



Written Testimony of Mayor Joy Cooper
House Transportation and Infrastructure Committee
Subcommittee on Water Resources & Environment
September 26, 2017

Introduction

Good morning Chairman Graves, Ranking Member Napolitano, and members of the Committee. I thank you for this invitation to give mine and the Conference of Mayors' perspective on water and wastewater infrastructure needs in the United States.

My name is Joy Cooper and I have been the Mayor of Hallandale Beach, Florida since 2011. I also serve as a Trustee of the US Conference of Mayors and I co-chair the Mayors Water Council.

Let me start by commending this committee for holding this hearing on this important issue.

The United States Conference of Mayors has brought mayors together to craft recommendations to assist Congress as it develops a national infrastructure plan that addresses our water and wastewater infrastructure challenges along with energy, transportation, ports, and other infrastructure needs. The American Society of Civil Engineers estimates that there is a \$4.6 trillion shortfall in infrastructure investment in America, and failure to adequately address the needs will result in a reduction in the standard of living and global competitiveness of America.

I would like to present information on the water and overall infrastructure needs of Hallandale Beach to offer some perspective. Then, I would like to summarize some suggestions for how a recalibrated intergovernmental partnership including local-state-federal government and Congress can work together to rebuild an infrastructure that Americans need and deserve to ensure long-term economic vitality.

THE HALLANDALE BEACH STORY

Hallandale Beach is in Southeast Florida within Broward County and was incorporated 90 years ago. We are a midsize city of 4.4 square miles with a population of 38,000 that increases to over 50,000 during the winter months. Our annual city budget is \$120 million with a general fund of 70 million.

A full evaluation of our infrastructure needs was conducted during our 2014 budget process; and a "basis of design report" (BODR) was generated which identifies priority projects. The report included underground assets including water, wastewater and storm water, roadways,

landscape/hardscape, and sidewalks. The BODR's price tag is well over \$200 million for our small area city which is only 4.4 square miles.

I believe this puts in perspective the challenge many cities around the nation face. The true costs of repairing and replacing our aging infrastructure is tremendous, and it scales to size. For example, the challenges Fort Lauderdale faces, Broward County's largest city, are much more expensive.

It is obvious cities cannot address infrastructure capital investment needs combined with daily operating costs on their own. We need a robust plan with our partners on the national level to help us meet these challenges for our constituents.

More and higher charges and fees for local services are falling on our residents because of property tax limitations and dwindling shared revenues. These charges and service fees are increasing faster than our resident's household incomes, and are becoming unaffordable. The proposed FY17/18 City budget has increased various service fees from 10 to 51 percent to cover projected expenditures. In the case of storm water management alone the increase is 220 percent.

With a median income of \$24,000 in our city, and 15% of our residents living on \$15,000 a year the rising fees are difficult to afford, and there is concern in the water and sewer fees that those households that are unable to make payments will place a greater rate burden on those who can afford the service.

Another problem is that while we are investing substantial amounts on public water and sewer services and infrastructure we have a glaring need to invest in resilience measures to save lives, private and public property/infrastructure and, natural resources. As a coastal city, our resilience needs have been compounded with sea-level rise.

Recently, Hurricane Wilma-related flooding impacted numerous main roads and resulted in damages to many homes. Flood management requires us to pump our storm water down into groundwater aquifers, not out to the sea or other water body. The pumping system for two targeted areas with repetitive flood-related losses cost over \$25 million.

We are currently constructing phase two of this drainage project. This project could not have been possible without the help of the Federal Emergency Management Agency (FEMA) government both in financial assistance and technical consultation. This model of intergovernmental partnership works best. To complete the project and maintain it result in the before mention 220 percent increase.

Briefly, local governments in Florida (cities, counties, independent water/sewer authorities) have invested over \$88 billion in water and sewer infrastructure and services from 2000 to 2014. Local governments invested \$7.1 billion in water and sewer in 2014; and, that amounts to investing \$19.5 million every day. Sewer revenues (fees for service) increased 116 percent from 2000 to 2013; and, water revenues increased 88 percent over the same period.

Over the past five years the city has committed over \$12,000,000 for investment in our water supply and treatment system. In addition, we will be spending over \$30,000,000 in the next five years on improvements to the sanitary sewer system. On the storm water system, we plan on spending, in addition to the SW drainage project, approximately \$1,000,000 per year in upgrades to deal with sea level rise.

The United States Conference of Mayors (USCM)

The USCM has recently released *Leadership for America: Mayors' Agenda for the Future*, a framework for addressing the nation's local infrastructure, public safety, and workforce needs with the goal of building equitable communities with opportunities for all, ([see usmayors.org](http://usmayors.org)). The framework includes existing and new policies adopted by consensus of the nation's mayors. The *Mayor's Agenda* identifies some principles and key priorities and the recommendations in this testimony focus on those principles and priorities associated with local water and sewer (short, for sewer and wastewater) infrastructure.

