

**In support of investing in PA Water Data
or
Why do we need a Local-Resolution version of NHD?**

Pennsylvania is one of the most water-rich states in the country, blessed with high-quality surface and ground water. Equally abundant are regulatory and monitoring programs that maintain our knowledge and collect data about the water resource; a mere sampling is listed below:

- Federal - USGS-WRD, USGS-NGP, EPA (many divisions), Army Corps of Engineers, USFWS, FEMA, NRCS, USFS (Allegheny National Forest)
- Regional – SRBC, DRBC, Chesapeake Bay organizations, TNC, American Rivers, many more
- State – DEP Water Management (many bureaus), DCED (Flood Insurance Program), DCNR, DOT, Game Commission, Fish and Boat Commission
- Counties(67) – Emergency Management, Planning
- Municipalities(>2400) – Zoning, Subdivision and Land Use
- Authorities (>900) – Water Supply, Wastewater Management

We have generated tremendous amounts of data among the various entities listed, and in many cases the basic representation of the water resource is different. One agency measures and names stream reaches differently than another. For some programs the stream network that they started with 20 years ago remains the only data compatible with their continuous data collection efforts. Regional entities rely on less precise data than local entities just for simplicity, despite knowing that the location quality is suspect. We tend to separate programs and information on the quantity of water from those concerned with quality, even at a time when the practices for managing both are converging. *The fact is that we cannot even agree on a singular base map scale for water in PA, let alone the details of what we know about it!*

Over the past 40 years we have invested our talents and treasure in protecting and improving the water resource, and the results are gratifying. Indeed, the list of programs above that illustrated our divisions is equally instructive of the investments we have made in knowing and protecting the waters of the Commonwealth. Our commitment to conserving the resource was renewed with the Water Resources Planning Act (Act 220 of 2002), and a key finding of the State Water Plan published in 2008 is that data about water is largely unconnected.

Act 220 requires updates every five (5) years, and we are due in 2013. A **good, simple plan for 2013 is:**

1. Create a modern, digital base map for Waters of the Commonwealth at a scale suitable for local resolution, and which includes stormwater infrastructure as part of the surface water network for the first time.
2. Require Executive agencies and encourage all others to transform their data to be compatible with and connected to that base map by 2018.
3. Allocate \$50 million to this effort.

The cost is equivalent to about four (4) bottles of water for each citizen (not even one bottle per year each), or the cost of developing 10 or 15 Marcellus Shale wells. The return is the basis for managing, protecting, and conserving a priceless resource.

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