

Additional Background Information

Water and Wastewater

The City of Fort Lauderdale supplies water and sewer services on a regional basis to over 250,000 residents of central Broward County. The areas serviced by the City's treatment facilities and the distribution and collection system include Fort Lauderdale, Port Everglades, Sea Ranch Lakes, Lauderdale-by-the-Sea, Oakland Park, Wilton Manors, Davie, Tamarac and portions of unincorporated Broward County.

The series 2008 Water & Sewer Revenue Bonds Feasibility Report recommended the City perform and implement a rate study for the following reasons:

- Financial Stability
- Water Conservation & Stewardship
- Fund Operation & Capital Improvements

The firm of Burton and Associates was awarded the project. A complete water and wastewater rate study was conducted to review and make recommendations on the water and wastewater rate structure. The firm completed the Final Draft Report May 13, 2009. The report was presented to the Commission at the May 19th conference meeting, at which time City Commission directed staff to:

- Return with the rate changes in July
- Present an Environmental Review of the proposed rate structure changes

The Final Draft Report identifies a need for a rate structure adjustment that will provide additional revenue in FY 2009 -2010 and recommends a 5% rate increase in FY 2010-2011. The FY 2009-2010 rate structure changes are not just across-the-board rate increases. It is a restructuring of fixed fees and commodity charges. The table on Page 3 of this report reflects the impact of the FY 2009-2010 increase to a residential customer using 7,000 gallons of water monthly.

In addition, there is some new terminology being introduced, in the proposed ordinance, as a result of the Final Draft Report:

- The word "Block" was added. It is being used to identify the range of gallons used by a customer. The charts and the written explanations use the same terminology for ease in reading through the calculations.
- The word "commodity" is present in the current version of the ordinance. To be consistent it has been added to some of the charts where it was absent previously. The word is simply defined as water/wastewater bought and sold.
- The word "multifamily" has an expanded use in the revised ordinance. It is replacing the words "duplex" and "triplex". The word is defined as more than one dwelling unit. For example a duplex is multifamily residence consisting of two dwelling units and a triplex is a multifamily residence consisting of three dwelling units.
- Fixed charges are the charges applied to active customers to recover a portion of the costs the City incurs to maintain the ability to serve the property.
- Customers that turn their meters on and off will still be charged a minimal monthly fee to pay for the water and sewer capacity reserved for their property. This is a new charge and

it will take effect on or after August 1, 2009. There are exemptions to this charge, for example a vacant property with no water meter would be exempt.

- Service availability reconnection charge is also a new charge. If a customer meets the requirements for the exemption listed in the ordinance then they would not pay the service availability charges but, when they chose to activate the account they would pay the service availability reconnection charge.

Stormwater

The revenues collected for the City’s Stormwater Management Program are used for operating expenses and minor capital improvements directly related to the management of stormwater, including improvements designed to improve the water quality in the City’s waterways.

There continues to be a demand for additional stormwater projects. A Stormwater Master Plan is being developed. The first draft of the initial Stormwater Master Plan will be presented to the City Commission this fall or winter. Since reserves continue to be spent, a 5% rate increase has been recommended for approval. The City participated in a Florida Stormwater Association (FSA) survey in 2007, which contained 91 responses from cities and counties in Florida. The 91 respondents were listed from the lowest rate to highest rate per Equivalent Residential Unit (ERU). Number 1 on the list had the lowest rate and number 91 had the highest rate. The City of Fort Lauderdale was listed as number 20. In an effort to provide current information, City staff has surveyed the surrounding Utilities. Of the 23 utilities staff has surveyed, the City received 13 responses. The City is currently the fourth lowest of the 13 respondents.

The following chart shows our current stormwater rates, proposed rates, and the increase the customer will experience.

