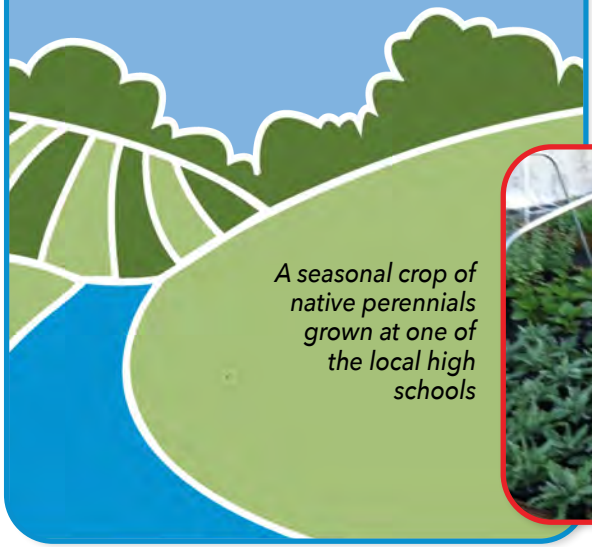
WHAT IS BETC?

Bionomic Educational Training Center (BETC, pronounced "Betsy") provides funding, work experience, practical math and science lessons and green infrastructure training for Durham Public School students. BETC is a youth workforce development training program that addresses water quality via stormwater retrofit design and implementation. Students are educated about urban stormwater pollution and Best Management Practices (BMPs) to improve water quality, as well as irrigation and off-grid solar power technology.

These lessons provide an opportunity for students to explore 21st century career fields that pay a livable wage.



A seasonal crop of native perennials grown at one of the local high schools

BETC CURRICULUM

AGRIBUSINESS

Specialized BETC program curricula has been developed and incorporated into middle and high schools in Durham. Classroom and hands-on lessons include an eleven-day unit on soil and water analysis that reinforces concepts in the Environmental and Agriscience courses, and a 30-day unit on engineering rain gardens and rain water harvesting.

GROWING & SELLING

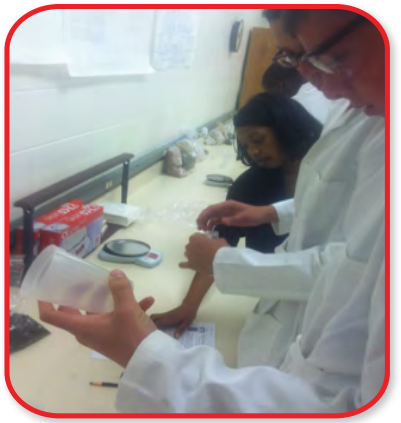
Students propagate, sell and install native plants for rain gardens, critical area plantings and riparian buffers in the community.

ENGINEERING RAIN GARDENS

Students learn how to engineer, design, and install rain gardens and discover why they are important in improving local stream health.

INSTALLING RAIN GARDENS

Students install and maintain rain gardens during the school year and through a summer internship program.



Students complete soil and water analysis tests.

SOLAR TECHNOLOGY

An off-grid solar system was installed with a grant from the National Institute of Food and Agriculture. Students use the solar power for greenhouse lights to grow their plants.

IRRIGATION TECHNOLOGY

A Sentinel Controller and Davis weather station were installed at the Southern School of Energy and Sustainability. This system allows the DPS maintenance staff to monitor water usage and save 20 to 50% of water use on the athletic fields.