Chairman Singleton and members of the Committee, I thank you for the opportunity to discuss the ongoing implementation of the Water Quality Accountability Act (WQAA) and linked issues of drinking water infrastructure. These issues also apply in many ways to wastewater and stormwater infrastructure, and are all fundamental to the functioning of our economy, protection of our environment, and support of our urbanized society. As others have mentioned, expanding the law to address wastewater and stormwater would benefit our society.

Please note that I am speaking in my personal capacity as a water management expert and am not representing Rutgers University or any other entity. My career in the water resources management field includes more than 38 years in the non-profit sector, state government and now Rutgers. During my state service, I supervised both water supply and wastewater management planning, among other programs. I serve as a Governor’s appointee and past chair of the New Jersey Clean Water Council, and am a Steering Committee member for the Jersey Water Works collaborative. In addition, I am pleased to note that Governor Murphy has nominated me to the Highlands Water Planning and Protection Council.

The WQAA is a major step forward toward cost-effective management of our drinking water utilities. Well-run systems have had no significant problem complying with the act, while others are clearly a work in progress, at best.

Even so, we should be clear that the WQAA goal is to bring our drinking water infrastructure to where it should have been anyway. In other words, the act should not have been needed, but responded to inadequate management practices. This limited goal is not sufficient in a time when we are rebuilding our urban areas, facing climate change impacts and trying to create a more equitable society. I will return to this point later.

The WQAA promotes cost-effective maintenance of utilities that, in all too many cases, did not adequately invest in maintenance and replacement. One result will be significant near-term increases in costs, especially for many of our smaller utilities. Most of these small systems are government-owned, often as municipal departments but sometimes as utility authorities. We should expect that some local governments will decide to exit the drinking water business, because the costs and management complexity are too great. They may seek to merge, sell or lease their systems.

I am agnostic when it comes to water utility ownership – public, private or investor-owned – as long as customers are being provided with quality service from well-maintained utilities using cost-effective asset management supported by fair and equitable rates. Top executives in investor-owned utilities tell
me that middle to large government-owned utilities should be able to achieve the same quality of results as investor-owned utilities. Whether they do so is a separate issue.\footnote{See also the NJ Spotlight op-ed piece on Monday by Dennis Doll, CEO of Middlesex Water Company.} The larger problem is with the small systems, as emphasized by my colleague Dr. Emanuel Teodoro, who spoke on September 10 of the correlation between small utility size and poor Safe Drinking Water Act compliance.

New Jersey is heading for a period of consolidation as small private companies and governments with small systems give up. Consolidation of publicly-owned utilities makes great sense, such as a county utility authority that manages multiple small systems. However, we should all recognize that our laws are biased toward the sale of small systems to investor-owned utilities. Mergers bring no money to municipalities, but selling the utility does. Which would you choose, as an elected official? One result is that the sale of and upgrades to purchased systems are subsidized by the other customers of these investor-owned utilities, a point rarely mentioned. Rates also go up for customers of the purchased system, but perhaps not as much as if they paid for all improvements themselves. That kind of rate comparison is rarely part of the discussion, by the way.

Further, the sale often benefits property taxpayers, even though nearly all value of water systems was created by its ratepayers. In many municipalities, property taxpayers and ratepayers are overlapping but very different populations. For example, schools and religious institutions pay utility costs but not property taxes. Rural landowners pay property taxes but not utility costs. As a result of utility sales under the current system, those who benefit are not always those who pay, and vice versa. There is no equity in this process.

The Legislature should evaluate why such an uneven playing field exists, and consider statutory changes that will place publicly and privately owned utilities on a competitive level for consolidation in a way that is fair to ratepayers.

One potential problem with the WQAA is that it lacks sufficient metrics for determining whether utilities have developed and are implementing good asset management programs. I was closely involved with drafting the recommendations to NJDEP endorsed by Jersey Water Works and the NJ Chapter of the American Water Works Association. Chris Sturm of New Jersey Future mentioned this on September 10. NJDEP is in the process of developing regulations for WQAA implementation. We may see metrics in those rules, but the act itself is relatively silent other than provisions for exercising valves and establishing a 150-year pipeline replacement schedule.

