Utility Rate Task Force

City of Louisville
COLORADO • SINCE 1878

Meeting No. 5
November 7, 2013
6:00 PM
749 Main Street

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Agenda

- **System Development Charges**
- **Financial Plan**
- **Cost of Service**
- **Rate Structure**
- **Preliminary 2014 Rates and Bill Impacts**
- **Next Steps**

System Development Charges

Principles of System Development Charges

- Definition – one-time charge paid by new connector for system capacity or by existing customer requiring increased capacity
- Based on costs of:
  - ➢ Major backbone infrastructure
    - o Water raw water mains and storage, treatment plants, transmission mains and storage facilities
    - o Wastewater interceptors, treatment plants and disposal facilities
  - ➢ Water resources
    - o Intangible assets such as water rights

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Principles of System Development Charges

- Based on a reasonable relationship *(rational nexus)* between amount of SDC and costs associated with serving connector
- Most common methods of calculating SDCs:
  - *Buy-In – achieves capital equity between existing and new customers. Typically used for systems capable of meeting long-term capacity needs.*
  - *Incremental – assigns incremental cost of future system expansion needed to serve new development. Typically used for systems that need to expand facilities to serve new development.*
  - *Combined – uses weighted average of the buy-in and incremental methods.*

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Review

Water and Sewer SDC Handouts
(previously distributed)

Stormwater SDC Handouts
(to be distributed at meeting)

Review

Survey Results – SDCs

(to be distributed at meeting)

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Financial Plan Alternatives

3 Financial Plan Alternatives

1. **No rate increases through 2018**
2. **Just-in-time rate increases - immediate self-sufficiency for each utility**
3. **Smooth rate increases - transition to self-sufficiency for each utility**

<u>Changes from last meeting:</u>

1. **Reduce Bond Issue**
2. **Reduce Cash Balances**
3. **Reduce Rate Increases**
4. **"Tailored" Debt Service Coverage Targets**

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3 Financial Planning Alternatives

Revenue Percentage Increases

	2014	2015	2016	2017	2018
Alternative 1 – No Rate Increases					
Alternative 2 – Just-in-Time Rate Increases (Immediate self-sufficiency)					
Water	0%	0%	0%	0.7%	0.5%
Wastewater	0%	71.4%	1.3%	18.6%	0%
Stormwater	0%	107.1%	0%	8.3%	0%
Combined (1)	0%	28.2%	0.5%	8.5%	0.7%
Alternative 3 – Smooth Rate Increases (Transition to self-sufficiency)					
Water	2.0%	2.0%	2.0%	2.5%	2.5%
Wastewater	27.0%	27.0%	8.0%	8.0%	8.0%
Stormwater	30.0%	30.0%	25.0%	25.0%	0%
Combined (1)	10.5%	12.0%	5.6%	6.2%	3.7%

(1) Total “utility bill” increase – Includes trash at $21.97 per SFR account

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Review

Financial Plan Handouts

(previously distributed)

Key Decision Point

- Financial Plan
  - Which alternative – just-in-time or smooth rate increases?

Alternative Water Rate Structures

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Pricing Objective Rankings

Louisville Rate Study Task Force

Pricing Objective	Total	Average	Rank
Growth pays for itself	32	4.57	1
Cost of service equity	31	4.43	2
Water conservation	30	4.29	3
Environmental enhancements	26	3.71	4
Customer acceptance	23	3.29	5
Customer impact	21	3.00	6
Fixed income / affordability	20	2.86	7
Revenue stability	19	2.71	8
Administrative ease	18	2.57	9
Peak usage reduction	17	2.43	10
Large volume customers	12	1.71	11

Water Rate Structure Alternatives

1. **Status Quo – existing structure**
2. **Cost of Service – customer class basis**
   - **Service charge based on meter size – no volume allowance**
   - **Volume charge varies by customer class, includes fixed rate blocks**
3. **Cost of Service – AWC basis**
   - **Service charge based on meter size – no volume allowance**
   - **Volume charge in each block is same for all customers, block size for each customer varies**

Review

Preliminary Water Rate Handouts

(previously distributed)

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SF Residential Water Bill Impacts

SF Residential Water Bill Impacts Under Alternative Rate Designs			
Range of Bill Outcomes		Water	
From	To	2014 Alternative #2	2014 Alternative #3
50%	or Greater	17.5%	23.1%
20%	50%	56.6%	40.3%
10%	20%	11.2%	17.4%
5%	10%	0.0%	0.9%
0%	5%	0.0%	1.2%
	Bills with Increase	62,410	60,587
0%	-5%	8.0%	9.1%
-6%	-10%	0.0%	0.3%
-10%	-20%	3.8%	4.5%
-20%	-50%	2.8%	3.2%
-50%	or Greater	0.0%	0.0%
	Bills with Decrease	10,658	12,481
		73,068	73,068

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MF Residential Water Bill Impacts

MF Residential Water Bill Impacts Under Alternative Rate Designs			
Range of Bill Outcomes		Water	
From	To	2014 Alternative #2	2014 Alternative #3
50%	or Greater	0.3%	11.7%
20%	50%	0.6%	1.7%
10%	20%	0.5%	0.6%
5%	10%	0.5%	0.3%
0%	5%	1.0%	0.9%
	Bills with Increase	63	308
0%	-5%	1.4%	0.6%
-6%	-10%	2.4%	0.4%
-10%	-20%	7.1%	2.3%
-20%	-50%	83.2%	21.8%
-50%	or Greater	2.8%	59.8%
	Bills with Decrease	1,978	1,733
	Total Bills	2,041	2,041

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Commercial Water Bill Impacts

Commercial Water Bill Impacts Under Alternative Rate Designs			
Range of Bill Outcomes		Water	
From	To	2014 Alternative #2	2014 Alternative #3
50%	or Greater	0.0%	14.3%
20%	50%	0.0%	1.9%
10%	20%	9.0%	0.7%
5%	10%	12.5%	0.5%
0%	5%	11.8%	0.7%
	Bills with Increase	1,422	775
0%	-5%	7.2%	0.5%
-6%	-10%	6.1%	0.5%
-10%	-20%	13.7%	2.2%
-20%	-50%	35.2%	17.2%
-50%	or Greater	4.5%	61.5%
	Bills with Decrease	2,850	3,497
	Total Bills	4,272	4,272

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Irrigation Water Bill Impacts

Irrigation Bill Impacts Under Alter. Rate Design Scenarios (Compared to Existing 2013)			
Range of Bill Outcomes		**Water**	
From	**To**	**2014 Alternative #2**	**2014 Alternative #3**
50%	or Greater	0.0%	0.0%
20%	50%	4.6%	0.0%
10%	20%	3.6%	0.0%
5%	10%	0.5%	0.0%
0%	5%	1.8%	0.4%
	Bills with Increase	162	6
0%	-5%	0.5%	0.0%
-6%	-10%	1.3%	-0.4%
-10%	-20%	4.9%	0.0%
-20%	-50%	41.4%	1.3%
-50%	or Greater	41.3%	98.7%
	Bills with Decrease	1,374	1,530
	Total Bills	1,536	1,536

Bills for Small, Medium and High Consumption Single Family Residential Customers

Single Family Residential Water				
Consumption	2013 Existing	2014 Status Quo	2014 Alt. #2 (Inclining Block)	2014 Alt. #3 (AWC) (See Note 1)
5	$12.08	$12.32	$18.70	$20.56
10	$29.48	$30.07	$40.90	$42.16
20	$64.28	$65.57	$107.50	$119.92
30	$150.98	$154.00	$207.40	$227.92
40	$244.58	$249.47	$318.40	$335.92
50	$344.58	$351.47	$429.40	$443.92

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Bills for Small, Medium and High Consumption Multi-Family Residential Customers

Multi-Family Water (10 Units - 1 1/2" Meter)				
Consumption	2013 Existing	2014 Status Quo	2014 Alt. #2 (Inclining Block)	2014 Alt. #3 (AWC)
5	$53.64	$54.71	$35.45	$36.80
10	$71.04	$72.46	$44.90	$47.60
20	$105.84	$107.96	$63.80	$69.20
30	$192.54	$196.39	$82.70	$90.80
40	$286.14	$291.86	$120.50	$134.00
50	$386.14	$393.86	$158.30	$177.20

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Bills for Small, Medium and High Consumption Commercial Customers

Commercial Water (1 1/2" Meter Size)				
Consumption	2013 Existing	2014 Status Quo	2014 Alt. #2 (Uniform)	2014 Alt. #3 (AWC)
5	$53.64	$54.71	$46.40	$41.12
10	$71.04	$72.46	$66.80	$67.04
20	$105.84	$107.96	$107.60	$164.24
30	$192.54	$196.39	$148.40	$272.24
40	$286.14	$291.86	$189.20	$380.24
50	$386.14	$393.86	$230.00	$488.24

Bills for Small, Medium and High Consumption Irrigation Customers

Irrigation Water (1 1/2" Meter Size)				
Consumption	**2013 Existing**	**2014 Status Quo**	**2014 Alt. #2 (Uniform)**	**2014 Alt. #3 (AWC)**
5	$53.64	$54.71	$44.45	$40.50
10	$71.04	$72.46	$70.00	$62.10
20	$105.84	$107.96	$121.10	$105.30
30	$192.54	$196.39	$172.20	$148.50
40	$286.14	$291.86	$223.30	$191.70
50	$386.14	$393.86	$274.40	$234.90

Key Decision Point

- Rate Design
  - Which structure – class cost of service or AWC?

