

PENNSYLVANIAVIEW 2020 - 2021



PENNSYLVANIAVIEW 2020 - 2021 ACTIVITIES

PennsylvaniaView (PAView) is working with the Pike Run Watershed Association on an outdoor classroom. Pike Run, a fourth-order stream in eastern Washington County, Pennsylvania, is a tributary to the Monongahela River. Its course begins at the headwaters in West Pike Run Township and winds through mostly rural and minor residential areas to its outflow between Coal Center and California Boroughs. Pike Run's proximity to California University of Pennsylvania (CalU) makes it an ideal "outdoor classroom" for university courses in Earth Sciences and Geospatial Technology. Students will use existing remote sending imagery and geographic data to create a watershed evaluation map and continue undergraduate research. Students used a mobile colorimeter to expand water quality parameters testing, then performed distributed, self-selective testing using multiple mobile test kits throughout the watershed. They tested for pH, conductivity, iron, copper, aluminum, and hardiness. Due to COVID - 19, the team could not host the Watershed Symposium. Instead, the team created videos on the use of the materials and supplies, including a discussion of the testing results. These videos were uploaded to the Geology Club YouTube Channel to be used in class and eventually for the public. This data was uploaded into the ArcGIS Online account, and next year there will be a data visualization site for the public to examine the results.



Pike Run Tests Sites and Watershed.



Data on ArcGIS Online



Students in the field.

cyclomedia

Lauren Roberts is using the mobile test kits to test for pH, conductivity, iron, copper, aluminum and hardiness. She will presenting her results at a Spring 2022 Conference

PennsylvaniaView began a partnership with Cyclomedia (LIDAR and 360-degree georeferenced photographs). California University of Pennsylvania students created lessons using the Cyclomedia Map service in their Environmental Applications of GIS course, which was evaluated by the Cyclomedia team. The top two exercises (Event Planning and Fire Safety) were published on the PennsylvaniaView site.

Make sure you change your caption.

PennsylvaniaView is a member of the AmericaView Consortium, a nationally coordinated network of academic, agency, non-profit, and industry partners and cooperators that share the vision of promoting and supporting the use of remote sensing data and technology within each state. AmericaView is funded by USGS grant agreement G18AP00077.



AmericaView Website: www.AmericaView.org Christopher McGinty, Executive Director: chris.mcginty@americaview.org Lisa Wirth, Program Manager: lisa.wirth@americaview.org Brent Yantis, Board Chair: rodney.yantis@louisiana.edu

BENEFITS TO PENNSYLVANIAVIEW

PennsylvnaniaView's projects are not just focused on southwestern Pennsylvania. We are a consortium of members throughout the Commonwealth of Pennsylvania. Our primary goal is to educate the public about remotely sensed imagery and provide any information in a public forum. Here are a few examples:

- 1) Villanova University As part of a senior thesis project at Villanova University, undergraduate student Lauren Sage worked with Professors Jennifer Santoro and Steven Goldsmith to map and understand patterns of invasive plant spread at Riverbend through imagery and fieldwork. Lauren took field measurements of invasive species in a series of meter-square plots on the property and quantified the cover of these species across the preserve.
- 2) Bucknell University used imagery and spatial data to predict Hotspots for Sediment Erosion in Turtle Creek Watershed. Lewisburg. Faculty and students completed this research.



Riverbend study area in Gladwyne, PA



The six locations where carpet squares were place in Turtle Creek Watershed

