Scott Smouse & Paula Singer, Friends of Versailles Road
- Allendale Stream Buffer Restoration Nursery and Demonstration Area: Dr. Julian Campbell, Bluegrass Woodland Restoration Center, Bluegrass Community and Technical College (BCTC)
- 6. <u>Pine Meadow Park Section of Vaughn's Branch</u>: Mead Overbeck, Pine Meadows, Mason Headley & Cardinal Hill NA
- 7. <u>Preston's Cave Spring Park:</u> Gary Libby, Skybax Environmental, LFUCG Environmental Commission and Cardinal Valley Neighborhood

#### **PROJECT PLAN ELEMENTS**

The goals of the Streamside Buffer Stewardship Program are to improve water quality by restoring riparian stream buffers along Wolf Run Creek and its tributaries by engaging community leadership and volunteers in a coordinated, quality assured effort. Objectives are to create and maintain stream buffer demonstration projects, and engage neighborhood leadership in maintaining stream buffers on both public and private property. To recruit, train, supply, and support volunteer stewardship groups to assist LFUCG streamside property owners in managing vegetative riparian buffers along Wolf Run and its tributaries. To educate the public about the value of streamside buffers, to conduct performance monitoring showing water quality impacts of streamside buffer projects.

#### Project Strategy and work plan:

- 1. Volunteer Stream Buffer Stewardship recruitment, training and support
  - -Ongoing support for existing volunteer leadership through funding and technical assistance -Field days and demonstration workshops
  - -Support for new projects tackling several new neighborhoods not participating in the past.
  - -Marking areas planted with educational signage and "Stream Buffer" boundary markers so that community members and mowing contractors are aware of the effort.
- 2. Allendale-Moberly Spring Greenway "Riparian Arboretum" demonstration area.
- 3. Maintenance on areas already cleared and planted in previous years.

#### A. Project Element: Volunteer Stream Buffer Stewardship Initiative

Work includes identifying and recruiting volunteers from neighborhoods adjacent to particular parks, greenways or other public spaces. This is accomplished by engaging residents in a progressive level of involvement/work activities including:

- 1. **Conducting stream walks** along portions of the stream and inviting area residents via email, door to door flyers, post cards, and/or neighbor to neighbor personal invitations. During stream walks, discuss water quality, habitat and stream side buffer issues and management strategies with the residents. Discuss and seek approval for a remediation plan for the stream from those participating.
- 2. Planning Trash Cleanup Days, light litter pickups and trash removal.
- 3. Attacking Invasive Plants via "Bushwhacking Parties". Participants use hand tools to remove bush honeysuckle, garlic mustard, multi-flora rose, and Japanese Knot Weed. Activities involve treating cut shrubs with herbicides in accordance with practices developed by the Invasive Plant Working Group.
- 4. *Follow up Native Plantings* using volunteers to install perennials, shrubs, and trees according to a planting plan.
- 5. Leadership Training and Support through field days, on-site consultants with restoration experts.
- 6. *Education and Outreach* through distribution of "Living Along Kentucky Streams" and a "Stream Buffer Brochure", produced by the University of Kentucky Cooperative Extension Service, at work days, when promoting events and door to door distribution to stream side property owners.
- 7. *Effectiveness Monitoring:* Continuing water quality checks for field parameters (DO, pH, Temperature, and Conductivity) as well as nutrients via field spectrophotometers

- and pathogens via E. Coli analysis in cooperation with LFUCG Town Branch lab and BCTC.
- 8. *Identification and support for "Key Stewards"* to provide ongoing leadership for the parcel/greenway to organize follow-up efforts to keep invasive species in check, water plants, and organize additional work days to take place beyond the scope of the project.
- 9. Clearly marking Stream Buffer Improvement areas with fiberglass posts and educational signs.

## B. Project Element: Individual Project Site Support

There are seven project sites planned to be supported, as listed below. See also the Supplemental Project Element Information section for additional information for each of the project sites including; Figure 1: Project Location Map, individual project site details and budgets.

- 1. Clays Mill Greenway Demonstration Area, 1869 Clays Mill Road
- 2. Deauville Drive Greenway, Cardinal Valley Neighborhood
- 3. Eastway Wetland Seep, Hill-N-Dale Neighborhood
- 4. Vaughn's Branch Versailles Road Corridor, Oxford Circle and Cardinal Hill
- 5. Allendale-Moberly Spring Greenway "Riparian Arboretum", Allendale Dr.
- 6. Pine Meadows, Mason Headley & Cardinal Hill Neighborhood Association
- 7. Preston's Cave Spring Park, 1937 Dunkirk Drive

# C. Project Element: Provide Overall Project Support through Coordination, Quality Assurance, Communications, and Signage

Friends of Wolf Run Leadership will provide the overall project management through distribution of publications, coordinating field trips to each site, providing signage and boundary marking, and promotions via email, social media, and web site publications. See also the Supplemental Project Element Information – Project Detail 08 for description and budget.

#### REPORTING REQUIREMENTS

In addition to the reporting requirements outlined in the Grant Award Agreement, the following special items are noted for this project:

- 1. The Organization shall submit copies of the herbicide application plan to the LFUCG Grant Manager and the Division of Environmental Services prior to work beginning.
- The Organization shall provide written authorizations for private property access (including LFUCG Parks) to the LFUCG Grant Manager prior to work on any area for which they are required.
- 3. No Project shall proceed with field work until written approval to proceed is obtained from the Grant Administrator or Director of Water Quality, because of the potential for conflict with potential future LFUCG Capital Projects.

#### **EQUIPMENT**

Any equipment purchased with the Grant shall remain the property of the Organization.

## PERMANENT FACILITIES/INFRASTRUCTURE

**Permanent Capital Infrastructure:** This grant does not include "Permanent Capital Infrastructure" as defined in the Grant Award Agreement. Attachment B is not required for this Agreement.

**Monitoring:** The Organization agrees to allow LFUCG staff access to the project site(s) to monitor the installed features for compliance with this agreement. Water quality sampling via grab samples or other methods may be employed by LFUCG staff as part of LFUCG's annual reporting requirement of its Kentucky Pollutant Discharge Elimination System (KPDES) MS4 Phase 1 permit.

## **CONSTRUCTION ACCESS**

If work is to be performed on private property, the Organization is responsible to obtain <u>written</u> authorization from the affected property owner(s) allowing such access. No permanent feature (including plantings), shall be placed upon private property without prior signed authorization from the owner.