Alternative Wastewater Rate Structures

Wastewater Rate Structure Alternatives

1. **Status Quo – existing structure**
2. **Cost of Service**
   - **Service charge based on meter size**
   - **Uniform volume charge**
     - **Single family – applied to AWC**
     - **Multifamily – applied to AWC**
     - **Nonresidential – applied to all usage, same rate year-round**

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Review

Preliminary Wastewater Rate Handouts
(previously distributed)

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SF Residential Sewer Bill Impacts

SF Residential Water Sewer Impacts Under Alternative Rate Designs		
Range of Bill Outcomes		**Sewer**
From	**To**	**2014 Alternative #2**
50%	or Greater	19.3%
20%	50%	21.7%
10%	20%	15.1%
5%	10%	0.0%
0%	5%	5.0%
	Bills with Increase	44,653
0%	-5%	10.0%
-6%	-10%	4.6%
-10%	-20%	4.1%
-20%	-50%	16.2%
-50%	or Greater	4.0%
	Bills with Decrease	28,415
		73,068

MF Residential Sewer Bill Impacts

MF Residential Water Sewer Impacts Under Alternative Rate Designs		
Range of Bill Outcomes		Sewer
From	To	2014 Alternative #2
50%	or Greater	3.5%
20%	50%	3.0%
10%	20%	3.3%
5%	10%	1.5%
0%	5%	3.9%
	Bills with Increase	310
0%	-5%	3.2%
-6%	-10%	3.2%
-10%	-20%	10.2%
-20%	-50%	51.4%
-50%	or Greater	16.7%
	Bills with Decrease	1,731
	Total Bills	2,041

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Commercial Sewer Bill Impacts

Commercial Water Sewer Impacts Under Alternative Rate Designs		
Range of Bill Outcomes		Sewer
From	To	2014 Alternative #2
50%	or Greater	68.2%
20%	50%	5.5%
10%	20%	2.6%
5%	10%	0.5%
0%	5%	1.3%
	Bills with Increase	3,338
0%	-5%	3.7%
-6%	-10%	0.5%
-10%	-20%	2.9%
-20%	-50%	7.0%
-50%	or Greater	7.8%
	Bills with Decrease	934
	Total Bills	4,272

Bills for Small, Medium and High Discharge Customers

Single Family Residential Sewer			
Consumption	2013 Existing	2014 Status Quo	2014 Alternate #1
5	$16.29	$20.69	$22.27
10	$16.29	$20.69	$38.27
20	$16.29	$20.69	$70.27
30	$16.29	$20.69	$102.27
40	$16.29	$20.69	$134.27
50	$16.29	$20.69	$166.27

Multi-Family Sewer (10 Units - 1 1/2" Meter)			
Consumption	2013 Existing	2014 Status Quo	2014 Alt. 1
5	$162.90	$206.88	$35.97
10	$162.90	$206.88	$52.32
20	$162.90	$206.88	$85.02
30	$162.90	$206.88	$117.72
40	$162.90	$206.88	$150.42
50	$162.90	$206.88	$183.12

Commercial Sewer (1 1/2" Meter Size)			
Consumption	2013 Existing	2014 Status Quo	2014 Alt. 1
5	$20.43	$25.95	$35.97
10	$20.43	$25.95	$52.32
20	$20.43	$25.95	$85.02
30	$32.53	$41.31	$117.72
40	$45.93	$58.33	$150.42
50	$61.03	$77.51	$183.12

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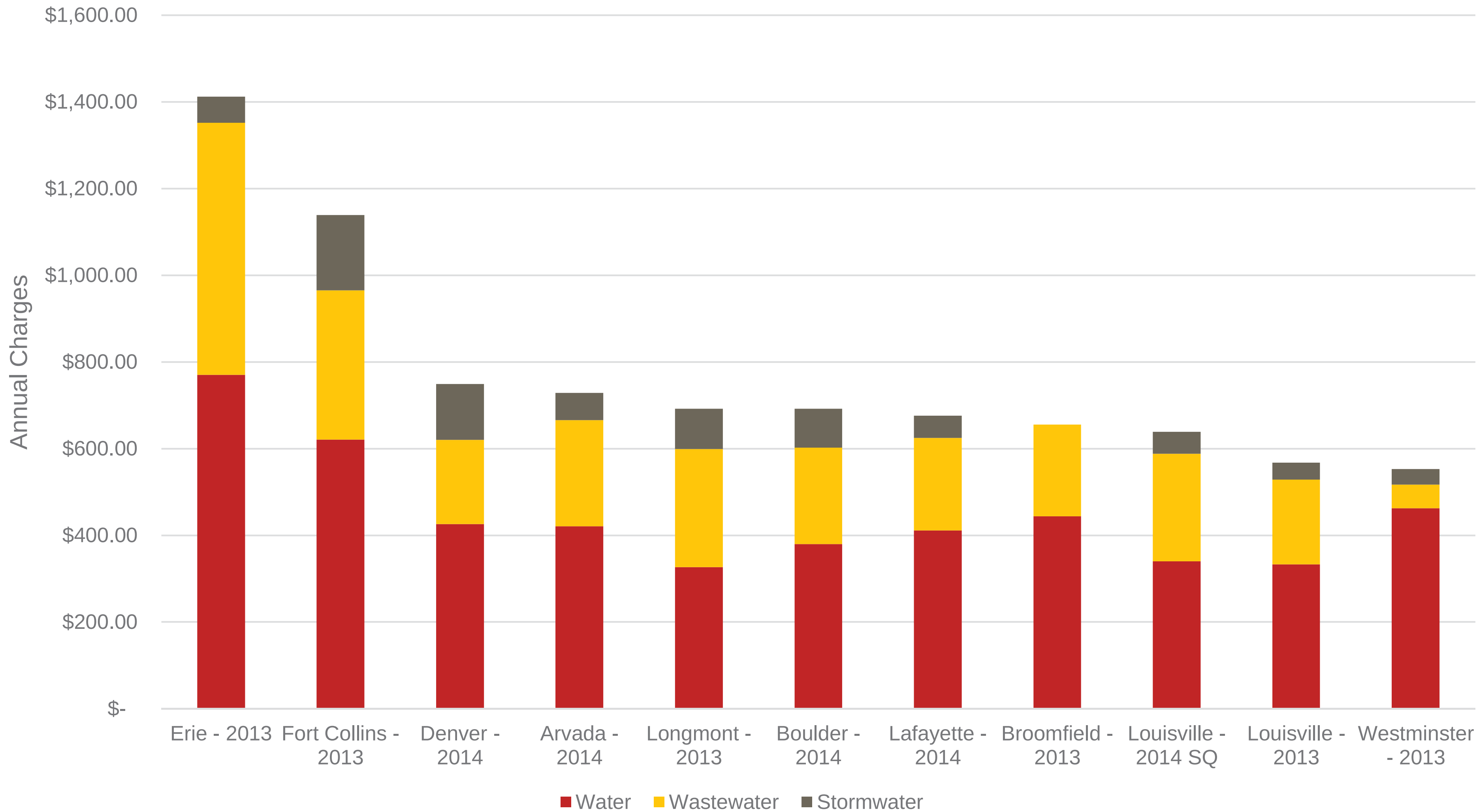
Comparison of Annual Water, Wastewater, and Stormwater Rates (Single Family Residential)



Note: Rates used are most current available rates for each community. Annual charges calculated by consolidating charges by month. For each month calculation, assumed water usage level of the Louisville, CO average customer usage for given month. Assumed customer is resident of community if charges differ for residents and non-resident customers. For Stormwater calculations, assumed Lot size of 8,000 Sq. Ft, and Impervious Area of 3,500 Sq. Ft.

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Decision Points

Key Decision Points

- Financial Plan
  - Which alternative – just-in-time or smooth rate increases?
- Rate Design
  - Which structure – class cost of service or AWC?

Discussion

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TABLE OF CONTENTS

Section 1: System Development Charges

Table WSDC - 1

Water Utility
Development of 2014 Facilities System Development Charge

Water Mains

Diameter (in.)		Inventory of Mains		Current Construction Cost		Current Cost
		linear feet		*per linear foot*		
Non-Backbone						
4		29,523				
6		123,783				
8		308,847				
	Total	462,153		NA		NA
Backbone						
12		150,197	$	171.00	$	25,683,687
14		1,830	$	174.00	$	318,420
16		17,212	$	177.00	$	3,046,524
18		9,114	$	180.00	$	1,640,520
20			$	183.00	$	-
24		21,733	$	186.00	$	4,042,338
30		935	$	189.00	$	176,715
36		5,770	$	192.00	$	1,107,840
	Total	206,791			$	36,016,044

Treatment Plant

Max Day Capacity		Current Construction Cost		Current Cost
(gallons per day)		*per gpd*		
13,000,000	$	4.00	$	52,000,000.00

Treated Water Storage

Volume		Current Construction Cost		Current Cost
gallons		*per mg*		
3,000,000	$	1.25	$	3,750,000.00

Fee Calculation

Total Facilities Current Cost	$	91,766,044.00
Less Principal on Outstanding Debt	$	8,005,000.00
Wastewater System Equity	$	83,761,044.00
No. of Equivalents (a)		8,693
Water SDC per equivalent	$	9,635

(a) Calculated in development of rates. One equivalent represents the water service characteristics of a typical single family residential customer.

TABLE WSDC-2

Water Utility
Development of Proposed Water Resource System Development Charge

Line No.				
1	Average annual SFE usage, gallons		120,000	gallons
2	Estimated water losses in City system		15%	
3	Average annual production needed to serve an SFE, gallons		141,180	gallons
4	Gallons per acre-foot		325,850	gallons
5	SFE per acre-foot		2.308	SFE
6	Estimated C-BT current cost per acre-foot	$	26,000	per acre-foot
7	Current C-BT cost per SFE	$	11,260	per SFE

TABLE WSDC-3

Water Utility
Schedule of Water System Development Charges

		Proposed SDC		
Meter Size	Existing	Facilties	Water Resource	Total
3/4	$ 24,140	$ 9,640	$ 11,300	$ 20,940
1	$ 42,910	$ 17,160	$ 20,200	$ 37,360
1 1/2	$ 96,540	$ 38,560	$ 45,200	$ 83,760
2	$ 171,630	$ 68,550	$ 80,400	$ 148,950
3	$ 386,160	$ 154,240	$ 180,800	$ 335,040
4	$ 693,400	$ 274,170	$ 321,400	$ 595,570

Table SSDC - 1

Sewer Utility
Development of 2014 System Development Charge

Wastewater Mains

Diameter (in.)		Inventory of Mains	Current Construction Cost	Current Cost
		linear feet	*per linear foot*	
Non-Backbone				
4		9,616		
6		26,414		
8		350,433		
10		15,131		
	Total	401,594	NA	NA
Backbone				
12		24,218	$220	$ 5,327,960.00
15		19,200	$244	$ 4,684,800.00
18		6,743	$260	$ 1,753,180.00
21		5,386	$276	$ 1,486,536.00
24		941	$292	$ 274,772.00
	Total	56,488		$ 13,527,248.00

Treatment Plant

	Capacity (gallons per day)	Current Construction Cost per gallons per day	Current Cost
	2,500,000	$10	$ 25,000,000.00

Fee Calculation

Total Facilities Current Cost	$ 38,527,248.00
Less Principal on Outstanding Debt	$ -
Wastewater System Equity	$ 38,527,248.00
Projected 2013 Equivalents (a)	8,693
Sewer SDC per equivalent	**$ 4,432**

(a) Calculated in development of sewer rates. One equivalent represents the wastewater service characteristics of a typical single family residential customer.

Table SSDC - 2

Sewer Utility
Schedule of 2014 System Development Charges

Type of Customer	Existing SDC		Proposed SDC Equivalent Ratio	Proposed SDC Proposed	
Single Family, per unit	$	3,221		$	4,432
Multifamily, per unit	$	2,577		$	3,102
Nonresidential					
Meter Size inch					
3/4		(a)	1.00	$	4,432
1		(a)	1.78	$	7,889
1-1/2		(a)	4.00	$	17,728
2		(a)	7.11	$	31,512
3		(a)	16.00	$	70,912
4		(a)	28.44	$	126,046

(a) Existing fee based on 50% of water tap fee.