CATEGORY	FY		INCREASE	UNIT
	2008/2009	FY 2009/2010		
Category I	\$3.20	\$3.36	\$0.16	Per living unit
Category II	\$32.38	\$34.00	\$1.62	Per Acre
Category III	\$10.27	\$10.78	\$0.51	Per Acre

- Category I - Residential property with 3 or less living units.
- Category II - Commercial and residential property with 4 or more living units
- Category III - Low runoff property such as parks, vacant lots, etc.

Attachments

1. FY 2008 - FY 2018 Rate Summary Sheets
2. Environmental Consultant Letter
3. Financial Consultant Letter

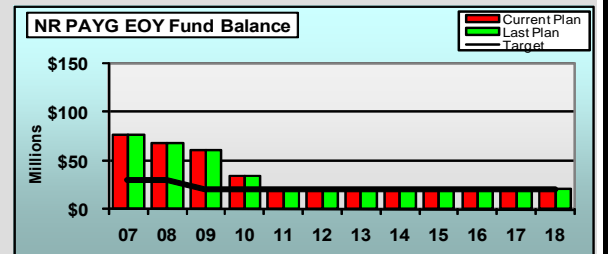
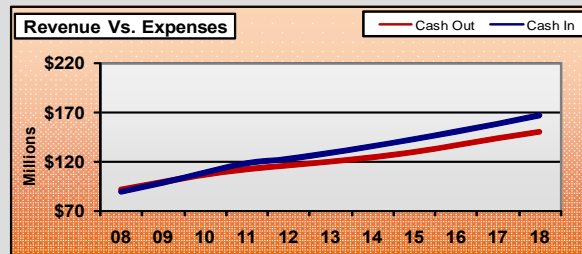
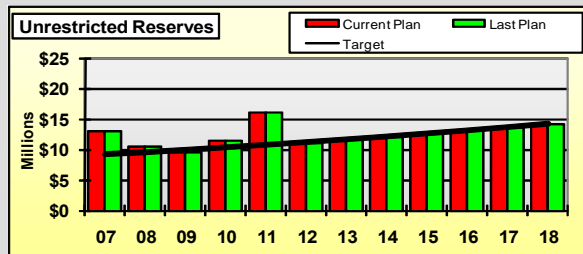
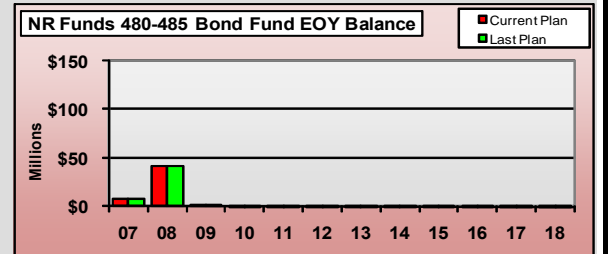
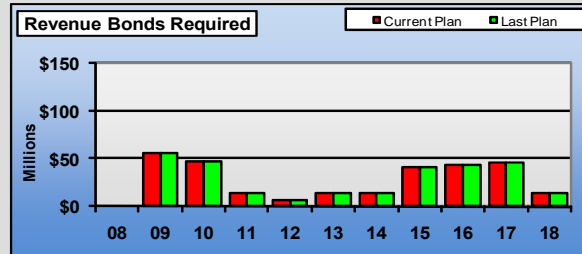
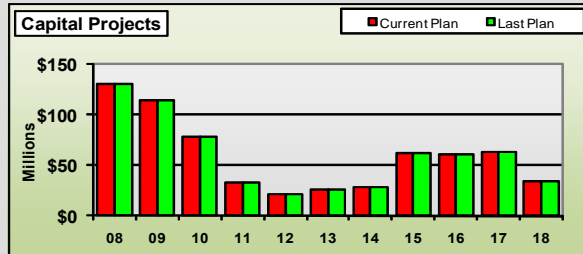
CITY OF FORT LAUDERDALE, FLORIDA

