ORDINANCE NO. 10-23

AN ORDINANCE OF THE CITY OF KEY WEST, FLORIDA, AMENDING CHAPTER 74 OF THE CODE OF ORDINANCES ENTITLED "UTILITIES' BY AMENDING SECTION 74-246 TO ADJUST THE SEWER SERVICE MONTHLY BASE CHARGE UNIT (BCU); PROVIDING FOR SEVERABILITY; PROVIDING FOR REPEAL OF INCONSISTENT PROVISIONS; PROVIDING FOR AN EFFECTIVE DATE

WHEREAS, the City Commission finds that an adjustment of the sewer service monthly base charge unit would promote the health, safety and welfare of the citizens of Key West.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY OF KEY WEST, FLORIDA:

Section 1: That Section 74-246 of the Code of Ordinances is hereby amended as follows*:

74-246. Annual sewer rates, charges and components.

(a) The base charge component (BCU) of the sewer service user charge is determined to be $23.23. The BCU may be adjusted each October 1, by Resolution of the city commission by up to 100

*(Coding: Added language is underlined; deleted language is ~~struck through~~.)

percent of the percentage increase in the CPI-(U), U.S. City Averages (as of June). The city commission shall enact an ordinance amendment to this section in order to increase the BCU in excess of the CPI.

* * * *

e) The assumed percentage of water being contributed to the sewer system, as referred to in Ordinance No. 89-33, subsection (b)(1), continues to be 80 percent. This figure times the average monthly residential water consumption, the product then divided by the average number of residential dwelling units, yields an average residential monthly wastewater production (rounded to the nearest hundred gallons) or monthly base charge unit (BCU) of ~~3,700~~ 3,600.

* * * *

Section 2: If any section, provision, clause, phrase, or application of this Ordinance is held invalid or unconstitutional for any reason by any court of competent jurisdiction, the remaining provisions of this Ordinance shall be deemed severable therefrom and shall be construed as reasonable and necessary to achieve the lawful purposes of this Ordinance.

Section 3: All Ordinances or parts of Ordinances of said City in conflict with the provisions of this Ordinance are hereby superseded to the extent of such conflict.

Section 4: This Ordinance shall go into effect immediately upon its passage and adoption and authentication by the signature of the presiding officer and the Clerk of the Commission.

Read and passed on first reading at a regular meeting held this 7th day of September, 2010.

Read and passed on final reading at a regular meeting held this 5th day of October, 2010.

Authenticated by the presiding officer and Clerk of the Commission on 6th day of October, 2010.

Filed with the Clerk October 6, 2010.

Craig Cates
CRAIG CATES, MAYOR

ATTEST:

Cheryl Smith
CHERYL SMITH, CITY CLERK

THE CITY OF KEY WEST
Post Office Box 1409 Key West, FL 33041-1409 (305) 809-3700

MEMORANDUM

TO: Jim Scholl, City Manager

Cc: Mark Finigan, Asst. City Manager
E. David Fernandez, Asst. City Manager-Operations

FROM: Jay Gewin, Utilities Manager

DATE: July 30, 2010

SUBJECT: **Establishing a Monthly Base Charge Unit of 3,600 Gallons for Sewer Utility Billing.**

Action statement:

This ordinance will amend City Code Section 74-246 (e) to establish 3,600 gallons as the monthly base charge unit (BCU) for sewer utility billing.

Background:

Section 74-246 (e) of the Code of Ordinances reads:

"The assumed percentage of water being contributed to the sewer system, as referred to in Ordinance No. 89-33, subsection (b)(1), continues to be 80 percent. This figure times the average monthly residential water consumption, the product then divided by the average number of residential dwelling units, yields an average residential monthly wastewater production (rounded to the nearest hundred gallons) or monthly base charge unit (BCU) of 3,700. "

The Monthly Base Charge Unit (BCU) represents the gallons of sewer usage in an average residential household. This figure is needed to establish the base charge rates for sewer billing for our commercial properties.

Purpose and Justification:

In setting the FY 2011 sewer rate model, it was determined based on actual flow calculations that 3600 gallons would be a more accurate reflection of average household wastewater consumption.

Line	Description	Calculated BCUs
1	2003	3,625
2	2004	3,624
3	2005	3,619
4	2006	3,889
5	2007	3,626
6	2008	3,740
7	2009	3,467
8	2010	3,398
	Currently in Effect	**3,700**
	Calculated per City Code:	
9	- 3-Yr Rolling Average	3,535
10	- 5-Yr Rolling Average	3,624
11	- 7-Yr Rolling Average	3,623
12	**Proposed FY 2011**	**3,600**

Line	Fiscal Year	Monthly Flow (Gals.)	Residential BCUs Billed	Inactive	Active
1	2008	42,313,387	11,313	316	10,997
2	2009	38,557,040	11,120	276	10,844
3	2010	38,586,880	11,357	274	11,083

		Residential Wastewater Flow Billed	Active
4	2008	3,740	**3,848**
5	2009	3,467	**3,556**
6	2010	3,398	**3,481**
6		**Proposed BCU**	3,600

For purposes of rate equity between residential and commercial customers, it is important that the BCU figure utilized by the City reflects a figure that is near the actual average gallons of household wastewater use.

Options:

1) The City may choose to maintain its BCU figure at 3700 gallons. This option is not recommended because the average gallons of wastewater consumed per household has been decreasing in recent years, resulting in our current tabulation being inaccurate.

2) The City can reduce its BCU figure to 3600 gallons. This option will better approximate actual household sewer consumption, and will improve our rate equity between commercial and residential customers.

Financial Impact:

The financial impact of this proposed increase would be as follows:

Recommendation:

Staff recommends option #2, reducing the City's BCU total to 3,600 gallons of wastewater consumed.