The 150-year replacement cycle, by the way, is not clear enough. If a utility has 50 percent of their pipelines currently in need of repair or replacement, replacing them on a 150-year schedule is entirely inadequate. More appropriate would be a requirement to bring the entire pipeline system up to a point where future rehabilitation and replacement is based on a time period appropriate to the types of pipeline materials used (not necessarily 150 years). Catch up first, then move into a routine cycle.

The critical question we face is whether the WQAA achieves any measurable changes in asset management, or becomes a paper exercise where systems do nothing different. The law requires that the highest priority projects be funded and implemented, but it provides no certainty that utilities won’t game the system simply by defining few capital projects as high priority. Recent efforts through Jersey Water Works to identify and track capital expenditures by municipal water departments encountered
major difficulties in accessing budgets and audits, and in determining from available information the extent to which capital project budgets were actually expended. The Department of Community Affairs testified on September 18 regarding their Financial Automation Submission Tracking ("FAST") System. This is a step in the right direction, but standardization in how budget and expenditure information is provided will be critical. New Jersey should be able to track annual information and trends in utility net worth, capital budgets, capital expenditures and future capital needs based on asset management plans. Being able to look back in time, for trend analysis, is also important.

The WQAA exempts the smallest systems, those with less than 500 service connections. These systems serve a very small percentage of New Jersey residents, and including these systems would increase NJDEP’s administrative burdens for NJDEP. Still, the law exempts the systems most likely to have problems achieving SDWA compliance and proper asset management, as discussed by Dr. Teodoro. New Jersey has a large number of very small public community water systems, nearly half of the total (260 of 547). Once the results of the current WQAA are clearer, perhaps in two years, the Legislature may want to consider extending the law to these smallest systems.

New Jersey needs to better address the issue of affordability. Water and sewer rates in New Jersey and nationally have been growing faster than the rate of inflation (the Consumer Price Index) since 1980. These costs now can be a major fraction of household budgets for low and moderate income households. Further increases are likely as New Jersey replaces much of its water infrastructure in the next 20 years. New Jersey needs to develop a consensus method for assessing household affordability, put laws in place that allow utility affordability programs, and determine whether a statewide approach is needed, similar to the Low Income Household Energy Assistance Program (LIHEAP).

Finally, let me return to an earlier point. New Jersey was developed mostly in a time of low energy prices, good prosperity and no awareness of climate change. Now we are among the oldest states, from a development perspective, and must rebuild in a new era. Getting our infrastructure in shape is useful, but not sufficient. We must rethink how we get, manage, use and reuse water resources, and that thinking must be within the context of New Jersey’s revitalization and redevelopment. The state planning process is more critical than ever, to make best use of limited resources for a better society that can address the major issues it faces.

Thank you again for this opportunity to speak before you. Please feel free to call upon me if you have any questions.

Summary of Recommendations (In Order Presented)

- Consider expansion of the WQAA approach to sewer and stormwater utility systems.
- Determine and implement methods for ensuring that consolidation of water systems is equally feasible through public to public, public to private and private to private mergers and acquisitions.
- Ensure that ratepayers are fairly treated during any mergers or acquisitions, so that the benefits accrue to ratepayers rather than others who did not financially support the utility.
- Revise the 150-year pipeline replacement cycle to emphasize the need to upgrade first, and then establish a replacement cycle based on pipeline materials and construction methods.
• Provide clarity and transparency in financial reporting, allowing trend and status analysis.
• After three to four years of WQAA implementation, consider expansion to the smallest systems.
• Develop and implement household affordability assessments and programs.
• Restart and refocus the State Development and Redevelopment Plan process to address long-term revitalization and redevelopment needs that recognize the fundamental need to revitalize New Jersey’s developed areas, including infrastructure, climate change, demographic, social equity, economic and environmental issues.