Rather than describe the already well-known benefits of clean water (e.g., public health, environment, ecosystems, supporting the economy), we urge the Committee to recognize that 95 percent of investment in water and sewer infrastructure and services is local investment, and that the state and federal governments have added costly mandates. These mandates with no accountability and inadequate financial assistance have impacted a constantly growing portion of American households with unaffordable rising rates. We also urge the Committee to recognize that cities are the true environmental stewards in our communities as practitioners of clean water technology. With this long-term experience, cities have an educated understanding of key local priorities- and we want to share those priorities with the EPA in a more productive intergovernmental partnership through local integrated planning.

Our comments to the Committee include a discussion of the public water and sewer infrastructure needs and how they are estimated. This is followed by comments on how much local government is now spending on water and sewer infrastructure. The recommendations to the Committee are listed in a section on guiding principles, and a list of key local water/sewer and port priorities.

What are the Infrastructure Needs?

Capital needs are substantial, there is consensus on that point. But capital investments create systems that must be operated and maintained to deliver the public service. Any discussion on capital investment must be mindful of its relation to long-term, annually recurring O&M costs. These O&M costs are expenditures, and therefore they can be considered investments made by local government. Looking at one side of the investment (capital or O&M) does not adequately address the cost to society (households) for access water and sewer over the long term. O&M costs are generally 60 percent of annual all-in investments.

EPA surveys on investment needs in drinking water over a 20-year period is \$384 billion, and sewer/wastewater investment needs are \$271 billion. Joel Beauvais, former Acting Assistant Administrator for the Office of Water, suggested in 2016 that these are underestimates of the real need to modernize the nation's water infrastructure inventory. The combined need of \$655 billion is calculated by including only capital investments eligible for State Revolving Fund Loan assistance. Two things to point out: first, this financial assistance involves loans that are paid back by local governments with interest; second, the capacity of the SRF programs in America to help local government is limited to about 5 percent of annual capital investments. The program is helpful to some but clearly inadequate as a progressive force for increased investment. The

Congressional Budget Office (CBO) estimates that about \$50 billion in capital investments in water infrastructure is needed per year.

It is time to be critical of these traditional Government estimates because they do not represent a full picture of local needs.

EPA estimates needs only for capital investments for eligible SRF water and wastewater systems that are required to comply with current law. Traditional federal financial assistance does not normally include Operations and Maintenance (O&M) cost to provide water and sewer services. While this is existing policy, it is a major flaw in policy strategy to ignore all-in (capital and O&M costs) to estimate real needs.

Since the mid-1980s public water and sewer O&M costs have surpassed Capital investment expenditures, (approximately 60 percent on O&M, 40 percent on Capital). An analysis of 2013 Census data indicates the ratio of O&M to capital:

- \$2.31 O&M per \$1 Capital investment for water
- \$1.55 O&M per \$1 Capital investment for sewer

If past investments are indicative of future investments, and they are in this case, local governments spent \$115 billion on water and sewer infrastructure investments and service provision. From 2000 to 2014 local governments invested \$1.38 trillion: \$770 billion on water, and \$616 billion on sewer. Federal financial assistance to local government during this period has been about \$30 to \$35 billion in the form of State Revolving Fund loans, repayable with interest- they are not grants.

Local Investment Trends – A Countdown to Zero Growth

A review of local government investment in public water and sewer from 1956 to 2014 indicates a robust 7 percent year over year growth rate for water and sewer. Annual growth continued to rise until 2010, then flattened out. Combined water and sewer spending is trending down on a year over year and long-term basis. For example, the long-term average annual growth rate of 7.2 percent was down to 4 percent on average for ten years 2005 to 2014, (see Table). When the year over year or short-term annual growth rate approaches the inflation factors for Capital and O&M we will have begun to enter no-growth or declining investment.

Investment Annual Growth Rate	%
58 Year Average Annual Growth	7.2
30 Years 1985-2014	5.5
20 Years 1995-2014	4.7
10 Years 2005-2014	4.0
1 Year 2013-2014	2.2

The investment trend is problematic because the greatest drinking water and water quality challenges for cities lie ahead, and our past achievements are no guarantee of future success.

Clean water laws have produced cleaner water in America. The laws have trigger-forcing action provisions that are intended to renew and expand water quality and drinking water standards. These activities have produced safer water in America. The regulatory programs have focused on chronic stress to the environment and public health. The tools EPA uses to estimate risk often involves theoretical assessments of cancer risk over a lifetime of exposure to a substance or mix of substances.

Local governments are experiencing a series of acute natural and social shocks, and must rely on local resources to address them. The direction of investments should place local priorities first. Future investments must consider the following headwinds:

Population Growth and Infrastructure Capacity:

The Census projections suggest the U.S. population will reach 400 million by 2051. For perspective, the population growth of 80 million more than the current 320 million Americans today is equivalent to 2 times the population of California. California spent \$22.1 billion on water and sewer in 2014- 19% of national investment and 12% of the population.

Accommodating the capacity to service 400 million Americans or even 80 percent of them will require an enormous investment.