Water & Sewer System Financial Management Program Summary

FAMS-XL © Control Panel - Assuming 8/1/09 Implementation

FINANCIAL ANALYSIS AND MANAGEMENT SYSTEM (FAMS) SUMMARY

CITY OF FORT LAUDERDALE, FLORIDA												Check	\$	-
		FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	Cumulative Change	
Override ▶		0.00%	14.00%	0.00%	11.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	FY 2013	FY 2018
Water Rev. Increases		0.00%	14.00%	0.00%	11.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	46.5%	87.0%
Last Plan		0.00%	14.00%	0.00%	11.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	46.5%	87.0%
Override ▶		0.00%	14.00%	0.00%	11.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%		
Sewer Rev. Increases		0.00%	14.00%	0.00%	11.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	46.5%	87.0%
Last Plan		0.00%	14.00%	0.00%	11.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	46.5%	87.0%
Combined Rev. Plan		0.00%	14.00%	0.00%	11.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	46.5%	87.0%
Last Plan		0.00%	14.00%	0.00%	11.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	46.5%	87.0%
Rate Covenant	1.25	2.12	1.46	1.56	1.70	1.76	1.83	1.88	1.90	1.85	1.82	1.83	O&M FY08	96%
SRF Coverage	1.15	5.10	2.85	3.43	4.31	4.71	5.32	5.90	6.31	6.54	6.78	7.26	O&M FY09→	96%
Last Plan		2.12	1.46	1.56	1.70	1.76	1.83	1.88	1.90	1.85	1.82	1.83	Elasticity	0.20
CIP Execution % ▶		80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	Coverage	NO
Customer	Water	\$15.82	18.94	18.94	21.02	22.07	23.17	24.33	25.55	26.83	28.17	29.58	CAP RES.	\$ 20
Impacts	Sewer	\$28.70	34.35	34.35	38.13	40.04	42.04	44.14	46.35	48.67	51.10	53.66	CIP TXFR	\$ 3.0
Average Bill		\$44.52	53.29	53.29	59.15	62.11	65.22	68.48	71.90	75.50	79.27	83.23	Reserve Target	
Last Plan		\$44.52	53.29	53.29	59.15	62.11	65.22	68.48	71.90	75.50	79.27	83.23	2.00	Mos. O&M



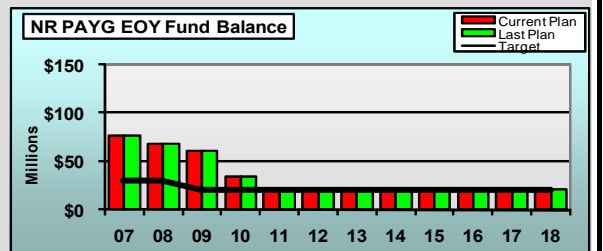
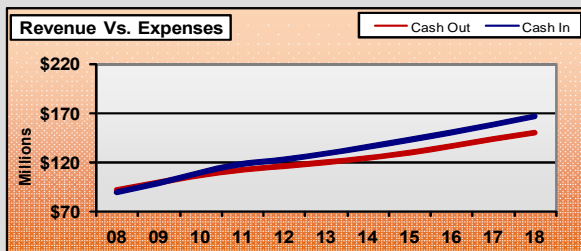
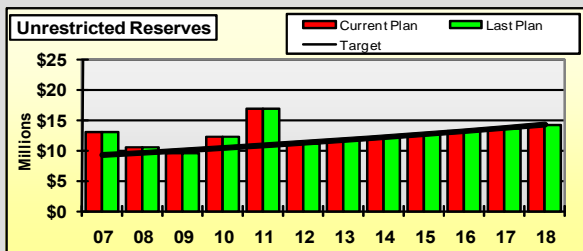
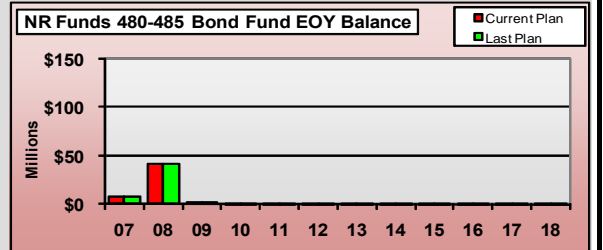
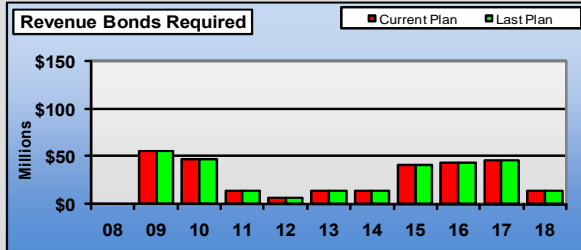
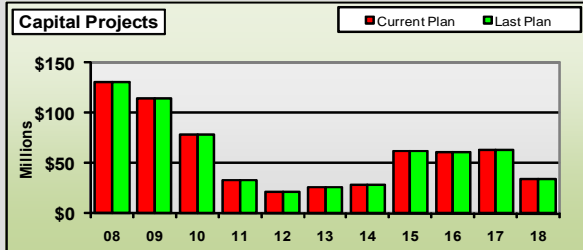
CITY OF FORT LAUDERDALE, FLORIDA

