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Mother Nature Knows Best: Fundamentals for Ensuring a Safe Water Supply

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FEATURED SPEAKER

MOTHER NATURE KNOWS BEST: FUNDAMENTALS FOR ENSURING A SAFE WATER SUPPLY

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MR. MUKERJEE: Welcome back to the afternoon session. My name is Deepro Mukerjee, and I am the Research and Writing Editor of the *Fordham Environmental Law Journal.*

It is my sincere pleasure to introduce to all of you today our second featured speaker, Mr. Eric Goldstein. Mr. Goldstein is a Senior Attorney and Co-Director in the New York Office of the Natural Resources Defense Council. He has worked for nearly two decades on urban environmental issues, including air pollution, solid waste, drinking water, and environmental justice.

Mr. Goldstein has gained nationwide attention in the early 1980s for spearheading the public campaign to reduce levels of toxic lead in gasoline. He is co-author of *The New York Environment Book* and co-teaches the Environmental Law Clinic at New York University Law School.

Without further ado, I would like to leave the floor to Mr. Eric Goldstein.

MR. GOLDSTEIN: Thank you.

This is great, seven hours of continuous discussion on watershed issues. It is kind of like those "Honeymooners" marathons that they broadcast on TV or something. I am really delighted you have tuned in for the NRDC portion of the show.

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Almost exactly 200 years ago, in 1801, a very different New York City was facing similar problems with respect to its drinking water supply. The population then was about 75,000, and the sources of water for both fire fighting and for drinking water consumption were limited, in many ways as limited as they were in the 1600s when the English first arrived on the scene.

The Collect, which was a major source of water, a forty-eight-acre pond located essentially right near where the courthouses are in Foley Square, was becoming contaminated with a variety of problems, from garbage dumping to even the occasional dead body. The public and private wells that were being utilized at the time were contaminated largely with cesspool seepage and runoff. And Aaron Burr's Manhattan Company, which had been founded to, in theory, take water from upstate New York and bring it to a thirsty city, was running into surprises and many, many unkept promises.

There were, of course, some calls during this period to look further upstate and improve the City's water supply by finding new sources, but from 1801 to 1830 little progress was made, and the City endured a variety of water quality problems.

Why no progress during those thirty years? Aside from the usual political problems, there were two major reasons: first, government complacency; and second, public acquiescence in the inadequate water supply. While there was some decent water still coming in from the T-Water Pump and from springs that were further upland, which means north of Wall Street, which was really New York City at the time—many people simply decided to go along with the best possible, the quickest, easiest fix and, according to historians, that was adding brandy or gin to water to make it safe to drink. Hopefully we will not have to resort to that today, although maybe it is not such a bad idea.

It was only however, after repeated outbreaks of yellow fever and cholera and typhoid that New Yorkers began to realize that the problem could no longer be ignored and that efforts had to be redoubled to get water from then-pristine sources north of the City, and it really was things like the cholera outbreak in 1832, in which 3,500 New Yorkers perished, that ultimately prodded reluctant government officials to get rolling on this, even though some scientists had been talking about it for thirty years.

Fortunately, today in New York City we do not face those kinds of problems, nor do we face the significant fire-fighting problems that were faced in those early days, with major fires in the City in 1776,

in 1828, and of course the gigantic fire in the City in 1835 which leveled 700 buildings and twenty square blocks.

But the City does face a variety of other very significant water quality challenges. First of all, we need to protect and preserve this unparalleled resource for future generations because once the watersheds are suburbanized, they are lost forever. Second, we face an economic threat, which is defined as the costs, estimated at $6 billion, to build a filtration plant for the Catskill and Delaware system. So our threats today are very different from the threats of 1801, but unless government devotes the energy, the resources, and the political will to solving these problems, we are likely to face similar problems.

Today, I plan briefly to summarize some of the deficiencies and problems, some of which you have already heard of, as we see them at NRDC with respect to the New York City water supply; and second, I will give you a brief outline of a solution that, after some modification, we believe the environmental community will be presenting to the powers that be as discussions on watershed improvements move forward in 2002.