Sec. 74-246. - Annual sewer rates, charges and components.

(a)

The base charge component (BCU) of the sewer service user charge is determined to be $23.23. The BCU may be adjusted each October 1, by resolution of the city commission by up to 100 percent of the percentage increase in the CPI-(U), U.S. City Averages (as of June). The city commission shall enact an ordinance amendment to this section in order to increase the BCU in excess of the CPI.

(b)

The proportional use charge component of the sewer service user charge is determined to be $4.60 per 1,000 gallons per month of actual or estimated sewage flow per user. The proportional use charge may be adjusted each October 1, by resolution of the city commission by up to 100 percent of the percentage increase in the CPI-(U), U.S. City Averages (as of June). The city commission shall enact an ordinance amendment to this section in order to increase the proportional use charge in excess of the CPI.

(c)

The extra-normal strength charge component of the sewer service user charge is determined to be $0.57 per pound of biochemical oxygen demand (BOD) and $0.26 per pound of total suspended solids (TSS) contributed per month per user in excess of the amount accounted for in waste at a rate of 350 mg/l for BOD and for TSS.

(d)

The flat monthly alternative water surcharge is determined to be $8.51.

(e)

The assumed percentage of water being contributed to the sewer system, as referred to in Ordinance No. 89-33, subsection (b)(1), continues to be 80 percent. This figure times the average monthly residential water consumption, the product then divided by the average number of residential dwelling units, yields an average residential monthly wastewater production (rounded to the nearest hundred gallons) or monthly base charge unit (BCU) of 3,700.

(Code 1986, § 74.42(j); Ord. No. 00-30, § 1, 10-4-2000; Ord. No. 01-14, § 1, 9-18-2001; Ord. No. 03-25, § 1, 9-11-2003; Ord. No. 06-18, § 1, 10-3-2006; Ord. No. 09-19, § 1, 9-15-2009)

City of Key West

Sewer Rate Study Update Presentation

July 27, 2010

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REDOAK CONSULTING
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Project Highlights

- Financial Forecast Drivers
  - Inflation (CPI), capital needs, debt service coverage, and ending cash balances
  - GIS Conversion
  - Debt Service (includes FEMA repayment)
- Capital Improvement Program
- The Utility fulfills debt service coverage requirements over the forecast period (FY 2011 through FY 2015).
- Maintaining the minimum ending cash balances
  - 60 – Day Cash Balance (Acceptable)
  - 90 – Day Cash Balance (Target)

Capital Improvement Program ("CIP")

CIP Drivers:

- *North Roosevelt Force Main Replacement D.O.T.*
- *Pump Station F & Force Main Capacity Expansion*
- *30" Force Main Extension & Headworks Capacity Expansion*

Description	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
Lightning Protection Rehab	$125,183	$0	$0	$0	$0
Misc Sewer System Repairs	200,000	210,000	220,000	230,000	240,350
Fleming Key Pipe Bridge Repair	30,000	69,000	700,000	0	0
N.Roosevelt Force Main Replacement D.O.T.	1,986,000	0	0	0	0
Pump Station F Force Main Capacity Exp.	935,215	0	1,050,000	0	0
30" Forcemain Extention	1,517,288	4,356,485	0	0	0
Wastewater Reuse (City-FKAA)	0	0	0	0	0
P.S. B Gravity Front to Green	0	0	0	250,000	2,993,500
CAT Generator Enclosure	313,000	0	0	0	0
Total Capital Projects	$5,106,686	$4,635,485	$1,970,000	$480,000	$3,233,850

Pathways to Lasting Solutions

RED OAK CONSULTING
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Capital Improvement Program ("CIP")

CIP Drivers:

- *North Roosevelt Force Main Replacement D.O.T.*
- *Pump Station F & Force Main Capacity Expansion*
- *30" Force Main Extension & Headworks Capacity Expansion*

Description	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Lightning Protection Rehab	$0	$0	$0	$0	$0
Misc Sewer System Repairs	877,000	250,000	261,250	273,006	285,291
Fleming Key Pipe Bridge Repair	0	0	0	0	0
N.Roosevelt Force Main Replacement D.O.T.	0	0	0	0	0
Pump Station F Force Main Capacity Expansion	0	0	0	0	0
30" Forcemain Extention	0	0	0	0	0
Wastewater Reuse (City-FKAA)	0	500,000	0	0	0
P.S. B Gravity Front to Green	0	0	0	0	0
CAT Generator Enclosure		0	0	0	0
Total Capital Projects	$877,000	$750,000	$261,250	$273,006	$285,291

Historical & Proposed BCUs (FY 2011)

Line	Description	Calculated BCUs
1	2003	3,625
2	2004	3,624
3	2005	3,619
4	2006	3,889
5	2007	3,626
6	2008	3,740
7	2009	3,467
8	2010	3,398
	Currently in Effect	**3,700**
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Line	Fiscal Year	Monthly Flow (Gals.)	Residential BCUs Billed	Inactive	Active
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2	2009	38,557,040	11,120	276	10,844
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Line	Fiscal Year	Residential Wastewater Flow Billed	Active
4	2008	3,740	**3,848**
5	2009	3,467	**3,556**
6	2010	3,398	**3,481**
6		**Proposed BCU**	3,600

Pathways to Lasting Solutions

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Financial Highlights

Scenario 1:

