#### GRANT AWARD AGREEMENT

#### Fiscal Year 2018 Class A Incentive Grant Program

THIS AGREEMENT, made and entered into on the \_\_\_\_\_\_ day of \_\_\_\_\_\_, 20\_\_\_\_\_, by and between the LEXINGTON-FAYETTE URBAN COUNTY GOVERNMENT, an urban county government of the Commonwealth of Kentucky, pursuant to KRS Chapter 67A (hereinafter "Government"), on behalf of its Division of Water Quality, and FRIENDS OF WOLF RUN INC., 639 CARDINAL LANE, LEXINGTON, KENTUCKY 40503, (hereinafter "Grantee").

#### 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 \$\sum\_{33,500.00}\$ (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:
  - 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 infra-structure 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>24</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

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CLERK, URBAN COUNTY COUNCIL

Grantee Organization: FRIENDS OF WOLF RUN, INC.

639 CARDINAL LANE

**LEXINGTON, KY 40503** 

NAME: Key Cooks

TITLE: Treasures

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

Ken Cooke \_\_\_\_\_\_, as the duly authorized representative for and on

behalf of Friends of Wolf Ruy on this the 24 day of January, 2018.

My commission expires: \( \frac{18}{202} \)

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### **ATTACHMENT A**

#### to the GRANT AWARD AGREEMENT

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

**GRANT PROGRAM:** FY2018 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

#### **PROJECT TEAM AND CONTACT INFORMATION**

**Organization:** 

Friends of Wolf Run Inc. (FOWR)

639 Cardinal Lane Lexington, KY 40503 KY Organization #: 0612068

**Organization President:** 

Karen Fawcett, President

859-469-2777

kygreenfawcett@gmail.com

**Primary Project Contact** and Project Manager:

Ken Cooke, Treasurer, FOWR – Treasurer

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 Lisa Collins, Vice-President

Layton Register

Project Steering Committee: Project operations and support.

Dr. Julian Campbell, Plant Materials Selection

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 Mehlhorn, 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: Possible coordination 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, Key Steward, JH Technology Trust, Dunbar High School
- 3. <u>Eastway Wetland Seep</u>: Eric Spangler, Hill-N-Dale NA with support from Southland Association
- 4. <u>Hill-N-Dale Park Stream Restoration:</u> Gail Lightener, Key Steward, Hill-N-Dale Neighborhood Association.
- 5. <u>Allendale Stream Buffer Restoration and Demonstration Area</u>: Dr. Julian Campbell, Bluegrass Woodland Restoration Trust
- 6. <u>St. Raphael Episcopal Church Project:</u> Dave Sevigny Project Manager, Russ Turpin Project Contractor, Roger Kirk Project Administrator, Ryan Koch Seedleaf
- 7. <u>Preston's Cave Spring Park:</u> Gary Libby, Skybax Ecological Restoration, LFUCG Environmental Commission with Cardinal Valley Neighborhood Association
- 8. <u>Project Training and Technical Support</u>: Amanda Gumbert, PhD, Carmen Agouridis, P.E., PhD

#### **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.
  - -Engagement of youth and other community leadership in storm drain stenciling in the Pine Meadows Neighborhood
- 2. Allendale-Moberly Spring Greenway "Riparian Arboretum" demonstration area.
- 3. Preston's Cave Spring Riparian Forest Restoration.

#### 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. **Bringing in the "Big Guns" once** the neighborhood fully understands the process, LFUCG, Friends of Wolf Run and others can then proceed with the full scale invasive control and native plantings with new found understanding and support from neighborhood leadership.
- 6. *Leadership Training and Support* through field days, on-site consultants with restoration experts.
- 7. **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.
- 8. *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.
- 9. *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.
- 10. Clearly marking Stream Buffer Improvement areas with fiberglass posts and educational signs.

#### B. Project Element: Individual Project Site Support

There are nine project sites along with Administration and Coordination planned to be supported by this project, 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
- 3. Eastway Wetland Seep, Hill-N-Dale Neighborhood
- 4. Hill-N-Dale Park Stream Restoration
- 5. Allendale Stream Buffer Restoration Nursery and Demonstration Area
- 6. St. Raphael Episcopal Church Project
- 7. Preston's Cave Spring Park, 1937 Dunkirk Drive
- 8. Springs Branch Stream Restoration Maintenance, Southland Park
- 9. McConnell Springs Stormwater Pond, Floating Wetland Island and Solar Aeration Demonstration Project
- 10. Overall Project Administration, Coordination, and Watershed Wide Activities.

# 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 10 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.
- 2. 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.
- 4. All attachments to Request for Funds & Project Status Reports shall reference the associated line Table 2 Eligible Expenses

#### **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

- 1. 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.
- 2. Applicant shall obtain written approval/agreement prior to work being done on properties not owned by the applicant.
- 3. All existing utilities shall be located, contacted, and coordinated with prior to any work being performed if within the project vicinity.
- 4. 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.
- 5. Riparian Arboretum plant material sales shall not be held unless approval is granted from Grant Administrator and LFUCG Division of Law.
- 6. The project shall not proceed with field work until written approval to proceed is obtained from the Grant Administrator or Director or Water Quality, because of the potential for conflict with potential future LFUCG Projects.
- 7. Organization proposes a larger cost share beyond that required by the grant program. Budget shall reflect the 28.8% cost share offered in the application (Approximately \$13,532.80).

