



PENNSYLVANIA SEA GRANT



February 2018

Pennsylvania Sea Grant is one of 33 Sea Grant college programs and is based at Penn State University.



Green Stormwater Infrastructure Plan for Chester, PA.
Credit: Pennsylvania Sea Grant & Delaware Valley
Regional Planning Commission

Chester City incorporates Pennsylvania Sea Grant resilience work into stormwater authority strategies

The city of Chester, PA incorporated strategies outlined in a green stormwater infrastructure (GSI) plan developed by a Pennsylvania Sea Grant-led team into the guidelines of their newly-established stormwater authority. Through a \$1 Million PennVest grant, the city has begun to design and implement GSI projects that will improve water quality, reduce the volume of run-off into nearby waterways and augment a stormwater collection system that serves 12,068 flood-vulnerable, low-income households. The city's engineer, economic development authority and planning department also utilize the GSI plan to guide development.

seagrants.psu.edu

9,400

Volunteer hours completed



16,000

K-12 students reached

70

Undergraduate and graduate students supported



Metrics reported to National Sea Grant Office in June 2017 for work completed February 2016 to January 2017



RESEARCH

EXTENSION

EDUCATION

Pennsylvania Sea Grant education program inspires students to take action against plastic pollution



Iroquois Elementary School students in Erie, PA, participate a watershed map game to improve their environmental literacy. Credit: Pennsylvania Sea Grant

Iroquois Elementary School students learned about plastic pollution and its impacts on wildlife health, water quality and shoreline aesthetics during a Pennsylvania Sea Grant education program. After concluding that lack of curbside pickup makes it difficult for people to recycle, the students embarked on a service project to reduce the number of single-use plastic bags that end up in the environment, created receptacles at school and started a recycling competition. Within two months, student volunteers collected 68,000 plastic bags, which were then converted into a park bench. The students' efforts were rewarded in 2016 with the Pennsylvania Governor's Award for Environmental Excellence.

“The students leading this [Pennsylvania Sea Grant] project made a strong effort to educate their peers and their community about the importance of plastic bag recycling ... Those students educated their families and neighbors, making this a community effort to recycle plastic bags.”

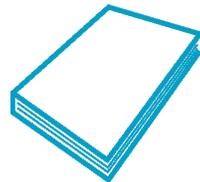
- Sarah Skelton, Iroquois Elementary School teacher

Increasing Community Aesthetics and Water Quality



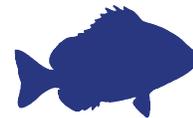
Pennsylvania Sea Grant helped Millcreek Township develop regulations to improve water quality and community aesthetics by requiring a level of green stormwater infrastructure. New zoning amendments to Millcreek's existing ordinance were adopted in 2016, and now require all new land developments to incorporate at least 7% planted green infrastructure into new parking areas.

Developing a Regional Field Guide to Aquatic Invasive Species



Pennsylvania Sea Grant developed a field guide to aquatic invasive species for the Mid-Atlantic region, based on a need identified by the Mid-Atlantic Panel on Aquatic Invasive Species. Fifty new invasive species profiles were added to the existing Pennsylvania guide, for a total of 100 species represented in the Mid-Atlantic region. In 2016, over 1,000 copies were distributed across the region.

Improving Critical Fish Habitat



In 2016, Pennsylvania Sea Grant coordinated Fish Habitat Construction project partners and volunteers to build and install 60 new structures to improve critical fish habitat in Presque Isle and Lake Erie. In addition, Sea Grant's "Lake Erie Shipboard Science" program incorporated a learning station that uses student-built underwater robots to monitor the fish habitat structures.