- Hold Monthly BCU at 3,700, no FY 2011 rate increase

- Utilize a 0.3% annual customer growth rate

Line	Description	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
	Revenues:					
1	Operating Revenues	$ 11,902,333	$ 12,171,227	$ 12,484,432	$ 12,856,365	$ 13,241,770
2	Other Income	124,590	106,358	76,981	75,367	91,063
3	**Total Operating Revenues**	$ 12,026,923	$ 12,277,585	$ 12,561,414	$ 12,931,732	$ 13,332,833
4	**Total Operating Expenditures**	$ 8,096,571	$ 8,098,986	$ 8,301,460	$ 8,550,504	$ 8,807,019
5	**Operating Income**	**$ 3,930,352**	**$ 4,178,599**	**$ 4,259,953**	**$ 4,381,228**	**$ 4,525,814**
6	Sewer Connection Fees	60,000	60,000	60,000	60,000	60,000
7	**Net Revenues**	**$ 3,990,352**	**$ 4,238,599**	**$ 4,319,953**	**$ 4,441,228**	**$ 4,585,814**
8	Debt Service Requirements	2,908,443	2,906,513	2,907,063	2,904,833	2,910,283
9	**Income Avail. After Debt Service**	**$ 1,081,909**	**$ 1,332,087**	**$ 1,412,891**	**$ 1,536,396**	**$ 1,675,532**
10	**Debt Service Coverage**	**1.37**	**1.46**	**1.49**	**1.53**	**1.58**

Financial Highlights

Scenario 1 (cont'd):

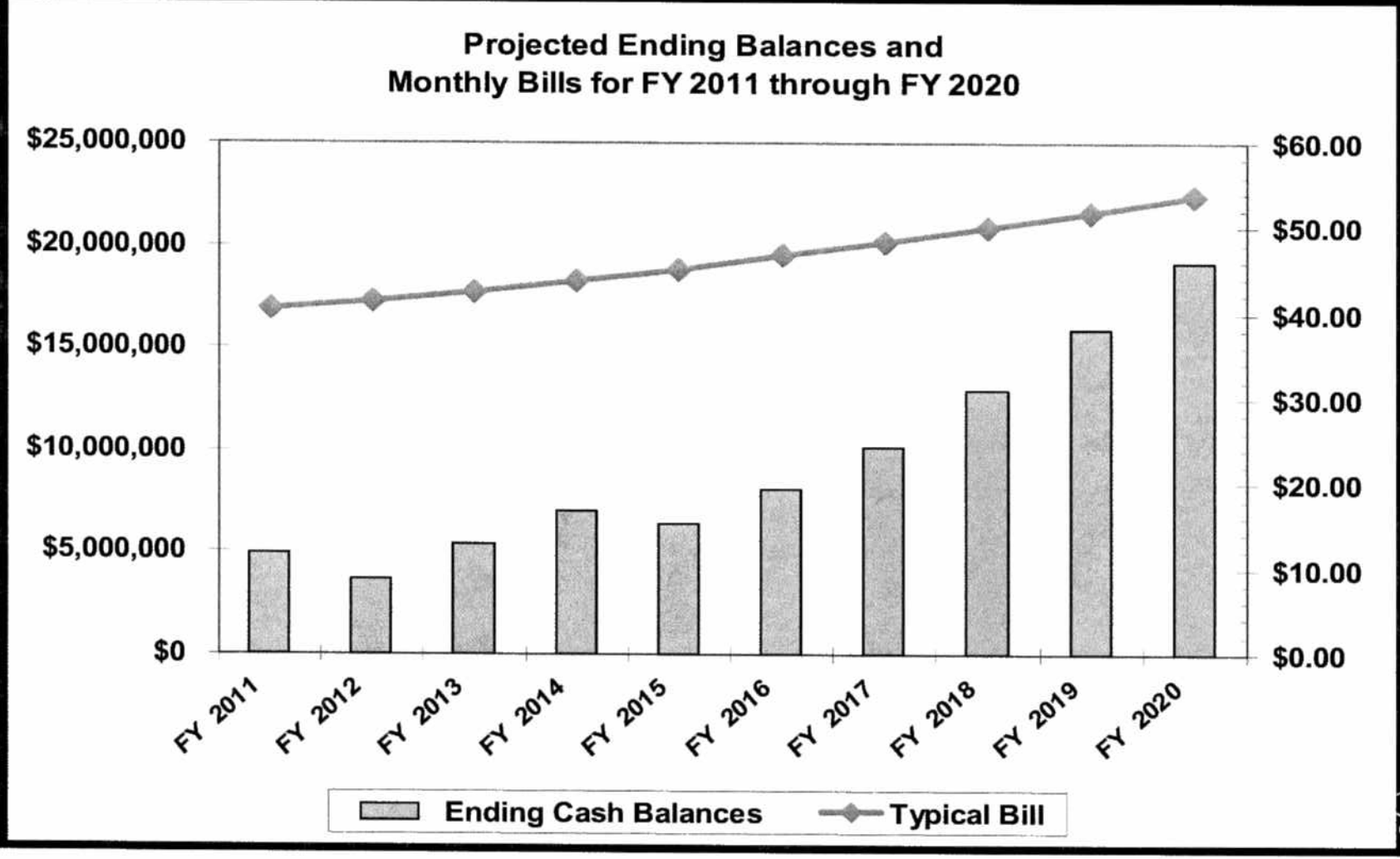
- Hold Monthly BCU at 3,700, no FY 2011 rate increase