Water & Sewer System Financial Management Program Summary

FAMS-XL © Control Panel - Assuming 8/1/09 Implementation

FINANCIAL ANALYSIS AND MANAGEMENT SYSTEM (FAMS) SUMMARY

CITY OF FORT LAUDERDALE, FLORIDA												Check	\$	-
		FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	Cumulative Change	
Override ▶		0.00%	15.00%	0.00%	10.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	FY 2013	FY 2018
Water Rev. Increases		0.00%	15.00%	0.00%	10.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	46.4%	86.9%
Last Plan		0.00%	15.00%	0.00%	10.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	46.4%	86.9%
Override ▶		0.00%	15.00%	0.00%	10.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%		
Sewer Rev. Increases		0.00%	15.00%	0.00%	10.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	46.4%	86.9%
Last Plan		0.00%	15.00%	0.00%	10.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	46.4%	86.9%
Combined Rev. Plan		0.00%	15.00%	0.00%	10.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	46.4%	86.9%
Last Plan		0.00%	15.00%	0.00%	10.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	46.4%	86.9%
Rate Covenant	1.25	2.12	1.46	1.59	1.70	1.76	1.83	1.89	1.90	1.86	1.82	1.83	O&M FY08	96%
SRF Coverage	1.15	5.10	2.86	3.58	4.30	4.71	5.32	5.90	6.31	6.53	6.78	7.25	O&M FY09→	96%
Last Plan		2.12	1.46	1.59	1.70	1.76	1.83	1.89	1.90	1.86	1.82	1.83	Elasticity	0.20
CIP Execution % ▶		80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	Coverage	NO
Customer	Water	\$15.82	19.10	19.10	21.01	22.06	23.17	24.33	25.54	26.82	28.16	29.57	CAP RES.	\$ 20
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Average Bill		\$44.52	53.76	53.76	59.13	62.09	65.19	68.45	71.88	75.47	79.24	83.21	Reserve Target	
Last Plan		\$44.52	53.76	53.76	59.13	62.09	65.19	68.45	71.88	75.47	79.24	83.21	2.00	Mos. O&M



