LOOKING FORWARD

By Mary Theresa Julien

Does it make sense to say that flood waters are a resource? It may make sense to someone in a drought-stricken western state, but does it make sense to us in NY? It depends. If your community's aquifer does not recharge as quickly as its water is withdrawn, then maybe. Historically, we have enjoyed the luxury of a seemingly endless supply of groundwater but we may need to be more creative in the future if we want to meet demand.

What about the areas in our nation which do not have enough water to meet demand? Under what terms and conditions should we share our water resources and what are the implications for communities? Who really owns the water? As these issues heat up, we will have interesting times ahead for Source Water Protection in NYS.

I recently joined NYRWA as its Source Water Protection Specialist. Getting my feet in this role involved familiarizing myself with a multitude of state and federal agency objectives and funding opportunities related to water resources. I got the sense that we are all in this together and I am glad to be part of the collaborative effort working to address these challenges.

Source Water Protection at NYRWA focuses on communities with a population of less than 10,000. I like that. Many water issues are specific to localities. One community may be 80% agricultural in terms of land use area and another may have immediate threats to the wellhead area. I look forward to helping connect communities with localized solutions.

Working at a larger geographic scale, the NYS DEC Integrated Watershed Action Plan (IWAP) aims to address issues at the watershed level. This makes sense because water flows in streams, wetlands and underground aquifers with no regard for municipal boundaries and the water which drains from one basin can flow into another, thus impacting it. About fifteen towns and villages are at least partly within the Sterling-Wolcott IWAP pilot study area. NYRWA is working on a Source Water Protection Plan (SWPP) with one of these communities.

The Sterling-Wolcott pilot study area encompasses several HUC 12 drainage areas (sub-watersheds). HUC stands for Hydrologic Unit Code which represents a unit of area used to identify a drainage network. Basins, sub-basins, watersheds and sub-watersheds are arranged in a nested, hierarchical system and each is identified by unique 2- to 16-digit HUC. Codes are assigned using a progressive two-digit system where each successively smaller area adds two digits to the identifying code; the smaller the HUC area, the longer the code. These nationwide drainage networks are available for download in GIS format from the U.S. Geologic Survey as the National Hydrography Dataset (NHD) Watershed Boundary Delineations (WBD), at https://www.usgs.gov/national-hydrography/access-national-hydrography-products.



IWAP plans to address issues using an ecosystem-based management approach. The objectives of IWAP do not align in all respects with the SWPP but there are some joint interests. Our NYRWA community in the Sterling-Wolcott study area plans to propose a project to the IWAP team as part of the Source Water Protection Plan in development with NYRWA. NYRWA looks forward to this collaboration.

Funny, early in my career I delineated NYS watersheds and sub-watersheds that are now part of the NHD WBD. I have experience with grant administration and program development but my overarching field of expertise is in geospatial analysis with a focus on water features. I am particularly drawn to the database side of GIS. In fact, my thesis involved producing a watershed model to identify non-point source contaminants. Coming back around to these issues at this point in my career feels like coming home.



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