- Utilize a 0.3% annual customer growth rate

Line	Description	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
	Other Needs & Transfers:					
11	Renewal and Replacement	$ 1,500,000	$ 1,500,000	$ 1,500,000	$ 1,500,000	$ 1,500,000
12	Grant Funding - ACOE	(1,594,127)	0	0	0	0
13	Inter-Fund Loan	0	0	0	0	0
14	Inter-Fund Loan Repayment	(158,312)	(158,312)	(158,312)	(158,312)	(158,312)
15	**Total Other Needs & Trans.**	**$ (252,439)**	**$ 1,341,688**	**$ 1,341,688**	**$ 1,341,688**	**$ 1,341,688**
16	**Operating Balance**	**$ 1,334,348**	**$ (9,601)**	**$ 71,203**	**$ 194,708**	**$ 333,844**
	Beginning Cash Balance:					
17	Revenue Surplus/Deficit	**$ 7,967,541**	**$ 6,508,893**	**$ 4,158,661**	**$ 4,029,497**	**$ 5,285,263**
18	Operating Balance	1,334,348	(9,601)	71,203	194,708	333,844
19	Renewal and Replacement Func	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000
19	Capital Funded fron Rate Rev.	(4,292,996)	(3,840,630)	(1,700,367)	(438,942)	(2,957,234)
20	**Ending Cash Balance**	**$ 6,508,893**	**$ 4,158,661**	**$ 4,029,497**	**$ 5,285,263**	**$ 4,161,873**
21	**Required Cash Balance**	**$ 2,024,143**	**$ 2,024,746**	**$ 2,075,365**	**$ 2,137,626**	**$ 2,201,755**
22	**Surplus/Deficit Cash Balance**	**$ 4,484,750**	**$ 2,133,915**	**$ 1,954,132**	**$ 3,147,637**	**$ 1,960,118**

Financial Highlights

Scenario 1 (cont'd):



Financial Highlights

Scenario 2:

- Adjust Monthly BCU to 3,600, no FY 2011 rate increase

- Assume a 0.0% annual customer growth rate

Line	Description	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
	Revenues:					
1	Operating Revenues	$ 11,996,425	$ 12,267,496	$ 12,582,955	$ 12,957,669	$ 13,345,930
2	Other Income	124,590	107,534	79,375	79,022	96,031
3	**Total Operating Revenues**	$ 12,121,015	$ 12,375,030	$ 12,662,330	$ 13,036,691	$ 13,441,961
4	**Total Operating Expenditures**	$ 8,096,571	$ 8,098,986	$ 8,301,460	$ 8,550,504	$ 8,807,019
5	**Operating Income**	**$ 4,024,444**	**$ 4,276,045**	**$ 4,360,870**	**$ 4,486,187**	**$ 4,634,942**
6	Sewer Connection Fees	60,000	60,000	60,000	60,000	60,000
7	**Net Revenues**	**$ 4,084,444**	**$ 4,336,045**	**$ 4,420,870**	**$ 4,546,187**	**$ 4,694,942**
8	Debt Service Requirements	2,908,443	2,906,513	2,907,063	2,904,833	2,910,283
9	**Income Avail. After Debt Service**	**$ 1,176,001**	**$ 1,429,532**	**$ 1,513,808**	**$ 1,641,355**	**$ 1,784,659**
10	**Debt Service Coverage**	**1.40**	**1.49**	**1.52**	**1.57**	**1.61**

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Financial Highlights

Scenario 2 (cont'd):

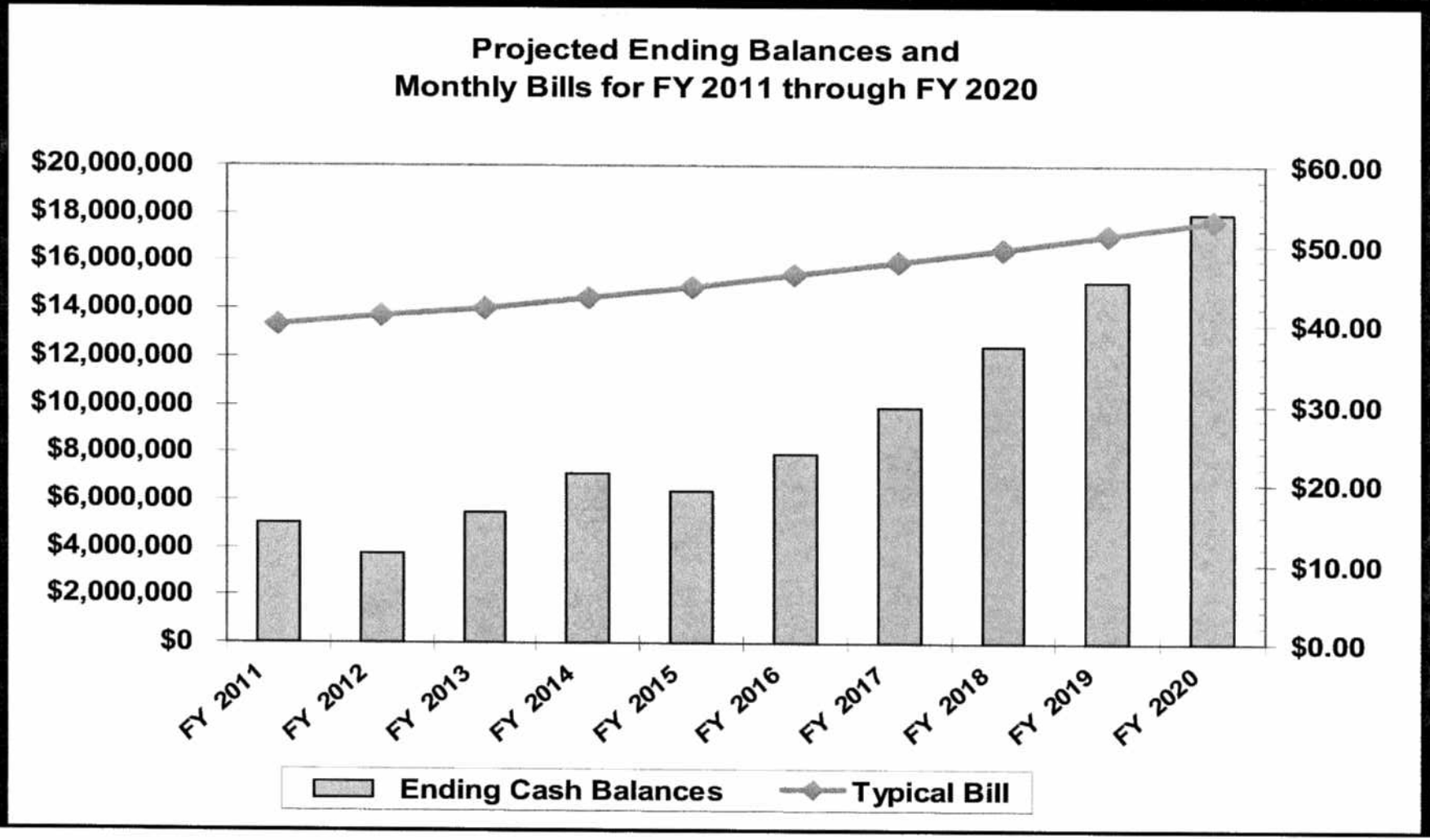
- Adjust Monthly BCU to 3,600, no FY 2011 rate increase