Section 2: Financial Plans

Financial Planning Matrix

Alternative #1: No Rate Increases Through FY 2018

Residential Monthly Bills	2013	2014	2015	2016	2017	2018
Water	$12.08	$12.08	$12.08	$12.08	$12.08	$12.08
Wastewater	$16.29	$16.29	$16.29	$16.29	$16.29	$16.29
Stormwater	$3.25	$3.25	$3.25	$3.25	$3.25	$3.25
Trash	$21.97	$21.97	$21.97	$21.97	$21.97	$21.97
Total	$53.59	$53.59	$53.59	$53.59	$53.59	$53.59
Annual % Increase		0.00%	0.00%	0.00%	0.00%	0.00%

Debt Service Coverage	2013	2014	2015	2016	2017	2018
Combined without Tap Fees	7.57	2.60	0.79	0.74	0.66	0.58
Combined with Tap Fees	18.84	6.86	2.20	1.49	1.37	0.90

Ending Reserves ($ Millions)	2013	2014	2015	2016	2017	2018
Water	$5.0	$5.5	$4.6	$3.5	$2.0	$2.0
Wastewater	$6.7	$5.0	$2.6	($0.4)	($4.2)	($5.9)
Stormwater	$1.6	$0.3	($0.5)	($0.7)	($1.8)	($2.1)
Combined	$13.3	$10.7	$6.7	$2.4	($4.0)	($5.9)

Alternative #2: Just In Time (Immediate Stand Alone Sufficiency)

Residential Monthly Bills	2013	2014	2015	2016	2017	2018
Water	$12.08	$12.08	$12.08	$12.08	$12.16	$12.21
Wastewater	$16.29	$16.29	$27.93	$28.28	$33.54	$33.54
Stormwater	$3.25	$3.25	$6.73	$6.73	$7.29	$7.29
Trash	$21.97	$21.97	$21.97	$21.97	$21.97	$21.97
Total	$53.59	$53.59	$68.71	$69.07	$74.96	$75.02
Annual % Increase		0.00%	28.21%	0.52%	8.54%	0.07%

Debt Service Coverage	2013	2014	2015	2016	2017	2018
Combined without Tap Fees	7.57	2.60	1.46	1.43	1.61	1.57
Combined with Tap Fees	18.84	6.86	2.87	2.18	2.32	1.89

Ending Reserves ($ Millions)	2013	2014	2015	2016	2017	2018
Water	$5.0	$5.5	$4.6	$3.5	$2.0	$2.1
Wastewater	$6.7	$5.0	$4.0	$2.4	$0.6	$1.1
Stormwater	$1.6	$0.3	$0.1	$0.4	$0.1	$0.4
Combined	$13.3	$10.7	$8.6	$6.3	$2.7	$3.6

Alternative #3: Smooth Rate Increases

Residential Monthly Bills	2013	2014	2015	2016	2017	2018
Water	$12.08	$12.32	$12.57	$12.82	$13.14	$13.47
Wastewater	$16.29	$20.69	$26.27	$28.38	$30.65	$33.10
Stormwater	$3.25	$4.23	$5.49	$6.87	$8.58	$8.58
Trash	$21.97	$21.97	$21.97	$21.97	$21.97	$21.97
Total	$53.59	$59.20	$66.30	$70.03	$74.34	$77.12
Annual % Increase		10.48%	11.99%	5.62%	6.15%	3.74%

Debt Service Coverage	2013	2014	2015	2016	2017	2018
Combined without Tap Fees	7.57	3.41	1.39	1.54	1.70	1.82
Combined with Tap Fees	18.84	7.67	2.80	2.30	2.41	2.14

Ending Reserves ($ Millions)	2013	2014	2015	2016	2017	2018
Water	$5.0	$5.6	$4.9	$4.1	$3.0	$3.7
Wastewater	$6.7	$5.5	$4.3	$2.8	$0.6	$1.0
Stormwater	$1.6	$0.4	$0.0	$0.4	$0.3	$0.8
Combined	$13.3	$11.5	$9.2	$7.3	$3.9	$5.5

Capital Improvement Program – Current Day Dollars

City of Louisville - Water Utility
Capital Improvement Program - Current Day Dollars

Line No.	Description	Percent Growth Related	Estimate 2013 $	Projected 2014 $	Projected 2015 $	Projected 2016 $	Projected 2017 $	Projected 2018 $
1	Water Line Replacement	0%	$205,000	$205,000	$205,000	$210,000	$210,000	$215,000
2	Turbidity Meters	0%	47,850	0	0	0	0	0
3	3 MG Tank	0%	1,000,000	0	0	0	0	0
4	Pump R and R	0%	108,050	25,000	25,000	25,000	25,000	25,000
5	Valve R and R	0%	24,260	23,640	23,750	24,450	25,180	25,940
6	DR 5000	0%	9,450	0	0	0	0	0
7	Eldorado Springs Stormwater Control	0%	87,000	0	0	0	0	0
8	City Services Facility Site Improvements (25%)	0%	2,370	0	0	0	0	0
9	City Services Facility (25%)	0%	513,650	2,050,000	0	0	0	0
10	McCaslin/Washington Underpass (17%)	0%	248,060	0	0	0	0	0
11	Marshall Lake Evaluation	0%	60,000	70,000	0	60,000	0	60,000
12	Lateral Lining	0%	147,100	-	-	-	-	-
13	Utility Rate Study	0%	115,500	-	-	-	-	-
14	Sludge Treatment/Handling	0%	1,900,000	-	-	-	2,500,000	-
15	New Water Meters & Pits	0%	90,000	20,000	20,000	20,000	15,000	15,000
16	Folder/Inserter Replacement (40%)	0%	8,000	-	-	-	-	-
17	Water Rights	0%	50,000	-	-	-	-	-
18	Water Rights Transfers	0%	30,000	-	-	-	-	-
19	South Water Plant Expansion	100%	125,000	-	-	-	-	-
20	North Plant Fuel Storage Modification	0%	21,000	-	-	-	-	-
21	NCWCD-Windy Gap Firming Project	100%	313,300	495,110	331,820	451,000	451,000	451,000
22	Water Resource Software Upgrade	0%	-	6,500	-	-	-	-
23	Lab Equipment	0%	-	18,500	-	-	-	-
24	Water System Tie-In with Superior	0%	-	90,000	450,000	-	-	-
25	Raw Water Master Plan Update	0%	-	150,000	-	-	-	-
26	North Plant Carbon Feed	0%	-	200,000	-	-	-	-
27	North WTP Pump Station Replacement	25%	-	100,000	2,200,000	-	-	-
28	Heating Upgrades (HBWTF)	0%	-	32,000	-	-	-	-
29	North Floculators	0%	-	42,000	-	-	-	-
30	North Plant Flooring Replacement	0%	-	15,000	-	-	-	-
31	DELO Utility (11%)	100%	-	82,500	-	-	-	-
32	North Clear Well Upgrade	0%	-	-	1,120,000	2,090,000	-	-
33	Chlorine Scrubbers	0%	-	-	330,000	-	-	-
34	Storage Building	0%	-	-	40,000	-	-	-
35	Solar Power Equipment Lease Buyout	0%	-	-	-	216,410	-	-
36	Raw Water SCADA Connection	0%	-	-	-	50,000	50,000	-
37	North Plant Roof	0%	-	-	-	97,050	-	-
38	Filter Media HBWTF	0%	-	-	-	-	110,000	-
39	SCADA Upgrade	0%	-	-	-	-	-	175,000
40	Enterprise Resource Planning (15%)	0%	-	66,000	96,000	45,000	18,000	18,000
63	**Total Growth Related**		**438,300**	**602,610**	**881,820**	**451,000**	**451,000**	**451,000**
64	**Total Non-Growth Related**		**4,667,290**	**3,088,640**	**3,959,750**	**2,837,910**	**2,953,180**	**533,940**
65	**Total CIP**		**$5,105,590**	**$3,691,250**	**$4,841,570**	**$3,288,910**	**$3,404,180**	**$984,940**

City of Louisville - Wastewater Utility
Capital Improvement Program - Current Day Dollars

Line No.	Description	Percent Growth Related	Estimate 2013 $	Projected 2014 $	2015 $	2016 $	2017 $	2018 $
1	Manhole Rehabilitation	0%	$12,000	$0	$0	$0	$0	$0
2	Roof Structure	0%	35,000	0	0	0	0	0
3	Sewer Utility Line Replacement	0%	275,000	275,000	275,000	300,000	300,000	325,000
4	Sewer Main Video	0%	27,500	25,000	25,000	25,000	25,000	25,000
5	Plant Pump Replacement	0%	76,000	0	0	0	0	0
6	Centrifuge Feed Pump	0%	20,000	0	0	0	0	0
7	Swamp Cooler Replacement	0%	15,000	0	0	0	0	0
8	Ammonium Sensor	0%	10,500	0	0	0	0	0
9	City Services Facility Site Improvements (25%)	0%	2,370	0	0	0	0	0
10	City Services Facility (25%)	0%	513,650	2,050,000	-	-	-	-
11	WWTP Aeration Basin Repair	0%	29,300	-	-	-	-	-
12	Folder/Inserter Replacement (40%)	0%	8,000	-	-	-	-	-
13	PLC and SCADA Replacements/Upgrades	0%	100,000	-	-	-	-	-
14	Wastewater Plant Upgrade	0%	1,424,440	-	9,220,000	10,500,000	2,200,000	-
15	Aeration Blower	0%	7,000	-	-	-	-	-
16	Enterprise Resource Planning System (15%)	0%	-	66,000	96,000	45,000	18,000	18,000
17	Pond Liner Replacement (50%)	0%	-	45,600	-	-	-	-
18	Vehicle Replacement	0%	-	10,000	-	-	64,000	-
19	Reuse System Equipment Replacement	0%	-	5,000	-	90,000	-	30,600
20	8-inch Water Line Upgrade	0%	-	250,000	-	-	-	-
21	Hwy 42 to WWTP Sewer Improvements	0%	-	550,000	-	-	-	-
22	DELO Utility (9%)	0%	-	67,500	-	-	-	-
23	Solar Power Equipment Lease Buyout	0%	-	-	-	106,950	-	-
24	Miscellaneous Equipment Replacement	0%	-	-	-	31,000	-	5,000
25	Laboratory Grade Water DI Unit	0%	-	-	-	-	5,050	-
26	Lagoon Cleaning	0%	-	-	-	-	120,000	-
27	HYCOR Drum Thickener	0%	-	-	-	-	-	-
28	Polymer Liquid Drum thick	0%	-	-	-	-	-	-
29	Booster Pump Drum Thick	0%	-	-	-	-	-	-
30	PICKUP #3604 4x4	0%	-	-	-	-	-	-
31	Tool Truck	0%	-	-	-	-	-	-
32	FILTER FEED PUMPS (2)	0%	-	-	-	-	-	-
33	Effluent Sampler	0%	-	-	-	-	-	-
34	DR5000 Spectrophotometer	0%	-	-	-	-	-	-
35	**Total Growth Related**		0	0	0	0	0	0
36	**Total Non-Growth Related**		2,555,760	3,344,100	9,616,000	11,097,950	2,732,050	403,600
37	**Total CIP**		$2,555,760	$3,344,100	$9,616,000	$11,097,950	$2,732,050	$403,600

City of Louisville - Stormwater Utility
Capital Improvement Program - Current Day Dollars

