

Information Sheet

Blue River Watershed Association (BRWA), and Metropolitan Community College – Maple Woods, brings *K.I.D.S. in StreamsSM* (Kids Investigate, Discover, and Study in Streams) to middle, high, and college level students. These *K.I.D.S. in StreamsSM participants, and project partners*, are trained in BRWA's trademark program, T.R.U.E. BlueSM (Teaching Rivers in an Urban EnvironmentSM) a 4-Day, 4- Lesson water quality-monitoring curriculum. Teacher Cadets and college students lead portions, or all of T.R.U.E. BlueSM to middle school students.

T.R.U.E. BlueSM is a watershed literacy, water quality monitoring curriculum targeting students in 6th grade and up.

T.R.U.E. BlueSM will be taught by Metropolitan Community College (MCC) students and Blue River Watershed Association (BRWA) certified educators. In addition to MCC students, Teacher Cadets from area high school education programs will serve as group leaders during Lesson 3 of the curriculum.

- This E-STEM (Environmental, Science, Technology, Education, and Mathematics) curriculum has been used by BRWA for twenty-three years and impacts an average 10,000 students and educators annually. Through T.R.U.E. BlueSM, BRWA uses critical thinking skills to teach students, teachers, and community members to participate in water quality monitoring throughout watersheds in the Metro Area. Together they learn about stormwater runoff, chemical pollutants, the importance of clean water as a natural resource, and the impacts people have in an urban environment. Students and their teachers are trained in the classroom to perform ten chemical and nonchemical tests, using proper safety and procedural protocols.
- **First Lesson - Asking the right question:** An introduction to watersheds, storm water runoff, physical and chemical pollution, and the detrimental effects of pollution to streams, rivers, and eventually the oceans.
- **Second Lesson - Preparing for field work:** BRWA Educators conduct in-class training as students learn proper safety and testing protocols on professional Surface Water Quality HACH chemical test kits.
- **Third Lesson - Field Work at local stream:** Students go to a nearby stream or river and using the HACH kits, conduct ten chemical and non-chemical water quality tests. Students observe first-hand the adverse effects of pollution. *For many students, this may be the first trip to a river.*
- **Fourth Lesson - Analyzing Student Data** - Using data collected from water tests, students use charts, graphs and calculators to determine the final Water Quality Index score for the river in which they tested. Discussion and conclusions are drawn from the results. What are the causes of the chemical pollutants? What remedies could be put into place? T.R.U.E. BlueSM gives students real-hand experience with E-STEM curriculum.

School District / Teacher Cadet (High School) Eligibility

Eligibility

Thirty-five (35) Teacher Cadets (Junior/Senior high school students who aspire to be an educator) from one of the eligible Kansas City, Missouri and Kansas City, Kansas public, private, and charter school districts listed below.

- Public, Private, Parochial, and Charter High School in the following Kansas and Missouri counties
 - Wyandotte County, Kansas
 - Jackson County, MO (Midtown)
 - Jackson County (Eastern), MO (Independence, Blue Springs, Lees Summit, and Grain Valley)

Students must meet the criteria below (at the time of application) to be eligible to participate in the K.I.D.S in Streams program.

- Junior or Senior at participating High School
- Be enrolled in a Teacher Cadet, Grow Your Own, or CTE program focused on education (if available in school)
- Be interested in and have a passion for education, environmental science, or science in general.
- Be able to transport one-self to assigned teaching and field experience sites within the Kansas City Metropolitan area (Kansas/Missouri). No transportation will be provided.
- Complete K.I.D.S in Streams Application

Stipend:

Each Teacher Cadet participant who successfully completes all components of the K.I.D.S in Streams program will receive a \$100.00 stipend from Blue River Watershed Association (BRWA). Stipends are paid at the conclusion of the program (June 2020). Questions about the stipend can be directed to Lynn Youngblood, BRWA Executive Director at youngblood@brwa.net.

K.I.D.S in Streams program Length:

The K.I.D.S in Streams program will start in January 2020 and end in May 2020. Participants will receive their confirmed dates and times once the middle school / field sites have been confirmed. All efforts will be made to work with participants work and school schedules.

Participation Expectation:

Each Teacher Cadet will be required to participate in a program orientation, T.R.U.E. BlueSM teacher training, and lead group/s of students (Lesson 3) at an assigned middle school / field sites. All efforts will be made to have student cadets assigned to schools within their school district (if available). Below are the required tasks and the estimated amount of time to complete each of these tasks.

Lesson/Item	Type	Time	Location	Teacher Cadet	
				Required	Responsibility
Lesson 1: Asking the right question	Lecture	1 hour	Classroom	X	Participant
Lesson 2: Preparing for field work	Lecture	1 hour	Classroom	X	Participant
Lesson 3: Field Work with local stream	Lab	3 hours	Field (water site)	X	Lead a student group
Lesson 4: Analyzing Student Data	Lecture	1 hour	Classroom	X	Participant
Pre/Post Assessments	Assessment	1 hour	NA	X	Participant
Training Orientation	Training	2 hour	MCC/Filed Site	X	Participant

Application:

All schools who meet the eligibility requirements are encouraged to complete an online application utilizing the link provided below. Any questions about the application can be sent to Dr. Mike Strohschein, MCC-MW Dean of Instruction at micheal.strohschein@mckck.edu.

Application Link: <https://www.brwa.net/education/kids-in-streams.html>

Deadline to Apply: April 2020 (open until all spots have been filled)

Notification of Program Acceptance: April 2020 (could be as soon as March 2020)

