



WATER RESOURCES RESEARCH GRANT PROPOSAL

Project ID: 2002PA1B

Title: Development of 4-H Water Quality Curriculum Materials

Project Type: Information Transfer

Focus Categories: Education, Water Quality, Non Point Pollution

Keywords: education, water quality

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Non-Federal Matching Funds: \$46,353

Congressional District: 5th of PA

Principal Investigator:

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Abstract

The Pennsylvania 4-H Natural Resources Curriculum Committee and Cooperative Extension faculty have identified as a pressing need a guidebook on water quality tailored for Pennsylvania children in grades seven and eight. The material, including hands-on activities, will be appropriate for use with 4-H groups and with small groups in schools.

Most citizens of the state rely on groundwater for their drinking water and other domestic uses, which, because of Pennsylvania's geology, is susceptible to pollution through sinkholes and rock fractures. Therefore, students need to understand that their actions can directly affect groundwater quality.

The topics addressed in the student guide will be based upon the state's academic standards for environment and ecology and for science and technology. Specific topics may include the definition of a watershed; factors affecting water quality and aquatic organisms, including vegetation, land use, topography, and geology; the importance of wetlands as pollution filters; the effects of humans and human influences on water quality; and how natural events, including droughts and floods, affect water quality. Participating students will be encouraged to become active in water quality management in their homes and in their communities.

Draft materials will be reviewed by expert scientists and by the 4-H Natural Resources Curriculum Committee and revised as necessary. The publication will be designed by Agricultural Information Services at Penn State and printed by a commercial printer.