An Aging Physical Plant Requires Replacement and Expansion:

Local experience suggests that the experiment with modernizing water and sewer infrastructure began in the 1970s, starting with matching federal grants, was a good start to a job that never stops, even though the federal help does. There is no set calendar schedule for replacing or expanding physical plant. Local investment decisions to repair and replace infrastructure are influenced by many factors. One way to look at it is that it all needs to be replaced, eventually. And, it will cost a lot more to do it again than it cost the first time. So, if local government invested \$1.37 trillion in water and sewer from 2000 to 2014, that same amount will be required to replace it. The Capital portion will be about 35-40%; and O&M needs will make up the rest. Inflation for water and sewer capital and maintenance will continue to increase adding to the replacement cost.

Several Resilience Issues are in Urgent Need of Investment to Manage Acute Natural Shocks:

The USCM recommends that Congress recognize local government's need to address and manage threats from: Drought; Earthquake; Flooding; Wildfire; and Coastal Surge Hazards, which is mine and many others most prominent threat. Every community faces one or more of these challenges.

Affordability Burdens Have Already Reached the Middle-Class

Case studies conducted on over 30 central California cities demonstrates that the current cost per household for water, sewer and stormwater fees place a disparate financial burden on the lower income 20 percent of households. (Reference USCM Report) Some cities in the study found that high cost burdens were reaching into the middle-class income households.

Mack and Wrase, researchers at the University of Michigan applied economic geography tools to analyze water and sewer rate affordability for the nation. They conclude that, "...while water rates remain comparatively affordable for many U.S. households, this trend will not continue in the future. If water rates rise at projected amounts over the next five years, conservative projections estimate that the percentage of U.S. households who will find water bills unaffordable could triple from 11.9% to 35.6%. This is a concern due to the cascading economic impacts associated with widespread affordability issues." (Reference: Mack EA, Wrase S (2017) A Burgeoning Crisis? A Nationwide Assessment of the Geography of Water Affordability in the United States. PLoS ONE 12(1): e0169488. doi:10.1371/journal.pone.0169488)

Some Guiding Principles for Congressional Solutions

The most pressing need is for Congress to pass a major infrastructure package that addresses all local public infrastructure, and begins to help cities rebuild the \$4.6 trillion in aging infrastructure. We urge Congress to pass an infrastructure package that promotes an increased role for direct federal to local financial assistance, and paves the way for Public-Private-Partnerships to bring expertise and financing capacity to public water and sewer infrastructure. We urge Congress to include federal financial assistance in the form of matching grants to local government to make the investments necessary to maintain and grow the technical capacity to provide safe and adequate water and sewer services at affordable rates.

Prevent any efforts to cap or limit tax-exempt municipal bonds: Mayors depend on tax-exempt municipal bonds to finance critical infrastructure, such as water and sewer facilities, schools, hospitals, roads, mass transit systems, and public power projects. Proposals to cap, limit, or eliminate the deduction of interest earnings from tax-exempt bonds would significantly increase the cost on state and local government for borrowing on these critical projects.

Allocate resources directly to cities and counties for priority water and sewer infrastructure projects that will support low- and moderate-income neighborhoods, and provide the resilient infrastructure improvements residents and businesses require.

Support the use of public-private partnerships to bring modern efficiencies to plant operations and save ratepayers money. Private investment in public water and sewer systems can be an innovative way to rebuild some of our nation's water and sewer systems; and, Congress can modify the tax code to allow public debt and private investment to coexist in projects involving a public service nature. If Partnerships are not appropriate in some regions for some types of infrastructure, we urge Congress to recognize that water and sewer Partnerships do work well; and they have rate controls built into their contractual arrangement as a service provider.

Amend the Internal Revenue Code of 1986 to remove the state volume caps for Private Activity Bonds (PABs) used to finance public purpose water and sewerage facilities.

Direct at least \$5 billion in additional funding to low- or no-interest grants to State Revolving Fund loans for local priorities. Direct and flexible funding will allow cities to

leverage more private sector partners and address the most critical infrastructure needs of our communities.

Codify Integrated Planning and Affordability legislation and, in particular, Mr. Gibbs' bill HR 465, the Water Quality Improvement Act of 2017. Although not an infrastructure bill, it provides the needed changes to the local-federal intergovernmental dynamic that is necessary to balance national goals and local priorities.

HR 465 provides the flexibility that would allow local governments to prioritize their wastewater and stormwater investments in an affordable manner based on that community's public health, environmental needs, and economic capability.

Build infrastructure that helps increase resiliency. Many communities are facing common threats: droughts, floods, coastal storm surges, earthquakes, and wildfires. We need to direct investments to address and manage these acute threats that endanger life, property and natural resources.

Increase the Army Corps of Engineers funding to upgrade and modernize the nation's inland waterway system and spend the full amount of the annual Harbor Maintenance Trust Fund on port modernization and maintenance activities. The Trust Fund now has a \$9 billion surplus. These funds should be taken off budget to provide significant resources to port infrastructure.

I again want to commend the committee for addressing this important and vital issue and for giving me this opportunity to share the positions of the nation's Mayors on rebuilding our nation's infrastructure.