### **ADDITIONAL GRANT STIPULATIONS**

Design, construction, and plant installation shall meet the following requirements:

- a) Any work to be coordinated with personnel in the LFUCG Contacts section is the responsibility of the grantee and shall be done prior to any work being done. The LFUCG contacts listed in this document are listed for informational purposes only and listing does not constitute approval or agreement at this time.
- b) All existing utilities shall be located, contacted, and coordinated with prior to any work being performed if within the project vicinity.
- c) Tree plantings shall be coordinated with existing utilities prior to plantings, and if possible, trees shall not be planted within 10' feet of an existing utility. Encroachment agreements shall be obtained when working within any private utility areas.
- d) Riparian Arboretum plant material sales shall not be held unless approval is granted from Grant Administrator and LFUCG Division of Law.

## **GRANT PERIOD & PROJECT SCHEDULE**

The grant period starts on the date of execution of the Grant Award Agreement by the Mayor and extends for the time period as listed in the Grant Award Agreement. Any time extensions must be approved in writing by the LFUCG Incentive Grant Manager. The project schedule shown in Table 1 is preliminary. Proposed changes to the project which alter this schedule significantly shall be discussed with the LFUCG Grant Manager prior to implementation.

TABLE 1 - PROJECT SCHEDULE - Streamside Buffer Stewardship Program

Activity	Anticipated Date
Approval of Grant Award Agreement	February 2016
Convening of project steering committees	Within 1 week of Notice to Proceed
Approval of work plan by property managers, (Parks, Greenways), etc.	Within 30 days of Notice to Proceed
Conduct stream walks in new project areas	April 2016
Conduct stream clean up and trash removal	April 2016, October 2016
Conduct invasive plant removal work days	April 2016, October 2016
Conduct native plant installations	May 2016 – October 2017
Follow up work days in existing riparian areas	May - October 2017
Final Report to LFUCG	November 30, 2017
	<u> </u>

## PROJECT BUDGET - GRANT ELIGIBLE EXPENSES & ORGANIZATION MATCH

Table 2 lists the Eligible Expenses for this project. Only properly invoiced items shall be reimbursed with grant monies or counted toward the Organization's match. Any work performed on this project prior to Grant Award by Urban County Council and Notice to Proceed from the LFUCG Grant Manager is not an eligible expense and shall not be reimbursed or counted toward the cost share. The Supplemental Project Element Information section lists Individual Project Budgets generated from the grant application and listed for informational purposes only. Table 2 remains the official list of Eligible Expenses for this project.

Hours worked by participants under the age of 12 shall <u>not</u> be counted toward the cost share.

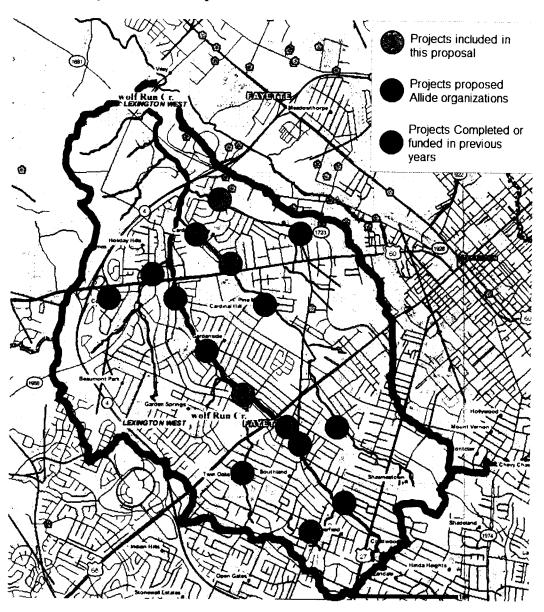
No work on any item outside of the project scope described herein, or any item to be covered by the contingency budget shall be performed without prior written approval from the LFUCG Grant Manager or Grant Administrator. Failure to do so may result in non-reimbursement for any such items.

Any donated professional service hours not currently listed in the Eligible Expenses shall be valued, at a maximum, at the Median Hourly Wage for the expertise provided – from the U.S. Department of Labor, Bureau of Labor Statistics, State Occupational Employment and Wage Estimates for Kentucky (current website: www.bls.gov/oes/current/oes\_ky.htm).

	Type of Expense	Participants	Item	Uni	t Price	Quantity	Funded by Organization		Total
1	Volunteer Time	Volunteers	Participation in field days, work days and	\$ 7.25	Per Hour	295	\$ 2,138		\$ 2,138
2	Project Management	Project Volunteer Leadership	follow up control Organizing, Grant Accounting, Purchasing, Financial Administration	\$ 13.56	Per Hour	118	\$ 1,600.	08 \$ -	\$ 1,600
3	Plant Materials	Area Nurseries, Plant Suppliers	Seed, shrubs, tree whips and nursery stock	\$ 7,250.00	Lump Sum	1	\$	- \$ 7,250.00	\$ 7,250
4	Supplies and Materials	Area Vendors	Landscaping supplies, mulch, signage, volunteer support materials	\$ 4,260.68	Lump Sum	1	\$ 40.	68 \$ 4,220.00	\$ 4,260
5	Private Property Owner Demonstration areas	Landowner Participation with technical support	Streamside Landowner Demonstration Project	\$500	Persite	3	\$ 500.	00 \$ 1,000.00	\$ 1,500
6	Donated Professional Services	Local Experts	Expert Discounts and Planning Services	Rate	Per Hour	15	\$ 1,198.	75 \$ -	\$ 1,198
7	Contracted Invasive control and maintenance	Contractors	Careful identification and removal of unwanted alien plants	***************************************	Lump Sum	1	\$ 950.	00 \$ 15,500.00	\$ 16,450
8	Chipping of honeysuckle and spreading around front plantings	Bluegrass Woodland Restoration Center and Subcontractor (TBD)	Chipping of honeysuckle for future use on site in formal plantings	\$ 500.00	peracre	2	\$	- \$ 1,000.00	\$ 1,000
9	Installation of plantings; with care for 1 year	Professional Contractors	Follow-up control of honeysuckle/weeds; planting; mulching	\$ 1,500.00	Lump Sum	1	\$ 750.0	00 \$ 750.00	\$ 1,500
10	Plant material: special collection; local provenance	Plant Specialists	Collection and selection of native woody and herbaceous species	\$ 3,000.00	Lump Sum	1	\$ 2,000.0	00 \$ 1,000.00	\$ 3,000
11	Plant Inventory, Mapping and Reports	Skybax Ecological Services, LLC	Preparation of a Species List and Special Features Map	\$ 600.00	per each	1	\$ 300.0	00 \$ 300.00	\$ 600
12	Effectiveness Monitoring	Bluegrass Community and Technical College	Monitor 3 stations for nurtrients, pathogents and field parameters	\$135	Per Visit Per Site	9	\$ 1,215.0	00	\$ 1,215
13	Monitoring	Bluegrass Community and Technical College	Supplies for field kits and laboratory analysis	\$800	Lump Sum	1		\$ 800.00	\$ 800.
14	tours and extra meetings for developing the site into a	Bluegrass Woodland Restoration Center and potential partners (including UK-LFUCG Arboretum)	Distributing drafts of written plan to develop consensus of potential partners	\$ 500.00	Lump Sum	1	\$ 250.0	250.00	\$ 500.
	Certification	Key Stewards and Volunteer Leadership	Kentucky Department of Agruculture Certification Fees	\$35.00	Per Each	10	\$ 100.0	0 \$ 250.00	\$ 350.
	Certification	Key Stewards and Volunteer Leadership	Time and Travel to Certification exams	\$13.56	Per Each	20	\$ 271.2	0	\$ 271.
	Communications .	Friends of Wolf Run Trustees	Social Media and Web Site Operations Field Trip for Project	Variable \$250	Per Campaign Per Event	1 2	\$ 500.0 \$500.0		\$ 500.
8		Trustees	Participant and Key Stewards				0.00c¢		\$ 500.0
9	- 1	Trustees	Publications related to Stream Buffer Restoration		Per Each	500		\$ 500.00	\$ 500.0
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## SUPPLEMENTAL PROJECT ELEMENT INFORMATION

