



Outreach and Restoration

This program was established to provide accessible funds to organizations and agencies to implement community-led stewardship efforts that increase public understanding of environmental challenges; implement demonstration-scale, community-based, on-the-ground restoration projects; and expand the base of public support necessary to advance the restoration of Maryland's bays, tributaries, and other natural resources.

Annapolis Harbour Center Stream and Wetland Restoration

This project is located within the Church Creek subwatershed of the South River. The restoration of this site re-creates or enhances over 1,500 linear feet of stream and over five acres of forested wetland habitat that drains 169 acres, of which nearly 85% is impervious.



Track 3: Outreach & Restoration

40 volunteers participated

123,000 sq. ft. of wetlands enhanced

1,500 sq. ft. of bank stabilized

1,300 native plants planted

500 publications produced

The purpose of the project is to improve habitat, increase floodplain connection, and prevent bed and bank erosion along perennial, intermittent and ephemeral drainage and stream channels on the property of Annapolis Harbour Center, a headwater tributary of Church Creek. This drainage area is over 85% impervious, and upland retrofits of properties and roadways began in 2014.

This particular project focuses on controlling flows and providing habitat at the bottom of existing outfalls, through the use of a step-pool storm conveyance (SPSC) in ephemeral reaches, and the use of riffle weirs and buried grade control structures in the intermittent and perennial reaches.

The design of the riffle weirs and floodplain grade control allows for minimal impacts to existing resources in the floodplain, including wetlands and trees, prevents stream bank erosion and headcutting, and

converts upland floodplain areas to saturated floodplain wetlands. This project will result in significant biological lift of the channels and floodplain via consistent floodplain reconnection that provides yearlong recharge of floodplain soils.

The restoration work will increase instream pool depth, which will expand fish habitat upstream without removing existing forest resources to reshape the channel. In addition, the varied size of substrate in the restored project (rock weirs, cobble riffles, fine sediment and organic substrate in the pools) will enhance macroinvertebrate habitat.

The improved floodplain connection will also improve sediment trapping within the floodplain. Along with pending upland BMPs in the contributing watershed (implementation 2014-2017), a healthy and robust urban habitat should result.



Project Elements

Outreach/Awareness: In spring of 2016, the South River Federation hosted thier annual Project Clean Stream cleanup at the Annapolis Harbour Center site. Over 40 volunteers came out to pick up trash and remove invasive plants throughout the site. During this event, Federation staff explained the history of the site and purpose of the project to volunteers. There will be multiple public planting opportunities at this site in the future. The clientele of Annapolis Harbour Center are representative of the surrounding community.

Like the Chesapeake Bay Trust, the Federation is committed to the advancement of diversity and engaging underrepresented groups in our projects. The Federation is currently working with Rev. Calhoun, the pastor of Mt. Olive AME Church and Watershed Steward, to engage students from Annapolis High School and/or participants from the READY program in planting the site. The Anne Arundel County READY (Restoring the Environment and Developing Youth) Program, hosted by the Alliance for the Chesapeake Bay, trains and employs young adults, aged 16-26, in building and maintaining stormwater Best Management Practices which includes plantings.

Restoration: The project uses a step-pool storm conveyance (SPSC) and riffle weirs with buried grade control. The SPSC is for ephemeral and intermittent sections of stream, and the riffle weirs with buried grade control are for the perennial stream reaches. The SPSCs and riffle weirs promote the streams' access to the floodplain, improve habitat, and prevent bed and bank erosion. The design of the riffle weirs allowed for minimal construction disturbance and minimized impacts to existing resources. The drainage area encompasses 169 acres of which nearly 85% is impervious.

CBT Funds Awarded:	\$100,000
Donors:	\$127,680
DNR:	\$350,378
Total:	\$578,058

Project Partners:



This project turned a trash-ridden , high run-off stream into a more stable habitat using step-pool storm conveyance.

For additional information: visit : www.cbtrust.org