INFORMATION SHEET

04/08

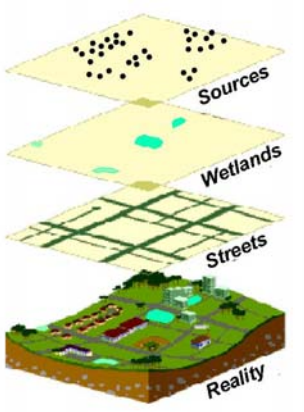
Susquehanna River Basin Commission 1721 North Front Street • Harrisburg, PA 17102 • 717-238-0423 • http://www.srbc.net

GEOGRAPHIC INFORMATION SYSTEM (GIS) PROGRAM

Providing Mapping, Data, and Analysis Support

What is GIS?

GIS (geographic information system) is a computer technology capable of assembling, storing, manipulating, and displaying geographically referenced information. Data, people, and hardware/software are key components of a GIS. While many people equate GIS with producing paper maps, the power of GIS technology is its use in a wide range of operations and applications. A GIS combines layers of information about a place in order to explore interrelationships of various natural, social, and man-made resources. The information or data combined can be from many different sources and be in various formats from tabular data to images. With a GIS, users can build multiple applications for decision-making purposes, perform statistical analysis, or query geo-referenced spatial data in three dimensions.

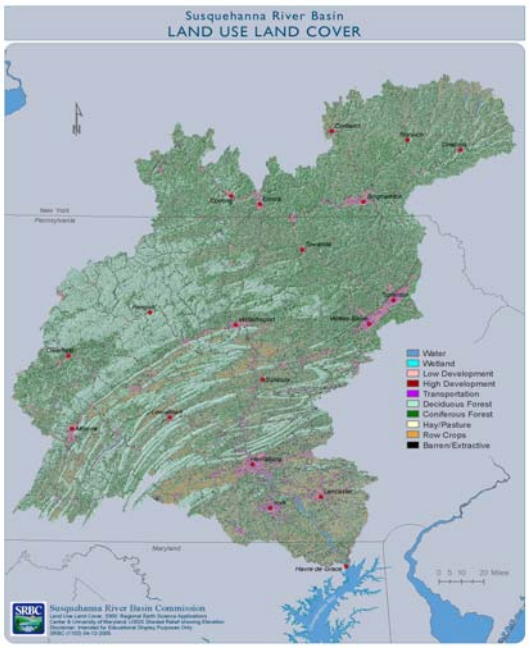


GIS Program

The goal of the Susquehanna River Basin Commission's (SRBC's) GIS program is to aid in the collection, organization, and distribution of information needed to protect the water resources of the basin. GIS staff builds and maintains the GIS database, manages the infrastructure, and provides support for SRBC's technical and public information and outreach staff.

GIS Program Implementation

SRBC staff uses GIS to strengthen its data analysis capability when investigating water resource activities. As a database tool, the integration of data from different data sources can reveal spatial relationships not apparent with tabular datasets. Data manipulation and data delineation functions are used to overlay various coverages creating new information about a study area. GIS also provides a way to communicate these results through visual presentation. As a mapping tool, cartographic information can be displayed in various formats that can be easily understood by a wide audience.



SRBC has incorporated GIS technology into its routine water resource management activities including public information and education, analysis and assessment, watershed planning, and data sharing and assistance.

GIS Program Database

SRBC's GIS Program database is a growing and continuously updated assemblage of data layers. Data sources include the U.S. Geological Survey, U.S. Environmental Protection Agency, Chesapeake Bay Program, New York State Clearinghouse, and Pennsylvania Spatial

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Data Access (PASDA). Due to data comparability and availability issues among SRBC's three member states (New York, Pennsylvania, and Maryland), an ongoing task of the GIS program is to create seamless datasets that encompass the entire Susquehanna River Basin. The following is a partial list of basinwide GIS datasets and maps available from SRBC.

GIS Datasets

- Ecoregions
- Geology by Rock Type
- Land Use Land Cover
- Municipal Boundaries
- Population Centers
- Roads
- Soils
- Streams
- Watersheds
- Precipitation, 30-Year Average
- Wetlands

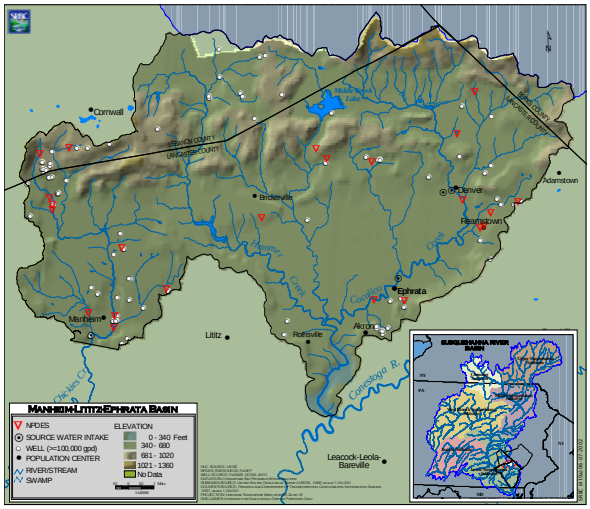
GIS Maps

- Susquehanna River Basin—Subbasins
- Susquehanna River Basin—Counties
- Susquehanna River Basin—Watersheds and Lake Associations
- Susquehanna River Basin—Physiographic Sections
- Susquehanna River Basin—Land Use Land Cover (as shown on page 1)
- Susquehanna River Basin—Elevation
- Upper Susquehanna Subbasin
- Chemung Subbasin
- Juniata Subbasin
- West Branch Susquehanna Subbasin
- Middle Susquehanna Subbasin
- Lower Susquehanna Subbasin
- Congressional Districts for the Susquehanna River Basin
- State Senatorial Districts for the Susquehanna River Basin
- State House Districts for the Susquehanna River Basin

GIS Maps and Data Access

To learn more about SRBC's GIS Program, visit http://www.srbc.net/atlas. The Atlas provides an array of maps and data based on general geographic themes and current projects. For each map, the user can view a larger online JPEG image or download a high quality printable Abode Acrobat (PDF) version. Selected GIS datasets are also available for download in ESRI shapefile format throughout the Atlas.

A Map Gallery CD can also be requested by e-mail at srbc@srbc.net or by telephone at 717/238-0423 extension 302.



GIS Hardware and Software

The SRBC GIS Program utilizes Environmental Systems Research Institute's software. Licenses for ArcInfo 9.2, ArcView 9.2, ArcView 3.2, Spatial Analyst, and 3-D Analyst are maintained. Staff can access the software on a local area network with Pentium class PCs running Windows XP. Peripheral hardware includes a Hewlett Packard DesignJet 800 PS plotter and 7 Global Positioning System (GPS) units:

- Trimble GeoExplorer 3 (1)
- Trimble GeoXT (2)
- Garmin GPS 12 (4)