

EPA GRANT REPORT

- KEEC is working on a \$91,000 grant from the US Environmental Protection Agency for water quality and conservation projects through the Kentucky Green and Healthy Schools program.
- Through August 31, 2017:
 - KEEC had mostly caught up to the grant timeline after being behind due to losing our Executive Director last fall.
 - Tabitha Owens worked on the project as KEEC's Environmental Education Specialist from March 16, 2017, until she left for a new job with the Kentucky Division of Water on July 31, 2017.
 - three out of five planned teacher professional development workshops had been completed, with a total of 50 participants.
 - Applications for mini-grants for schools had been announced through multiple channels.
 - The hiring process for a new Environmental Education Specialist had been initiated.
- The complete semi-annual report to the EPA for the period of March 1, 2017, through August 31, 2017, is presented on the following pages.
- Since August 31, 2017:
 - Tabitha Owens returned on loan to complete the fourth teacher professional development workshop, with 14 participants.
 - 26 schools applied for mini-grants, of which 21 were selected to receive \$1000 each for water projects through the Kentucky Green and Healthy Schools program. The remaining five are on a waiting list to receive any funds unused by the current awardee schools.
 - KEEC received applications from schools in six of the seven watershed basins in Kentucky. One school in the Big Sandy watershed basin must be recruited to apply for a grant in order to fulfill EPA grant requirements.
 - The Environmental Education Specialist position was offered to a candidate who has accepted, but who has not yet started work. We are awaiting final approval from HR

Project Manager:

Billy Bennett
300 Sower Blvd., 4th Floor
Frankfort, KY 40601
Email: billy.bennett@ky.gov
Phone: 502-564-9299

Grant Number (FAIN): 00D53017**Modification Number: 0****Program Code: NE****EPA Project Manager:**

Jason McDonald
61 Forsyth Street
Atlanta, GA 30303-8960

Project Period: 09/01/2016 – 08/31/2018

**EPA Local EE Grant Work Plan
Semi-annual Report
03/01/2017 – 08/31/2017**

Work Progress and Status

In our first semi-annual report, the Kentucky Environmental Education Council (KEEC) reported that this project was behind schedule due to the resignation of our previous Executive Director. After the six-month period from March 1, 2017, through August 31, 2017, the project is nearly back on schedule with the timeline submitted in the grant application.

The new Executive Director was able to hire a Kentucky Green and Healthy Schools (KGHS) Coordinator beginning on March 16, 2017. Because of the delayed start date, KEEC was able to retain the KGHS Coordinator through the end of July instead of the end of May as originally scheduled. The KGHS Coordinator used the extended time to conduct teacher professional workshops and promote the sub-grants to schools.

Objective 1.1 of our grant states: “Working with partners, we will host at least five professional development workshops for K-12 teachers in different watershed basins across the Commonwealth to improve environmental education teaching skills, increase teacher environmental literacy at the local level, demonstrate the use of water as an educational theme, and give teachers resources and skills to implement project-based conservation education.”

Three teacher professional development workshops with a total of 50 participants were held during this period. With 12 years of experience as a high school science teacher, our KGHS Coordinator was able to put together a wealth of water resources for teachers, presented in six hours of demonstrations, plus a USB drive with dozens of water-related activities and take-home resources such as curriculum materials and water testing kits. The agenda and resources were compiled in consultation with professionals from the Kentucky Division of Water, the Kentucky Department of Education, and university researchers. In addition, each workshop included a demonstration of a water quality activity—either macroinvertebrate sampling in streams or chemical sampling of a river—that could be completed with students. The anticipated audience over the five workshops was 75 participants, so the first three workshops were just ahead of the pace to meet that target.

KEEC also developed an application and rubric for the \$22,750 in sub-grants to schools. The application is three forms: the pledge form to join the Kentucky Green and Healthy Schools program, the Instructional Leadership form that prepares all school staff and administration to participate in the KGHS program, and an information sheet about school demographics. The application was advertised heavily through emails, newsletters, teacher networks and the professional development workshops. The application is due September 30, 2017.

Expenditures

KEEC Grant Expense Summary - September 1, 2016 through August 31, 2017

		EPA Funds	Non-EPA Funds	Total
Personnel/Salaries	Actual	\$22,125.90	\$15,152.85	\$37,278.75
	Budget	\$45,858.93	\$22,167.79	\$68,026.72
Fringe Benefits	Actual	\$0.00	\$8,477.79	\$8,477.79
	Budget	\$0.00	\$13,675.38	\$13,675.38
Travel	Actual	\$255.26	\$0.00	\$255.26
	Budget	\$4,193.75	\$195.00	\$4,388.75
Supplies	Actual	\$3,510.21	\$0.00	\$3,510.21
	Budget	\$7,792.32	\$0.00	\$7,792.32
Other Costs	Actual	\$925.30	\$0.00	\$925.30
	Budget	\$33,155.00	\$3,100.00	\$36,255.00
	TOTAL ACTUAL	\$26,816.67	\$23,630.64	\$50,447.31
	TOTAL BUDGET	\$91,000.00	\$39,138.17	\$130,138.17

KEEC remains within the budget parameters of the grant agreement.