Figure 1: Project Location Map



- 1. Clay's Mill Greenway
- 2. Deauville Drive Greenway
- 3. Eastway Wetland Seep
- 4. Vaughn's Branch Versailles Road Corridor
- 5. Allendale Stream Buffer Restoration Nursery and Demonstration Area
- 6. Pine Meadow Park Section of Vaughn's Branch
- 7. Preston's Cave Spring Park

## Project Site 1 Detail: Clays Mill Greenway Demonstration Area



Clays Mill Greenway was our original stream buffer restoration demonstration site. The site is used as an example of the long term results when invasive bush honeysuckle is removed and replaced with native plants.

#### Personnel

Project Manager, Key Steward, Layton Register with support from Friends of Wolf Run volunteers

#### Background:

When new neighborhood groups consider working to restore stream buffers, they need to see how the project will evolve over time. Native plants installed at Clay's Mill Road Greenway are now in their 4<sup>th</sup> year of development. We use the property as a key

demonstration area. Key Steward Layton Register has extensive experience working with native plant restoration with this project and with other Central Kentucky Bluegrass Native Restoration Projects. The project area is also used to test new methods and tools for maintenance with volunteers.

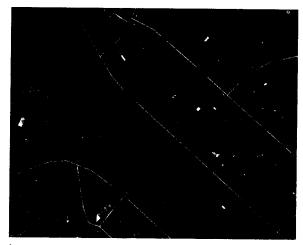
Project 01 Budget:

TYPE OF EXPENSE	PARTICIPANTS	PARTICIPANTS ITEM		UNIT PRICE QUANTITY		FUNDED BY ORGANIZATION		FUNDED BY GRANT	TOTAL
Volunteer Time	Friends of Wolf Run Inc, Community Volunteers	Follow-up control of honeysuckle/weeds; planting; mulching	\$ 7.25	Per Hour	25	\$	181.25	<b>\$</b> -	\$ 181.25
Professional Services	Layton Register, Key Steward	Expert Discounts and Planning Services	\$ 13.25	Per Hour	15	\$	198.75	\$	\$ 198.75
Project Management	Friends of Wolf Run Trustees	Grant Accounting, Purchasing, Financial Administration	\$ 13.56	Per Hour	5	\$	67.80	\$	\$ 67.80
Plant Materials	Area Nurseries, KY Division of Forestry	Seed, shrubs, tree whips and nursery stock	\$ 2,500.00	Per Project	1	\$	-	\$ 1,250.00	\$ 1,250.00
Supplies and Materials	Area Vendors	Landscaping supplies, mulch, signage, volunteer support materials	\$ 500.00	Per Project	1	\$	-	\$ 500.00	\$ 500.00
			eria (TO).	A B AROUE	ರಾ <i>ತಿಲ್ಲಿಂತ</i> ಡ		447,83	: 760,00	27.87.80A

\*COST SHARE % = 20.37%

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## Project Site 2 Detail: Deauville Drive Greenway Demonstration Area



Deauville Drive Greenway is a recent FEMA buy-out area. The site provides a demonstration and volunteer engagement area for residents of the Cardinal Valley Neighborhood.

#### Personnel

Project Manager, Key Steward, Jerome Higgenbotham with support from Dunbar High School, Cardinal Valley and Jesse Higgenbotham Trust Volunteers.

## Background:

Jessee Higgenbotham Technology Trust operates the Native Plant Program at Dunbar High School. This project area serves as a real world laboratory

for propagation and installation of native plants produced by the students of the school. Project support also comes from volunteers in the Cardinal Valley neighborhood.

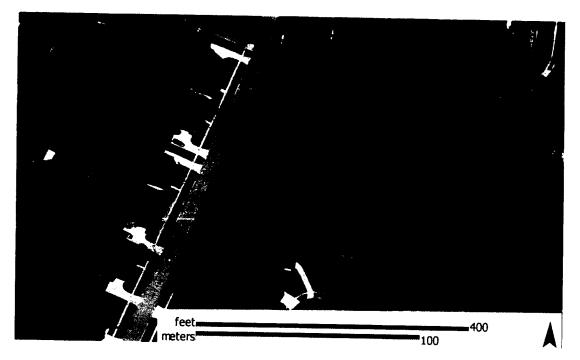
#### Project 02 Budget:

EXPENSE	PARTICIPANTS	ITEM	UNIT	PRICE	QUANTITY	NDED BY ANIZATION	FUNDED BY GRANT		TOTAL EXPENSE
Volunteer Time	JHTT, Cardinal Valley Neighborhood	Follow-up control of honeysuckle/wee ds; planting; mulching	\$ 7.25	Per Hour	50	\$ 362.50	\$	<del>-</del>	\$ 362.50
Project Management	Cardinal Valley Neighborhood Association	Key Steward Event Coordination, volunteer organization and planning	\$ 13.56	Per Hour	20	\$ 271.20	\$	-	\$ 271.20
Project Management	Friends of Wolf Run Trustees	Grant Accounting, Purchasing, Financial Administration	\$ 13.56	Per Hour	5	\$ 67.80	\$	-	\$ 67.80
Plant Materials	Area Nurseries, JHTT KY Division of Forestry	Seed, shrubs, tree whips and nursery stock	\$ 1,500.00	Per Project	1	\$	\$	1,500.00	\$ 1,500.00
Supplies and Materials	Area Vendors	Landscaping supplies, mulch, volunteer support materials	\$ 500.00	Per Project	1	\$ -	\$	500.00	\$ 500.00
				W. FLEYE	SI BULGER.	\$ 70.5¢		ئىنىنى <u>،</u>	270 50

\*COST SHARE % = 35.08%

## Project Site 3 Detail: Eastway Wetland Seep, Hill-N-Dale Neighborhood

Eastway Drive Wetland is a small, but unique, wetland forest restoration project. The site should be enhanced and protected for the storm water filtering and storage, urban wildlife habitat, and to provide natural, cultural and historical education opportunities for the residents of Fayette County through high quality environmental education and interpretation.



