

Leading the Way to Clean Water

By Jayne Daly

Director of Programs
Glynwood Center

This is the story of one town's struggle to protect its drinking water supply. It illustrates the often overlooked role that local leaders can-and must-play to protect critical natural resources in their communities.

During the early 1970s, the federal government enacted several laws designed to protect the quality of the nation's water supply. Soon afterward, many states passed regulations to apply or supplement the federal scheme. Since then, local governments across the country have relied on these laws to protect their water supplies from contamination. But what happens when this system fails? Who is ultimately responsible for ensuring that a community's drinking water supply remains safe?

Jayne Daly has been working with communities on issues of natural resource preservation and economic development since 1993. Before becoming Director of Programs for Glynwood Center, Ms. Daly, an attorney and mediator, was Co-Director at the Land Use Law Center at Pace University School of Law, where she also taught courses in land use, environmental law and alternative dispute resolution.

She served as an advisor to Town Supervisor Jill Way throughout the Dover landfill application and lawsuit.

The Town of Dover is located in Dutchess County, New York, about 75 miles northeast of New York City. Dover is predominantly rural, although development pressure is steadily increasing. Agriculture is still alive in Dover, but more and more farmland is being lost to residential development. There are some commercial establishments, but the largest employer in the region, the Hudson Valley Psychiatric Center, closed in 1994, leaving many people unemployed and many homes vacant.

Dover is located in the Harlem Valley which runs along the eastern side of Dutchess County, bounded by the Taconic Range and the Berkshires. It also contains part of the Great Swamp, the second largest freshwater wetland in New York. Because of its geologic formation, the Valley has many important natural resources, including rare and endangered species such as the federally listed bog turtle, significant wildlife habitat and a valley bottom aquifer that supplies water to 20,000 residents.

The glaciers that created the Valley also deposited significant quantities of rock, minerals, sand and gravel which have made Dover a magnet for mining operations. In the early 1990s, there were 11 active mining permits for 33 mined locations and 12 inactive, abandoned or unregistered mine locations. Five mines were being reclaimed with landfill or used to recycle solid waste such as contaminated soil and rubber. Another six permits were pending. While these activities may seem benign, a recent fire at a one of the existing tire recycling facilities burned actively for 10 days. It took more than 25 fire departments from three states to contain the blaze. The Master Plan for the Town, which sets out appropriate land uses and densities for the community, was adopted in 1966. In 1991, the Town Board appointed a Master Plan Committee to develop a vision for the community's future as the basis for revising the Master Plan. As a first step,

the committee conducted a town-wide survey to determine the residents' needs and aspirations.

In response to the survey, residents indicated that Dover's environmental features and natural beauty were "very important". In addition, residents stressed that protecting stream corridors, preserving wildlife areas, maintaining the Town's rural character and preserving wetlands were

"important issues" to be considered when making land use and development decisions. Residents were also clear in their views on mining, quarrying and industrial development-they wanted to limit mining, quarrying and heavy industries to the greatest extent possible, while subjecting existing activities to strict regulation.

Shortly after the residents' concerns about mining were made evident through the survey, the owner of an existing sand and gravel mine filed an application to conduct an activity that posed a threat to the very resources residents valued most. The owner sought to modify its mining permit to develop a landfill for construction and demolition debris, a more profitable type of operation.

The owner estimated that the landfill would be active for approximately 20 years, taking in more than 27,000 tons of debris and creating a "third mountain" between the two ranges on either side of the Harlem Valley.

The 150-acre mining operation, begun before the Town's first master plan and zoning ordinance were enacted, is now surrounded by medium density residential development and located one mile from the Dover junior and Senior High School. The conversion to a construction debris landfill would have substantial negative impacts on the neighborhood. An estimated 50 trucks per day would arrive and leave the site. Emissions from the trucks, along with dust and traffic noise, would clearly impact both nearby residents and school children. Of even greater concern, the landfill would be located over the region's only drinking water supply-an aquifer that runs along the valley bottom.

Residents in the Town had been concerned that the concentration of mines in the area would someday overwhelm the Town and change its character. When they found out about the proposed landfill, many became alarmed. As residents learned more about the potential impact on the aquifer, they became determined to protect their drinking water supply. The Town Supervisor, Jill Way, and her colleagues found themselves confronting a host of complex legal issues with little time to act.