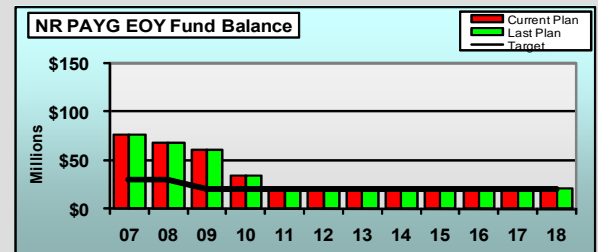
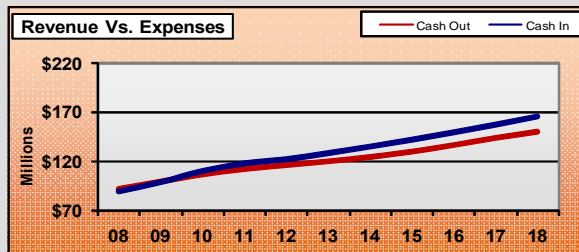
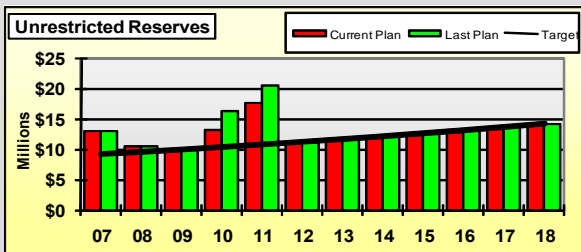
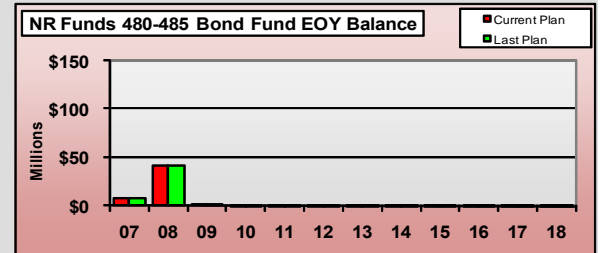
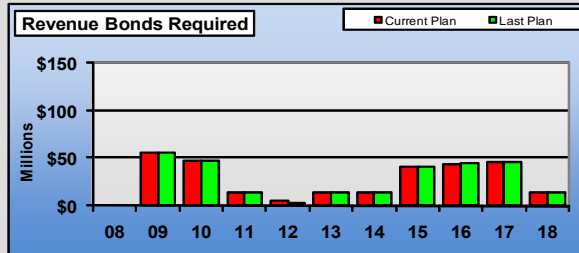
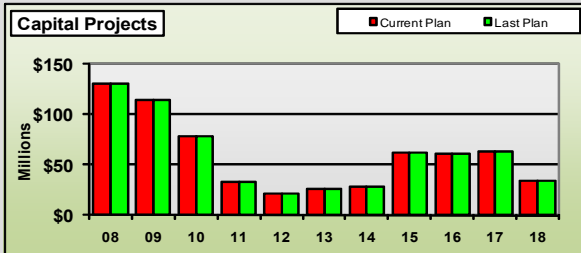
CITY OF FORT LAUDERDALE, FLORIDA

Water & Sewer System Financial Management Program Summary

FAMS-XL © Control Panel - Assuming 8/1/09 Implementation & Alternative Rate Recommendation