#### **Personnel**

Key Steward: Eric Spangler, Hill-H-Dale Neighborhood Association, volunteer plant ecologist supported by Southland Association, Friends of Wolf Run and volunteers from the local neighborhood. Environmental Contractor, Skybax, Eco Gro, Leachman Landscaping Etc... (Selected through bid process)

## Background:

The Eastway Drive Wetland is an important site for potential improvement in water quality and natural habitats on the west side of Lexington. There is no structural development and at least 1 acre is available for environmental improvements. It could become one of the most significant wetland sites within the city, especially within the Wolf Run watershed. Wetland soils are present and currently support a forest canopy of Maple-Ash-Sycamore-Elm-Oak. The Inner Bluegrass Region is thought to have had small wetlands with Oak-Maple-Dogwood-Buttonbush-Willow in pre-settlement. These forested wetlands had the appearance of small swamps with plants specially adapted to living in saturated soils. Now, invasive plants and habitat fragmentation has diminished the plant diversity. Bush Honeysuckle, Wintercreeper, and Garlic Mustard are currently dominating the forest understory at Eastway Wetland. By removing the non-native plants and reintroducing local plant species we can enhance the beauty and function of the watershed. In the past, there has been a lack of Kentucky native plant species used in stream and wetland restoration within the Bluegrass Region, but native species are now being propagated in Kentucky by Julian Campbell and Roundstone Seed, as well as the Kentucky Division of Forestry.

#### **Project Outline**

The site will be devoted to restoring native vegetation in aim of increasing the plant diversity to help stabilize the plant communities and resist competition from the invasive plant species that dominate the forest understory. This project will include approximately 1 acre of forested wetland on the east side of Eastway Drive (see attached map). This area provides storm water filtering and storage as well as wildlife habitat. Local residents have a strong interest in helping to improve and protect this area. Garlic Mustard (*Alliaria petiolata*) and alien Bush Honeysuckle (*Lonicera maackii*) will be pulled, cut and treated, and removed from the site initially. Native species to be emphasized in plantings here will include Willows, Dogwoods, Spicebush, Bladdernut, Black Haw and other selected shrubs (e.g., *Amorpha fruticosa, Cephalanthus occidentalis, Physocarpus opulifolius, Ptelea trifoliata, Rosa setigera, R. palustris, Sambucus canadensis, Viburnum dentatum, Zanthoxylum americanum*). It will also include a tree planting on the 1 acre of wetland with emphasis on Swamp White Oak (*Quercus bicolor*), Bur Oak (*Quercus macrocarpa*) and Shumard Oak (*Q. shumardii*). At completion of the project, a complete report will be produced, including description of plant material, planting map and plan for future use.

Thus, the project has two elements:

- 1. Project Element: Wetland Restoration Zone and Wetland Plantings [ca. 1 acre] SUBTOTAL = \$7,600
- 2. Project Element: Volunteer Days, Plant Species Inventory, Map of Project/Special Features SUBTOTAL = \$775

#### Schedule of Work

Winter of 2016/2017: removal of alien plants along stream and in wetlands. Spring & Fall 2016: planting of native plants (as outlined above). Summer 2016: establishment of educational signs; development of trails. Fall 2017: seminar and release plant inventory and ecological maps.

## **Potential Developments and Applications in Future**

Further plantings can be designed at the site in future years, as funds become available. More open areas in the wetland and near trails could be converted to meadows of native grasses and wildflowers.

The site would also become an outstanding demonstration for wetland restoration within the city. With controlled public access, it would serve varied educational and recreational uses. The Eastway Wetland, itself, is a significant feature that can become a focus for an attraction to the site.

#### Project 03 Budget:

TYPE OF EXPENSE		ITEM			T PRICE	QUANTITY		JNDED BY	F	UNDED BY		TOTAL EXPENSE
Project Element: \	Wetland Restoration	n Zone and Wetland Plant	ings	[ca. 1 ac	re]		-	, and a second		OWNER	<del>'</del>	CAPENSE
Contracted honeysuckle removal from	Skybax Ecological Services, LLC	Cutting and piling honeysuckle; herbicide application to stumps		4,200.00	per acre	1	\$	500.00	\$	3,700.00	\$	4,200.00
Plant material: special collection; local provenance	Skybax Ecological Services, LLC	Collection and selection of native woody and herbaceous species	\$	30.00	per plant	50	\$	750.00	\$	750.00	\$	1,500.00
Contracted alien plant removal; mostly peripheral	Skybax Ecological Services, LLC	Careful identification and removal of unwanted alien plants	\$	900.00	per acre	1	\$	200.00	\$	700.00	\$	900.00
Plant material: special collection; local	Skybax Ecological Services, LLC	Collection and growing of tree seedlings for wetland planting	\$	5.00	per plant	100	\$	250.00	\$	250.00	\$	500.00
Installation of plantings; with care for 1 year	Services, LLC	Follow-up control of honeysuckle/weeds; planting; mulching	\$	5.00	per plant	100	\$	250.00	\$	250.00	\$	500.00
Project Element: V	Vetland Restoration	Zone and Wetland Plant	ings	[ca. 1 acr	e]	:	. :		-:			
Volunteer Hours		Volunteer Hours for organizing and advertising event	\$	7.50	per hour	20	\$	150.00	\$	-	\$	150.00
Materials	FWR and	Advertising for event: 200 single page flyers - black & white	\$	0.10	per flyer	250	\$		\$	25.00	\$	25.00
Mapping and Reports	Services, LLC	Preparation of a Species List and Special Features Map	\$		per each	1	\$	300.00	\$	300.00	\$	600.00
TOTALS	[	*cos	T SH	IARE % =	28.66%	<u>uulgen</u>	No. Exhaust			607520 Elektra Heriotzak	S	237500

## Project Site 4 Detail: Vaughn's Branch Versailles Road Corridor



Vaughn's Branch intersects the main Versailles Road Corridor at Oxford Circle and Cardinal Hill Hospital. The project area includes dense commercial land use, but still provides a significant greenspace for the area. Invasive plants have obscured views of the waterway and are damaging native trees and shrubs in the area. The project seeks to build on work done over the last two years on both sides of Versailles Road.

Project Personnel: Scott Smouse, Key Steward, Friends of Versailles Road, Paula Singer, Organizational Support, Friends of Versailles Road, Jake Campbell, President, Cardinal Valley Merchants Association.