- Assume a 0.0% annual customer growth rate

Line	Description	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
	Other Needs & Transfers:					
11	Renewal and Replacement	$ 1,500,000	$ 1,500,000	$ 1,500,000	$ 1,500,000	$ 1,500,000
12	Grant Funding - ACOE	(1,594,127)	0	0	0	0
13	Inter-Fund Loan	0	0	0	0	0
14	Inter-Fund Loan Repayment	(158,312)	(158,312)	(158,312)	(158,312)	(158,312)
15	**Total Other Needs & Trans.**	**$ (252,439)**	**$ 1,341,688**	**$ 1,341,688**	**$ 1,341,688**	**$ 1,341,688**
16	**Operating Balance**	**$ 1,428,440**	**$ 87,844**	**$ 172,120**	**$ 299,667**	**$ 442,971**
	Beginning Cash Balance:					
17	Revenue Surplus/Deficit	**$ 7,967,541**	**$ 6,602,985**	**$ 4,350,199**	**$ 4,321,952**	**$ 5,682,676**
18	Operating Balance	1,428,440	87,844	172,120	299,667	442,971
19	Renewal and Replacement Func	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000
19	Capital Funded fron Rate Rev.	(4,292,996)	(3,840,630)	(1,700,367)	(438,942)	(2,957,234)
20	**Ending Cash Balance**	**$ 6,602,985**	**$ 4,350,199**	**$ 4,321,952**	**$ 5,682,676**	**$ 4,668,414**
21	**Required Cash Balance**	**$ 2,024,143**	**$ 2,024,746**	**$ 2,075,365**	**$ 2,137,626**	**$ 2,201,755**
22	**Surplus/Deficit Cash Balance**	**$ 4,578,842**	**$ 2,325,453**	**$ 2,246,587**	**$ 3,545,050**	**$ 2,466,659**

Financial Highlights

Scenario 2 (cont'd):



Customer Bill Impacts – Residential (Scenario 1)

	Metered Water Use (gallons)	Est. Sewer Volume (gallons)	Bill Under Prior Year Rates			Bill Under Current Year Rates			Percent Charge
			Base Charge	Commodity Charge	Total Charge	Base Charge	Commodity Charge	Total Charge	
FY 2011	2,500	2,000	$22.91	$9.08	**$31.99**	$22.91	$9.08	**$31.99**	***0.00%***
	4,625	3,700	$22.91	$16.80	**$39.71**	$22.91	$16.80	**$39.71**	***0.00%***
	5,000	4,000	$22.91	$18.16	**$41.07**	$22.91	$18.16	**$41.07**	***0.00%***
	6,250	5,000	$22.91	$22.70	**$45.61**	$22.91	$22.70	**$45.61**	***0.00%***
FY 2012	2,500	2,000	$22.91	$9.08	**$31.99**	$23.48	$9.30	**$32.78**	***2.47%***
	4,625	3,700	$22.91	$9.08	**$31.99**	$23.48	$9.30	**$40.69**	***2.47%***
	5,000	4,000	$22.91	$16.80	**$39.71**	$23.48	$17.21	**$42.08**	***2.46%***
	6,250	5,000	$22.91	$18.16	**$41.07**	$23.48	$18.60	**$46.73**	***2.46%***
FY 2013	2,500	2,000	$23.48	$9.30	**$32.78**	$24.07	$9.54	**$33.61**	***2.53%***
	4,625	3,700	$23.48	$17.21	**$40.69**	$24.07	$17.65	**$41.72**	***2.54%***
	5,000	4,000	$23.48	$18.60	**$42.08**	$24.07	$19.08	**$43.15**	***2.54%***
	6,250	5,000	$23.48	$23.25	**$46.73**	$24.07	$23.85	**$47.92**	***2.55%***
FY 2014	2,500	2,000	$24.07	$9.54	**$33.61**	$24.79	$9.82	**$34.61**	***2.98%***
	4,625	3,700	$24.07	$17.65	**$41.72**	$24.79	$18.17	**$42.96**	***2.97%***
	5,000	4,000	$24.07	$19.08	**$43.15**	$24.79	$19.64	**$44.43**	***2.97%***
	6,250	5,000	$24.07	$23.85	**$47.92**	$24.79	$24.55	**$49.34**	***2.96%***
FY 2015	2,500	2,000	$24.79	$9.82	**$34.61**	$25.53	$10.12	**$35.65**	***3.00%***
	4,625	3,700	$24.79	$18.17	**$42.96**	$25.53	$18.72	**$44.25**	***3.01%***
	5,000	4,000	$24.79	$19.64	**$44.43**	$25.53	$20.24	**$45.77**	***3.02%***
	6,250	5,000	$24.79	$24.55	**$49.34**	$25.53	$25.30	**$50.83**	***3.02%***
FY 2016	2,500	2,000	$25.53	$10.12	**$35.65**	$26.42	$10.48	**$36.90**	***3.51%***
	4,625	3,700	$25.53	$18.72	**$44.25**	$26.42	$19.39	**$45.81**	***3.52%***
	5,000	4,000	$25.53	$20.24	**$45.77**	$26.42	$20.96	**$47.38**	***3.52%***
	6,250	5,000	$25.53	$25.30	**$50.83**	$26.42	$26.20	**$52.62**	***3.52%***