Line No.	Description	Percent Growth Related	Budget 2013 $	Projected 2014 $	2015 $	2016 $	2017 $	2018 $
1	South Street Underpass (5%)	0%	$21,000	$130,000	$0	$0	$0	$0
2	Sand-Salt Storage Building	0%	135,000	0	0	0	0	0
3	Storm Drainage Manual Update	0%	10,000	0	0	0	0	0
4	Drainageway "A-2"	0%	412,710	0	0	0	0	0
5	BNSF RR Underpass/N Drainage (75%)	0%	75,000	750,000	0	0	0	0
6	Dillon & 96th Street Drainageway "G"	0%	100,000	0	0	0	0	0
7	South Boulder Road Drainage Improvements	0%	83,500	0	0	0	0	0
8	City-Wide Storm Sewer Outfall Improvements	0%	0	0	3,450,000	1,300,000	3,100,000	0
9	Storm Sewer Detention Pond Maintenance	0%	0	110,000	110,000	110,000	110,000	110,000
10	DELO Utility (80%)	100%	0	600,000	0	0	0	0
11	CCS Drainage	0%	0	250,000	0	0	0	0
12	**Total Growth Related**		**0**	**600,000**	**0**	**0**	**0**	**0**
13	**Total Non-Growth Related**		**837,210**	**1,240,000**	**3,560,000**	**1,410,000**	**3,210,000**	**110,000**
14	**Total CIP**		**$837,210**	**$1,840,000**	**$3,560,000**	**$1,410,000**	**$3,210,000**	**$110,000**

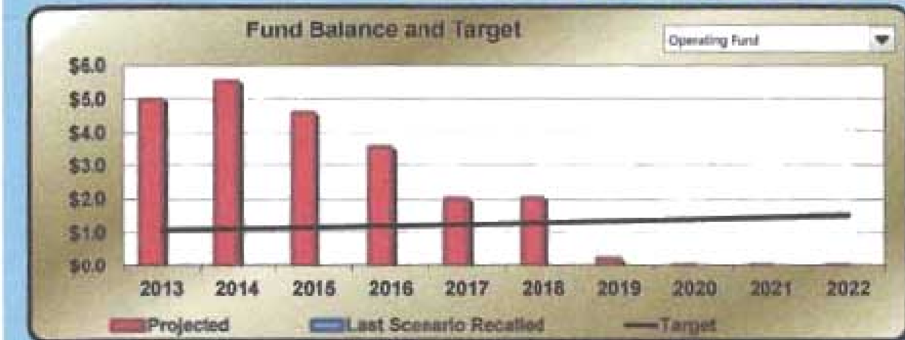
Alternative #1

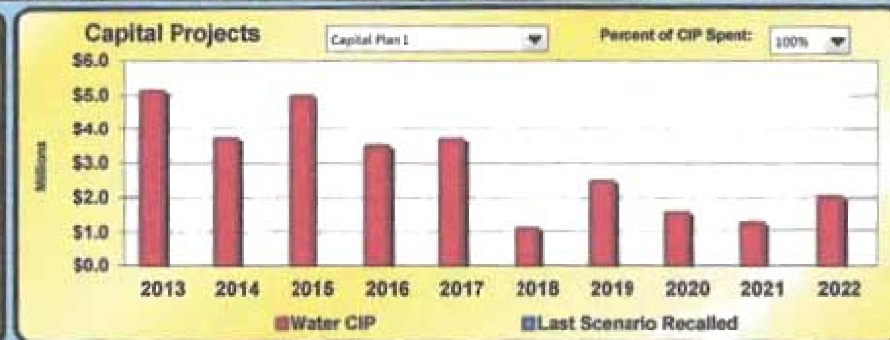
No Rate Increases

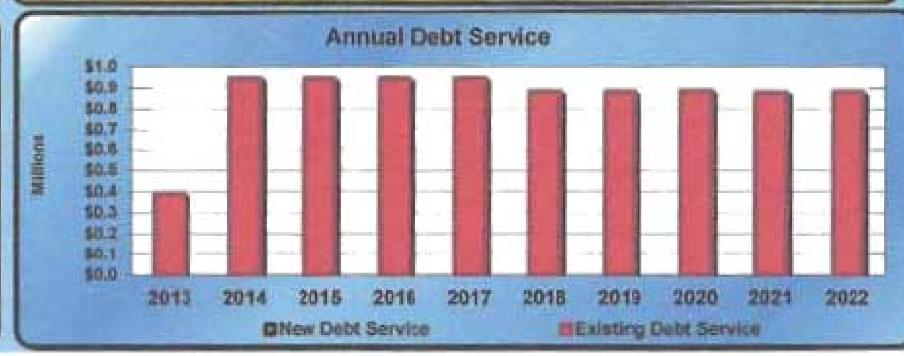
City of Louisville, CO
Water Utility
Alternative #1: No Rate Increases

Model Integrity Test		Calc Error	Select Last Year to Solve	Actual Year Solved To	Time
Optimized	Neg. Balances	OK!	2022	2052	15 Seconds

Description	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Water DSCR w/o Tap Fees	4.23	1.67	1.60	1.50	1.38	1.35	1.18	0.94	0.81	0.62	0.42
Water DSCR with Tap Fees	14.02	5.85	5.67	3.78	3.52	2.26	1.70	1.51	1.34	1.15	0.95
Combined DSC - w/o Tap Fees	7.57	2.60	0.79	0.74	0.66	0.58	0.50	0.42	0.33	0.24	0.14
Combined DSC - w Tap Fees	18.84	6.86	2.20	1.49	1.37	0.90	0.69	0.60	0.52	0.42	0.33
Manual Rate Adjustments		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.0%







City of Louisville - Water Utility
Operating Fund Cash Flow Analysis
Alternative #1: No Rate Increases

Line No.	Description	Budget 2013 $	Projected 2014 $	2015 $	2016 $	2017 $	2018 $
1	**Beginning Operating Fund Balance**	$6,388,520	$4,984,103	$5,507,880	$4,589,073	$3,503,370	$1,993,957
	Revenue						
2	Rate Revenue	4,777,044	4,777,044	4,824,814	4,873,063	4,921,793	4,971,011
3	Unclassified Charges for Services	15,000	15,000	15,150	15,302	15,455	15,609
4	Delinquent Charges	20,000	20,000	20,200	20,402	20,606	20,812
5	Miscellaneous Revenues	50,000	50,000	50,500	51,005	51,515	52,030
6	Interest Earnings	40,000	65,575	63,106	50,578	34,358	25,111
7	Sale of Fixed Asset	2,770	2,798	2,826	2,854	2,882	2,911
8	Solar Power Renewable Energy Credit	16,500	15,000	15,150	15,302	15,455	15,609
9	**Total Revenue**	4,921,314	4,945,417	4,991,746	5,028,504	5,062,084	5,103,094
	Revenue Requirements						
10	Operating Expenses	3,263,350	3,374,080	3,491,814	3,623,425	3,764,597	3,918,039
11	Debt Service - Existing	392,010	943,655	942,867	942,435	945,111	883,441
12	Debt Service - Proposed	0	0	0	0	0	0
13	Transfer Out to Capital Fund	2,670,371	103,905	1,476,071	1,548,347	1,861,770	271,813
14	Transfer Out to Debt Service Reserve	0	0	0	0	0	0
15	**Total Revenue Requirements**	6,325,731	4,421,640	5,910,553	6,114,208	6,571,477	5,073,293
16	**Annual Surplus/(Deficit)**	(1,404,417)	523,777	(918,807)	(1,085,703)	(1,509,413)	29,801
17	**Ending Operating Fund Balance**	$4,984,103	$5,507,880	$4,589,073	$3,503,370	$1,993,957	$2,023,757
18	*Target Op. Reserve (120 Days Operating Exp.)*	*1,072,882*	*1,109,287*	*1,147,928*	*1,191,263*	*1,237,676*	*1,288,122*
19	**Ending Balance Excess/(Shortfall)**	3,911,221	4,398,593	3,441,145	2,312,107	756,281	735,635
20	**Debt Service Coverage - Target 1.40**	4.23	1.67	1.59	1.49	1.37	1.34
21	**Projected Revenue Increase**	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

City of Louisville - Water Utility
Capital Fund Cash Flow Analysis
Alternative #1: No Rate Increases

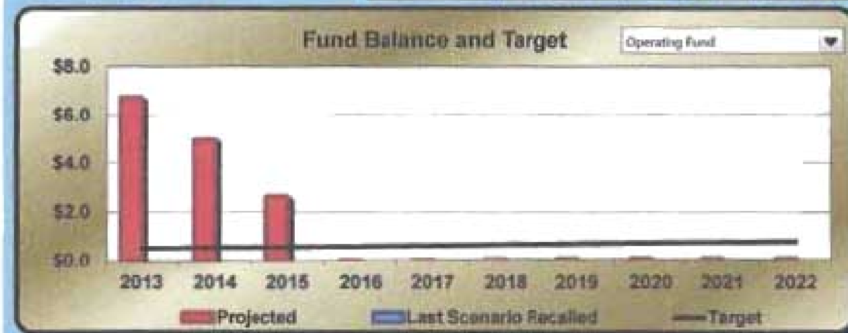
Line No.	Description	Budget 2013 $	Projected 2014 $	2015 $	2016 $	2017 $	2018 $
1	**Beginning Fund Balance**	$0	$1,400,000	$1,410,211	$1,417,594	$1,427,519	$1,434,430
	Sources of Funds						
2	Tap Fee Revenue	3,835,219	3,580,642	3,485,472	1,908,884	1,804,819	806,431
3	Transfer In From Operating Fund	2,670,371	103,905	1,476,071	1,548,347	1,861,770	271,813
4	Bond/Loan Proceeds	-	-	-	-	-	-
5	Interest Earnings	0	16,914	8,448	8,105	6,251	16,277
6	**Total Sources of Funds**	6,505,590	3,701,461	4,969,992	3,465,336	3,672,840	1,094,521
	Uses of Funds						
7	CIP	5,105,590	3,691,250	4,962,609	3,455,411	3,665,930	1,087,189
8	**Total Uses of Funds**	5,105,590	3,691,250	4,962,609	3,455,411	3,665,930	1,087,189
9	**Annual Surplus/(Deficit)**	1,400,000	10,211	7,382	9,926	6,911	7,332
10	**Ending Fund Balance**	$1,400,000	$1,410,211	$1,417,594	$1,427,519	$1,434,430	$1,441,762
11	**Target Fund Balance (2% of Fixed Assets)**	1,400,000	1,410,211	1,417,594	1,427,519	1,434,430	1,441,762
12	**Ending Balance Excess/(Shortfall)**	0	0	0	0	0	0
13	**Projected Tap Fee Increase**	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

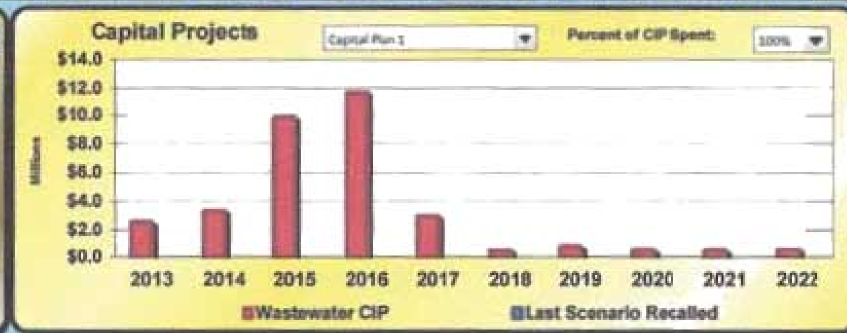
City of Louisville, CO
Wastewater Utility
Alternative #1: No Rate Increases

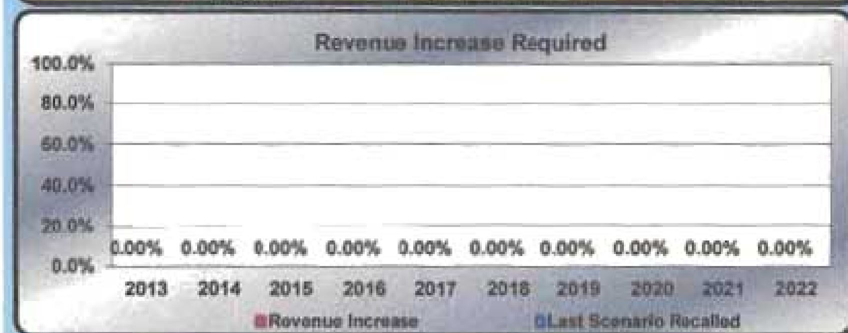
Model Integrity Test		Calc Error
Optimized!	Neg. Balances	OK!