#### Project Plan:

The team working on Vaughn's Branch's intersection with Versailles will focus on two project areas we have already worked on:

- The Vaughn's Branch stream bank restoration project on the Cardinal Hill side of Versailles Road and,
- 2. The Vaughn's Branch stream bank restoration project on the Oxford Circle side of Versailles Road.

## Project Area #1 (Upstream side of Versailles Road on Vaughn's Branch)

For Project Area #1 two acre area, we propose going back to this 2014 Project Area but limit the 2016 revisit to the steep hill bank behind the Versailles Road guardrail and the stream bank on the Revival Tabernacle Church side.

- 1. Contract labor, supplies, invasive eradication, and treatment of re-sprouts.
- We propose beginning in Jan/Feb 2016 (or as early as funding & weather allow) to completely
  mow down and weed eat the area and cover with heavy plastic to eliminate the weed and
  invasive growth.
- 3. Plant in fall. Materials and Supplies.
- 4. Provide Volunteer landscaping supplies, tools and materials.

## Project Area #2 - 2 acre area downstream side of Versailles Road on Vaughn's Branch

- 1. Maintenance: litter control, weed control, invasive control, treatment of re-sprouts
- 2. Increase planting density with new plant material
- 3. Contract labor for herbicide treatment of re-sprouts
- 4. Provide Volunteer materials and supplies for volunteer work days

### Project 04 Budget:

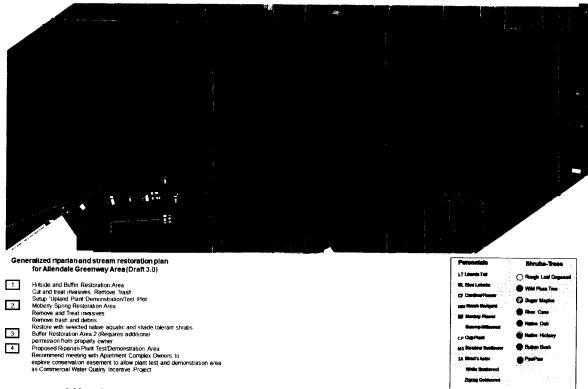
TYPE OF EXPENSE	PARTICIPANTS	ITEM	UNI	T PRICE	QUANTITY		NDED BY ANIZATION	FUNDED BY GRANT		TOTAL EXPENSE
Volunteer Time	Friends of Versailles Road, Community Volunteers	Follow-up control of honeysuckle/weeds; planting; mulching	\$ 7.25	Per Hour	100	\$	725.00	\$ -	\$	725.00
Project Management	Friends of Versailles Road	Key Steward Event Coordination, volunteer organization and planning	\$ 13.56	Per Hour	50	\$	678.00	\$ -	\$	678.00
Professional Services	Contractor and Technical Advisors	Expert Discounts and Planning Services	\$ 50.00	Per Hour	20	\$	1,000.00	\$ -	\$	1,000.00
Project Management	Friends of Wolf Run Trustees	Grant Accounting, Purchasing, Financial Administration	\$ 13.56	Per Hour	10	\$	135.60	\$ -	\$	135.60
Contracted Services	Bids accepted, Skybax, Dickey, Leachman Landscaping	Cut, treat, remove invasive plants and shrubs	\$ 1,250.00	Per Acre	4	\$	-	\$ 5,000.00	\$	5,000.00
	Area Nurseries, KY Division of Forestry	Seed, shrubs, tree whips and nursery stock	\$ 1,500.00	Per Project	2	\$	-	\$ 3,000.00	\$	3,000.00
Supplies and Materials	Area Vendors	Landscaping supplies, mulch, volunteer support materials	\$ 500.00	Per Project	2	\$	-	\$ 1,000.00	\$	1,000.00
Totals			S	_ ೨೫೦೨೯೮	<u> ೨೦೦೦೨:</u> :	Ş	2,55 5,50	نېدەدىرۇ ت	Ş	
		*cos	ST SHARE % =	22.00%		2.03. 2 2		5:000 3:006 3:002		

# Project Site 5 Detail: Allendale-Moberly Spring Greenway "Riparian Arboretum" demonstration area

Allendale-Moberly Spring Greenway as a 'Riparian Arboretum' for the Central Bluegrass: Establishment of Native Plant Collection for Riparian Zones and Wetlands in this region.

#### **Personnel**

PROJECT MANAGER: Julian Campbell, Bluegrass Woodland Restoration Center Ken Cooke, Friends of Wolf Run; and board members Jean Watts, Bluegrass Community and Technical College Layton Register, neighborhood representative



#### **Purpose and Need**

The Allendale-Moberly Spring Greenway is an important site for potential improvement in water quality on the west side of Lexington. With a relatively broad floodplain, it has already been used for enhancement of the small wetland here in the 1990s, and some recent test plantings coordinated by the Friends of Wolf Run Inc. The city owns land here, and two private tracts have easements for riparian protection. There is virtually no structural development and at least 20 acres are available for environmental improvements. It could become one of the most significant wetland sites within the city that is adjacent to a major stream corridor. Wetter soils are fluventic endoaquepts (Newark and Melvin).

In the whole central Bluegrass Region (mostly Fayette and surrounding counties), there has been much restoration of riparian zones and wetlands within the past 20 years. However, there has been a serious shortage of native plant species for these projects, especially plants with provenance from the Bluegrass Region. Much public funding has been spend on questionable plant material; there has been little accountability in results; and in several cases, there have been failures.

### **Project Outline**

2016 Activity will complete removal of honeysuckle on slopes at south side of the Allendale Greenway, replace with native trees & shrubs.

Project work will be coordinated with LFUCG Division of Sanitary Sewers and Division of Water Quality as not to interfere with Remedial Measures Plan implementation, or to put in jeopardy any work done under this authorization by sanitary sewer line construction.

The 2016 project includes provision only for follow-up control of invasive plants at the base of the slopes, adjacent to the wetlands. Given the cooperative interest in converting this whole greenway into a "Riparian Arboretum" we also plan to remove all of the honeysuckle on these slopes.

Native species would be planted here instead of the honeysuckle. In addition to general enhancement of the corridor, this extension would focus where possible on areas close to the seeps and springs along the base of this slope. Species to be concentrated on in the plantings include: buckeye, basswood, sugar/black maple, spicebush, hornbeam, bladdernut, and pawpaw.

#### Schedule of Work

- Spring of 2016 Assessment of existing plantings, continued maintenance
- Spring 2016 Installation of additional plant materials
- Fall 2016 Continued clearing of invasive plants in the corridor
- December 31, 2016, Final Report and Analysis

#### Potential Developments and Applications in Future

Further plantings will be designed at the site in future years, as funds become available. More open areas on the bottomland will be converted to meadows of native grasses and wildflowers, with maintenance by mowing or other means. There will be a special focus on swamp milkweed, which is common on the Palumbo Apt tract and will be enhanced on the Moberly tract. The Garden Club of Lexington and UK Horticulture Club are already partners in this concept. More sloping areas on the west side of this greenway will be developed into deeper woodland shade, after removal of honeysuckle and wintercreeper.