Customer Bill Impacts – Residential (Scenario 2)

	Metered Water Use (gallons)	Est. Sewer Volume (gallons)	Bill Under Prior Year Rates			Bill Under Current Year Rates			Percent Charge
			Base Charge	Commodity Charge	Total Charge	Base Charge	Commodity Charge	Total Charge	
FY 2011	2,500	2,000	$22.91	$9.08	**$31.99**	$22.91	$9.08	**$31.99**	***0.00%***
	4,500	3,600	$22.91	$16.34	**$39.25**	$22.91	$16.34	**$39.25**	***0.00%***
	5,000	4,000	$22.91	$18.16	**$41.07**	$22.91	$18.16	**$41.07**	***0.00%***
	6,250	5,000	$22.91	$22.70	**$45.61**	$22.91	$22.70	**$45.61**	***0.00%***
FY 2012	2,500	2,000	$22.91	$9.08	**$31.99**	$23.48	$9.30	**$32.78**	***2.47%***
	4,500	3,600	$22.91	$9.08	**$31.99**	$23.48	$9.30	**$40.22**	***2.47%***
	5,000	4,000	$22.91	$16.34	**$39.25**	$23.48	$16.74	**$42.08**	***2.46%***
	6,250	5,000	$22.91	$18.16	**$41.07**	$23.48	$18.60	**$46.73**	***2.46%***
FY 2013	2,500	2,000	$23.48	$9.30	**$32.78**	$24.07	$9.54	**$33.61**	***2.53%***
	4,500	3,600	$23.48	$16.74	**$40.22**	$24.07	$17.17	**$41.24**	***2.54%***
	5,000	4,000	$23.48	$18.60	**$42.08**	$24.07	$19.08	**$43.15**	***2.54%***
	6,250	5,000	$23.48	$23.25	**$46.73**	$24.07	$23.85	**$47.92**	***2.55%***
FY 2014	2,500	2,000	$24.07	$9.54	**$33.61**	$24.79	$9.82	**$34.61**	***2.98%***
	4,500	3,600	$24.07	$17.17	**$41.24**	$24.79	$17.68	**$42.47**	***2.97%***
	5,000	4,000	$24.07	$19.08	**$43.15**	$24.79	$19.64	**$44.43**	***2.97%***
	6,250	5,000	$24.07	$23.85	**$47.92**	$24.79	$24.55	**$49.34**	***2.96%***
FY 2015	2,500	2,000	$24.79	$9.82	**$34.61**	$25.53	$10.12	**$35.65**	***3.00%***
	4,500	3,600	$24.79	$17.68	**$42.47**	$25.53	$18.22	**$43.75**	***3.01%***
	5,000	4,000	$24.79	$19.64	**$44.43**	$25.53	$20.24	**$45.77**	***3.02%***
	6,250	5,000	$24.79	$24.55	**$49.34**	$25.53	$25.30	**$50.83**	***3.02%***
FY 2016	2,500	2,000	$25.53	$10.12	**$35.65**	$26.42	$10.48	**$36.90**	***3.51%***
	4,500	3,600	$25.53	$18.22	**$43.75**	$26.42	$18.86	**$45.28**	***3.52%***
	5,000	4,000	$25.53	$20.24	**$45.77**	$26.42	$20.96	**$47.38**	***3.52%***
	6,250	5,000	$25.53	$25.30	**$50.83**	$26.42	$26.20	**$52.62**	***3.52%***

Customer Bill Impacts – Commercial (Scenario 1)

Line	Description	Large Hotel	Medium Hotel	Small Hotel	Guest House
	PRIOR YEAR				
1	Actual Wastewater Usage (gal/mo.	1,301,640	686,634	28,914	16,100
2	BCUs	336	174	8	4
3	BCU Charge	$7,698	$3,986	$183	$92
4	Commodity Charge	$5,909	$3,117	$131	$73
5	Typical Monthly Bill	$13,607	$7,104	$315	$165
	PROPOSED YEAR				
6	Actual Wastewater Usage (gal/mo.	1,301,640	686,634	28,914	16,100
7	BCU	336	174	8	4
8	BCU Charge	$7,698	$3,986	$183	$92
9	Commodity Charge	$5,909	$3,117	$131	$73
10	Typical Monthly Bill	$13,607	$7,104	$315	$165
11	Percent Change	*0.00%*	*0.00%*	*0.00%*	*0.00%*

Pathways to Lasting Solutions

REDOAK CONSULTING
A DIVISION OF MALCOLM PIRNIE

Customer Bill Impacts – Commercial (Scenario 1)

Line	Description	Restaurant	Grocery	Downtown Shop	Laundry
	PRIOR YEAR				
1	Actual Wastewater Usage (gal/mo.	81,506	60,940	1,786	54,934
2	BCUs	24	19	1	16
3	BCU Charge	$550	$435	$23	$367
4	Commodity Charge	$370	$277	$8	$249
5	Typical Monthly Bill	$920	$712	$31	$616
	PROPOSED YEAR				
6	Actual Wastewater Usage (gal/mo.	81,506	60,940	1,786	54,934
7	BCU	24	19	1	16
8	BCU Charge	$550	$435	$23	$367
9	Commodity Charge	$370	$277	$8	$249
10	Typical Monthly Bill	$920	$712	$31	$616
11	Percent Change	*0.00%*	*0.00%*	*0.00%*	*0.00%*

