

**ATTACHMENT A**  
**to the GRANT AWARD AGREEMENT**  
between Lexington-Fayette Urban County Government (LFUCG) and  
 **University of Kentucky Research Foundation**

**GRANT PROGRAM: 2017 Stormwater Quality Projects Incentive Grant Program**

**Class B (Education) Projects**

- Funded through the LFUCG Water Quality Management Fee
- Administered by the LFUCG Division of Water Quality in the Department of Environmental Quality

**PROJECT TEAM AND CONTACT INFORMATION**

**Grantee Organization:**

The University of Kentucky Research  
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Lexington, KY 40506-0057  
KY Organization #: 0052708

**Primary Project Contact**

Rick Durham, Horticulture Ext. Specialist - UK

And Project Manager:

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**Secondary Project Contact:**

Brad Lee, Water Quality Ext. Specialist - UK

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**Project Team Members:**

Gregg Munshaw, Water Quality Ext. Specialist - UK  
Ashley Osborne, Water Quality Ext. Associate - UK  
Jamie Dockery, Fayette County Horticulture Cooperative Ext. Agent

**TARGET AUDIENCE**

The target audience for this project is expected to reach approximately 210,000 to include Homeowners, Neighborhood Associations, Watershed groups, Master Gardeners, and Lawn and Landscape Management Businesses. The objectives for the audiences are broken into two (2) groups. The first is a public element, which incorporates education and involvement at the homeowner level. The second seeks lawn and landscape management business education and involvement.

The public element is the 2.35 persons occupying 89,122 single family dwellings, townhomes and duplexes with lawns, gardens and/or landscape beds in Lexington. These households are primarily responsible for the excess nutrient loads from fertilizers that reach the streams in Fayette County. By engaging the business element we will target the lawn and landscape care companies that manage Lexington lawn and landscaped properties (both residential and commercial).

**PROJECT PLAN ELEMENTS**

This project focuses on Nutrient Load Reduction. To help protect the waters of the commonwealth, this project through public education and public involvement seeks to engage Lexington residence about nutrient management for plant growth through a "No P on My Lawn" campaign. The emphasis will be on phosphorus; however, the outcome could result in a correlated reduction in nitrogen and potassium fertilization as well. In addition, the project seeks to educate and involve Turfgrass and landscape management businesses in nutrient management strategies that will reduce the phosphorus (and other nutrients) load to their clientele's properties through a Green Certification program. Proper nutrient management will reduce loads being applied in the city, thus reduce nutrient runoff and improve water quality.

1) **Public Education and Involvement (Home Owner Level):** Educational material for the "No P on my Lawn" initiative at the home owner level will focus on ecological and aesthetic ramifications of over fertilization, how to take a soil test, interpret the results, and identify

appropriate plant nutrients utilizing the 5-R approach to nutrient management: right source, right rate, right time, right place, and right price.

A. The information will be presented in newspaper articles, educational brochures and fact sheets, news stories, and PowerPoint presentations at neighborhood and community events. All educational information will also be available on the UK Environmental & Natural Resource Issues web site (<http://water.ca.uky.edu/>).

B. The attendees of neighborhood association meetings, watershed group meetings, County CES office meetings, Arboretum meetings and Master Gardener programs will be trained on how to do the following:

- Obtain and submit a soil sample for nutrient analysis from their lawn, garden, landscape bed
- Interpret the soil test results
- Identify an appropriate nutrient source/fertilizer to meet the plant growth needs
- Apply the nutrients at the correct rate and in a manner that will not contribute to excess nutrients in our streams
- Apply the plant nutrient(s) at the correct time to be the most effectively and efficiently utilized by the plant
- Apply the plant nutrient(s) in the correct place in the garden or landscape to minimize transport via stormwater runoff
- For participants in this program, the soil test costs (\$7/each) from any Lexington home or commercial lawn, landscape or garden will be supplemented by this grant. The soil test bags for this program will be identified. We expect to double the number of soil samples for home lawn, garden and landscapes submitted in 2017.
- Organization expects 94% of the soil test results to indicate that no phosphorus application will be necessary.