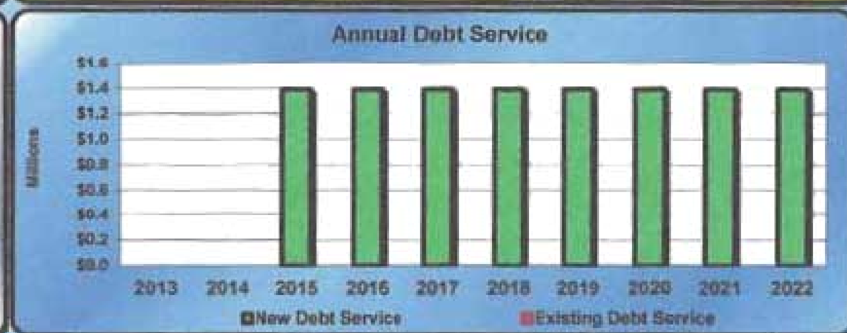
Select Last Year to Solve	Actual Year Solved To	Time
2032	2052	15 Seconds

Description	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Wastewater DSCR w/o Tap Fees	N/A	N/A	0.32	0.27	0.18	0.09	0.03	(0.03)	(0.09)	(0.15)	(0.22)
Wastewater DSCR with Tap Fees	N/A	N/A	0.77	0.48	0.37	0.16	0.08	0.02	(0.05)	(0.11)	(0.17)
Combined DSC - w/o Tap Fees	7.56	2.60	0.79	0.74	0.65	0.58	0.50	0.41	0.33	0.24	0.14
Combined DSC - w Tap Fees	18.83	6.86	2.20	1.49	1.36	0.98	0.89	0.80	0.51	0.42	0.33
Manual Rate Adjustments		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.0%









City of Louisville - Wastewater Utility
Operating Fund Cash Flow Analysis
Alternative #1: No Rate Increases

Line No.	Description	Budget 2013 $	Projected 2014 $	2015 $	2016 $	2017 $	2018 $
1	**Beginning Operating Fund Balance**	**$9,028,301**	**$6,710,781**	**$4,954,719**	**$2,617,477**	**($384,863)**	**($4,231,621)**
	Revenue						
2	Rate Revenue	1,860,580	1,879,186	1,897,978	1,916,957	1,936,127	1,955,488
3	Unclassified Charges for Services	0	0	0	0	0	0
4	Assessment Fee	0	0	0	0	0	0
5	Delinquent Charges	4,000	4,000	4,120	4,264	4,413	4,590
6	Pretreatment Fees	10,000	10,000	10,300	10,661	11,034	11,475
7	RV Dump Station Fees	5,000	5,000	5,150	5,330	5,517	5,737
8	Miscellaneous Revenues	0	0	0	0	0	0
9	Interest Earnings	60,000	72,909	47,326	13,954	0	0
10	Net Increase (Decrease) in Fair Value	0	0	0	0	0	0
11	Biosolids Revenue	690	600	618	640	662	688
12	Solar Power Renewable Energy Credit	8,250	6,000	6,180	6,396	6,620	6,885
13	Sale of Fixed Assets	0	0	0	0	0	0
14	Transfer from Golf Course	180,000	180,000	185,400	191,889	198,605	206,549
15	**Total Revenue**	**2,128,520**	**2,157,695**	**2,157,072**	**2,150,091**	**2,162,078**	**2,191,414**
	Revenue Requirements						
16	Operating Expenses	1,546,040	1,655,050	1,715,131	1,781,047	1,919,290	2,077,128
17	Debt Service - Existing	0	0	0	0	0	0
18	Debt Service - Proposed	0	0	1,389,591	1,389,591	1,389,591	1,389,591
19	Transfer Out to Capital Fund	2,900,000	2,258,707	-	1,981,793	2,700,855	346,528
20	Transfer Out to Debt Service Reserve			1,389,591			
21	**Total Revenue Requirements**	**4,446,040**	**3,913,757**	**4,494,313**	**5,152,431**	**6,009,737**	**3,813,248**
22	**Annual Surplus/(Deficit)**	**(2,317,520)**	**(1,756,062)**	**(2,337,242)**	**(3,002,340)**	**(3,846,758)**	**(1,621,834)**
23	**Ending Operating Fund Balance**	**$6,710,781**	**$4,954,719**	**$2,617,477**	**($384,863)**	**($4,231,621)**	**($5,853,455)**
24	***Target Operating Reserve (120 Days Operating Exp.)***	***508,287***	***544,126***	***563,879***	***585,550***	***631,000***	***682,891***
25	**Ending Balance Excess/(Shortfall)**	**6,202,494**	**4,410,593**	**2,053,599**	***(970,413)***	***(4,862,621)***	***(6,536,347)***
26	**Debt Service Coverage - Target 1.30**	**N/A**	**N/A**	**0.32**	**0.27**	**0.18**	**0.08**
27	**Projected Revenue Increase**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**
28	**Cumulative Revenue Increase**						

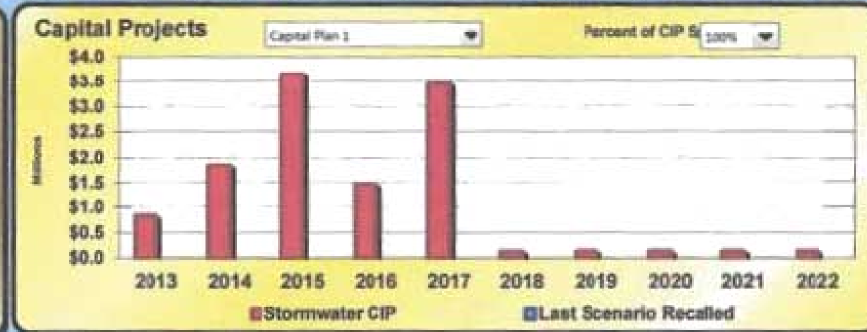
City of Louisville - Wastewater Utility
Capital Fund Cash Flow Analysis
Alternative #1: No Rate Increases

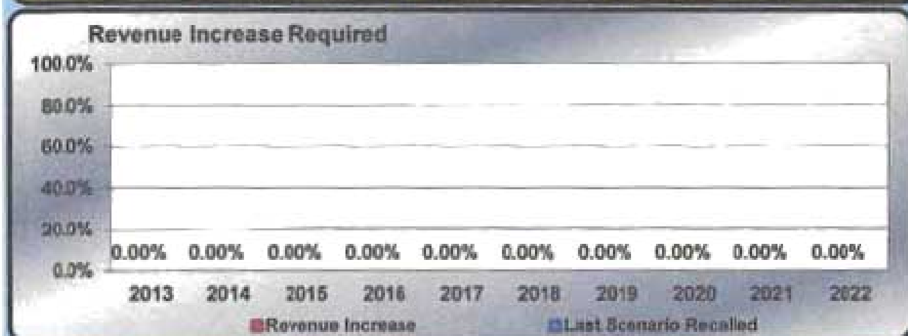
Line No.	Description	Budget 2013 $	Projected 2014 $	2015 $	2016 $	2017 $	2018 $
1	**Beginning Fund Balance**	**$0**	**$928,632**	**$282,239**	**$9,649,474**	**$308,159**	**$330,355**
	Sources of Funds						
2	Tap Fee Revenue	584,392	439,000	618,135	286,827	263,460	102,437
3	Transfer In From Operating Fund	2,900,000	2,258,707	-	1,981,793	2,700,855	346,528
4	Bond/Loan Proceeds	-	-	18,605,500	-	-	-
5	Interest Earnings	0	0	0	49,849	0	1,998
6	**Total Sources of Funds**	**3,484,392**	**2,697,707**	**19,223,635**	**2,318,469**	**2,964,315**	**450,963**
	Uses of Funds						
7	CIP	2,555,760	3,344,100	9,856,400	11,659,784	2,942,119	445,499
8	**Total Uses of Funds**	**2,555,760**	**3,344,100**	**9,856,400**	**11,659,784**	**2,942,119**	**445,499**
9	**Annual Surplus/(Deficit)**	**928,632**	**(646,393)**	**9,367,235**	**(9,341,315)**	**22,196**	**5,464**
10	**Ending Fund Balance**	**$928,632**	**$282,239**	**$9,649,474**	**$308,159**	**$330,355**	**$335,819**
11	**Target Fund Balance (2% of Fixed Assets)**	**277,128**	**282,239**	**288,927**	**308,159**	**330,355**	**335,819**
12	**Ending Balance Excess/(Shortfall)**	**651,504**	**0**	**9,360,547**	*(0)*	**0**	*(0)*
13	**Projected Tap Fee Increase**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**

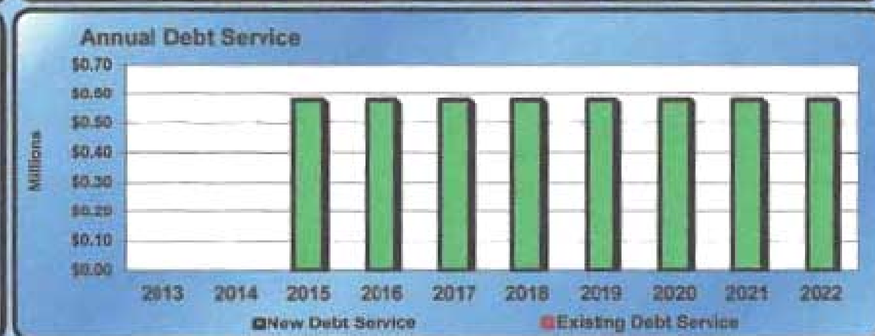
City of Louisville, CO
Stormwater Utility
Alternative #1: No Rate Increases

