Healthy Waters, Healthy Communities

GIS Tools



Geographic Information Systems (GIS) Tools are free resources that provide individuals, organizations, and government agencies critical information for mapping and visualizing local clean water efforts. These tools can be useful for viewing or downloading relevant data, planning clean water restoration, tracking project locations, and mapping results. GIS tools also help target problem areas so resources can be used wisely. Any questions about the tools should be directed to the organization that developed the tool.

Pennsylvania DEP GIS Mapping Tools

www.dep.pa.gov/DataandTools/Pages/GIS.aspx

Pennsylvania DEP's GIS Mapping Tools webpage contains several GIS tools and datasets that can be used to assist with planning for clean water restoration, tracking project locations, and mapping results. The following is a brief list of some of these tools:

<u>eMapPA</u>: eMapPA is a GIS-based website and mapping tool that focuses on the display of environmentally relevant data to the general public.

Integrated Water Quality Report Viewer: This interactive web mapping application shows the location of impaired and attaining streams in Pennsylvania. A viewer application has accompanied each Integrated Water Quality Monitoring and Assessment Report since the 2018 Integrated Report.

WQN Mapping Application: The Pennsylvania Water Quality Network (WQN) is a statewide, fixed-station water quality sampling system operated by DEP's Bureau of Clean Water.



Above is an example of eMapPA. Additional information on each of the tools can be found at the DEP GIS Mapping Tools website.

Main Users: Public, County Coordinators

Source Data: DEP Data

User Restrictions: Public and certain

information upon request from DEP

Pennsylvania Spatial Data Access (PASDA)

www.pasda.psu.edu

The purpose of PASDA is to serve as the Commonwealth's comprehensive and coordinated open geospatial data portal that provides free public access to geospatial data and information by, for, and about the Commonwealth of Pennsylvania.

Main Users: Engineering and Scientific

Community

Source Data: Penn State, Commonwealth of

Pennsylvania

User Restrictions: None



One of the primary purposes of PASDA is to facilitate data sharing in a streamlined environment.

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PA Data Downloader

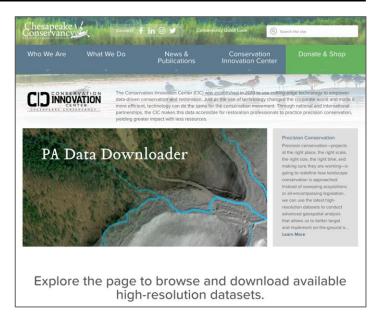
https://chesapeakeconservancy.org/conservation-innovation-center-2/high-resolution-data/enhanced-flow-paths/pa-data-downloader/

PA Data Downloader allows users to view enhanced flow paths and high-resolution buffer data and download flow path intermediate datasets by hydrologic unit code (HUC): flow accumulation, flow direction, and hydro-conditioned digital elevation models (DEMs). Users can download enhanced flow paths, buffer data (35' or 100' buffer zones divided into 12 or 3 land cover classes), and buffer summary reports for individual counties.

Main Users: Public, County Coordinators
Source Data: LIDAR-derived digital elevation

(DEM) data

User Restrictions: None



Restoration Prioritization Tool

Prioritization tool for ranking watersheds for restoration and conservation based on over 200 unique metrics.

Conservation Toolbox

A suite of tools for assessing conservation and restoration value of individual parcels using datasets gathered from around the

PAOneStop

https://paonestop.psu.edu/

PAOneStop provides online tools to help farmers meet regulatory requirements for Agriculture Erosion and Sediment Control (Ag E&S) Plans and Nutrient and Manure Management Planning. The first module of PAOneStop is a Nutrient and Manure Management Mapping Module. This module provides a tool to extract data and generate high quality maps that are required for completion of Nutrient Balance Sheets and Nutrient Management Plans, information on the Pennsylvania Phosphorus Index, and Ag E&S Plans. Users can create, save, and print farm maps with operation and field boundaries, field identification, field acreage, landscape features such as wells, streams, sinkholes, and manure application setbacks.

Main Users: Public, Farmers

Source Data: Penn State Cooperative

Extension Land Analysis Lab **User Restrictions**: Login Required



The Erosion and Sedimentation module enables farmers and planners, through the input of field level cropping and tillage system data, to generate soil loss values that are required in Ag E&S Plans and the Pennsylvania Phosphorus Index.