Suffice it to say that the New York City water supply today is facing some very difficult challenges. The City's plan for a water filtration plan for the Croton supply at Van Cortlandt Park has been struck down in court. A decade-old and potentially catastrophic leak in the Delaware Aqueduct is reportedly sending a billion gallons a month out of the system, and remedial efforts to repair it could most generously be described as slow.

Unrestrained development throughout much of the Watershed threatens to permanently alter this wonderful landscape. It ranges from major projects, like Dean Gidder's [phonetic] new BelAire Resort, a Disneyland-like scope and size of a project in the Ashokan and related basins; to inappropriate expansions of other major projects, such as Westchester Airport; to dozens of more mundane, but nevertheless insidious, residential and commercial development projects that are now underway or being planned throughout primarily the east-of-Hudson Watersheds.

There is more. At least three years after plans were first announced, few, if any, of the hundred non-City owned sewage plants in the watershed have been upgraded to standards as promised in the Watershed Agreement. Thousands of failing or improperly operating or improperly sited septic systems in the watershed are in

need of attention, but limited government funding for repairing those systems has already dried up.

Land parcels alongside the streams that feed into our reservoirs are not adequately protected and not adequately vegetated, and the amount of impervious surface in key basins continues to increase.

The all important Kensico watershed, the conduit for 90% of the City's drinking water supply, is still not receiving the attention it deserves, and only a handful of the 1,100 developable acres left in Kensico have been purchased, even though EPA first directed the City to begin making those purchases in 1993.

And the list could go on. Just pick up the National Academy of Sciences' report prepared recently for Comptroller Alan Hevesi that reviews the New York City water supply, or take a look at EPA's own excellent mid-course review document that was released recently as well.

One lesson is clear: in many of these areas, the lack of vigorous leadership and attention by the Giuliani Administration cannot be ignored.

To be sure, there has been some progress. With the glaring exception of the Kensico Basin, the City's land acquisition program has made some important gains. DEP scientists and their many committed DEP staff and public servants at the agency have done some excellent work in performing first-class research on the water quality issues and problems that we face. The whole farm program, under the leadership of Dick Coombe, has gotten off to a promising start, although the final results are not yet in. And despite understandable flare-ups, there is a budding partnership between New York City and watershed town officials. But the problem is there for all to see.

One quick word about the Watershed Agreement, which was discussed in the earlier panels. That 1997 Agreement was a start. It broke the logjam. And if Bobby Kennedy and the Riverkeeper had not been involved, it would not have been as strong as the Agreement ultimately proved to be.

But the Watershed Agreement had significant gaps, and it was dependent upon intense follow-up and hundreds of small decisions over the course of ten years. And, from NRDC's viewpoint, it was a troubling document in that, to a troubling degree, it was the result of a political compromise, not a compromise forged on scientific principles of watershed protection.

As a result of such gaps, Comptroller Hevesi and others insisted that the National Academy of Sciences analyze the City's program, and the NAS did, and they identified many gaps in the program, and many of those gaps are yet to be addressed.

So let's thank the negotiators of the 1997 Watershed Agreement for what they achieved, but let's recognize that without enhancements and without a renewed political commitment to solve the remaining problems, New York's water supply is still in big trouble.

Fortunately, we are about to enter the political season. There will be a mayoral election at the end of this year and a gubernatorial election in 2002. This is a crucial opportunity for New Yorkers to see to it that drinking water issues are part of the discussions.

Long-term filtration avoidance, as EPA has indicated, is by no means assured, and decisions that are made over the next year or so are likely to affect the City's long-term water supply for decades to come.

What a perfect time for a conference on watershed issues, and so we thank Sharron Gelobter, we thank Dean Feerick, and we thank everyone else who put together this conference and for inviting us to share with you our thoughts.

With this in mind, on behalf of Mark Izeman and Robin Marx and Meaghan Delaney [phonetic] and Liz Kaufman at NRDC, we want to share with you our draft of a New York Drinking Water Users' Bill of Rights. It is our hope that, after further discussions with the environmental community and drafting sessions with them, that we will come out with a final document that we will ask every elected official and every candidate running for City office this year and running for State office in the next year to endorse. That is the plan.

