



EDUCATIONAL RESOURCES

Provided by Philadelphia Water, Fairmount Water Works & Partners

IN YOUR CLASSROOM

Curriculum Guide & Teacher Resources

The new *Understanding the Urban Watershed Curriculum Guide* and companion online teacher resources are a creative and practical K-8 learning framework designed for classroom teachers and informal educators who want to engage students in the compelling and evolving story of cities and their water systems:

- Designed for classroom teachers from all disciplines and cross-disciplines
- Easily integrated with existing class content
- Project-based learning activities such as our GreenSTEM network monitoring kit
- Professional support from Fairmount Water Works, Philadelphia Water and our partners

Hands-on lessons and activities aligned with Common Core state standards for Math and Literacy and organized into six thematic units:

- Water in Our World
- Drinking Water and You
- Down the Drain
- Land And Water: A Delicate Balance
- Green Plan for the Future: Playing a Part
- Environmental Stewardship

Access content background, videos, relevant resources and give feedback at:

www.resourcewater.org

Visiting Environmental Educators

Philadelphia Water will arrange for an environmental educator to visit your classroom to lead a lesson for one class period about water supply, wastewater, stormwater and nature.

- 45-minute to one hour hands-on activity related to understanding the urban watershed
- Extension activities and lesson resources provided

Learn more:

Fairmount Water Works

ellen.schultz@phila.gov - 215-685-0721

www.fairmountwaterworks.org



PROJECTS FOR STUDENTS

Green City, Clean Waters Art Contest

Philadelphia students can participate in this contest by creating a drawing, a short video or both. Projects should show others how to stop polluted water from entering local storm drains. Winning artwork is exhibited publicly as innovative street stickers, featured in SEPTA advertising and published in our free calendar. Sponsored by the Partnership for the Delaware Estuary on behalf of Philadelphia Water.

For more information contact:

Partnership for the Delaware Estuary

info@delawareestuary.org - 800-445-4935

www.delawareestuary.org

OUT OF SCHOOL

Come to Fairmount Water Works, Philadelphia's Urban Waters Education Center

Visits to Fairmount Water Works are available for classes from pre-K through college. Two-hour hands-on activities address topics such as science and technology, Philadelphia history, math, social studies, global water environmental justice, language art and tours of the landmark site. Themed lessons include:

- Water in Our World
- Green City, Clean Waters: Nature's Lead
- Land and Water: A Delicate Balance
- From Streams to Sewers: Building a City Infrastructure
- Building as Machine: Water for the City
- Seeing is Believing: Lab-Based Program
- Global Water Action: Engineering a 21st Century Solution
- Environmental Justice: A Historical Perspective

Field Trips to Environmental Education & Recreation Centers in Fairmount Park

Philadelphia Parks & Recreation educators offer a variety of experiences at the Wissahickon and Pennypack environmental nature centers or at your nearby recreation center. Fun engaging lessons for ages 6-14 include topics such as turtles, trees, wildlife tracks and greener bubbles. Schedule a free visit:

Wissahickon Environmental Center WEC@phila.gov - 215-685-9285

Pennypack Environmental Center 215-685-0470

Cobbs Creek Community Environmental Education Center Programs

Offers a docent program for high school students to help them better connect to their natural habitat in West Philadelphia. Educational lessons can also be offered at the center.

Contact: wildwestphiladelphia@gmail.com - 215-685-1990

Tour Drinking Water & Wastewater Treatment Plants

Students and teachers can visit the water and sewage treatment plants where they are able to see how water is processed and cleaned before it reaches their taps. Contact Fairmount Water Works to schedule.



TEACHER TRAINING

Summer Watershed Teacher Workshops from Partnership for Delaware Estuary

Estuary Explorer and *Urban Waters* workshops each run for 3 days in July. Teachers are encouraged (but not required) to attend both parts of this series:

- Receive professional instruction in environmental education
- Get free educational and classroom materials
- Explore field-trip locations in DE, NJ, & PA
- Earn 15 clock hours of professional development per session

Academic Year Teacher Fellowship & Stipend

Fairmount Water Works offers this program by invitation to teachers who integrate our *Understanding the Urban Watershed Curriculum* in their classrooms and attend monthly meetings.



PROGRAMS & RESOURCES

Soak It Up Adoption

The Soak it Up Adoption program awards civic organizations grants to help care for 1 or more green stormwater tool, helping to keep the tools litter-free and functioning properly.

www.phillywatersheds.org/adoption

Water Education Resource Guide from Partnership for the Delaware Estuary

Learn about the many exciting programs and resources for teaching water-related issues and concepts. The guide contains a list of materials and programs that are available through non-profit organizations and governmental agencies on topics relating to water resources.

Guide to Stormwater on School Campuses

This guide provides schools with steps for improving stormwater management on campus and in the surrounding community. The projects help protect drinking water sources, provide green space, restore waterways, and improve quality of life locally. Check it out for new opportunities to use your campus as an outdoor classroom.

www.phillywatersheds.org/whats_in_it_for_you

Schoolyard Habitats

Offered by the Partnership for the Delaware Estuary, this program helps schools transform their properties into outdoor classrooms where children can learn about native-plant landscapes and improving water quality.

Programs from Tookany/Tacony-Frankford Watershed Partnership

- Watershed Heroes
- Storm Drain Marking
- Park and Stream Cleanups
- Green Stormwater Infrastructure (GSI) Tours
- Guided Nature & Bird Walks by Tacony Creek

www.ttfwatershed.org - 215-744-7853
doryan@ttfwatershed.org