#### **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	Within 1 week of grant award notice
Convening of project steering committees	Within 1 week of grant award notice
Approval of work plan by property managers, (Parks, Greenways)	Within 30 days of grant notification
Conduct stream walks in new project areas	April 2018
Conduct stream clean up and trash removal	April 2018, October 2019
Conduct invasive plant removal work days	April 2018, October 2019
Conduct native plant installations	May 2018 – October 2019
Follow up work days in existing riparian areas	May – October 2019
Final Report to LFUCG	December 1, 2019

#### 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 not 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).

**TABLE 2 - PROPOSED PROJECT BUDGET** 

				_ (	Overall Proje	ct buage	<u> </u>	 	_			
	TYPE OF EXPENSE. Project Charges: Gr		e ITEM		PRICE.	UNIT	CHARTELY	WINGER WASON	10.14	UNIDED BY SRANT		TAL EXPENS
2	Project Management	Key Stewards, Friends of Wolf Run Leadership	Project Management	\$	2,735.55	each	1	\$ 2,735.55	\$	<del>-</del>	\$	2,735.5
2	Project Clement: Pl	entings and Plants	z Wetland Island	end	Soler Agrat	ion Activi	tion of the				No.	We had to
1274	Volunteer Time	Friends of Wolf Run Inc, Schools, Neighborhood, Community Volunteers	Volunteer Time	6.70	A CONTRACTOR	each	415	\$ 3,008.75	\$	-	\$	3,008.
5	Contracted Services	EcoGro	Contracted	\$	350.00	each	1	\$ 350.00	\$	-	\$	350.0
6	Contracted Services	Services/Russ EcoGro Services/Russ	Services Contracted Services	\$	12,075.00	each	1	\$ -	\$	12,075.00	\$	12,075.0
7	Plant Materials	Area Nurseries, KY Division of Forestry, Seed	Plant Materials	\$	2,500.00	each	1	\$ 2,500.00	\$	-	\$	2,500.0
8	Plant Materials	Area Nurseries, KY Division of Forestry, Seed	Plant Materials	\$	15,400.00	each	1	\$ -	\$	15,400.00	\$	15,400.0
	Materials and landscaping supplies	Area Vendors	Materials and landscaping supplies	\$	821.00	each	1	\$ 821.00	\$	-	\$	821.0
0	Materials and landscaping supplies	Area Vendors	Materials and landscaping supplies	\$	1,450.00	each	1	\$ -	\$	1,450.00	\$	1,450.0
1	Equipment (Pond Aerators)	Area vendors	Solar Pond Equipment	\$	1,200.00	each	2	\$ -	\$	2,400.00	\$	2,400.0
2	rrojest Element: Ed	ucation		, j. (1								
	Effectiveness Monitoring	BCTC, Town Branch Labs	Effectiveness Monitoring	\$	1,360.00	each	1	\$ 1,360.00	\$	-	\$	1,360.0
- 1	Effectiveness Monitoring	BCTC, Town Branch Labs	Effectiveness Monitoring	\$	800.00	each	1	\$ -	\$	800.00	\$	800.0
ľ	Printing, Tours, Workshops and Communications	Project Leadership and area scientists, resource management agencies and experts in the field	Printing, Tours, Workshops and Communication s	\$	1,750.00	each	1	\$ 1,750.00	\$	-	\$	1,750.0
ŀ	Printing, Tours, Workshops and Communications	Leadership and area scientists, resource management agencies	Printing, Tours, Workshops and Communication s	\$	275.00	each	1	\$ -	\$	275.00	\$	275.0
7	Signage	and experts in the Friends of Wolf Run	Signage	\$	1,000.00	each	1	\$ 1,000.00	\$	-	\$	1,000.0
8	Signage	Friends of Wolf Run	Signage	\$	1,100.00	each	1	\$ -	\$	1,100.00	\$	1,100.0
9		IISMII	****		NO LES	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1					14	
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#### **SUPPLEMENTAL PROJECT ELEMENT INFORMATION**

Note: Supplemental project element information is provided from application.

#### FIGURE 1: PROJECT LOCATION MAP



- 1. Clay's Mill Greenway
- 2. Deauville Drive Greenway
- 3. Eastway Wetland Seep Eastway and Sunseeker Drives
- 4. Hill-N-Dale Park Stream Restoration
- 5. Allendale-Moberly Spring Greenway
- 6. St. Raphael's property/Cardinal Run Stream Restoration
- 7. Preston's Cave Spring Park
- 8. Springs Branch Stream Restoration
- 9. McConnell Springs Floating Wetland Island and Solar Pond Aeration

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

#### Personnel

Layton Register, Key Steward, Spring Meadows Neighborhood

#### **Activity and outlook**

Wolf Run flows through this LFUCG Sanitary Sewers Buy Out property, which now hosts one of our longest standing stream buffer stewardship areas. Our Key Steward continues to provide maintenance, invasive control and new infill plantings along the waterway. The site serves as one of our demonstration areas where people can visit to view plants that now have several years' growth. New and innovative control methods are tested here, including non-motorized, natural weed control methods using historic hand tools and large format scythes.