Model Integrity Test		Calc Error	Select Last Year to Solve	Actual Year Solved To	Time
Optimized!	Neg. Balances	OK!	2032	2052	15 Seconds

Description	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Stormwater DSCR w/o Tap Fees	N/A	N/A	0.64	0.64	0.64	0.64	0.63	0.62	0.61	0.59	0.58
Stormwater DSCR with Tap Fees	N/A	N/A	0.64	0.64	0.64	0.64	0.63	0.62	0.61	0.59	0.58
Combined DSC - w/o Tap Fees	7.56	2.60	0.79	0.74	0.65	0.58	0.50	0.41	0.33	0.24	0.14
Combined DSC - w Tap Fees	18.83	6.86	2.20	1.49	1.36	0.90	0.69	0.60	0.51	0.42	0.33
Manual Rate Adjustments		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.0%







City of Louisville - Stormwater Utility
Operating Fund Cash Flow Analysis
Alternative #1: No Rate Increases

Line No.	Description	Budget 2013 $	Projected 2014 $	2015 $	2016 $	2017 $	2018 $
1	**Beginning Operating Fund Balance**	**$1,845,570**	**$1,621,300**	**$272,553**	**($512,663)**	**($721,401)**	**($1,752,169)**
	Revenue						
2	Rate Revenue	516,280	521,443	526,657	531,924	537,243	542,615
3	Stormwater Permit Fees	2,000	2,000	2,060	2,132	2,207	2,295
4	Grant Revenues	350,000	0	0	0	0	0
5	Assessment Fees	0	0	0	0	0	0
6	Delinquent Charges	900	900	927	959	993	1,033
7	Miscellaneous Revenue	0	0	0	0	0	0
8	Interest Earnings	15,000	11,837	0	0	0	0
9	Net Increase (Decrease) in Fair Value	0	0	0	0	0	0
10	**Total Revenue**	**884,180**	**536,179**	**529,644**	**535,015**	**540,443**	**545,943**
	Revenue Requirements						
11	Operating Expenses	158,450	154,940	160,656	166,652	173,275	180,253
12	Debt Service - Existing	0	0	0	0	0	0
13	Debt Service - Proposed	0	0	577,102	577,102	577,102	577,102
14	Transfer Out to Capital Fund	950,000	1,729,987	0	0	820,835	127,839
15	Transfer Out to Debt Service Reserve			577,102			
16	**Total Revenue Requirements**	**1,108,450**	**1,884,927**	**1,314,860**	**743,754**	**1,571,211**	**885,194**
17	**Annual Surplus/(Deficit)**	**(224,270)**	**(1,348,747)**	**(785,215)**	**(208,738)**	**(1,030,768)**	**(339,251)**
18	**Ending Operating Fund Balance**	**$1,621,300**	**$272,553**	**($512,663)**	**($721,401)**	**($1,752,169)**	**($2,091,420)**
19	*Target Operating Reserve (120 Days Operating Exp.)*	*52,093*	*50,939*	*52,818*	*54,790*	*56,967*	*59,261*
20	**Ending Balance Excess/(Shortfall)**	**1,569,207**	**221,614**	*(565,481)*	*(776,191)*	*(1,809,136)*	*(2,150,682)*
21	**Debt Service Coverage - Target 1.25**	**N/A**	**N/A**	**0.64**	**0.64**	**0.64**	**0.63**
22	**Projected Revenue Increase**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**
23	**Cumulative Revenue Increase**						

City of Louisville - Stormwater Utility
Capital Fund Cash Flow Analysis
Alternative #1: No Rate Increases

Line No.	Description	Budget 2013 $	Projected 2014 $	2015 $	2016 $	2017 $	2018 $
1	**Beginning Fund Balance**	$0	$112,790	$2,777	$4,080,277	$2,640,903	$16,397
	Sources of Funds						
2	System Development Fee Revenue	0	0	0	0	0	0
3	Transfer In From Operating Fund	950,000	1,729,987	-	-	820,835	127,839
4	Bond/Loan Proceeds	-	-	7,726,500	-	-	-
5	Interest Earnings	0	0	0	42,007	11,478	0
6	**Total Sources of Funds**	950,000	1,729,987	7,726,500	42,007	832,313	127,839
	Uses of Funds						
7	CIP	837,210	1,840,000	3,649,000	1,481,381	3,456,819	121,419
8	**Total Uses of Funds**	837,210	1,840,000	3,649,000	1,481,381	3,456,819	121,419
9	**Annual Surplus/(Deficit)**	112,790	(110,013)	4,077,500	(1,439,374)	(2,624,506)	6,420
10	**Ending Fund Balance**	$112,790	$2,777	$4,080,277	$2,640,903	$16,397	$22,817
11	**Target Fund Balance (2% of Fixed Assets)**	1,102	2,777	6,457	13,577	16,397	22,817
12	**Ending Balance Excess/(Shortfall)**	111,688	(0)	4,073,820	2,627,326	(0)	(0)
13	**Projected System Development Fee Increase**	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

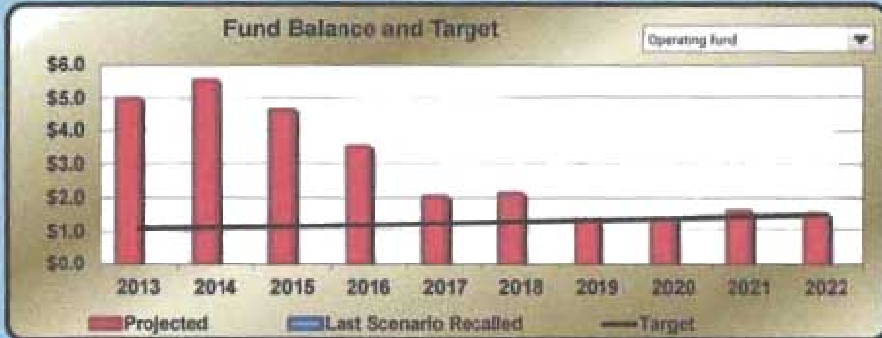
Alternative #2

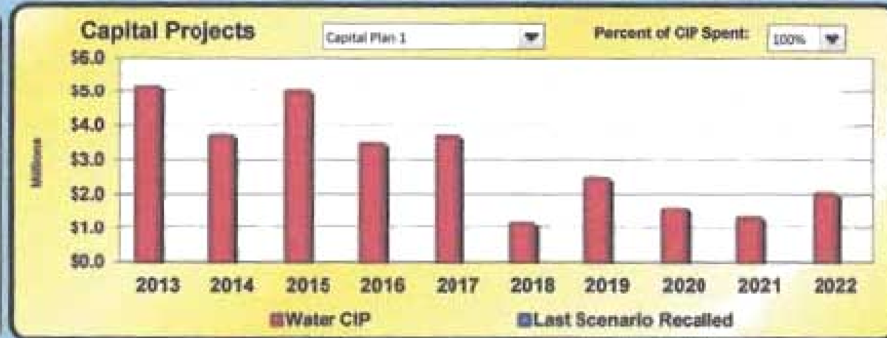
Just In Time (Immediate Stand Alone Sufficiency)

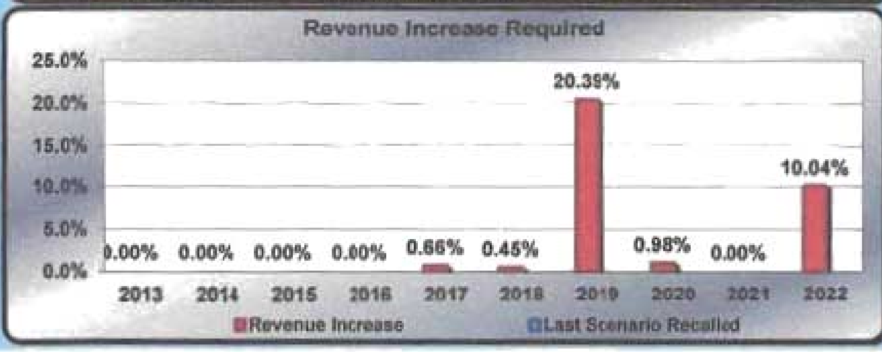
City of Louisville, CO
Water Utility
Alternative #2: Just In Time (Immediate Stand Alone Sufficiency)

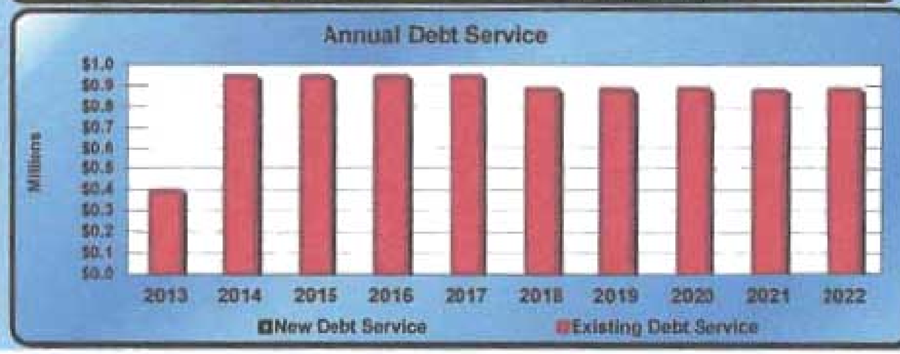
Model Integrity Test		Calc Error	Select Last Year to Solve	Actual Year Solved To	Time
Optimized!	Balanced	OK!	2032	2052	15 Seconds

Description	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Water DSCR w/o Tap Fees	4.23	1.67	1.50	1.50	1.41	1.41	2.42	2.29	2.14	2.65	2.46
Water DSCR with Tap Fees	14.02	5.85	5.57	3.78	3.56	2.32	2.94	2.82	2.67	3.18	2.99
Combined DSC - w/o Tap Fees	7.57	2.60	1.46	1.43	1.61	1.57	1.86	1.80	1.73	1.85	1.77
Combined DSC - w Tap Fees	18.84	6.86	2.87	2.18	2.32	1.89	2.04	1.98	1.91	2.04	1.95
Manual Rate Adjustments											









City of Louisville - Water Utility
Operating Fund Cash Flow Analysis
Alternative #2: Just In Time (Immediate Stand Alone Sufficiency)