Here is the preview. Our Bill of Rights starts off with a reaffirmation of some basic principles, and here they are.

The first is the right to a clean and safe drinking water supply, which is a fundamental right for all New Yorkers. This is a right that elected officials must be willing to fight for on behalf of their constituents.

The second is that in providing a safe water supply, government decision makers need to be guided by a recognition that Mother Nature knows best. In other words, they should always seek to safeguard our water resources, in the first instance, by the application of the concept of pollution prevention, keeping contaminants out of the water supply in the first place, and seeking

to prevent the impacts of development, rather than simply mitigate the harm of development projects.

Third, New Yorkers have a right to basic information on the quality of the water in their taps, in their reservoirs and in watershed tributaries, and the City has an obligation to disseminate that information and analysis, regardless of what it shows, in a timely and accessible fashion.

Fourth, officials must be sensitive to the costs of water supply on rate payers and recognize that water rates, which have increased significantly over the last ten or fifteen years, are a regressive way of generating revenues for the City.

And fifth, in our philosophical underpinnings, New York City and watershed towns have a responsibility to strengthen the upstate/downstate partnership. This is not a mere political partnership, but it must be a partnership anchored on the concepts of watershed protection. Essential elements of that partnership must be, first and foremost, the preservation of the rural character of the Catskill and Delaware watershed communities, while advancing economic prosperity in these communities without triggering sprawl—and that is a tough challenge—and third, mutual respect.

Now I turn briefly to the draft outline of the New York Water Users Bill of Rights itself. First, we were going to come up with twenty-six amendments. There are twenty-six amendments to the Constitution, as you know, but the time is tight, it is a long program, so we are going to stick with ten.

Number one is land protection. As others have already discussed today, a strong and comprehensive land acquisition program is essential to a successful watershed protection plan. With the exception of Kensico, the City's land acquisition program, as I noted, is making progress. But there are a host of exceptions that prevent the City from buying watershed lands even from willing sellers. And while it makes sense for the City to secure larger parcels in the early years of the program, all things being equal, ultimately New York City water users are entitled to assurances that all watershed lands that are critical to water quality will be protected, regardless of their size or location in the watershed.

Second is sewage. Sewage discharges and improperly operating septic systems or poorly sited septic systems pose a significant long-term threat to New York City water quality. Sewage plant upgrades at key plants need to be expedited. A moratorium on the construction of new plants in the watershed ought to be adopted, at

least until the City can determine whether the upgraded plants are reliably providing the promised pollution removals. It makes no sense to go ahead with all of these upgrades and all of these new plants until we get significant assurances that the promised reductions in pollution from the proposed upgrades program are actually achieved in practice. And thus, New York City water consumers are entitled to know that State and City officials will work cooperatively at the same time to assure that, within a reasonable schedule, every septic system in the watershed is properly sited and maintained in a state of good repair. Dealing with sewage and septics is number two.

Number three, buffer zones and setbacks. Now, most of you know what a buffer zone and setback program are. Hopefully, you know the difference.

Minimum setback distances away from reservoirs and streams for non-watershed-compatible land uses, like sewage plants, septic systems, petroleum tanks, landfills, and other waste facilities. These non-compatible watershed land uses need to be set back from reservoirs and tributaries. The minimum setback guidance that is now existing needs to be comprehensively reviewed and increased wherever necessary to provide a margin of safety to protect this unfiltered water supply.

Several members of the NAS panel that completed the recent report on the New York City water supply ought to be asked to review all of these setback distances and to make appropriate recommendations to EPA in time for the Agency's 2002 review. As the NAS panel has observed in its recent report, setback distances are not buffer zones.

Buffer zones, which are the immediate area adjacent to streams or reservoirs, need special protections. And, as to landowners immediately adjacent to these streams, New York City water users deserve assurances that appropriate planting and vegetation restoration are advanced, with the first priority going to all government owned lands and any new development proposals. So that buffer zones need an added measure of protection and ought to be created, and simply calling a distance away from a stream or a reservoir a "buffer zone" is, according to the scientific community, in appropriate.