Pathways to Lasting Solutions

REDOAK CONSULTING
A DIVISION OF MALCOLM PIRNIE

Customer Bill Impacts – Commercial (Scenario 2)

Line	Description	Large Hotel	Medium Hotel	Small Hotel	Guest House
	PRIOR YEAR				
1	Actual Wastewater Usage (gal/mo.	1,301,640	686,634	28,914	16,100
2	BCUs	336	174	8	4
3	BCU Charge	$7,698	$3,986	$183	$92
4	Commodity Charge	$5,909	$3,117	$131	$73
5	Typical Monthly Bill	$13,607	$7,104	$315	$165
	PROPOSED YEAR				
6	Actual Wastewater Usage (gal/mo.	1,301,640	686,634	28,914	16,100
7	BCU	363	191	8	4
8	BCU Charge	$8,316	$4,376	$183	$92
9	Commodity Charge	$5,909	$3,117	$131	$73
10	Typical Monthly Bill	$14,226	$7,493	$315	$165
11	Percent Change	*4.55%*	*5.48%*	*0.00%*	*0.00%*

Pathways to Lasting Solutions

REDOAK CONSULTING
A DIVISION OF MALCOLM PIRNIE

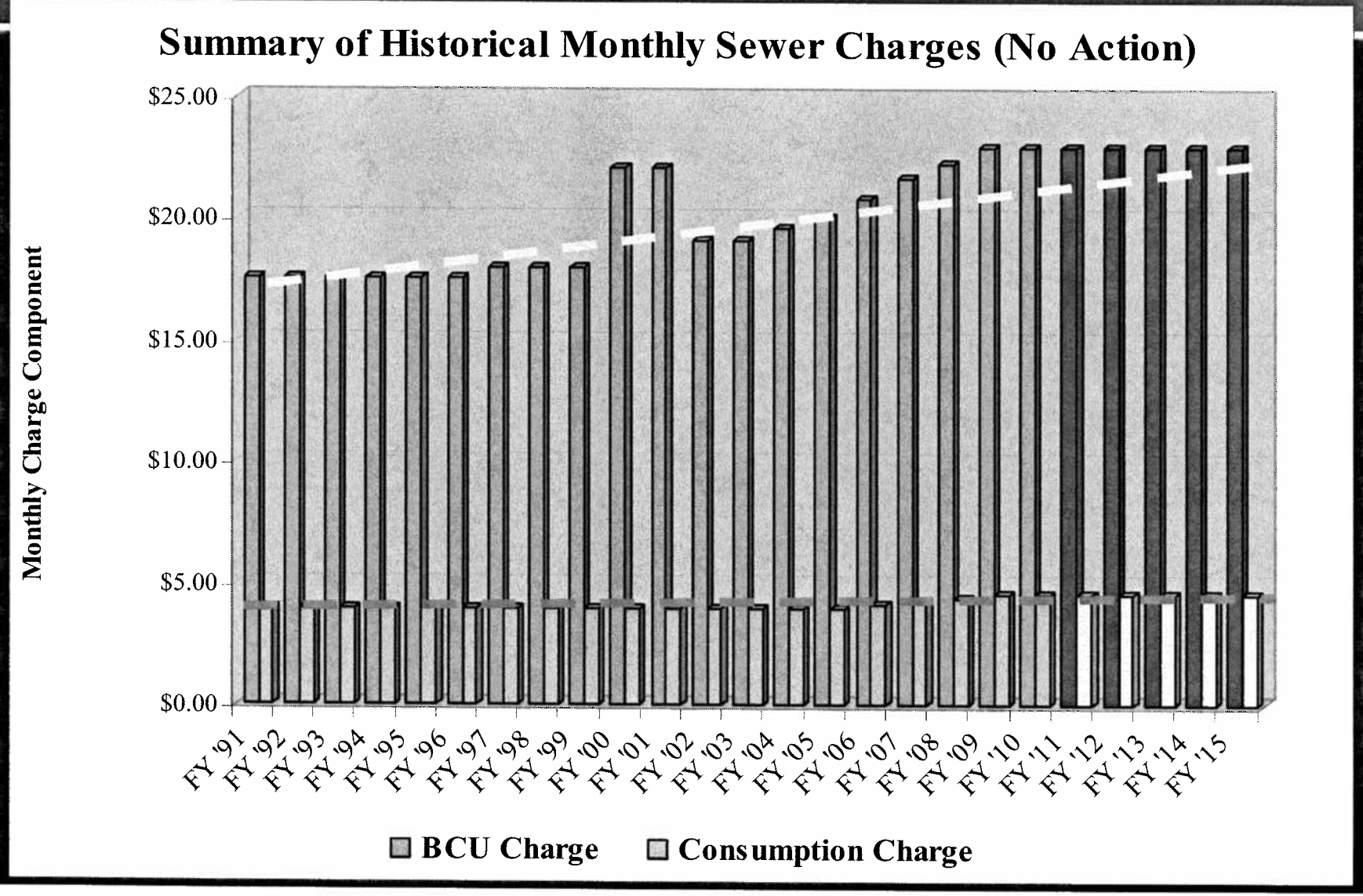
Customer Bill Impacts – Commercial (Scenario 2)

Line	Description	Restaurant	Grocery	Downtown Shop	Laundry
	PRIOR YEAR				
1	Actual Wastewater Usage (gal/mo.	81,506	60,940	1,786	54,934
2	BCUs	24	19	1	16
3	BCU Charge	$550	$435	$23	$367
4	Commodity Charge	$370	$277	$8	$249
5	Typical Monthly Bill	$920	$712	$31	$616
	PROPOSED YEAR				
6	Actual Wastewater Usage (gal/mo.	81,506	60,940	1,786	54,934
7	BCU	24	19	1	16
8	BCU Charge	$550	$435	$23	$367
9	Commodity Charge	$370	$277	$8	$249
10	Typical Monthly Bill	$920	$712	$31	$616
11	Percent Change	*0.00%*	*0.00%*	*0.00%*	*0.00%*

