



## **GK-12 REGIONAL CONFERENCE**

**The University of Toledo/Lake Erie Center  
Toledo, OH**

***Fellows in High School STEM Education:  
An Environmental Science Learning  
Community at the Land-Lake Ecosystem Interface***

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“Graduate Teaching Fellows in STEM High School Education: An Environmental Science Learning Community at the Land-Lake Ecosystem Interface” partners advanced graduate students at the University of Toledo with high school teachers and their students to build an Environmental Science Learning Community at the land-lake ecosystem interface. The objectives are to: 1) Generate student enthusiasm for science careers by engaging them in hands-on research into environmental problems, 2) Exchange knowledge and pedagogies between graduate students and high school teachers resulting in cutting-edge environmental science content and increased teaching and communication skills, and 3) Develop hands-on solutions to environmental problems along schoolyard stream ecosystems feeding the Great Lakes. Projects center on environmental study of urbanized and agricultural habitats to investigate multiple stressors and major ecological community change along a transect from the Oak Opening Savanna, through the Maumee River watershed, and into western Lake Erie. Graduate fellows, teachers, and high school students gain hands-on experience in the role of urban and agricultural influences on watersheds in the history, social development, and future vitality of the Great Lakes region; disseminated through the project website, presentations, and publications. Research on environmental problems is a real method through which students can give back to their own local communities, thereby helping to build an educational network focused on making lifestyles more interactive with the natural environment. This program thus embraces the public scholarship philosophic concept of merging scientific research with civic responsibility to benefit the public and the community.