FINANCIAL ANALYSIS AND MANAGEMENT SYSTEM (FAMS) SUMMARY

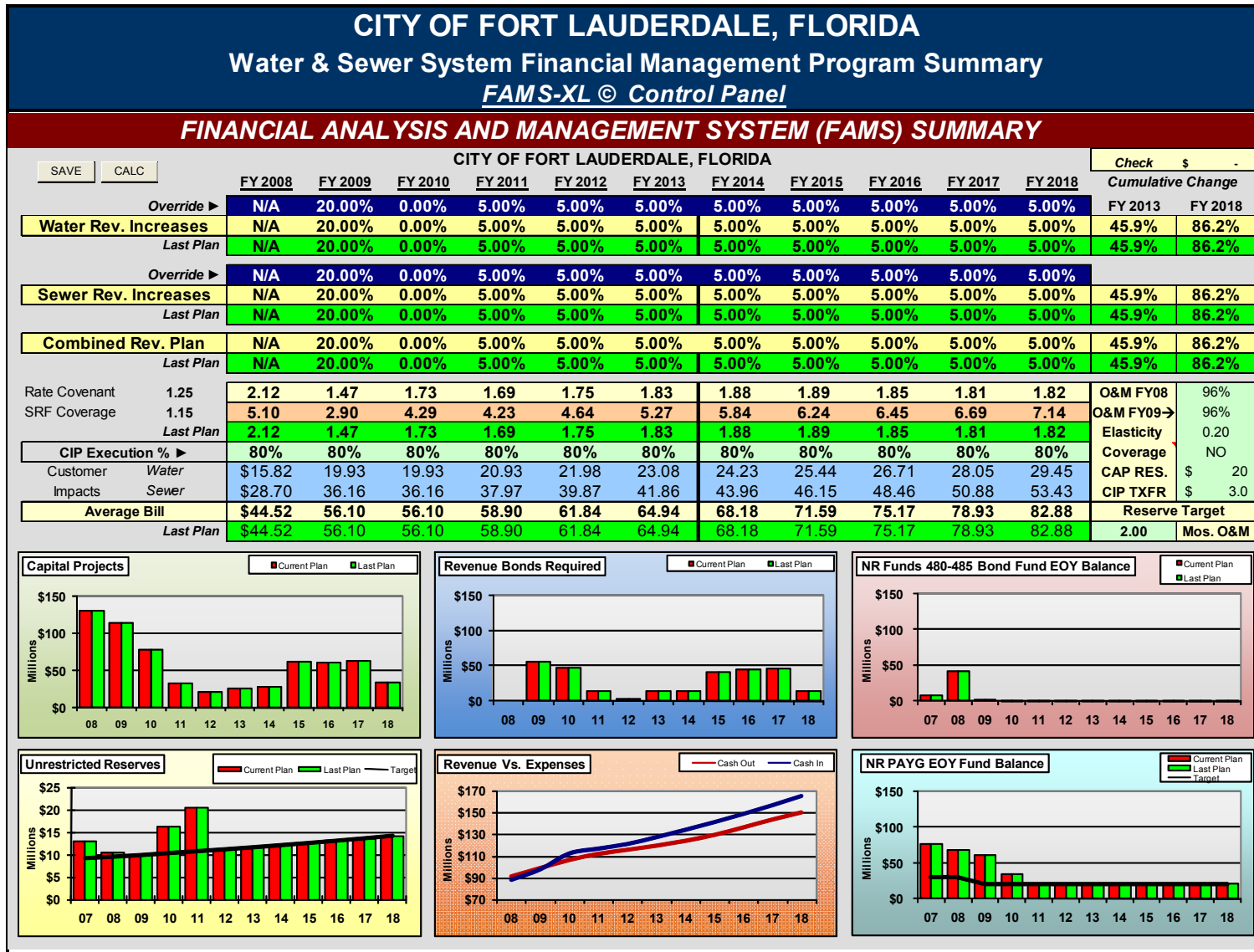
CITY OF FORT LAUDERDALE, FLORIDA												Check	\$	-
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Override ▶		0.00%	16.00%	0.00%	9.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	FY 2013	FY 2018
Water Rev. Increases		0.00%	16.00%	0.00%	9.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	46.4%	86.8%
Last Plan		0.00%	20.00%	0.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	45.9%	86.2%
Override ▶		0.00%	16.00%	0.00%	9.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	46.4%	86.8%
Sewer Rev. Increases		0.00%	16.00%	0.00%	9.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	46.4%	86.8%
Last Plan		0.00%	20.00%	0.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	45.9%	86.2%
Combined Rev. Plan		0.00%	16.00%	0.00%	9.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	46.4%	86.8%
Last Plan		0.00%	20.00%	0.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	45.9%	86.2%
Rate Covenant	1.25	2.12	1.47	1.62	1.70	1.76	1.83	1.89	1.90	1.86	1.82	1.83	O&M FY08	96%
SRF Coverage	1.15	5.10	2.87	3.72	4.29	4.70	5.31	5.90	6.31	6.53	6.77	7.24	O&M FY09→	96%
Last Plan		2.12	1.47	1.73	1.69	1.75	1.83	1.88	1.89	1.85	1.81	1.82	Elasticity	0.20
CIP Execution % ▶		80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	Coverage	NO
Customer	Water	\$15.82	19.27	19.27	21.00	22.05	23.16	24.31	25.53	26.81	28.15	29.55	CAP RES.	\$ 20
Impacts	Sewer	\$28.70	34.96	34.96	38.10	40.01	42.01	44.11	46.31	48.63	51.06	53.61	CIP TXFR	\$ 3.0
Average Bill		\$44.52	54.23	54.23	59.11	62.06	65.16	68.42	71.84	75.44	79.21	83.17	Reserve Target	
Last Plan		\$44.52	56.10	56.10	58.90	61.84	64.94	68.18	71.59	75.17	78.93	82.88	2.00	Mos. O&M