**Project 01 Budget** (From Application)

TYPE OF EXPENSE	PARTICIPANTS	пем		UNITP	RICE	QUANTITY	Same Section	ALECTER ALECTER	A	NICES EY SHARE	TOTAL EXPENSE
			Jen Č								
Volunteer Time	Friends of Wolf Run Inc, Community	Follow-up control of honeysuckle/weeds;	\$	7.25	Per Hour	25	\$	181.25	\$	-	\$ 181.25
Project Management	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	\$	13.56	Per Hour	5	\$	67.80	\$	-	\$ 67.80
Plant Materials	Area Nurseries, KY Division of Forestry	Seed, shrubs, tree whips and nursery	\$	1,000.00	Per Project	1	\$	=	\$	1,000.00	\$ 1,000.00
Materials and landscaping	Area Vendors	Landscaping supplies, mulch, signage,	\$	500.00	Per Project	1	\$	-	\$	300.00	\$ 300.00
			2								
:		*co	ST :	SHARE % =	25.62%						

#### Project Site 2 Detail: Deauville Road Greenway Project

#### Personnel

Jerome Higgenbotham, Key Steward, Jessie Higgenbotham Technology Trust, Dunbar High School

#### **Activity and outlook**

Vaughn's Branch flows through the Deauville Drive Greenway, our Key Steward works with students at Dunbar High School through their Peace Garden on native plant propagation and maintenance along the Greenway. Activities include neighborhood and school based work days along the creek controlling invasive plants, expanding the coverage area as time and hand tools permit.

**Project 02 Budget** (From Application)

TYPE OF BUILDING	*PARTICIPACES	<b>FFW</b>	, j.	UNIT PA	iŒ	GUARTIY	The second	1026:54 1026:54	Į.		TOTAL VPENSE
Volunteer Time	JHTT, Cardinal Valley Neighborhood	Follow-up control of honeysuckle/weeds; planting; mulching	\$	7.25	Per Hour	50	\$	362.50	\$	-	\$ 362.5
Project Management	Cardinal Valley Neighborhood Association	Jerome Higgenbotham Key Steward 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	10	\$	135.60	\$	-	\$ 135.60
Plant Materials	Area Nurseries, JHTT KY Division of Forestry	Seed, shrubs, tree whips and nursery stock	\$	2,500.00	Per Project	1	\$	-	\$	1,500.00	\$ 1,500.00
Materials and landscaping supplies	Area Vendors	Landscaping supplies, mulch, volunteer support materials	\$	500.00	Per Project	1	\$	-	\$	500.00	\$ 500.00
					- A 5	I share					
		•	COST	SHARE % =	27.78%						

## Project Site 3 Detail: Eastway Wetland Seep Eastway and Sunseeker Drives

#### Personnel

Eric Spangler, Key Steward, Hill-N-Dale Neighborhood Association

#### **Activity and outlook**

This headwater area is a tributary to the Dearfield Branch of Wolf Run with work focusing on a critical environmental area designated by LFUCG as part of the development plan for the new neighborhood. The wetland/Seep area has unique hydrologic features, staying wet most the year. This portion of the project will provide professional follow up on a major invasive control effort for the 1-acre parcel to be sure re-sprouts do not re-claim the area. New infill plantings will be installed by contractors and by volunteers. A maintenance path will be installed with the Neighborhood installing a small foot to allow better access to the property as part of grant match.

**Project 03 Budget** (From Application)

TYPE OF EXPLICA	PACHCIPANTS	TTEM		UNIT PI		QUANTITY		HOED BY ALIZATION	21	HEED BY SALET	<b>30</b>	A Dress
MARKET AU												
Volunteer Hours	Project personnel, FWR and neighborhood	Volunteer Hours for organizing and advertising event	\$	7.25	per hour	20	\$	145.00	\$	•	\$	145.00
Project Management	Hill-N-Dale Neigbhorhood Association	Eric Seigel Key Steward 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	\$	<del></del>	\$	67.80
Plant Materials	Project personnel, FWR and neighborhood	Supplemental plantings and seeding		\$1,000.00	Per Project	1	\$	-	\$	1,000.00	\$	1,000.00
Materials and landscaping supplies	Area Vendors	Signage, Volunteer Work Day Supplies, Landscaping materials	\$	600.00	per each	1	\$	300.00	\$	300.00	\$	600.00
TOTALS			(1) 数(5)	98/99/15			1		3	1.8.00	8 :	1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1
			*COST S	HARE % =	37.62%							

# Project Site 4 Detail: Hill-N-Dale Park Stream Bank Restoration and Storm Drain Outfall Mural

#### Personnel

Gail Lightener, Key Steward, Hill-N-Dale Neighborhood Association

#### **Activity and outlook**

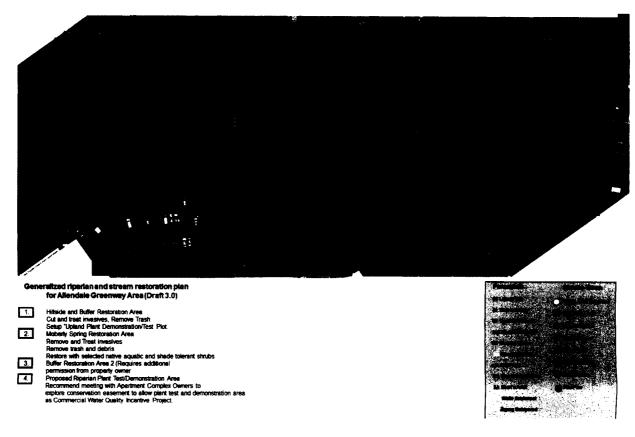
A perennial stream flows through Hill-N-Dale Park that is currently mowed to the water's edge and hosts a number of large Bush Honeysuckle Plants and a large cement stormwater headwall outfall from which the creek emerges. The Hill-N-Dale Neighborhood has slated this section of creek for beautification and creating a neighborhood focus project with the goal of creating an aesthetically pleasing but functional stream buffer using flowering shrubs and perennial plants.