Preliminary Data Results

The teacher professional development workshops were held as follows:

- May 31, 2017, Pulaski County (Upper Cumberland Watershed): 26 participants
- June 16, 2017, Hardin County (Green River Watershed, Salt River Watershed): 10 participants
- July 18, 2017, Campbell County (Licking River Watershed): 14 participants

Water Workshop Post-Survey (38 responses)

Q1. On a scale of 1 – 5 with 5 being most familiar, how would you describe your familiarity with

	1	2	3	4	5
Water resources on the internet.	3%	5%	11%	47%	34%
Water resources within your community	3%	5%	29%	37%	26%
Water resources within your state.	0%	13%	21%	32%	34%
Finding credible resources.	0%	11%	16%	26%	47%

Q2. On a scale of 1 – 5 with 5 being very knowledgeable, how would you describe your level of

	1	2	3	4	5
Environmental knowledge	0%	5%	21%	58%	16%
Environmental education teaching skills	0%	3%	21%	61%	16%
Integrating environmental education in the K-12 school setting	0%	3%	24%	42%	32%
The use of water as an educational theme	0%	0%	24%	37%	39%
Conducting student-led projects	0%	5%	29%	45%	21%
Conducting service learning projects	3%	11%	29%	34%	24%
Conducting environmental stewardship projects	8%	11%	18%	47%	16%

Q3. In your opinion, can the use of environmental education improve your students'

	1	2	3	4	5
Academic performance	0%	0%	5%	26%	68%
Classroom behavior	0%	0%	11%	42%	47%
Attendance	0%	3%	18%	42%	37%
Engagement	0%	0%	5%	39%	55%
English knowledge & skills	0%	5%	8%	47%	39%
Science knowledge & skills	0%	0%	0%	37%	63%
Technology knowledge & skills	0%	0%	3%	47%	50%
Engineering knowledge & skills	0%	0%	3%	53%	45%
Math knowledge & skills	0%	0%	3%	47%	50%

Q4. How likely is it that you would recommend this workshop to a friend or colleague?

	0-6	7-8	9-10	Net Promoter Score
	5%	11%	84%	78.4

Q5. How would you rate the quality of workshop?

Very high quality	63%
High quality	34%
Neither high nor low quality	3%
Low quality	0%
Very low quality	0%

KEEC will conduct a post-survey at the end of the year for all teachers who participated in a teacher professional development workshop or grant project. The post-survey will allow us to compare responses and determine if teacher knowledge and attitudes were changed by the grant project.

Equipment, Techniques, and Materials Used or Evaluated

The following online materials were referenced in the teacher professional development workshops and/or provided to participants on their USB drives (click the arrow to expand each section):

[K-2](#)

[3-5](#)

[6-8](#)

[9-12](#)

[Macroinvertebrates](#)

[Maps](#)

[Lesson Resources](#)

[Water Info](#)

[Supplies](#)

[KY Education Connections](#)

Additional offline materials were also provided, including field trip ideas, connections to Kentucky Academic Standards, grants, and more curricula.

During the training, KEEC emphasized the importance of using credible resources and discussed how to determine accuracy and validity of educational materials. We also focused on teaching students to be curious and skeptical.

Changes in Key Personnel

The Kentucky Green and Healthy Schools Coordinator, Tabitha Owens, completed her term with KEEC on July 31, 2017. She is now working for the Kentucky Division of Water. However, the Division of Water has agreed to allow her to teach the final two teacher professional development workshops in fall 2017.

KEEC has begun preparations to hire a new KGHS Coordinator.

Activity Anticipated During the Subsequent Reporting Period

Before the next report, the final two teacher professional development workshops will be completed, drawing teachers from the watershed basins that have not yet been reached. The workshops are scheduled for the Kentucky River Watershed/Big Sandy Watershed in September and the Four Rivers Watershed in October.

The sub-grant applications will be accepted through September 30, 2017, with the deadline extended if necessary to involve a minimum of ten schools, with at least one school in each of Kentucky's seven watershed basins.

A new KGHS Coordinator will be hired, and will conduct sub-grant training and site visits for schools involved in the grant project.

All KEEC staff will continue to provide assistance to schools participating in the Kentucky Green and Healthy Schools program as they formulate projects for the school year.