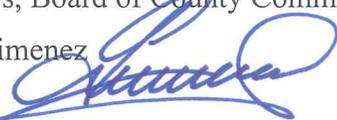


# Memorandum



**Date:** November 17, 2015

**To:** Honorable Chairman Jean Monestime  
and Members, Board of County Commissioners

**From:** Carlos A. Gimenez  
Mayor 

**Subject:** Water Infrastructure Improvements to Non-residential Zoned Properties  
Water and Sewer Department's Service Area – Directive No. 150112

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In accordance with Resolution No. R-232-15 adopted by the Board of County Commissioners (Board) on March 3, 2015, the Miami-Dade Water and Sewer Department (WASD) developed a plan (Plan) to enhance water service to the major commercial corridors where existing water supply lines cannot meet existing and/or anticipated water supply and fire flow needs. The Plan includes proposed funding mechanisms which would be incorporated into WASD's Multi-Year Capital Plan.

Per WASD's Rules and Regulations, a 12-inch diameter pipe is the standard size used for water main installations in commercial, industrial, business and high density residential developments to ensure proper fire flow protection. As part of the Plan, a review of the water distribution system within WASD's service area was performed, and all of the non-residential parcels currently served by a water main less than 12-inches in diameter were identified, as well as the connectivity restrictions. The improvements required to upgrade existing water services in non-residential areas throughout the County will require the installation of 1.6 million linear feet of 12-inch pipe. These improvements would provide water and fire flow service to over 15,000 non-residential properties in the County at a total estimated cost of \$580 million. These improvements may be implemented throughout a period of ten (10) years, which assumes an installation rate of about 30 miles of pipe per year. This cost estimate has a large contingency factor of 40 percent, which reflects the fact that detailed design may require construction techniques that are more expensive than average costs due to site specific conditions that may come to light during the design process.

Inadequately sized water mains are the result of systems that were installed many years ago by other utilities that were acquired by WASD, older water mains that pre-date the Department's current standards, or areas that transitioned from residential to commercial use. If a water main has to be replaced due to the deteriorated condition of the pipe or work in the roadway right-of-way, WASD pays for the costs of installing the new water main to conform to current Department standards. However, WASD's Rules and Regulations require developers to upgrade water mains as a condition of redeveloping property. The installations are completed by a developer's contractor, and, following inspections conducted by the Department, the facilities are conveyed to the County. On smaller redevelopment projects, the cost of bringing the water distribution system into compliance with today's water delivery and fire flow standards can be large by comparison with the total redevelopment project cost, and, therefore, can become an impediment to productive redevelopment that provides economic opportunity.

Adopting a policy of Department-financed water main upgrades requires a considerable commitment to funding in addition to the substantial requirements of the on-going consent

decree, the ocean outfall retrofits, the water facilities, and other operational improvements necessary to meet regulatory mandates and economic growth.

The Plan identifies several different funding mechanisms by which water main upgrades could be financed, including customer/developer funding, General Obligation Bond funding, a rate surcharge on commercial customers, renewal and replacement funding, and the use of revenue bonds. The Board has already directed use of the remaining available General Obligation Bonds to extend the sewer system to commercial areas not having sewers. The FY 2015-16 Proposed Budget includes a six (6) percent water and wastewater increase consistent with the plan approved by the Board to address consent decree requirements. Using renewal and replacement funding (pay-as-you-go) to address the upgrade of water mains would require an initial water and wastewater rate increase of 18 percent in FY 2015-16, impacting both residential and wholesale customers. The 18 percent increase would generate \$58 million per year over a ten-year implementation period. An alternative would be to combine renewal and replacement funding with the issuance of additional revenue bonds for the proposed water main upgrades which would require an eight (8) percent rate increase for FY 2015-16, followed by annual increases currently expected to be in the range of six (6) percent to eight (8) percent over the next ten (10) years to meet WASD's capital (including the water main upgrades) and operational needs. This combined approach will have the most moderate impact on WASD's customers while still enabling the Department to achieve the goals of the resolution. The actual rates required will fluctuate with operational costs, interest rates, and construction costs in the future, and will be the result of a complete analysis during each annual budget cycle.

The implementation strategy to upgrade the water mains in commercial corridors should include: 1) all of the commercial areas slated for sewer extensions to minimize costs and local roadway disruptions; 2) the ability to initiate upgrades in response to private redevelopment proposals and public roadway improvements so that redevelopment is not impeded by a fixed schedule for the water main upgrades; and 3) a systematic program for designing and installing upgrades over the recommended ten-year implementation period for all work not completed under 1) and 2).

The Plan provides a breakdown of the improvements by Commission Districts, which are presented in Tables 3-1 to 3-13 (total length of pipe); Table 3-14 (the acreage impact, 24,800 total acres), Table 5-1 (capital expenditures per year); and Table 6-1 (summary of total estimated project cost, linear feet, and unit cost per linear feet).

Additionally, the Department is working on legislation to create a program that would permit a partial reimbursement to private developers who replace and later donate to the County mains that have already been identified as substandard. By creating such a program, areas where development is already taking place can be improved quickly and the Department will have additional flexibility to use the funding collected for additional advancements of the entire system.

In addition, WASD will include the commercial water main upgrade project proposed by this Plan in its Multi-Year Capital Plan, along with any rate adjustment needed to support the program.

Honorable Chairman Jean Monestime  
and Members, Board of County Commissioners  
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Per Ordinance No. 14-65, this memorandum will be placed on the next available Board of County Commissioners meeting agenda.

c: Abigail Price-Williams, County Attorney  
Jack Osterholt, Deputy Mayor, Office of the Mayor  
Lester Sola, Director, Water and Sewer Department  
Jennifer Moon, Director, Office of Management and Budget  
Charles Anderson, Commission Auditor  
Eugene Love, Agenda Coordinator