Part of the plan involves designing a storm drain art project to design and install a water quality related mural on the storm outfall head wall with a local wildlife artist willing to donate part of his time for design and installation of the "natural stream based theme denoting how natural streams should function" for the now unsightly concrete structure.

**Project 04 Budget** (From Application)

TYPEOR EXPENSE	(A) Regispages	. ITEM	L:	UNITAP	RICE:	QUANTITY	4 10 10 10	INDED TY ANIZATION	100	NDED BY SHANT	TOTAL SPENCE
Plant Materials	EcoGro Services/Russ Turpin	Trees, Shrubs, Native Perennials (Wildflowers, grasses) Landscape Supplies (Mulch and materials)	\$ 3	3,000.00	Per Unit	1	\$	<del>-</del>	\$	3,000.00	\$ 3,000.00
Contracted Services	EcoGro Services/Russ Turpin	Design - Planting plan, coordination with LFUCG Parks & Recreation, Hill-n- Dale Neighborhood		\$300.00	Lump Sum	1	\$	-	\$	300.00	\$ 300.00
Contracted Services	EcoGro Services/Russ Turpin	Installation - selection, procurement and delivery of materials, planting layout, site preparation, warranty of materials, etc.		\$700.00	Lump Sum	1	\$	-	\$	700.00	\$ 700.00
Donated Professional Services	EcoGro Services/Russ Turpin	Programs/Events - coordinate with project partners, develop educational program, conduct/oversee volunteer planting event, etc.		\$22.50	Per Hour	10	\$	225.00	\$	-	\$ 225.00
Project Management	Friends of Wolf Run	Grant Accounting, Purchasing, Financial Administration	\$	14.50	Per Hour	10	\$	145.00	\$	-	\$ 145.00
Project Management	Hill-N-Dale Neighborhood	Gail Lightener Key Steward, Project management	\$	14.50	Per Hour	20	\$	290.00	\$	-	\$ 290.00
Volunteer Time	Hill-N-Dale Neighborhood Association, Community Volunteers	Volunteer work days, planning and educational event attendance	\$	7.25	Per Hour	100	\$	725.00	\$	-	\$ 725.00
		*cc	OST SH	ARE % =	25.72%						

# Project Site 5 Detail: Allendale-Moberly Spring Greenway "Riparian Arboretum" Demonstration Area



#### Personnel

Dr. Julian Campbell, Project Manager, Bluegrass Woodlands Restoration Trust

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

#### **Personnel**

PROJECT MANAGER: Julian Campbell, Bluegrass Woodland Restoration Center Page 10 of 17

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 10 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 spent on questionable plant material; there has been little accountability in results; and in several cases, there have been failures.

#### **Project Outline**

2018/19 Activity will consist of final removal of all mature bush honeysuckle remaining on slopes and streambanks along the Allendale Greenway, including necessary follow-up to previous control.

There will be continued replacement with native trees and shrubs in the wetland, spring, low slopes, and streamside areas.

Also, we continue with regular production of native plant material from the small nursery, focusing on willows, dogwoods, roses, buttonbush and other wetland shrubs. This material will be offered to the community under the aegis of LFUCG (who owns the land) and Friends of Wolf Run (who is permitted to grow plants here). Several large elm saplings (5-15 ft tall) have already been supplied to Parks and other public sites, and more of these will become available.

Project work will be coordinated with LFUCG Division of Sanitary Sewers and Division of Water Quality so 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.

Only true native plants would be established 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, roughleaf dogwood, spicebush, hornbeam, bladdernut, and pawpaw. As initially envisaged, the goal is to prepare for a small "Riparian Arboretum" and associated nursery, at least for woody species.

#### Schedule of Work

- Spring of 2018 Assessment of existing plantings and continued maintenance
- Spring of 2018 Installation of additional plant materials
- Summer/Fall of 2018 Continued clearing of invasive plants in the corridor
- Summer/Fall of 2018 Preparation of native plant material from the nursery
- December 31, 2018, Final Report and Analysis

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

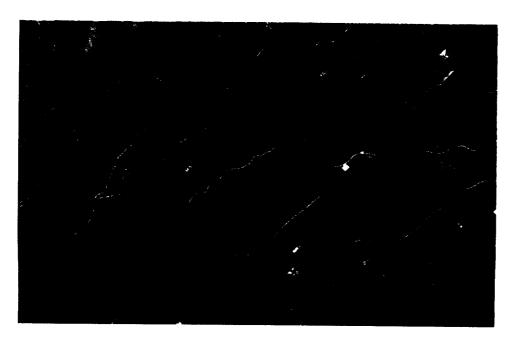
Further plantings can be designed in more detail at the site during future years, as funds become available. More open areas on the bottomland could be converted to meadows of native grasses and wildflowers, with maintenance by mowing or other means. More sloping areas on the west side of this greenway could be converted into a small woodland restoration, after removal of honeysuckle and ideally the winter-creeper (although the latter will need more intensive work outside the scope of this initial project).