Source: Burton & Associates

5/27/2009

Schedule A11 – FAMS-XL© Control Panel





June 15, 2009

Mr. Albert Carbon
Public Works Director
City of Fort Lauderdale
949 NW 38 Street
Fort Lauderdale, Florida 33309

Re: Water & Wastewater Rate Study–Environmental Element

Dear Mr. Carbon:

Milian, Swain & Associates, Inc., is pleased to respond to your request that we review the Water and Wastewater Rate Study Draft Report of May 2009 prepared by Burton & Associates, and to express an opinion as whether the rates appropriately include an environmental element.

In order to express an opinion, we reviewed the above stated report, in addition to draft Ordinance 09-13(revised). Attached is our report detailing the extent of our review and analysis, as well as the basis of our conclusion.

Based on our review, it is our expressed opinion that the rates recommended by Burton & Associates encompasses a philosophy of water conservation in keeping with industry standards as well as those water use restrictions and conservation efforts promulgated by the South Florida Water Management District.

Please let me know if you require any additional information or clarification.

Sincerely,
Milian, Swain & Associates, Inc.

Deborah D. Swain
Vice President

Firm Introduction and Qualifications

Milian, Swain & Associates, Inc. (MSA) has a long history of providing Civil and Environmental Engineering, Financial and Management Consulting Services to private, public, and municipal clients. The company is a multiple disciplined, full-service consultant firm with expertise and experience in public and private utilities cost of service studies and rate design, utility financial management, budgets, regulatory support, utility operations and management, economic feasibility studies, cost evaluation of utility systems, infrastructure project management, design, permitting, construction administration; master planning and analysis, general engineering studies, GIS systems; hydro-geology, water/wastewater modeling; regulatory and permitting compliance and many other utility related engineering services and studies.

MSA's principals are involved in many activities because of their dedication to, the environment, the community, and the utility industry. Mr. Milian is President and founder of Citizens for a Better South Florida, an organization that promotes the safeguarding of South Florida's natural resources through environmental education. He previously served on the Governing board of the South Florida Water Management District, on the State of Florida Environmental Land Management Study Committee (ELMS III), the Florida Forever Advisory Council, the Advisory Committee of the Miami-Dade County's National Parks Trust, and chaired the Stormwater Subcommittee for the Miami River Commission

Deborah Swain, Vice President, who heads up the firm's finance, accounting, and management team, has over 30 years of experience in utility management, accounting, finance, rate regulation, and rate design. She has been accepted as an expert witness, and has provided testimony before several agencies in the State of Florida. Ms. Swain has served as Director and Treasurer of Citizens for a Better South Florida for over ten years. She has also served as Board member of the Miami-Dade County Shoreline Review Committee, and on the boards of several other professional and community organizations.

Rate Review Assignment

MSA was requested by the City of Fort Lauderdale (City) to review the rates and rate structure developed by Burton & Associates as described in the Utility Rate Study Final Draft Report (Report) dated May 13, 2009. Specifically MSA was asked to express an opinion as to whether the rates recommended by Burton & Associates represent a philosophy of water conservation and compatible with environmentally friendly initiative.

General Conservation Rate Philosophy

A rate structure that includes a volume based component generally promotes responsible water use because the more the customer uses, the higher the total cost. It has been shown that the higher the cost of water, the less water a customer uses.⁽¹⁾ Of course utilities cannot increase cost indiscriminately to reduce water use. A method of accomplishing this without causing the utility

to generate excessive revenues is to reduce the rates for lower volumes adequately to allow increases at higher volumes. This results in an “inclining block” rate structure.