Line No.	Description	Budget 2013 $	Projected 2014 $	2015 $	2016 $	2017 $	2018 $
1	**Beginning Operating Fund Balance**	$6,388,520	$4,984,103	$5,507,880	$4,589,073	$3,503,370	$2,026,531
	Revenue						
2	Rate Revenue	4,777,044	4,777,044	4,824,814	4,873,063	4,954,164	5,025,979
3	Unclassified Charges for Services	15,000	15,000	15,150	15,302	15,455	15,609
4	Delinquent Charges	20,000	20,000	20,200	20,402	20,606	20,812
5	Miscellaneous Revenues	50,000	50,000	50,500	51,005	51,515	52,030
6	Interest Earnings	40,000	65,575	63,106	50,578	34,562	25,866
7	Sale of Fixed Asset	2,770	2,798	2,826	2,854	2,882	2,911
8	Solar Power Renewable Energy Credit	16,500	15,000	15,150	15,302	15,455	15,609
9	**Total Revenue**	4,921,314	4,945,417	4,991,746	5,028,504	5,094,639	5,168,817
	Revenue Requirements						
10	Operating Expenses	3,263,350	3,374,080	3,491,614	3,623,425	3,764,597	3,918,039
11	Debt Service - Existing	392,010	943,655	942,867	942,435	945,111	883,441
12	Debt Service - Proposed	0	0	0	0	0	0
13	Transfer Out to Capital Fund	2,670,371	103,905	1,476,071	1,548,347	1,861,770	271,813
14	Transfer Out to Debt Service Reserve	0	0	0	0	0	0
15	**Total Revenue Requirements**	6,325,731	4,421,640	5,910,553	6,114,208	6,571,477	5,073,293
16	**Annual Surplus/(Deficit)**	(1,404,417)	523,777	(918,807)	(1,085,703)	(1,476,839)	85,524
17	**Ending Operating Fund Balance**	$4,984,103	$5,507,880	$4,589,073	$3,503,370	$2,026,531	$2,112,055
18	*Target Op. Reserve (120 Days Operating Exp.)*	*1,072,882*	*1,109,287*	*1,147,928*	*1,191,263*	*1,237,676*	*1,288,122*
19	**Ending Balance Excess/(Shortfall)**	3,911,221	4,398,593	3,441,145	2,312,107	788,856	823,933
20	**Debt Service Coverage - Target 1.40**	4.23	1.67	1.59	1.49	1.41	1.40
21	**Projected Revenue Increase**	0.0%	0.0%	0.0%	0.0%	0.7%	0.4%

City of Louisville - Water Utility
Capital Fund Cash Flow Analysis
Alternative #2: Just In Time (Immediate Stand Alone Sufficiency)

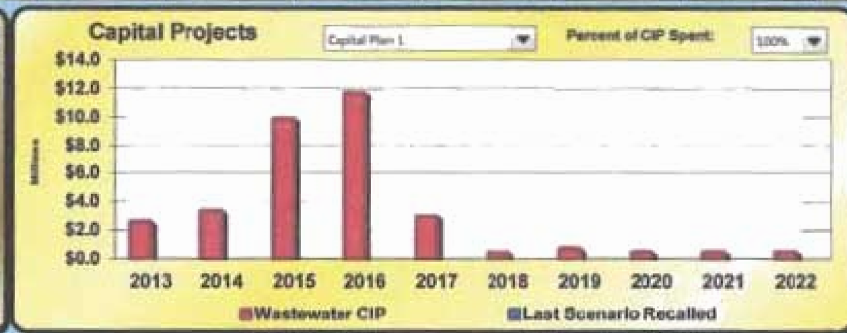
Line No.	Description	Budget 2013 $	Projected 2014 $	2015 $	2016 $	2017 $	2018 $
1	**Beginning Fund Balance**	$0	$1,400,000	$1,410,211	$1,417,594	$1,427,519	$1,434,430
	Sources of Funds						
2	Tap Fee Revenue	3,835,219	3,580,642	3,485,472	1,908,884	1,804,819	806,431
3	Transfer In From Operating Fund	2,670,371	103,905	1,476,071	1,548,347	1,861,770	271,813
4	Bond/Loan Proceeds	-	-	-	-	-	-
5	Interest Earnings	0	16,914	8,448	8,105	6,251	16,277
6	**Total Sources of Funds**	6,505,590	3,701,461	4,969,992	3,465,336	3,672,840	1,094,521
	Uses of Funds						
7	CIP	5,105,590	3,691,250	4,962,609	3,455,411	3,665,930	1,087,189
8	**Total Uses of Funds**	5,105,590	3,691,250	4,962,609	3,455,411	3,665,930	1,087,189
9	**Annual Surplus/(Deficit)**	1,400,000	10,211	7,382	9,925	6,911	7,332
10	**Ending Fund Balance**	$1,400,000	$1,410,211	$1,417,594	$1,427,519	$1,434,430	$1,441,762
11	**Target Fund Balance (2% of Fixed Assets)**	1,400,000	1,410,211	1,417,594	1,427,519	1,434,430	1,441,762
12	**Ending Balance Excess/(Shortfall)**	0	0	0	0	0	0
13	**Projected Tap Fee Increase**	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

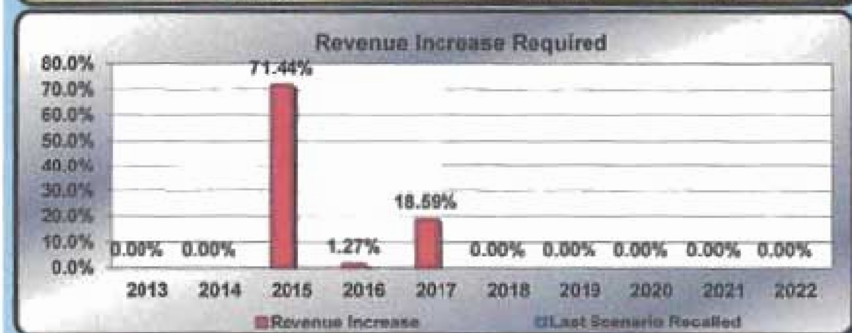
City of Louisville, CO
Wastewater Utility
Alternative #2: Just In Time (Immediate Stand Alone Sufficiency)

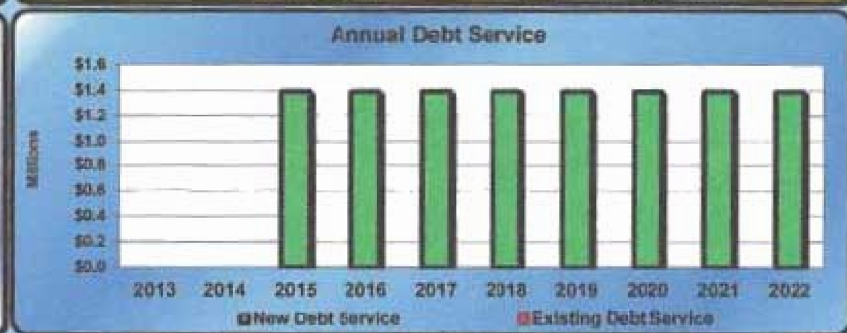
Model Integrity Test		Calc Error
Optimized!	Balanced	OK!

Select Last Year to Solve	Actual Year Solved To	Time
2032	2062	15 Seconds

Description	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Wastewater DSCR w/o Tap Fees	N/A	N/A	1.30	1.30	1.67	1.59	1.54	1.49	1.44	1.38	1.32
Wastewater DSCR with Tap Fees	N/A	N/A	1.75	1.51	1.86	1.66	1.58	1.53	1.48	1.42	1.37
Combined DSC - w/o Tap Fees	7.56	2.60	1.46	1.43	1.61	1.57	1.86	1.80	1.72	1.85	1.77
Combined DSC - w Tap Fees	18.83	6.86	2.87	2.18	2.32	1.89	2.04	1.98	1.91	2.04	1.95
Manual Rate Adjustments											







City of Louisville - Wastewater Utility
Operating Fund Cash Flow Analysis
Alternative #2: Just In Time (Immediate Stand Alone Sufficiency)

Line No.	Description	Budget 2013 $	Projected 2014 $	2015 $	2016 $	2017 $	2018 $
1	**Beginning Operating Fund Balance**	$9,028,301	$6,710,781	$4,954,719	$3,982,005	$2,417,090	$639,763
	Revenue						
2	Rate Revenue	1,860,580	1,879,186	3,253,977	3,328,342	3,986,454	4,026,318
3	Unclassified Charges for Services	0	0	0	0	0	0
4	Assessment Fee	0	0	0	0	0	0
5	Delinquent Charges	4,000	4,000	4,120	4,264	4,413	4,590
6	Pretreatment Fees	10,000	10,000	10,300	10,661	11,034	11,475
7	RV Dump Station Fees	5,000	5,000	5,150	5,330	5,517	5,737
8	Miscellaneous Revenues	0	0	0	0	0	0
9	Interest Earnings	60,000	72,909	55,855	39,994	19,105	10,871
10	Net Increase (Decrease) in Fair Value	0	0	0	0	0	0
11	Biosolids Revenue	690	600	618	640	662	688
12	Solar Power Renewable Energy Credit	8,250	6,000	6,180	6,396	6,620	6,885
13	Sale of Fixed Assets	0	0	0	0	0	0
14	Transfer from Golf Course	180,000	180,000	185,400	191,889	198,605	206,549
15	**Total Revenue**	2,128,520	2,157,695	3,521,600	3,587,516	4,232,410	4,273,115
	Revenue Requirements						
16	Operating Expenses	1,546,040	1,655,050	1,716,131	1,781,047	1,919,290	2,077,128
17	Debt Service - Existing	0	0	0	0	0	0
18	Debt Service - Proposed	0	0	1,389,591	1,389,591	1,389,591	1,389,591
19	Transfer Out to Capital Fund	2,900,000	2,258,707	-	1,981,793	2,700,855	346,528
20	Transfer Out to Debt Service Reserve			1,389,591			
21	**Total Revenue Requirements**	4,446,040	3,913,757	4,494,313	5,152,431	6,009,737	3,813,248
22	**Annual Surplus/(Deficit)**	(2,317,520)	(1,756,062)	(972,714)	(1,564,915)	(1,777,326)	459,867
23	**Ending Operating Fund Balance**	$6,710,781	$4,954,719	$3,982,005	$2,417,090	$639,763	$1,099,631
24	*Target Operating Reserve (120 Days Operating Exp.)*	*508,287*	*544,126*	*563,879*	*585,550*	*631,000*	*682,891*
25	**Ending Balance Excess/(Shortfall)**	6,202,494	4,410,593	3,418,126	1,831,540	8,764	416,739
26	**Debt Service Coverage - Target 1.30**	N/A	N/A	1.30	1.30	1.66	1.58
27	**Projected Revenue Increase**	0.0%	0.0%	71.4%	1.3%	18.6%	0.0%
28	**Cumulative Revenue Increase**						

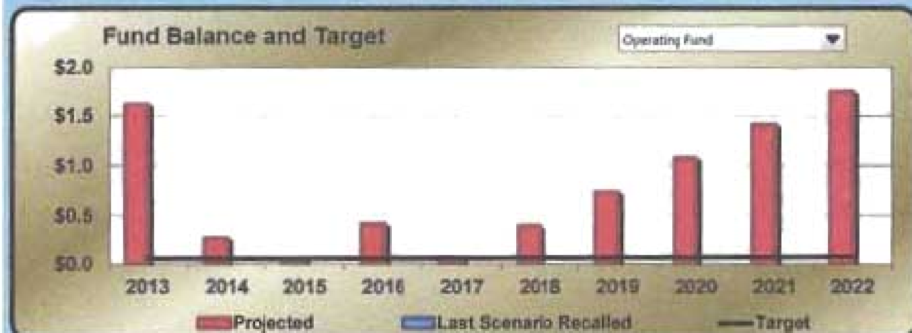
City of Louisville - Wastewater Utility
Capital Fund Cash Flow Analysis
Alternative #2: Just In Time (Immediate Stand Alone Sufficiency)