As the site becomes used for a source of plant material, harvesting of seed, cuttings and other material could generate considerable value for government-sponsored restoration projects in the region. Funds for regular maintenance of the site—ensuring its ecological function and genetic collection—could be generated from varied fees, grants or sales of material.

The site would also become an outstanding demonstration for riparian restoration within the city. With controlled public access, it would serve varied educational and recreational functions. The Moberly Spring, itself, is a significant feature that can become a focus for visitors to the site.

#### Project 05 Budget:

TYPE OF EXPENSE	PARTICIPANTS	ITEM	UNI	T PRICE	QUANTITY		IDED BY	FUNDED BY		TOTAL
	<u> </u>		<u> </u>			ORGA	NIZATION	GRANT		EXPENSE
Project Element:	Wetlands and Toeslo	pes on Palumbo Apt. and	Moberly tra	cts [ca. 1.5 ac	res]					
Contracted alien	Bluegrass	Complete honeysuckle	\$ 1,000.00	per acre	2	\$	-	\$ 2,000.00	\$	2,000.00
plant removal;	Woodland	removal on slopes at	1	l					ļ	
mostly peripheral	Restoration Center	south side of corridor								
and followup to				i						
2015-17 work	<u> </u>									
Chipping of	Bluegrass	Chipping of honeysuckle	\$ 500.00	per acre	2	\$	-	\$ 1,000.00	\$	1,000.00
honeysuckle and	Woodland	for future use on site in	i			ŀ				
spreading of chip	Restoration Center	formal plantings								
around front	and Subcontractor		i							
plantings	to be determined									
Installation of	Bluegrass	Establishment of	\$ 5.00	per plant	200	\$	500.00	\$ 500.00	\$	1,000.00
plantings; with	Woodland	buckeyes, sugar maples,						,	ľ	_,
care for 1 year	Restoration Center	basswoods, red elms etc	ŀ		1					
	İ	after honeysuckle		1	1					
	L	removed								
Plant material:	Bluegrass	Further development of	\$ 5.00	per plant	200	Ś	1.000.00	\$ -	\$	1,000.00
special	Woodland	nursery on site; selected	l .			*	2,000.00	*	,	1,000.00
collection; local	Restoration Center	1 '		i	1 1					
provenance		previous plantings	1							
Project Element: (	Corridor Connection	to Harrodsburg Road (by	Frisch's Big Be	ov)	<u></u>				-	
Annual weed	Bluegrass	Quarterly mulch with		per acre	0.1	\$	-	\$ 500.00	\$	500.00
control and care	Woodland	straw and/or cutting of		ľ		•		9 999.00	•	300100
for plant material	Restoration Center	tall weeds; further								
on slope by road*		removal of adjacent								
		honeysuckle								
Project Element: E	ducational Material	s, Seminar and Tour:		·	:				:	
		Volunteer Hours for	\$ 7.50	per hour	10	\$	75.00	\$ -	\$	75.00
	FWR and	organizing and				•		,	7	, 5.00
	neighborhood	advertising event			1					
Supplies and	Project personnel.	Advertising for event:	\$ 0.10	per flyer	250	Ś		\$ 25.00	\$	25.00
Materials	FWR and	200 single page flyers -		.,		•		25.00	7	25.00
	neighborhood	black & white								
Regular annual	Bluegrass	Distributing drafts of	\$ 500.00	per each	1	\$	250.00	\$ 150,00	Ś	500.00
tours and extra	Woodland	written plan to develop			1 1			230100	•	
meetings for	Restoration Center	consensus of potential			1 1					
developing the	and potential	partners			1 1					
site into a	partners	i l								
Riparian	(including UK-									
Arboretum	LFUCG Arboretum)			]	1 1					
Totals				900 EAR			2.7-10	\$ 4,22,520		
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						- 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	1.00			

## Project Site 6 Detail: Pine Meadows, Mason Headley & Cardinal Hill Neighborhood Association

#### Personnel

Karen Hudson, neighborhood representative and Kentucky Native Plant Seciety Certified Native Plant Steward, Mead Overbeck, Neighborhood Association Representative, Property Owner adjacent to Pine Meadow Park.



#### Background

Vaughn's Branch of Wolf Run flows through the Pine Meadows, Mason Headley, and Cardinal Hill neighborhood. Most of our residents, however, do not understand the value of protecting, improving, and preserving this rich natural legacy. Many residents simply do not understand, for example, the benefit of streamside buffers; the negative effects of bush honeysuckle and other invasive plants; and the negative impact of dumping pollutants down storm drains. The neighborhood association initiated stream stewardship education in 2014 by sponsoring a stream walk conducted by the Friends of Wolf Run. One goal of this grant project is to build upon this initial educational effort. The project will be designed to help our residents understand the benefits of stream stewardship, for example, increasing land value and reducing problems such as sewer system overflows, erosion, and flooding. As part of this project, we will demonstrate inexpensive techniques individuals can use to make stream stewardship a part of their everyday life. We will also identify neighborhood leaders and volunteers willing to implement similar projects in the future. Ultimately, the goal is for our neighborhood to help improve water quality in the larger Wolf Run Watershed.

## **Pine Meadows Project Outline**

As part of the 2015 activity we will:

- 1. Trash Cleanup Day: Neighborhood volunteers will gather to clean the stream. All neighborhood residents will be invited to help via the neighborhoods Facebook page and door-to-door flyers. During the event we will discuss water quality, habitat and streamside buffer issues, and management strategies. Finally, we will discuss a remediation plan for the stream and begin encouraging residents who own homes adjacent to the stream to volunteer to serve as demonstration areas.
- 2. Two Demonstration Areas: The Neighborhood Association will identify three property owners, whose homes border the stream, who will volunteer to participate in a remediation plan. Each demonstration area will consist of approximately 300 feet.
- 3. Invasive Plant Bushwhacking Parties: Using hand tools, volunteers will remove bush honeysuckle, garlic mustard, multi-floral rose, winter-creeper, and Japanese Knot Weed located in the three demonstration areas. These activities will involve treating cut shrubs with herbicide in accordance with practices developed by the Invasive Plant Working Group. All neighborhood residents will be invited to help via the neighborhoods Facebook page and door-to-door flyers.
- 4. Follow up Native Plantings: Volunteers will replace the invasive plants with native perennials, shrubs and trees according to a planting plan.
- 5. Education and Outreach: Neighborhood residents will be further educated by distribution of "Living Along Kentucky Streams" produced by the University of Kentucky Cooperative Extension Service at workdays and by door-to-door distribution.
- **6. Marking the Demonstration Areas:** The three demonstration areas will be clearly marked with fiberglass posts and educational signs.
- 7. Maintenance: In the first year following planting, teams of volunteers will visit the demonstration areas on at least three additional occasions to keep invasive plants in check and insure that the

Attachment A Friends of Wolf Run Inc. FY2016 Class A Grant Award Agreement

- new plants are being watered. In subsequent years, the sites will be inspected annually, in the spring, to facilitate long-term success.
- 8. Identification and Support for "Key Stewards": As part of this project, efforts will be made to identify additional home owners who will agree to participate in similar projects in the future. Neighborhood leaders, willing to volunteer to organize additional workdays in the future, will also be identified.
- 9. Report: At the completion of the project, a report will be produced, including a description of the three demonstration areas and the native material planted. Maps indicating the location of the three demonstration areas and the storm drains that were stenciled will be included in the report.