2) **Education for Lawn and Landscape Management Companies (Business Level):** educational materials at the “Business Level” to address many of the same topics as the public elements adding an emphasis on the potential cost savings of reduced phosphorus fertilization and how incorporating soil testing into client services will impart an increased awareness of environmental stewardship on the part of the landscape professional.

3) **Green Certification Program:** In addition, the project contains a “Green Certification” program targeting lawn and landscape businesses. This program will focus on nutrient management in Fayette County and will be associated with the annual Central Kentucky Ornamental and Turfgrass Association Conference and the Kentucky Certified Professional Turf Managers Workshop. Certification will be offered as Level III - Green Certification to Kentucky Certified Professional Turf Managers and will be authorized through an existing collaboration between UK Cooperative Extension and Kentucky Department of Agriculture

4) **Educational Workshops:** stormwater education incorporating discussions on nutrient management through several media outlets and workshops in an effort to reach homeowners: radio announcements, newspaper articles, Cooperative Extension Service and LFUCG newsletters, TV interviews, workshops at the Fayette County Cooperative Extension office, The Arboretum, Watershed Group meetings (e.g. Friends of Wolf Run), neighborhood association meetings. The timeline for these meetings is spelled out in the attached schedule (Table 1.) We will also link these meetings through a Facebook page and provide on-going updates and promote interaction of attendees.

## **PROJECT SUSTAINABILITY**

1) **Long-term Component for Ongoing Education and Involvement:** The project plans to include ongoing education and involvement beyond the end of the grant, so this resource can continue to be introduced and available to the public. Fayette County Master Gardeners will be trained to implement the educational program as part of their required CEUs. In addition, the educational component of this program will demonstrate to homeowners that they will save money by not purchasing fertilizer that their lawn and garden does not need. This money saved will more than cover future soil test costs.

The Green Certification program for lawn and landscape management businesses will be delivered on a recurring basis associated with the CKOT A and Kentucky Certified Professional Turf Managers Workshop. These programs will be marketed to the 104 MS4 communities through the Kentucky Stormwater Association. Expenses will be covered by registration and certification fees.

2) *Personnel for Long-Term Implementation:* Fayette County Master Gardeners will be trained to implement the educational program as part of their required CEUs.

3) *Ongoing Sources of Funding for Future Program Implementation beyond the Grant Period:* The Fayette County Cooperative Extension Office coordinates a Master Gardener Program. These Master Gardeners have volunteer requirements annually in order to maintain their Master Gardener active status. Delivering an education program will be one of the ways Master Gardeners can gain their volunteer requirements. An on-going objective of this project is to pass major responsibilities of public education regarding nutrient management to the Fayette County Master Gardeners as one of their signature programs.

The University of Kentucky Cooperative Extension Service indicates that urban water quality will be a part of their next 4-year strategic initiative. This demonstrates the UK CES investment into MS4 communities and allows Extension Specialists to allocate time toward developing and implementing programs to help MS4 communities meet their regulatory requirements in public education and public involvement.

#### **PROJECT SUCCESS MEASURES**

The success of the project will be measured by the following quantifiable mechanisms:

- The number of media announcements delivered and people reached through these media outlets.
- The number of Extension bulletins distributed
- The number of participants at the workshops
- Document #INC.2017E.2 Page 5 of 7
- The number of soil samples submitted for testing
- The number of professional landscape companies attaining "Green Certification"

#### **REPORTING REQUIREMENTS**

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

- 1) All handouts and educational material shall be provided to the LFUCG Grant Manager in hard copy and electronic (PDF) format with Request for Funds & Project Status Report and/or Project Final Report.
- 2) Organization proposes a larger cost share beyond that required by the grant program. Budget shall reflect the 50.5% cost share (beyond the first \$2,500) offered in the application (Approximately \$33,202.00).