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 will become an outstanding demonstration for riparian restoration within the city. With controlled public access, it would also serve varied education and recreational activities

TWEO ELSE	PARTICIPANTS	TEM		UNITP		QUANTITY	Section in the	INDED BY ANDADION	F	JABED BY GRANT		TOTAL
Project Electric III	etherite aut (estope)	Tables Mark and Make	WW.	racts [ca.	1.5 acres				705565	i	2 2 2 3	301.
Contracted Services	Bluegrass Woodland Restoration Center	Complete honeysuckle removal on slopes at south side of corridor			per acre	2	\$	-	\$	2,000.00	\$	2,000.0
Contracted Services	Bluegrass Woodland Restoration Center and Subcontractor to be determined	Chipping of honeysuckle for future use on site in formal plantings	\$	500.00	per acre	2	\$	-	\$	1,000.00	\$	1,000.0
Plant Materials	Bluegrass Woodland Restoration Center	Establishment of buckeyes, sugar maples, basswoods, red elms etc. after honeysuckle	\$	5.00	per plant	200	\$	500.00	\$	500.00	\$	1,000.0
Plant Materials	Bluegrass Woodland	Further development of	\$	5.00	per	200	\$	1,000.00	Ś		Ś	1,000.00
Project Element; Co	rridge Connection to H	rrodsburg Road (by Frisch)	s Bla	Boy)		10.71.7 (5.4.7)	. 11.0264		<u> </u>	C. 100.0	Ļ	
	Bluegrass Woodland Restoration Center	Quarterly mulch with straw and/or cutting of tall weeds; further removal of adjacent honeysuckle	\$	500.00	per acre	1	\$	-	\$	500.00	\$	500.00
Project Element: Ed	ucational Materials, San	tions and Tour:			- GP		3.510	4.847°.			<del>-</del>	
Volunteer Time	Project personnel, FWR and neighborhood	Volunteer Hours for organizing and advertising event	\$	7.25	per hour	10	\$	72.50	\$	-	\$	72.50
	Project personnel, FWR and neighborhood	Advertising for event: 250 single page flyers - black & white	\$	0.10	per flyer	250	\$	-	\$	25.00	\$	25.00
		Distributing drafts of written plan to develop consensus of potential partners	\$	500.00	per each	1	\$	250.00	\$	250.00	\$	500.00
				en in	¥.57.7		\$3.6 \$1.6 \$1.6					
		COS	ST SI	IARE % =	29.89%			15.014				

# Project Site 6 Detail: St. Raphael's property/ Cardinal Run Stream Restoration



#### Personnel

Dave Sevigny onsite manager; Roger Kirk, Grant Administrator; Ken Cooke and FOWR, Grant Consultants; Ryan Koch, Seedleaf native fruit/nut plantings, Russ Turpin, EcoGro invasive removal and education consulting.

#### **Purpose and Need:**

The project at the rear of the property owned by St. Raphael's Episcopal Church, that adjoins the Colony Neighborhood, on 1891 Parkers Mill Rd, contains a tributary to Cardinal Run that makes its way to what is known as "Blue Hole". The property owner wishes to engage in a project to clear out invasive plant material like honeysuckle and poison hemlock, and create a more natural stream bed feature to use for walking trails, native fruit and nut bearing trees/shrubs that may provide revenue for ongoing support. As part of an educational initiative by the church, both Sunday school and summer program community classes on ecology for children and adults are scheduled to be offered. The stream area also includes an existing decaying fence that will be removed to allow for better stream maintenance and water access.

**Project 06 Budget (From Application)** 

TYREOF EXPENSE	t Carl	TEM:	*	PRICE	QUANTIT Y	Sec	NOED BY BNZATIEN	FUNDED BY	1	TOTAL EXPENSE
Protest Comment	initial Treatment & Rem	enal of Investore Species Imperox.	Lacrel						3 40. 3	
Contracted Services	Bids/Ecogro	Cutting and piling honeysuckle; herbicide application to stumps	\$ 6,000.00	per acre	0.6	\$	-	\$ 3,600.00	\$	3,600.00
Contracted Services	Bids/Ecogro	Treat and remove resprouts in previously cleared areas	\$ 1,750.00	Per Acre	0.9	\$	-	\$ 1,575.00	\$	1,575.00
Plant Materials	Bids/landowner	Seed, shrubs, plants, tree whips and nursery stock	\$ 2,000.00	Per Project	1	\$	-	\$ 2,000.00	\$	2,000.00
Materials and landscaping supplies	SRELEX/Colony Neighborhood	Landscaping supplies, mulch, volunteer support materials	\$ 500.00	Per Project	1	\$	500.00	\$ -	\$	500.00
Plant Materials	Bids/Seadlleaf	Establishment and installation including materials of native fruit and nut trees	\$ 120.00	per tree/bush	50	\$	1,000.00	\$ 5,000.00	\$	6,000.00
Signage	SRELEX	No Mow Zone Boundary Markers, Stickers and polls, street sign	\$ 10.00	Per Each	100	\$	1,000.00	\$ -	\$	1,000.00
Materials and landscaping supplies	SRELEX	Advertising for event: 300 single page flyers - black & white	\$ 0.07	per flyer	300	\$	21.00	\$ -	\$	21.00
Volunteer Time	SRELEX/Colony Neighborhood	Follow-up control of honeysuckle/weeds; planting; mulching	\$ 7.25	Per Hour	80	\$	580.00	\$ -	\$	580.00
Project Management	Roger L. Kirk, Dave Svigny	Grant Accounting, Purchasing, Financial Administration	\$ 13.56	Per Hour	20	\$	271.20	\$ -	\$	271.20
Project Management	Ken Cooke/Friends of Wolf Run	Key Steward Event Coordination, volunteer organization and planning	\$ 13.56	Per Hour	15	\$	203.40	\$ -	\$	203.40
Totals				1277 37	rest in the				Ħ	
		*cos	SHARE % =	22.70%						