Understandably, Dover's leaders assumed that there must be federal or state laws that would prevent a landfill that might endanger a community's water supply. After all, isn't that the reason for having all these laws? Town leaders began to consider legal strategies. They looked first to federal law and briefly considered pursuing designation of the aquifer as a Sole Source under the Safe Drinking Water Act. However, they were advised that the designation would take a substantial amount of time, during which the landfill proposal could go forward, and in the end the designation would not afford the kind of protection they were seeking.

They also learned that under New York state law the Department of Environmental Conservation (DEC) has the authority to designate certain aquifers as "principal or primary aquifers" based on geology and productivity. Such designation would prohibit the landfill and protect the region's water supply. The Town rigorously pursued this designation, but despite their efforts, in 1996 DEC determined that Dover's valley bottom aquifer did not meet designation criteria because the geologic formation did not create a completely contained aquifer. The Town challenged this administrative ruling for the next five years.

Meanwhile, the Town appealed to the State's Department of Health, which can issue regulations to protect drinking water. An agency representative, while sympathetic to the Town's dilemma, advised that it would take three to five years for such regulations to be issued. Since the landfill permit might well be granted during that time, this approach was not pursued.

When it became apparent that neither the federal nor state government would protect its water supply, the Town decided to exercise its own zoning authority to prohibit the landfill and then work with neighboring municipalities to design a long term protection strategy for the entire aquifer. The opportunity to do this had been provided by a critical determination made early in the permitting process by DEC, which regulates mining in New York State.

DEC had determined that the operation of the landfill would require a new permit as a solid waste facility, rather than a mere modification of the existing mining permit. When applying for a new

permit, the applicant would be required to comply with all local ordinances. In this case, the mine owner would have to seek a rezoning of the property from residential to industrial use, as well as comply with other local regulations and review procedures. The door was open for the Town to use its local zoning authority to protect its drinking water.

Through the efforts of informed and dedicated local leaders, the Town designed an innovative approach to protect not only its drinking water, but other valuable natural resources as well. The new plan was based on residents' needs and desires as well as an extensive resource inventory and scientific analysis. In addition to the hydrological assessments that were being conducted on the aquifer, the Town commissioned studies to identify unique habitats and species, wetlands, floodplains, and other areas of natural significance.

In 1993, the Town had adopted its new Master Plan, but the preparation of a new zoning ordinance to implement the plan was delayed for several years in large part due to the impact the tire fire had on the Town's financial resources. However, in 1999 the Town Board adopted a zoning ordinance that contained several new provisions intended to protect the Town's natural resources. It included provisions for clustering development to preserve open space, established resource conservation zones to discourage intensive development in important natural areas and prohibited the development of construction and demolition debris landfills, unless municipally owned.

Once the new zoning ordinance was adopted, the mine owner knew that even if the DEC permit were issued, the Town would prohibit the development of the landfill. The applicant sued the Town, challenging the legality of the new zoning ordinance. The Court found in favor of the Town of Dover and upheld the new zoning ordinance. As a result, the landfill could not go forward.

However, the Town recognized that its water supply was still at risk. Since water in the aquifer flows southward, water quality is impacted by actions taken by communities to Dover's north. In response, the Town of Dover has taken the lead in developing a regional resource protection strategy. It commissioned the development of model regulations which, if adopted by all of the municipalities that share the aquifer, would protect the quality of the water relied upon by all. The process of convincing all of the neighboring municipalities to enact these regulations-no easy task-is now underway.

They say that "necessity is the mother of invention" or perhaps in this case, innovation. In order to protect its water supply, the Town of Dover had no choice but to become innovative and self reliant. But Dover's approach emphasizes another important lesson-local leaders need more than the law to effectively protect natural resources. Community leaders need training, financial support and, perhaps most importantly, a new framework for civic discourse that fosters communication and education, and encourages residents to come together, at both the local and regional level, to make informed, collective decisions about their communities.

Town Supervisor Jill Way attributes her ability to manage this difficult process to lessons she learned while a participant in the Community Leadership Alliance (CLA), a training program developed and conducted by Glynwood Center and Pace University's Land Use Law Center. "I realized that by working regionally you can get the technical, financial and human resources that you need to tackle a problem of this size," says Way. "CLA also gave me the courage and support I needed to make it through the really challenging moments."

This publication is adapted from an article Ms. Daly wrote for the Environmental Law Institute and Pace Law School's Environmental Law Review entitled [What's Really Needed to Effectuate Resource Protection in Communities](#), which provides further details about the legal aspects of the Dover case.