Number four, Kensico and West Branch. These two reservoirs serve as the terminal reservoirs for 90% of the City's water supply and they play an essential and strategic role in protecting the over-

one billion gallons a day that flows into New York City and Westchester County. As such, they deserve special protection.

While progress on purchasing land in the Westchester Basin has advanced nicely by the DEP land team, the story for Kensico is not a pretty picture, as I indicated earlier. New York City water users are entitled to know that the Mayor and the Governor will use every available tool to protect the remaining open space.

Watershed protection and the preservation of watershed wetlands, regardless of size, should be a high priority for government. The role of wetlands is that of natural filters and pollution cleaners, and it cannot be overstated.

The continuing loss of wetlands, which is occurring right now, is a bad omen for long-term filtration avoidance. Unfortunately, the problem is exacerbated by the State's current definition of "wetlands," which, in a quirk of law, defines wetlands as only "wetlands above 12.4 acres in size." That is a major impediment, as you might imagine, to the protection of wetlands.

So among the additional steps that New York City water consumers are entitled to in this area, the State must redefine the term "wetlands" for watershed purposes to mean "any wetlands of larger than an acre," so that all such partials are subject to the setback requirements and the other safeguards of law.

Item number six in our Bill of Rights, for those of you keeping count, is runoff, stormwater, and impervious surfaces. Increasing amounts of blacktop and concrete, existing roadway stormwater runoff, all of this from developed lands, are threats to the watershed's integrity, and they must be reduced. As we noted earlier, existing stormwater planning requirements contain a handful of exemptions and, in any event, have not proven likely to prevent degradation related to new development.

New York City water consumers have the right to expect stormwater runoff and impervious surface additions will not degrade water quality in reservoir basins and their tributaries. The City and the State have a obligation to adopt a new comprehensive plan for controlling stormwater. The new program owes it to New York City water consumers to be sufficiently strong to require reductions in the size of potential projects where that is appropriate, to embrace a philosophy that recognizes natural filtration is the way to go on properties where runoff is generated in the first place, and to include much more effective performance and maintenance criteria.

Number seven is the agriculture world. The retention of a strong agricultural presence in the watershed is consistent with preserving the region's rural character and offers other environmental advantages, but agricultural runoff and related pollution threats must be effectively controlled if we are to include farms in the family of environmental friends.

The whole farm program, which is intended to apply to the 350 largest farms in the watershed area, has been among the most promising elements of the watershed accords that were developed in the 1990s. But proof that the measures that are now being implemented are actually having their desired effect in reducing pollution has not yet been fully demonstrated.

New York City water consumers are entitled to firm evidence, through monitoring and assessment, that (1) the whole farm program activities are focused on the most significant pollution sources; (2) the remedial efforts being advanced are actually having their intended effect in watershed tributaries.

We are up to number eight, enforcement and project review. This is a very important area. New York City has a 2,000 square mile watershed. There are numerous sources of pollution that exist within that watershed. There are dozens of new development projects that are now under construction or in various planning stages.

A strong, ongoing effort by City, State, and local agencies to assure watershed rules and other safeguards are being implemented and obeyed, therefore, is really essential to the whole watershed program. And so is a vigorous City program to review and critique proposed development projects in the watershed before they get a life of their own. While the foundation for these twin pillars has been laid in recent years, both remain shaky structures.

New York City water users deserve assurances that a fully-staffed and vigorously, yet sensibly, applied enforcement program becomes an ongoing priority feature of City, State, and local watershed protection efforts, and at the same time, these watershed users are also entitled to a more systematic, visible, and robust City presence in the early review stages of proposed development projects in watershed basins. We are not getting that now.

Number nine, TMDLs and anti-degradation. The principle that existing reservoir water quality should not be allowed to decline is really fundamental to watershed protection and to the safety of this water system and the health of the 9 million users in New York City and Westchester County. This is the concept, anti-degradation, that

is described in the Clean Water Act, but so far the principle has had little impact in watershed planning and watershed decision-making.