# Project Site 7 Detail: Preston's Cave Spring Park Stream Buffer Restoration and Inventory



Project Personnel: Garry Libby, Project Manager, Skybax Ecological Restoration LLC

#### **Project Objective**

The effort will be devoted to restoring the riparian buffer zone with 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.

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 2018 project will build on existing work along the waterway providing control for invasive resprouts and infill planting with volunteers allowing new trees and shrubs to out compete invasive plants.

#### **Work Items:**

- 1. Obtaining necessary permissions and approvals from the property owner LFUCG Parks, Contact Chris Cooperrider and Edmon Chaney or their designated representatives.
- 2. Follow up treatment of bush honeysuckle (*Lonicera maackii*) and other invasive species with approved herbicide based on product label directions and guidance from the University of Kentucky as found in December 2008, Kentucky Woodlands Magazine, Volume 3 Issue 3 Pages 12 -15.
- 3. Participation in (2) volunteer work days ensuring community engagement in the public resource in cooperation with Friends of Wolf Run and the LFUCG Environmental Commission.
- 4. Project Schedule
  - 4.1 Spring 2018: treatment of alien plants along stream and in wetlands
  - 4.2 Spring, Fall 2018 or Spring 2019: Volunteer Work Days.
  - 4.3 May 2019 Close out and final report.

Project 07 Budget (From Application)

TYPE OF BUILDING	/Anterview	пы		UNITA	UCE	QUANTITY		NAMES BY	PLINDED BY	TOTAL DO	EKSE
Project Element:	ette de Aradaeal e de	noval of loveston Species i	ca. 5	acres		7					101
Contracted Services	Skybax Ecological Services, LLC	Cutting and piling honeysuckle; herbicide application to stumps	\$	1,200.00	per acre	2	\$	-	\$ 2,400.00	\$ 2,4	400.00
Effectiveness Monitoring	Bluegrass Community and Technical College	Plant survivability and plant density surveys		\$7.25	Per Hour	20	\$	145.00		\$ :	145.00
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	\$ -	\$ 1	135.60
				0 # 2 \$ F (I)			Ã.	<b>4</b>			
		•cc	OST S	SHARE % =	21.13%						

## **Project Element 8: Springs Branch Stream Restoration Maintenance**

**Project Personnel:** Ken Cooke, Key Steward, Southland Park Neighborhood Association, Bluegrass Community and Technical College Environmental Science Technology Program Faculty.

#### Scope of Work and timeline:

The 2012 stream restoration project completed under a Class B Water Quality Incentive Grant Program continues to develop naturally but does require coordinated maintenance to replace lost plantings, control invasive resprouts and expand the stock of native trees and shrubs enhancing the area.

Activities will include twice annual spring and fall cleanups and volunteer work days with on-site monitoring in cooperation with LFUCG Parks Southbase (Located at the site) and Fayette County Public Schools (Notification only). Specific activities will include continuing control of Catttail infestation, Bush Honeysuckle sprout pulling and Johnson Grass Control. Educational stream walks will be planned in cooperation with the Neighborhood Association, and when requested, with Clay's Mill Elementary faculty and Staff.

Project 08 Budget (From Application)

TYPE OF EXPENS	PARTICIPANTS	CTEM	UNIT	PRICE	QUALITY	١,	FUNDED BY MEANIZATION	200	UNDED BY	Į.	TOTAL ENTERSEY
Volunteer Time	Southland Park Neighborhood, Community Volunteers	Follow-up control of honeysuckle/weeds; planting; mulching	\$ 7.25	Per Hour	20	\$	145.00	M.H. dille	-	\$	145.00
Project Management	Southland Park Neighborhood, Ken Cooke	Key Steward Event Coordination, volunteer organization and planning	\$ 13.56	Per Hour	5	\$	67.80	\$	•	\$	67.80
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	\$ 1,000.00	Per Project	1	\$	-	\$	1,000.00	\$	1,000.00
Materials and Landscaping Supplies	Area Vendors	Landscaping supplies, mulch, volunteer support materials	\$ 250.00	Per Project	1	\$	-	\$	250.00	\$	250.00
		*cc	SHARE % =	22.45%		184	an antara di Santara d		and and an analysis of the same and an analysis of the sam		

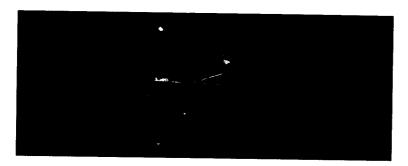
# Project Element 9: McConnell Springs Floating Wetland Island and Solar Pond Aeration Demonstration project.