Despite this strong incentive to impose an inclining block rate structure, utilities should avoid shifting too much of the total cost to the highest levels. By reducing the fixed minimum or base rate and the lower volume consumption, the revenues may become unstable. Certain expenditures by the utility must be made regardless of the volume of water produced and sold. The utility is faced with a balancing act—balancing the need to generate a steady revenue stream to cover fixed costs with the need to encourage and promote water conservation.

Review of Current Rates

Currently, the City’s commercial customers are billed a single uniform rate per thousand gallons while single-family and multi-family residential consumption billings are based on three (3) tiered-block ranges as follows:

Single-family Residences:
Block 1 0-3000 gallons
Block 2 4,000–20,000 gallons
Block 3 > 20,000 gallons

Multi-family Residences:
Block 1 0-1000 gallons
Block 2 2,000–8,000 gallons
Block 3 > 8,000 gallons

It is typical practice to use a single or uniform rate for non-residential customers while employing a tiered structure for residential customers. However, the upper limit of the City’s current Block 2 range is 13,000 gallons higher than the monthly usage of 7,000 gallons by the average residential customer. Based on the historical usage reported in Table E.4 Customer Impact Analysis (Usage up to 30,000 gallons per month) of the Report, approximately 93% of the City’s single-family residential customers’ consumption fall within Blocks 1 (32%) and 2 (61%). The wide span between the lower and upper range of Block 2, does not provide any incentive for water conservation by the majority of the City’s residential customers.

Review of Recommended Rates

In a recent study⁽¹⁾, findings indicate pricing of water is one way to motivate customers to conserve and that without reducing revenues, utilities can lower water use by using appropriately designed inclining block rates. The five-tiered block ranges as recommended in the Report for residential customers are as follows:

Single-family Residences:
Block 1 0 - 3,000 gallons
Block 2 4,000 - 8,000 gallons

Block 3	9,000	- 12,000 gallons
Block 4	13,000	- 20,000 gallons
Block 5		> 20,000 gallons

Multi-family Residences:

Block 1	0	- 1,000 gallons
Block 2	2,000	- 3,000 gallons
Block 3	4,000	- 5,000 gallons
Block 4	6,000	- 8,000 gallons
Block 5		> 8,000 gallons

The upper limit of the recommended Block 1 has not changed and remains sensitive to the financial hardship increased pricing may have on low income customers. Block 2 is more reflective of the average residential customer usage while Blocks 3, 4 and 5 have been designed to induce changes in water use by targeting above average residential usage through higher rates as a means of encouraging water conservation and is in line with the District's findings.

Drought Surcharge

It is apparent that the Phase II restrictions imposed by the SFWMD are likely to become permanent. If they do become permanent, there is no continued purpose to impose a surcharge unless a more severe restriction is imposed. This is consistent with Burton & Associates recommendation.

Conclusion

Based on our review, it is our expressed opinion that the rates recommended by Burton & Associates encompasses a philosophy of water conservation in keeping with industry standards as well as those water use restrictions and conservation efforts promulgated by the South Florida Water Management District.

(1) 'Florida Water Rates Evaluation of Single-Family Homes', John B. Whitcomb, PhD, July 13, 2005, funded in part by the South Florida Water Management District.



Fidelity Financial Services, L.C.

MEMORANDUM

TO: Mr. Albert Carbon
FROM: Frank Hall, Jr. *fh*
DATE: July 2, 2009
SUB: Rate Structure / Rating

The City of Ft. Lauderdale proposed utility rate structure will be viewed favorably by the rating agencies, assuming that there are no significant operating expenses beyond the amount previously projected. Additionally, this structure should enhance the likelihood that the City will retain its category AA rating. However, it must be noted that the rating agencies will consider other items than just the rate structure revision in determining rather or not the City maintains (at-least) its category AA rating.

If you have any questions do not hesitate to contact me.

Thanks,