#### **EQUIPMENT**

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

#### **GRANT PERIOD & PROJECT SCHEDULE**

The grant period starts on the date of execution 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 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**

Activity	Anticipated Date
Recruit Master Gardener Volunteers (MGV)	
Outline needed training and educational resources for public education/outreach	
Identify/develop needed graphics, photos, evaluation instruments	
Order Tools for soil testing	
Draft promotional materials (newspaper articles, radio scripts, fliers, FAQ for MGV)	Winter 2017
Progress update to LFUCG	
Finalize promotional and educational materials	
Seek comment on educational resources from LFUCG Division of Water, others, peer review of materials	
Populate web site with educational materials, develop reporting mechanism for MGV	
Train MGV	
Begin promotional activities (newspaper, radio, television)	
First public educational events/soil testing (Fayette Co. CES, Arboretum)	
MGV scheduling meetings with Home Owner Associations (HOA) for summer and later	
Progress update to LFUCG	Spring 2017
MGV begin holding educational/soil testing meetings with HOA	
Public educational event at Fayette Co. CES and watershed groups	
Continue promotional activities	
Review first rounds of soil testing meetings, feedback/questions from MGV, review program evaluations, make needed changes to educational materials	
Progress update to LFUCG	Summer 2017
Continue promotional activities especially newspaper (Herald Leader and county regional), newsletters (CES, Arboretum, LFUCG)	
MGV continue educational/soil testing meetings with HOA	
Public educational events at Fayette Co. CES, Arboretum	
MGV challenged to take ownership of public education/soil testing program	
Green Certification workshop with KY Certified Turf Managers and/or CKYOTA	
Educational resources submitted for recognition to professional societies	
Review activity to date and evaluations, Progress update to LFUCG	Winter 2018
MGV finish educational programs with HOA	
MGV adopt soil testing education as on-going project	
Public educational events at Fayette Co. CES, Arboretum	
Prepare and submit research article regarding activities and results of this program	
Prepare final report to LFUCG	Spring 2018

**PROJECT BUDGET – GRANT ELIGIBLE EXPENSES & ORGANIZATION COST SHARE**

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 cost share.

Any work performed on this project prior to grant award by Urban County Council and Notice to Proceed from the LFUCG Grant Administrator is not an eligible expense and shall not be reimbursed or counted toward the cost share with the following exception: None.

**TABLE 2 ELIGIBLE EXPENSES**

Type of Expense	Participants	Item	Unit Price	Quantity	Funded by Organization	Funded by Grant	Total Expense
<b>1 Project Element: No P in my Lawn</b>							
2 Personnel Hours	Rick Durham	Personnel hours	68.65 per hour	140	\$ 9,611.00	\$ -	\$ 9,611.00
3 Personnel Hours	Brad Lee	Personnel hours	71.90 per hour	95	\$ 6,830.00	\$ 0.50	\$ 6,830.50
4 Personnel Hours	Gregg Munshaw	Personnel hours	57.37 per hour	109	\$ 6,253.00	\$ 0.33	\$ 6,253.33
5 Personnel Hours	Ashley Osborne	Promotions and Material Development	35.39 per hour	404	\$ -	\$ 14,298.17	\$ 14,298.17
6 Personnel Hours	Undergraduate Student	Student to assist with soil sampling after public events	13.06 per hour	300	\$ -	\$ 3,918.00	\$ 3,918.00
7 Supplies		Soil Sample Test	7.00 per test	1300	\$ -	\$ 9,100.00	\$ 9,100.00
9 Supplies		Soil Sample probes for sample collection	100.00 per probe	6	\$ -	\$ 600.00	\$ 600.00
12 Materials		Printed materials for workshops	1.00 per handout	1250	\$ -	\$ 1,250.00	\$ 1,250.00
13 Indirect costs		Indirect costs (Cost of project, 11/5%)	LS	1	\$ 10,508.00	\$ -	\$ 10,508.00
14 Indirect costs		Indirect costs (20%)	LS	1	\$ 5,833.00	\$ -	\$ 5,833.00
15		<b>TOTAL PROJECT BUDGET:</b>			<b>\$ 33,202.00</b>	<b>\$ 35,000.00</b>	<b>\$ 68,202.00</b>
16					<b>ORGANIZATION SHARE</b>	<b>GRANT SHARE</b>	
17					<b>50.5%</b>	<b>49.5%</b>	
18					<b>COST SHARE % AFTER FIRST \$2,500 = 50.53% OK</b>		
19					<b>MUST BE &gt; 50%</b>		

\* Note: Organization share must be 50% after the first \$2,500.00. No cost share required for grants ≤ \$2,500.