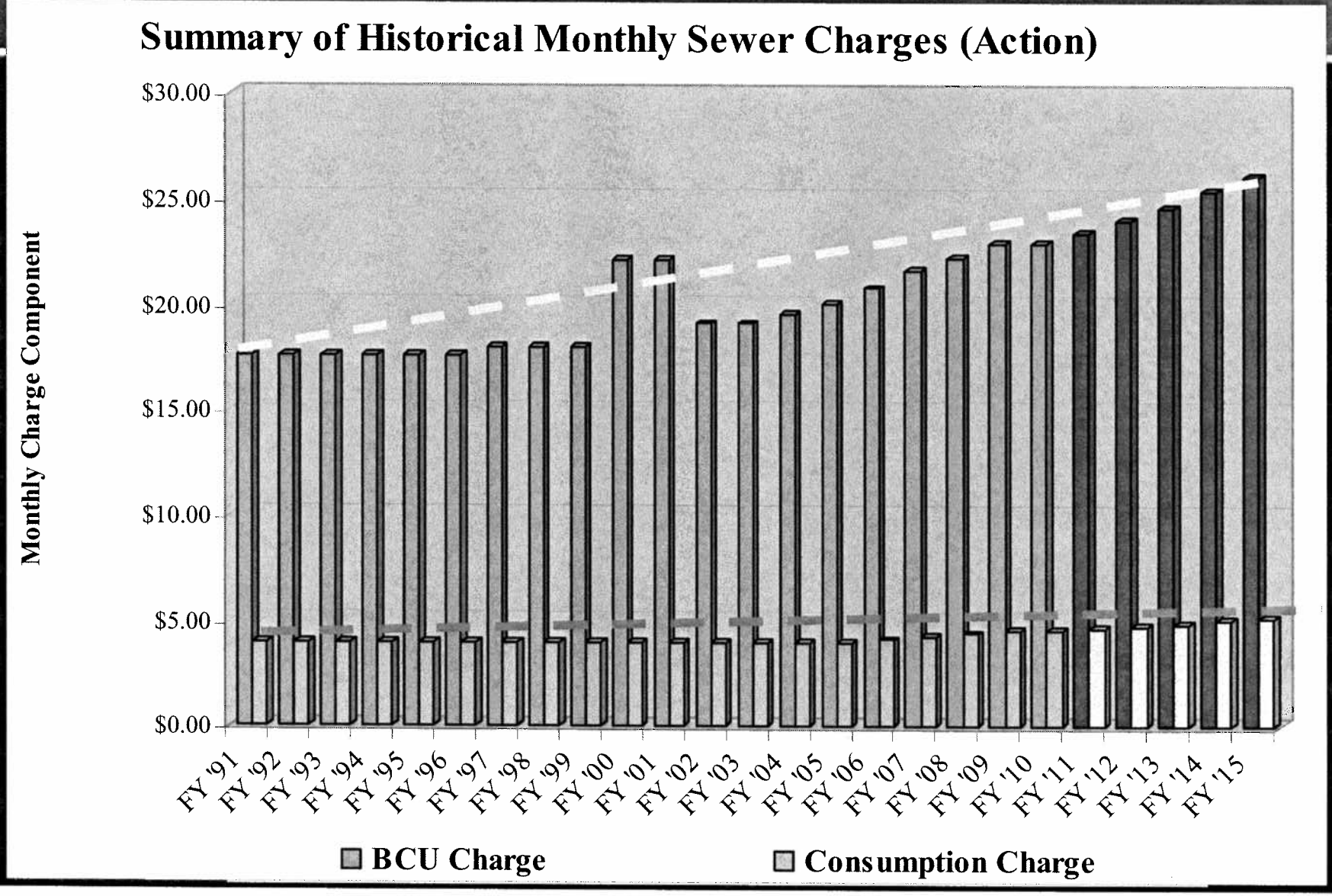
Pathways to Lasting Solutions

REDOAK CONSULTING
A DIVISION OF MALCOLM PIRNIE

Historical Month Sewer Bill (Residential)



Historical Month Sewer Bill (Residential)



Sound Utility Rate Making

- Implementing sufficient annual rate increases that tracks with the annual escalation in the cost to provide service.
  - Prevents a significant one-time rate increase
- Maintain rates that fully fund a Utility's asset maintenance schedule
  - Maintain adequate levels of service (aging infrastructure)
- Allows the Utility to abide by specific financial and regulatory requirements
- Allows a Utility to plan for unforeseen events
- Allows the City of Key West to develop rate that minimizes the financial impact on a customers monthly bill

Points of Uncertainty

- Recently, the south Florida region experienced a severe drought
  - Reduced drought restrictions does not equal increased revenues
  - Forecasting future water usage patterns may be difficult
  - Understanding the post drought customer usage patterns may be difficult.
- The impact of the tourism economy cannot be quantified based on the information provided to the City.
  - Low occupancy rates of vacation facilities will reduce water usage
- The impact of the real estate market (foreclosures) is not been tracked within the City.

Recommendations

- Recommend adjusting the Monthly BCU to 3,600 from 3,700 as illustrated in the Scenario 2 Financial Forecast.
- Formulate a monitoring program to track the economic and environmental characteristics of the City as it relates to the Sewer System in an effort to identify environmental, water usage, and customer attrition impacts on the Sewer System.
  - Reduced Water Usage
  - Tourism Sector