## **Water Quality Problem Addressed**

Stormwater Retention Ponds are often plagued with nutrient enrichment, algae blooms and low oxygen conditions. Mechanical control measures are expensive, and some pond owners are resorting to chemical controls (using Chelated Copper compounds and "bluestone" copper sulfate to try to control nuisance algae. Application of these chemicals in stormwater quality treatment ponds is against regulation, but private pond owners often resort to use of the compounds.

#### **Project Staff**

Friends of Wolf Run and McConnell Springs Park staff propose to provide a demonstration test bed for several innovative pond management systems that include "Floating Wetland Islands" and Solar Powered Pond Aerators. Ken Cooke, Project Coordinator, Bruce Hutcheson, Project Technical Lead and Steven Rogers, Floating Wetland Island Supervisor will manage the effort.



Floating Wetland Island Activities. The team currently has four floating wetland islands installed on the pond, funding will be used to continue maintenance and in-fill plantings to replace lost plants.

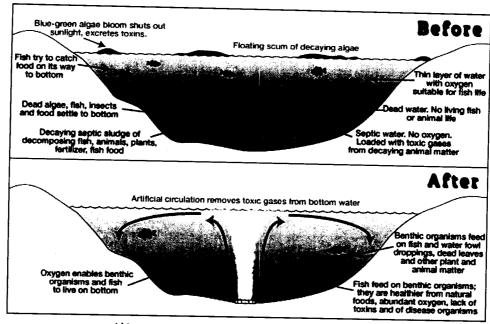
# Trapped particles subsequently slough-off with biofilms and roots as heavier particles that settle to the bottom Stems, leaves Plant uptake Plant uptake Roots Roots Phytrous oxides Soluble Zn. Cu, fine SS) Particulateassociated Zn, Cu Benthic Sediments ZnS, Native Cu, and complexed organics

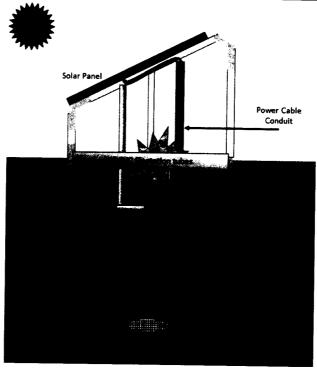
Theory of Operation for Pollutant Removal

#### **Solar Powered Pond Aeration Activity**

Pond aeration is an important tool in combating low oxygen levels and nutrient removal, but systems that require mains power are expensive and prone to vandalism in uncontrolled areas. Under this proposal we will be demonstrating a solar powered option for pond aeration and mixing by floating two independent and self-powered pond aerators. Activities will include design, test, installation and maintenance of the units and development of a descriptive brochure to distribute to other stormwater retention pond owners to alert them of the option.

The 300 watt solar powered pond aerators can move up to 13,000.00 cubic feet of water per day given 5 hours of full sun.





Project 9 Budget (From Application)

Type of expense	Manapaurs.	DEM.	UNIO	PRICE	CHARRIET	PORIDED BY CHEANIZATION	FUNDED BY	TOTAL EXPENSE
Plant Materials	Area Nurseries	Plant materials for floating wetland islands	Bulk Price	\$400.00	1		\$400.00	\$400.00
Materials and Landscaping Supplies	Area Vendors	Anchoring, floatation, plant media repair materials	Bulk Price	\$100.00	1		\$100.00	
Volunteer Time	Floating Wetland Island Operators	Repair, replanting, monitoring and supervision	Per Hour	\$7.25	20	\$145.00		\$145.00
Equipment	Area vendors	Solar Pond aeration system, floatation, solar panels, electric motors, anchoring systems	Per Each	\$1,200.00	2		\$2,400.00	\$2,400.00
Volunteer Time	Friends of Wolf Run	Construction, installation, operations and repair	Per Hour	\$14.50	20	\$290.00		\$290.00
Donated Professional Services	Solar technician Time,	Electrical wiring, solar system hookup, power calculations, safety installation	Per Hour	\$25.00	5	\$125.00	-	\$125.00
Total			N.M. W. P.	Ten en e		<b>VIII.</b>	18 1 21 21	\$125.00
	·	*co:	ST SHARE % =	16.18%				

