



Toward a Chesapeake "Basin" Program

Water quality is dependent upon what is happening in the upland watershed basin. This "land-water" connection is the reason why water professionals support the "watershed approach" to restoring and maintaining water quality and aquatic habitat.

Increasingly, we are focusing attention on the "air-water" connection, as well. The deposition of smokestack contaminants and nutrients is a serious problem. Toxic mercury that

has led to so many fish consumption warnings is rooted almost entirely in air pollution. Nitrogen air deposition from combustion and farm sources is a very significant contributor to marine and estuary algae blooms and low oxygen "dead zones." In fact, 31 percent of New York waters that are in violation of water quality standards are contaminated almost entirely by air pollutants.

Given all these interconnections, my hope is that the US Environmental Protection Agency's Chesapeake "Bay" program will evolve into a comprehensive "Basin" program. Merely focusing on the Bay, or just on problems that affect the Bay, is not enough. Efforts that help address problems specific to the Susquehanna and Chemung Basin headwaters are needed as part of a true water quality and eco-system partnership. In New York, that means the Chesapeake program should pay serious attention to agricultural environmental

management, flood mitigation, wetland construction, nutrient and sediment removal.

For its part, New York has actively responded to the Bay's nitrogen problem. New York has established and is implementing its "Tributary Strategy," which includes the implementation of nitrogen treatment at Binghamton's wastewater plant and NYS Department of Environmental Conservation's successful effort to optimize nitrogen treatment at basin sewage plants without adding costly new treatment technology. Key to this effort has been the Upper Susquehanna Coalition's great work to protect and build wetlands.

New York has adopted the "California" car with its lower nitrogen emissions; put in place strict controls on smokestack nitrogen emissions of nitrogen oxides, with even more stringent regulatory controls being evaluated at present; and submitted legislation to mandate the use of very low phosphorus lawn fertilizer and dish-washing detergent. Our comprehensive Concentrated Animal Feeding Operation (CAFO) permit covers farms with 200 or more cows and the state agriculture agency has a very substantial Agricultural Environmental Management program to address pollution from non-CAFO farms. Our stormwater and sediment controls are high quality and, unlike many other states, include post-construction management practices to address polluted runoff, sedimentation and flooding.

As they say, "the proof is in the pudding." If the waters entering the severely impaired Chesapeake Bay instead were of the same quality as the water leaving New York – there would be no water quality problem in the Bay. This is a point of pride for New Yorkers and a reason why we thank NYWEA's members for helping us in keeping the waters clean.

–James Tierney, Assistant Commissioner for Water Resources
NYS Department of Environmental Conservation



The Summer of our Discontent

Clearwaters' theme, the Chesapeake Bay watershed, is quite a personal one to the people of New York's Southern Tier. A weather system that stalled over this area in late June 2006 caused extensive flooding of the Susquehanna River and its tributaries. This put the Chesapeake Bay watershed right in the basement of one of my company's plants on the banks of the Susquehanna. The plant was inundated, forcing it offline and it was eventually abandoned to the river.

When the water finally crested, the basement had 29 feet of water in it – about five million gallons. Eventually the water receded and what remained of this industrial site was remarkably similar to what homeowners have experienced after a flood – the telltale ring, mud, debris, filth, damaged equipment, spoiled materials, destroyed electrical system, soaked insulation, waterlogged records and mold.

Health concerns were raised about the flooding of hundreds of dairy farms, the local wastewater treatment plant, and petroleum tanks. To get this one electrical generating plant back to working form took about 300 people six weeks. The recovery of the rest of the

region had a similar timeline. To add to the predicament, local people working to get their companies back in business had their own disaster at home to worry about; recovery workers from outside areas had difficulties finding lodging and operating restaurants; and a good portion of the local population were in temporary living arrangements. The local electrical grid took time to restore – so even if a hotel, house or business was high and dry, it might be dark. Food needed to be kept cold, and ice came at a premium. The water system needed to be restored and made sanitary – so bottled water became the norm. Many churches, charitable organizations and community groups set up shelters. The hands-on activities of cleaning, hauling, and home repair occupied people's time and minds for a while.

All this sounds remarkably similar to the events that have received national attention, even down to the orange X's on the houses – images that will stay in our memories. However, disasters also create memories and feelings that will stay with people in a more troubling way. Extreme fatigue, post-traumatic stress and anxiety work together to create mental unease and behavior changes that are not as easily fixed as drying out with a pump or removing insulation; yet, they need to receive the same attention. Counseling agencies and professionals are available to help people and families involved in a traumatic event. Many insurance policies will cover the cost of sessions or treatment. Although a flood or natural disaster may be a life defining event, it does not necessarily need to be a life altering one.

–Eileen Reynolds, CSP (Certified Safety Professional)
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