#### Pine Meadows Schedule of Work

- Meeting to plan project: within one month of NTP
- Advertise for stream cleaning event and coordinate volunteers: one month prior to event
- Hold stream cleaning event: Spring 2016
- Identify two home owners willing to volunteer to serve as demonstration areas. Spring 2016
- Advertise for and organize volunteers for invasive plant removal work days:
- Conduct invasive plant removal work days: Spring/Fall 2016
- Advertise for and organize volunteers for native plant installation: one month prior to events
- Conduct native plant installations: Spring and Fall 2016
- Complete follow-up work days: Summer and Fall 2016
- Mark demonstration areas: Fall 2016
- Final report to LFUCG: December 2016

#### Project 06 Budget:

TYPE OF EXPENSE	PARTICIPANTS	ITEM	UNIT	T PRICE	QUANTITY	NDED BY	FUNDED BY	Τ	TOTAL EXPENSE
Volunteer Time	Pine Meadow Neighborhood and Community Volunteers	Follow-up control of honeysuckle/weeds; planting; mulching	\$ 7.25	Per Hour	40	\$ 300.00	\$ -	\$	300.00
Project Management	Key Steward, Karen Hudson	Key Steward Event Coordination, volunteer organization and planning	\$ 13.56	Per Hour	10	\$ 135.60	\$ -	\$	135.60
Invasive control and maintenance	Maintenance Contractor	Treat and remove resprouts in previously cleared areas	\$1,200	Per Acre	1	\$ 250.00	\$ 1,200.00	\$	1,450.00
Private Property Owner Demonstration areas	Landowner Participation with technical support	Streamside Landowner Demonstration Project	\$500	Per site	2	\$ 500.00	\$ 1,000.00	\$	1,500.00
•	Run Trustees	Grant Accounting, Purchasing, Financial Administration	\$ 13.56	Per Hour	5	\$ 67.80	\$ -	\$	67.80
		Seed, shrubs, tree whips and nursery stock	\$ 1,500.00	Per Project	1	\$ -	\$ 1,500.00	\$	1,500.00
Supplies and Materials		Lands caping supplies, mulch, volunteer support materials	\$ 500.00	Per Project	2	\$ -	\$ 500.00	\$	500.00
Totals		i	\$ 1525.	SH.OJEGI	<i>ಚಿತ್ರವಣ್ಣ</i>	_2550,40	\$ 2,000.50	<b>5</b> .	39,53.W
	ſ	*009	T SHARE % =	29.84%	1 .		و بنعدت		

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## Project Site 7 Detail: Site Detail: Preston's Cave Spring Park



Preston's Cave Spring is a unique riparian forest restoration project. The park should be protected, restore, and enhanced for the unique geological, natural and historic features of Lexington's McConnell Springs-Preston Springs corridor and to provide natural, cultural and historical education opportunities for the residents of Fayette County through high quality environmental education and interpretation. Our 2016 project will build on existing

work along the waterway providing control for invasive resprouts and infill planting allowing new trees and shrubs to out compete invasive plants.

This proposal is for follow up treatment of bush honeysuckle (*Lonicera maackii*) and other invasive species along with volunteer work days ensuring community engagement in the public resource.

#### Personnel

PROJECT MANAGER: Gary Libby, Skybax Ecological Services, LLC Ken Cooke, Friends of Wolf Run; and board members Jim Rebmann, Lexington Fayette Environmental Commission

### **Purpose and Need**

Preston's Cave Spring Park was recently enhanced and restored by cutting and treating invasive species (primarily bush honeysuckle) and also planting hundreds of native trees and shrubs. The project improved the ecological integrity of these areas. Additionally, many adjacent residents have commented on the new look of these parks and support this type of work in their neighborhoods.

#### **Project Outline**

The initial treatment of bush honeysuckle rids the sites of the large, well-established, seed-producing shrubs. This effectively resets the clock as it takes about 8 years for bush honeysuckle to reach reproductive age. However, existing seed bank and re-sprouts from vigorous root systems means that 100% control is not possible. Returning to these sites to treat new seedlings and re-sprouts will be more effective, from both a cost and success standpoint, than waiting 8 years to treat the area again.

#### Schedule of Work

Spring & Fall 2016: treatment & removal of alien plants along stream and in wetlands.

## Project 07 Budget:

TYPE OF EXPENSE	PARTICIPANTS	ПЕМ	UNIT PRICE				QUANTITY	FUNDED BY ORGANIZATION		FUNDED BY GRANT	TOTAL
Project Element: I	follow-up Treatmen	t & Removal of Invasive S	secies (ca. 5 a	cres]					 		
Contracted honeysuckle removal from	Skybax Ecological Services, LLC	Cutting and piling honeysuckle; herbicide application to stumps	\$ 1,200.00	per acre	2	\$	-	\$ 2,400.00	\$ 2,400.00		
Volunteer Time	Friends of Wolf Run, Env. Commission	Follow-up control of honeysuckle/weeds; planting; mulching	\$ 7.25	Per Hour	50	\$	362.50	\$ -	\$ 362.50		
Project Management	Jim Rebmann, Ken Cooke	Key Steward Event Coordination, volunteer organization and planning	\$ 13.56	Per Hour	10	\$	135.60	\$ -	\$ 135.60		
Totals		*co:	ST SHARE % =	17.19%	¬			ىدىنىدە چ ئارىنىد ئارىنىدى	2705072		

# Project Detail 08: Coordination, Quality Assurance, Communications & Signage.

Multiple sites with multiple organizations involved requires effective communications, coordination and reporting between projects and with the community at large. Friends of Wolf Run Leadership will provide the overall project management through distribution of publications, coordinating field trips to each site, providing signage and boundary marking and promotions via email, social media and web site publications.

