Office Of Water (WH-546)

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Youth And The Environment







The Youth and the Environment Program was begun in 1990 to introduce high school students to environmental careers. Under the program, students combine work at local water/wastewater plants with academic training. Their work duties can include routine monitoring and lab analysis, plant operations, inspections and maintenance. Training emphasizes math, computer and science skills routinely needed for entry into the water and wastewater field.

This brochure profiles four cities that were involved in the pilot program. Participating cities were encouraged to tailor their program to meet their specific needs. The cooperative efforts of EPA, State officials, local city government and private industry are highlighted in the ways these cities successfully implemented innovative partnership programs.

"The enthusiasm of participating students and dedication of environmental professionals at all levels of government makes me feel that almost any city will find the development of a similar program a most rewarding experience."

Mary Settle, U.S. EPA
Program Director
Youth and the Environment

Atlanta, Georgia

"It is always a pleasure, a privilege and a responsibility to impart knowledge and experience to the youth of our community."

Larry Mitchell, Superintendent Hemphill Water Treatment Plant Atlanta, Georgia



Twenty high school students from the Atlanta area between the ages of sixteen and eighteen were selected to participate in the seven week summer program which combined academic study and actual work experience. The students assisted water and wastewater treatment facility operators with day to day operations, including: sampling of water, routine laboratory analysis, recording and monitoring data. In addition, students were provided an academic opportunity to improve mathematics and computer skills needed to reinforce work experiences at treatment plants.

The Georgia Environmental Protection Division (EPD), U.S. Environmental Protection Agency (EPA) and the Atlanta Urban League (AUL) all contributed to the Atlanta program. EPA provided funding support for a program coordinator; EPD identified eight participating water and wastewater plants and arranged jobs; and the AUL selected student participants, secured financial resources to pay salaries, designed supporting classroom curricula and coordinated the day-to-day operation of the program.

"The private sector support of the Youth and the Environment Program was tremendous. Trust Company Bank, the Georgia Power Company and the Metropolitan Foundation each made a contribution to assist with participant salaries."

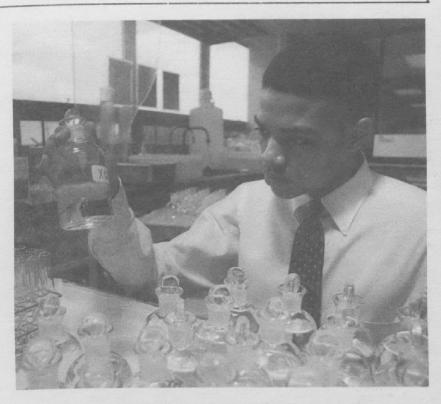
Lyndon A. Wade, President Atlanta Urban League, Inc.

Washington, D.C.

"I've learned a great deal about wastewater and all the environmental careers that people frequently don't think about."

Melissa Owens, Senior Ballou High School

Melissa, along with eight other students, worked for seven weeks in the Washington, D.C., program at area water and wastewater treatment plants. Prior to reporting to the four treatment plants, a "Kick Off" ceremony was held with representatives from EPA, Washington Suburban Sanitary Commission, the Mayors' Office of Youth Employment and the State Training Center.



The D.C. Department of Employment Services' Office of Youth Employment Programs paid the salaries of the students. The Maryland Center for Environmental Training assisted with coordination of the program. The students worked at the treatment plants four days each week while Fridays were devoted to field trips to environmental projects and/or guest speakers who gave presentations on various environmental careers. All of the participating schools and treatment plants are eager for the program to resume next year.

Lowell, Massachusetts

"In Massachusetts, there is a real need for operators and technical people in this field."

Lawrence Brill Regional EPA Official

In the small community of Lowell, located minutes from Boston, twelve high school students worked at the Lowell wastewater



treatment plant rotating at various work stations

and performing off-site sampling.

Marie Glenn was not thrilled when she found out she would be spending her summer vacation at the local wastewater treatment plant. "When I got here, I like oh my," exclaimed the 17-year old Glenn, unsure of how the job was going to work out. After her first week on the job, Glenn decided she enjoyed working at the plant and learning all about water and what happens when it's flushed.

U.S. EPA officials who helped to arrange the Youth and the Environment pilot program in Lowell hoped that students would be impressed enough by what they learned during the summer that they would come back in future years to fill an expected gap in the environmental workforce.

In the fall when these students returned to school, they and 10 additional students at their high school, enrolled in an operator training course developed as a result of the success of the summer program. A University of Lowell environmental professor on sabbatical taught the class. In January 1991, these students took the certification exam, the first step toward working at a treatment plant.

"Students are able to get involved when there is a major commitment to the environment, as was the case with this program."

James Campbell, City Manager Lowell, Massachusetts

Kansas City, Kansas

The Kansas City program was entirely different and designed to expose over 400 students in six different high schools to environmental careers through their participation in Project Choice. This program is a unique informal public-private partnership between EPA Region VII, Project Choice of the Kauffman Foundation and the Kansas City, Kansas Water Pollution Control Department. Project Choice is a philanthropic program to provide advanced vocational and educational training to socio-economically disadvantaged youth residing within the inner city communities.

The Missouri Environmental Training Center at Crowder College worked closely with EPA officials and local wastewater professionals in organizing an Environmental Career Workshop/Extravaganza for Project Choice students. The workshop featured professionals from the wastewater industry who made presentations on career goals, history of wastewater treatment, wastewater treatment processes and other related topics.

With the students awareness of wastewater operations heightened, a small group of students will be offered summer jobs and an opportunity to obtain hands on experience through summer employment at local wastewater plants. Local water and wastewater plants have revised their budgets to include summer jobs for these students.

"These students will be better prepared to solve future environmental concerns in their personal lives, in their community, and possibly in their professional life."

Lorene Boyt, Director Missouri Environmental Training Center



Setting Up Your Program

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Students involved in a Youth and the Environment Program will have an opportunity to better understand environmental problems and the technologies to solve these problems. To start a program:

- There are a number of different ways to pay the cost—Consider all options including private sources.
- Student salaries, about \$800.00 per participant for a seven week program make up the bulk of the cost.
- Involve your local wastewater managers in program design and job placement—The jobs should be designed to provide meaningful exposure to work in water and wastewater facilities.
- Contact your State Training Center or other qualified entity to establish options for the academic component of program.
- Coordinate transportation with the city's school system or private company—Transportation can be a problem.
- Make sure the students receive appropriate safety training — Safety is very important.
- The approach to selecting participants will vary—Secondary schools can help design a selection process.

As you can see, there are many different ways to develop a program. The challenge is for you to take a leadership role in establishing a program that addresses your communities' needs. For additional information, please contact your State Training Center or Mary Settle at (202) 382-5810.

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