

Abstract for Oral Presentation:

Catalyzing Chesapeake Bay Restoration Goals: A Private Foundation's Contribution

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As a funder working in the Chesapeake Bay watershed, the Chesapeake Bay Trust, a private, non-profit, grantmaking organization, strategically targets its funding to catalyze measurable ecological impacts, while involving students in meaningful experiences that promote their stewardship of the Bay. Through its 20-years of experience funding Bay restoration and education programs, the Chesapeake Bay Trust has built a grant portfolio and a funding ethic that reflects its key values and beliefs. Central to those values is the Trust's commitment to involving thousands of students and volunteers each year in activities that promote public awareness and participation in the restoration and protection of the Chesapeake Bay.

The following describes how the Trust uses its grant funding to bring about both ecological change and to help instill a stewardship ethic in the thousands of students that participate in Trust-funded projects each year.

The Chesapeake Bay is one of the world's largest estuaries and is designated by the state and federal government as impaired waters. The watershed is 64,000 square miles and encompasses six states in the mid-Atlantic region of the United States. Regional goals have been set to guide and coordinate the restoration of the Bay. This includes a commitment to implement Meaningful Watershed Experiences for all students within the watershed as a way to inspire and grow stewardship for the resource.

The Chesapeake Bay Trust plays an integral role in meeting that region-wide objective. Each year, the Trust awards more than \$600,000 to involve roughly 250 schools in Bay education programs. A key criterion for funding those institutions is the Trust's desire to engage students in hands-on restoration projects that strengthen their connection to and understanding of the Bay. The Trust helps schools get involved in hands-on projects by serving as a link or broker between watershed organizations and state agencies that are working on river restoration projects and students who are interested in studying the Bay and participating in projects that benefit it.

When a connection between restoration projects and educational goals is made, the Trust helps strengthen restoration efforts in streams and rivers, while enhancing a students' understanding of the forces that affect the health of the Bay and the actions that can be taken to improve it. Indeed, studies have shown that when environmental education includes a hands-on component, students' understanding of the environment, and its corresponding scientific principles, increases.

For instance, the Trust recently awarded a grant to the Beaver Creek Watershed Association for the restoration of three streams that feed Beaver Creek in western Maryland. The grant was one of the largest provided by the Trust and it has a goal of making a measurable improvement to water quality in this tributary of the Chesapeake Bay. As such, the Trust placed an emphasis on engaging students in the project. Today, students from six schools located in the watershed are helping to plant streamside forest buffers on highly degraded agricultural lands, planting rain gardens on their school grounds, and learning about the Bay through classroom lessons. One school in the area received a grant from the Trust for GIS units and monitoring probes to incorporate technology in a water quality testing program that examines the effects of the watershed's changing land use on the health of its local streams. The involvement of the schools

in a restoration program leverages human capital, and expands a student's knowledge about the Bay and its tributaries.

Another example of the Trust's commitment to advancing Bay restoration goals and Bay education is its support of the award-winning program, *Schools and Streams*, in central Maryland. Through the program, nearly 7,000 streamside trees in six years time have been planted, and teachers have educated more than 15,000 students about protecting the Chesapeake Bay. In one planting area alone, more than one thousand new saplings wave in long rows over eight acres of streamside land, each planted by the helping hands of fifth-grade students. The program is a partnership between the local jurisdiction, a volunteer organization, and the local school system, and it results in both Bay education that is integrated into the classroom and on-the-ground projects that benefit the Bay restoration goals. It is an excellent example of how the Chesapeake Bay Trust can leverage partnerships and other resources to sustain a meaningful program for the Bay and the students who participate.

In all of its grants, the Trust also encourages partnerships as a key component. This is expressed through watershed organizations partnering with students to provide educational and volunteer stewardship opportunities. It is demonstrated through the technical assistance provided by federal and state agencies to community-based groups and schools. And it is verified by the funding partnerships that often are needed to complete complex, yet interrelated projects and programs.

A final example of effective partnerships between schools and organizations working to implement regional environmental goals is the *Bay Grasses in Classes* program. Under this initiative students learn about submerged aquatic vegetation (SAV) by growing the grasses in the classroom and taking measurements and conducting experiments on the grass. Students also plant the underwater grasses, which helps to meet a larger regional commitment to restore SAV in the Bay. This has resulted in increased Bay knowledge through this hands-on project, as well as measurable ecological results. Through the combined efforts of over 32,000 students, over 2.5 acres of SAV have been planted to date, thus increasing the ecological function of those small watersheds and helping to make a cumulative impact in the water quality of the Chesapeake Bay.

This and the other projects cited above are just a few of the examples that reflect the Trust's goals as a grantmaker, to target its funding, build partnerships, and leverage resources to seek a measurable improvement in the Bay's health, while growing the next generation of stewards who will ensure its continued restoration and protection.