**Project Personnel:** Ken Cooke, Project Coordinator and Grant Administrator, Jean Watts, Rae Ann Gill, Bluegrass Community and Technical College Effectiveness Monitoring, Project Science Advisors and Consultants,

- -Volunteer Training and Certification in Herbicide Application: Key Stewards and volunteers participating in invasive plant control often used approved herbicides (Glyphosate) to prevent resprouts. Our herbicide use policies encourage at least one volunteer per project to become a certified non-commercial applicator through the Kentucky Department of Agriculture testing and certification program. The project would cover the \$25.00 certification fee and annual renewal fees for up to 10 certified applicators.
- -A "Stream Buffer Restoration Sign" has been developed for use at project areas to provide information to passers by about the nature of the project to prevent local residents from mistaking tall plant growth and shrubs as a sign of neglect. These signs are to be mounted at each project area were members of the public enter the area.
- -No Mow Zone Boundary Markers are necessary to protect stream buffers and plantings from contract mowers who may not be aware of the management practice. These fiberglass polls with printed "No Mow Zone stickers are designed to be attractive, yet provide clear enough notice on site boundaries.
- **-Living Along A Kentucky Stream Publication**: All streamside landowners in neighborhoods adjacent to the project are provided with a copy of this extension service publication. Friends of Wolf Run purchases copies at a discount from the University of Kentucky Extension Service. A companion brochure is also provided based on the larger publication.
- -Project events, work days, results reports and images are published on the Friends of Wolf Run **Social** -- **Media Page (Facebook), Email blasts** are sent out via a email service provided by Friends of Wolf Run advertising volunteer work days, field trips and events.
- -Informational Field Days and Tours are organized in Spring and Fall showcasing selected project areas, primarily for standards and comparisons among project leadership, but agency representatives, researchers and commercial vendors are also invited/included in the outings.
- **-Effectiveness Monitoring:** Bluegrass Community and Technical College Environmental Science Technology Program in cooperation with Kentucky River Watershed Watch conducts field monitoring for Nutrients, Specific Conductance, Turbidity, E. Coli and other water quality parameters in the project area providing feedback on water quality conditions.

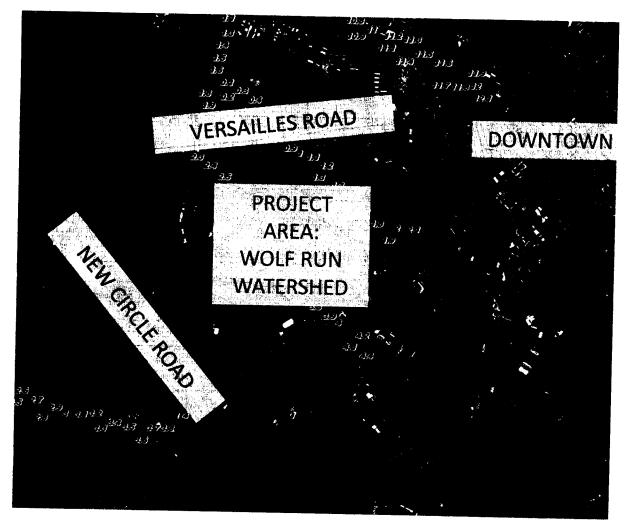
Overall Project accounting, grant reporting and coordination is managed by Friends of Wolf Run leadership.

Project 08 Budget:

TYPE OF EXPENSE		ПЕМ		T PRICE	QUANTITY	UNDED BY	4	UNDED BY		TOTAL EXPENSE
Signage	Friends of Wolf Run Trustees	Print and mount stream buffer signs 18X24"	\$38	Per Each	15	\$ 40.68	-		-	610.68
Signage	Friends of Wolf Run Trustees	No Mow Zone Boundary Markers, Stickers and polls	\$11.00	Per Each	100	\$ -	\$	1,100.00	\$	1,100.00
Printing	Friends of Wolf Run Trustees	Publications related to Stream Buffer Restoration	\$ 1.00	Per Each	500		\$	500.00	\$	500.00
Communications	Friends of Wolf Run Trustees	Social Media and Web Site Operations	Variable	Per Campaign	1	\$ 500.00		·	\$	500.00
Training and Certification	Key Stewards and Volunteer Leadership	Kentucky Department of Agruculture Certification Fees	\$35.00	Per Each	10		\$	250.00	\$	250.00
Training and Certification	Key Stewards and Volunteer Leadership	Time and Travel to Certification exams	\$13.56	Per Each	20	\$ 271.20			\$	271.20
Field Day	Friends of Wolf Run Trustees	Field Trip for Project Participant and Key Stewards	\$250	Per Event	2	\$500.00			\$	500.00
Monitoring	Technical College	Monitor 3 stations for nurtrients, pathogents and field parameters	1	Per Visit Per Site	9	\$ 1,215.00			\$	1,215.00
Monitoring	Bluegrass Community and Technical College	Supplies for field kits and laboratory analysis	Variable	Per Unit	1		\$	800.00	\$	800.00
Management		Grant Accounting, Purchasing, Financial Administration	\$ 13.56	Per Hour	3	\$ 40.68	\$	-	\$	40.68
otals	_		Reference.	. PROJECT	SLOGETH	4,557,55	7	9,220,00		\$151.50.

\*COST SHARE % = 79.74%

# Stormwater Quality Projects Incentive Grant Program



FRIENDS OF WOLF RUN



## Lexington-Fayette Urban County Government DEPARTMENT OF PUBLIC WORKS & ENVIRONMENTAL QUALITY

Jim Gray Mayor

Dowell Hoskins-Squier Commissioner

TO:

Mayor Jim Gray

Urban County Council

FROM:

Charles H. Martin, P.E., Director Division of Water Quality

DATE:

January 21, 2016

SUBJECT:

Recommendation for a FY16 (Class A) Stormwater Quality Projects Incentive Grant for

Friends of Wolf Run Inc. (FOWR)

## Request

The purpose of this memorandum is to request approval of a FY16 (Class A) Stormwater Quality Projects Incentive Grant for Friends of Wolf Run Inc. (FOWR) in the amount of \$32,820.00.

### Purpose of Request

Grant provides for funds to support the Stream Buffer Stewardship Program for Wolf Run. Activities shall include performing stream clean-ups, removal of invasive plant species, and planting of native vegetation along Wolf Run and its tributaries at various volunteer selected stewardship sites, as well as providing educational outreach by communication with streamside property owners and installation of educational signage at stewardship sites.

#### Project Cost in FY16 and in Future Budget Years

The grant has been approved by the Water Quality Fees Board in the amount of \$32,820.00 and will be fully spent by FY18.

## Are Funds Budgeted

Funds are budgeted in: 4052 - 303204 - 3373 - 78112 - WQINCENTIVE\_16 - WQ\_GRANT

### Martin/Hoskins-Squier

200 East Main Street

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