

Lake
Erie
Protection Fund



Final Report

PROJECT ID NUMBER: Small Grant SG25/95

PROJECT NAME: The Doan Brook GREEN Project

ORGANIZATION: Shaker Lakes Regional Nature Center dba Nature Center at Shaker Lakes

PROJECT DIRECTOR'S SIGNATURE: Nancy K. Smith DATE: 12-26-97

FISCAL AGENT'S SIGNATURE: William Carroll Finney DATE: 12/29/97

SUMMARY OF PROJECT:

The Doan Brook GREEN Project has been funded by the Lake Erie Fund Protection Fund over the last two and a half years. The first year of the Project proceeded quite closely to the projected activities, time-frame, and budget. At the time of the Interim Report it was noted that the biggest challenge to completing the project as described would be how to re-energize teachers; that indeed has been the case. Therefore the second year of the project was somewhat restructured, but the hoped-for goals have essentially been met and some worthwhile learning about inter-district teacher involvement has been learned.

There was difficulty with getting direction and participation from the teachers, largely because most of the elementary school teachers felt that participating in the water quality testing by their students was too complex and difficult. Many of them also didn't have either access to computers or to the expertise needed to report results and connect to the Internet. After offering to assist and modify the testing program to meet the needs of the younger students, we jointly determined that instead of trying to sustain the whole collaboration, we would work with individual schools. The result has been that we have piloted and are implementing a successful Water Quality program at the fourth grade level, have continued involvement at the secondary level and have moved the whole effort to the community-wide study and participation in Doan Brook stewardship.

ACCOMPLISHMENT OF GOALS:

The two key goals of the project were 1) to develop stewardship, and 2) to develop a model for collaboration. Accomplishments with the first goal include:

- Ten teachers attended a two-week course at Cleveland State University learning about watersheds and how to use the water quality test kits.
- Those teachers involved their classes in the GREEN testing process and in considering the meaning of the tests for an urban watershed.
- A Doan Student Congress was held at which fifteen fifth graders from Shaker Heights and five high school students from Martin Luther King School in Cleveland participated in a tour of the Doan Brook watershed and in debating community use and environmental impact through a simulation experience.
- A Saturday art project involved 15 students from several schools and grade levels in designing a map of the Doan Brook Watershed which was used for the first Doan Student Congress and for other community presentations about the watershed.
- A college student from the Case Western Reserve University AQUACorps National Service project has been assigned to those teachers who wanted assistance.
- Two Cleveland Public School classes have incorporated watershed education into their core curriculum and have continued with stream testing.
- Five fourth grade classes from Shaker Heights piloted a three-hour Water Quality program that now is being taught to 25 classes at the Nature Center.
- Fifty-eight eighth grade students from 28 schools who participated in the summer CWRU Office of Minority Programs over the summer were introduced in the Biology module to water testing and treatment, followed by designing model water treatment plants in the engineering module.
- Ninth grade students participating in the summer programs at CWRU were introduced to biological testing and monitoring concepts and were discussed watershed public policy and community decisions

Accomplishments with the goal of collaboration include:

- Teachers from three school districts and the Nature Center worked together in training for and planning the first year of the Doan GREEN Project.
- The schools, Nature Center and the CWRU Office of Student Community Services developed the AQUACorps program to provide support and extension of the GREEN activities.
- AQUACorps and the Nature Center collaborated on making the GREEN Project successful and in designing ways around problems.
- Students from different school districts, racial groups, and socio-economic levels worked together on the art project and the Student Congress.
- The Nature Center and Shaker Heights schools worked on developing an age-appropriate Water Quality Curriculum.
- AQUACorps and the Cleveland Schools worked on developing an ongoing curriculum and testing process.

We believe that these activities have contributed to teacher and student levels of understanding of the dynamics of watersheds with particular interest in the problems of the Doan Brook. Even though several adaptations have been made, we believe that all of the changes in the second year of the grant have maximized the impact and have linked well with the continuing community effort to influence the improvement of the Doan Brook and Lakes through the creation of long-term watershed planning.

ONGOING RESULTS:

As a result of this grant the Nature Center has established its interest and expertise about the Doan Brook watershed with area school districts. We expect to increase and deepen our work with schools and teachers as watershed curricula get introduced and recognized as part of the state science model and proficiencies. As a result of our collaborations we have received grants (additional Lake Erie Protection, ODNR and George Gund Foundation) to broaden our work to the whole watershed community and are working with an increasing number of partners on implementing the *Year of the Brook*, a series of activities during 1998 which will highlight awareness of the Doan Brook and its problems and possibilities

BUDGET EXPLANATION:

The budget sheet indicates the categories of use of the budget. Specifically we paid Jeremie Maehr, AQUACorps member and director, to coordinate the Student Congress and to continue the links with the various schools. The equipment allocation was used to purchase an overhead projector to help in the presentation of maps and data at the Nature Center with school groups, teachers, and the community. Expendable supplies and equipment included copies of materials and supplies for teachers and classes. The travel budget covered the use of *Lolly the Trolley* for the Student Congress and mileage for attendance at two watershed conferences. Publications and presentations included photography and video, art materials for the map display, and development and materials costs for the fourth grade Water Quality curriculum and program. Other costs include postage and expenses related to use of the Nature Center space. Indirect costs included some of the Nature Center's coordinating costs. In addition, equipment and in-kind services approximating \$26,000 were contributed by the Nature Center, Cleveland State University, CWRU, AQUACorps.