# **Project Element 10: Overall Project Administration, Coordination and Watershed Wide activities**

Project Personnel: Ken Cooke, Project Administrator, Friends of Wolf Run

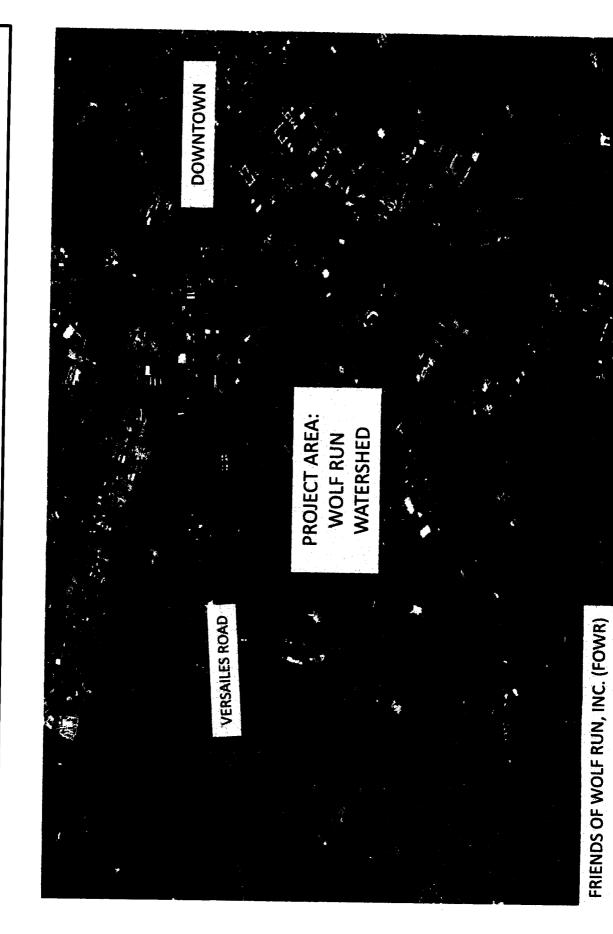
#### **Activity and Outlook**

Friends of Wolf Run leadership will provide general project coordination including:

- 1. Production and supply of signage and no-mow zone markers for project areas
- 2. Distribution to key stewards and neighborhood leadership publications related to stream buffer science, installation and maintenance. (Living Along A Kentucky Stream)
- 3. Outreach and communication regarding specific project work days, tours and events through social media, web site, email distribution and printed flyers
- 4. On site field support for Key Stewards, organizing meetings and planning sessions with property owners, city officials and volunteer leadership.
- Specific coordination of Herbicide Applicators Certification through the Kentucky Department of Agriculture Division of Pesticide Regulation. At least one certified herbicide applicator is assigned to each project area. The project covers the testing fee and certification fee for the Key Steward or his/her designated project representative.
- 6. Effectiveness monitoring in cooperation with the LFUCG Town Branch Water Quality Lab, operations of field testing for temperature, Dissolved Oxygen, pH, and Conductivity. Additional effectiveness monitoring conducted in cooperation with Bluegrass Community and Technical College Environmental Science Technology Program in surveying sites, kill ratios for invasive plants, viability of native plants and other field surveys.
- Making financial arrangements, purchasing coordination, accounting, grant reporting and record keeping for the overall project.
- Project long range planning for future funding and alternative funding sources for grant match and new development.

**Project 10 Budget (From Application)** 

TYPE OF EXPENSE	PARTICIPANTS	пем	UNIT	PRICE	CELARITY	Part aver	A LOCATION	TOTAL
Signage	Friends of Wolf Run Trustees	No Mow Zone Boundary Markers, Stickers and polls		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	<u></u>	\$ 500.00
Internet Information Services	Friends of Wolf Run Trustees	Social Media and Web Site Operations	Variable	Per Campaign	1	\$ 500.00		\$ 500.00
Field Day	Friends of Wolf Run Trustees	Field Trip for Project Participant and Key Stewards	\$250	Per Event	2	\$500.00		\$ 500.00
Effectiveness Monitoring	Watershed Watch Volunteers/Friends of Wolf Run	Monitor 3 stations for nutrients, pathogens and field parameters	\$135	Per Visit Per Site	9	\$ 1,215.00		\$ 1,215.00
Effectiveness Monitoring	Microbac Labs, Friends of Wolf Run	Supplies for field meters and laboratory analysis	Variable	Per Unit	1		\$ 800.00	\$ 800.00
Project Management	Friends of Wolf Run Trustees	Grant Accounting, Purchasing, Financial Administration	\$ 13.56	Per Hour	40	\$ 542.40	\$ -	\$ 542.40
Totals			Alexander .	kil bil	a gr		terminal and	5.1
		*co	ST SHARE % =	63.16%				



Stormwater Quality Projects Incentive Grant Program



CHARLES MARTIN DIRECTOR WATER QUALITY

TO:

Mayor Jim Gray

Urban County &

FROM:

Charles H. Martin, P.E., Director

Division of Water Quality

DATE:

January 25, 2018

SUBJECT:

Recommendation for a FY18 (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 FY18 (Class A) Stormwater Quality Projects Incentive Grant for Friends of Wolf Run, Inc. (FOWR), in the amount of \$33,500.00.

#### Purpose of Request

Grant provides for funds to support the stream buffer stewardship program for Wolf Run. Activities 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. Furthermore, the project will provide educational outreach by communication with streamside property owners and installation of educational signage at stewardship sites.

# Project Cost in FY18 and in Future Budget Years

The grant has been approved by the Water Quality Fees Board in the amount of \$33,500.00 and will be fully spent by FY20.

## Are Funds Budgeted

Funds are budgeted in: 4052 - 303204 - 3373 - 78112 - WQINCENTIVE\_18 - WQ\_GRANT

#### Martin/Hoskins-Squier