The Clean Water Act's TMDL program is one mechanism for ensuring that the promise of anti-degradation of our irreplaceable water supply is achieved. And thus, New York City water users are entitled to the protection of an anti-degradation program for its reservoirs that includes among the necessary elements TMDLs—those are the pollution limits that were talked about before—TMDLs of sufficient stringency to prevent declines in reservoir water quality. Sounds simple to describe, it is complex to implement, but the will and the political determination have to be there.

And last but not least, controlling development sprawl and land use planning. Ultimately, for the long-term survival of the Catskill and Delaware water supply, comprehensive land use planning, avoiding sprawl development, and similar techniques must become the norm throughout the watershed. Unfortunately, we are very far from that reality today. Many communities lack effective zoning, or zoning that supports watershed protection goals.

So far there have been very few attempts, let alone successes, in channeling development into cities and towns where more development makes sense. And in some cases, the State continues to provide actual incentives for sprawl development in the watershed, whether it is through tax abatements, roadbuilding, or the like.

New York City water users deserve a much more effective state and local program that discourages sprawl development and encourages growth in existing towns and hamlets and that stems the threatened suburbanization of the Catskill and Delaware watershed. Once suburbanization happens, you cannot turn off the tap.

Turning all of this around, achieving these ten element—and, by the way, there are others—but achieving just these ten is a significant challenge. It is a challenge to our political leaders in Albany, it is a challenge to the folks who are running the City's DEP and the folks in City Hall, it is a challenge to the U.S. Environmental Protection Agency, the watershed communities, and it is a challenge to everyone in this room to devote the energies necessary to strengthen the fragile fabric that is protecting this unfiltered water supply.

Dave Bristol, who is a manager, as some of you baseball fans may know, who at one time managed the hapless Milwaukee Brewers, probably said it best regarding the challenge that all of us face in protecting the water supply. He was talking about his hapless team,

which had lost a whole series of games in a row, and he said: "There will be two buses leaving the hotel for the ballpark tomorrow. The 2:00 o'clock bus will be the one for those of you who need some extra work. The empty bus will leave at 5:00 o'clock."

Everyone in this room needs to be on the 2:00 o'clock bus if we are to safeguard this priceless watershed for future generations.

Thank you for your attention.

MS. WILLIAMS GELOBTER: Good afternoon and thank you all for coming. My name is Sharron Williams Gelobter and I am the Senior Symposium Editor of the *Environmental Law Journal.*

"The New York City Watershed in the 21st Century: Preserving a Vital Resource," that is the title of our Symposium, as you know, and I chose that title because, as Eric was saying before, having access to clean water should be a right, and I think it is a right that we in America take for granted, we in New York City take for granted.

Organizing a panel or a conference on water was pretty central for me and pretty important for me because, having grown up in the developing world—I am from Belize—the source, the quality, and the cost of your water was very important, it was central to your existence, as it is for much of the developing world. So it was interesting for me to coordinate a conference on this subject.

I have learned a lot, perhaps more than I wanted to learn, about the source and quality of the New York City water supply. I would like to take what I have learned and apply it a little bit more in my life and in my practice and to encourage other people to get involved with the watershed and to understand where our drinking water comes from, because I think that we do take it for granted and we do not really understand how complicated it is—the politics, the legislation, and all that kind of stuff that goes into it.

Planning this conference has been time-consuming, it has been complex, it has been interesting, but most of all it has been educational. I want to thank a couple of people for that.

First of all, my husband, Michael Gelobter, who is sitting up front, who is an environmental professor at Rutgers University.

I want to thank, second of all, Bob Alpern [phonetic] from the New York City DEP, who was sort of my mentor in the beginning and my professor of environmental law, since I had not taken environmental law. Thank you, Mr. Alpern.

And, mostly, I want to thank my two daughters, Troy [phonetic] and Reese [phonetic], who are sitting in the back, who put up with not having a mom for several nights while I planned this conference.

And then I want to thank Kevin Cummins, our Editor-in-Chief; and Jennifer Lowry, our Managing Editor; and then, last but not least, the staff. This has been an incredible experience for me because I approached the planning of this conference without a background in environmental law.

I want to again thank you all for coming.