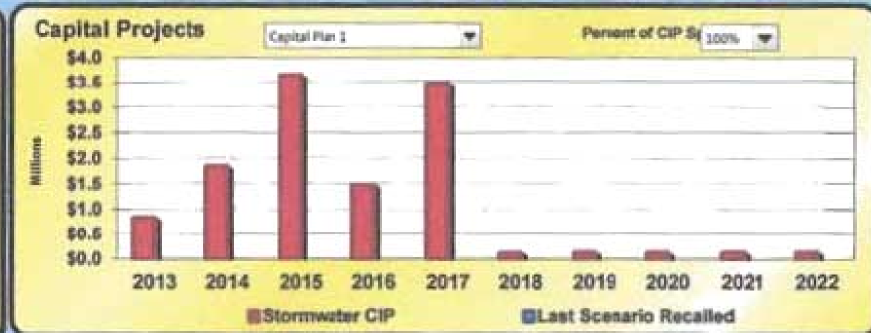
Line No.	Description	Budget 2013 $	Projected 2014 $	2015 $	2016 $	2017 $	2018 $
1	**Beginning Fund Balance**	$0	$928,632	$282,239	$9,649,474	$308,159	$330,355
	Sources of Funds						
2	Tap Fee Revenue	584,392	439,000	618,135	286,827	263,460	102,437
3	Transfer In From Operating Fund	2,900,000	2,258,707	-	1,981,793	2,700,855	346,528
4	Bond/Loan Proceeds	-	-	18,605,500	-	-	-
5	Interest Earnings	0	0	0	49,849	0	1,998
6	**Total Sources of Funds**	3,484,392	2,697,707	19,223,635	2,318,469	2,964,315	450,963
	Uses of Funds						
7	CIP	2,555,760	3,344,100	9,856,400	11,659,784	2,942,119	445,499
8	**Total Uses of Funds**	2,555,760	3,344,100	9,856,400	11,659,784	2,942,119	445,499
9	**Annual Surplus/(Deficit)**	928,632	(646,393)	9,367,235	(9,341,315)	22,196	5,464
10	**Ending Fund Balance**	$928,632	$282,239	$9,649,474	$308,159	$330,355	$335,819
11	**Target Fund Balance (2% of Fixed Assets)**	277,128	282,239	288,927	308,159	330,355	335,819
12	**Ending Balance Excess/(Shortfall)**	651,504	0	9,360,547	(0)	0	(0)
13	**Projected Tap Fee Increase**	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

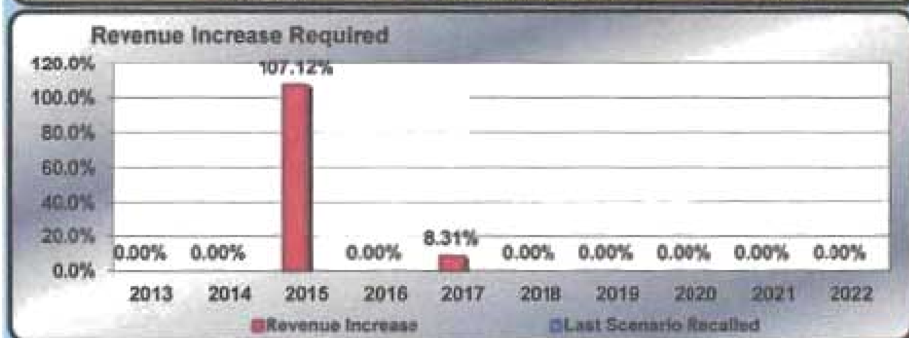
City of Louisville, CO
Stormwater Utility
Alternative #2: Just In Time (Immediate Stand Alone Sufficiency)

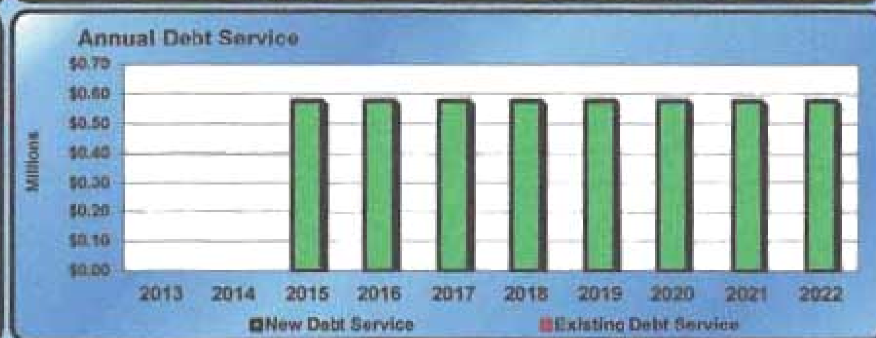
Model Integrity Test		Calc Error	Select Last Year to Solve	Actual Year Solved To	Time
Optimized!	Balanced	OK!	2032	2052	15 Seconds

Description	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Stormwater DSCR w/o Tap Fees	N/A	N/A	1.63	1.54	1.80	1.81	1.81	1.81	1.81	1.81	1.81
Stormwater DSCR with Tap Fees	N/A	N/A	1.63	1.54	1.80	1.81	1.81	1.81	1.81	1.81	1.81
Combined DSC - w/o Tap Fees	7.56	2.60	1.46	1.43	1.61	1.57	1.86	1.80	1.72	1.85	1.77
Combined DSC - w Tap Fees	18.83	5.86	2.87	2.18	2.32	1.80	2.04	1.98	1.91	2.04	1.95
Manual Rate Adjustments											









City of Louisville - Stormwater Utility
Operating Fund Cash Flow Analysis
Alternative #2: Just In Time (Immediate Stand Alone Sufficiency)

Line No.	Description	Budget 2013 $	Projected 2014 $	2015 $	2016 $	2017 $	2018 $
1	**Beginning Operating Fund Balance**	$1,845,570	$1,621,300	$272,553	$53,552	$417,577	$57,758
	Revenue						
2	Rate Revenue	516,280	521,443	1,090,834	1,101,742	1,205,222	1,217,274
3	Stormwater Permit Fees	2,000	2,000	2,060	2,132	2,207	2,295
4	Grant Revenues	350,000	0	0	0	0	0
5	Assessment Fees	0	0	0	0	0	0
6	Delinquent Charges	900	900	927	959	993	1,033
7	Miscellaneous Revenue	0	0	0	0	0	0
8	Interest Earnings	15,000	11,837	2,038	2,945	2,971	2,836
9	Net Increase (Decrease) in Fair Value	0	0	0	0	0	0
10	**Total Revenue**	884,180	536,179	1,095,859	1,107,778	1,211,393	1,223,438
	Revenue Requirements						
11	Operating Expenses	158,450	154,940	160,656	166,652	173,275	180,253
12	Debt Service - Existing	0	0	0	0	0	0
13	Debt Service - Proposed	0	0	577,102	577,102	577,102	577,102
14	Transfer Out to Capital Fund	950,000	1,729,987	0	0	820,835	127,839
15	Transfer Out to Debt Service Reserve			577,102			
16	**Total Revenue Requirements**	1,108,450	1,884,927	1,314,860	743,754	1,571,211	885,194
17	**Annual Surplus/(Deficit)**	(224,270)	(1,348,747)	(219,001)	364,024	(359,818)	338,244
18	**Ending Operating Fund Balance**	$1,621,300	$272,553	$53,552	$417,577	$57,758	$396,002
19	*Target Operating Reserve (120 Days Operating Exp.)*	*52,093*	*50,939*	*52,818*	*54,790*	*56,967*	*59,261*
20	**Ending Balance Excess/(Shortfall)**	1,569,207	221,614	734	362,787	791	336,740
21	**Debt Service Coverage - Target 1.25**	N/A	N/A	1.62	1.63	1.80	1.81
22	**Projected Revenue Increase**	0.0%	0.0%	107.1%	0.0%	8.3%	0.0%
23	**Cumulative Revenue Increase**						

City of Louisville - Stormwater Utility
Capital Fund Cash Flow Analysis
Alternative #2: Just In Time (Immediate Stand Alone Sufficiency)

Line No.	Description	Budget 2013 $	Projected 2014 $	2015 $	2016 $	2017 $	2018 $
1	**Beginning Fund Balance**	**$0**	**$112,790**	**$2,777**	**$4,080,277**	**$2,640,903**	**$16,397**
	Sources of Funds						
2	System Development Fee Revenue	0	0	0	0	0	0
3	Transfer In From Operating Fund	950,000	1,729,987	-	-	820,835	127,839
4	Bond/Loan Proceeds	-	-	7,726,500	-	-	-
5	Interest Earnings	0	0	0	42,007	11,478	0
6	**Total Sources of Funds**	**950,000**	**1,729,987**	**7,726,500**	**42,007**	**832,313**	**127,839**
	Uses of Funds						
7	CIP	837,210	1,840,000	3,649,000	1,481,381	3,456,819	121,419
8	**Total Uses of Funds**	**837,210**	**1,840,000**	**3,649,000**	**1,481,381**	**3,456,819**	**121,419**
9	**Annual Surplus/(Deficit)**	**112,790**	**(110,013)**	**4,077,500**	**(1,439,374)**	**(2,624,506)**	**6,420**
10	**Ending Fund Balance**	**$112,790**	**$2,777**	**$4,080,277**	**$2,640,903**	**$16,397**	**$22,817**
11	**Target Fund Balance (2% of Fixed Assets)**	**1,102**	**2,777**	**6,457**	**13,577**	**16,397**	**22,817**
12	**Ending Balance Excess/(Shortfall)**	**111,688**	*(0)*	**4,073,820**	**2,627,326**	*(0)*	*(0)*
13	**Projected System Development Fee Increase**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**

Alternative #3

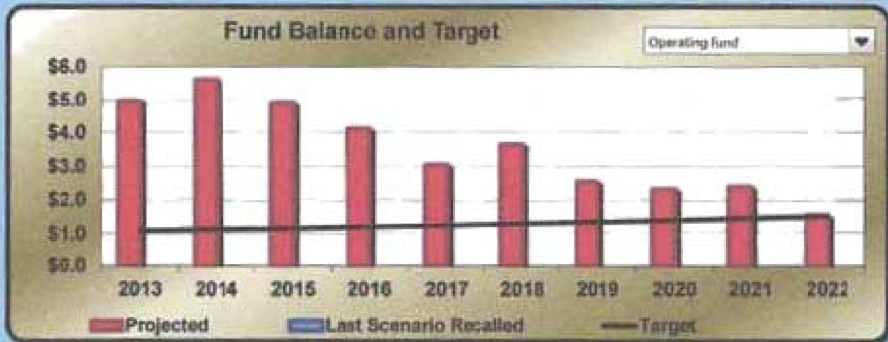
Smooth Rate Increases

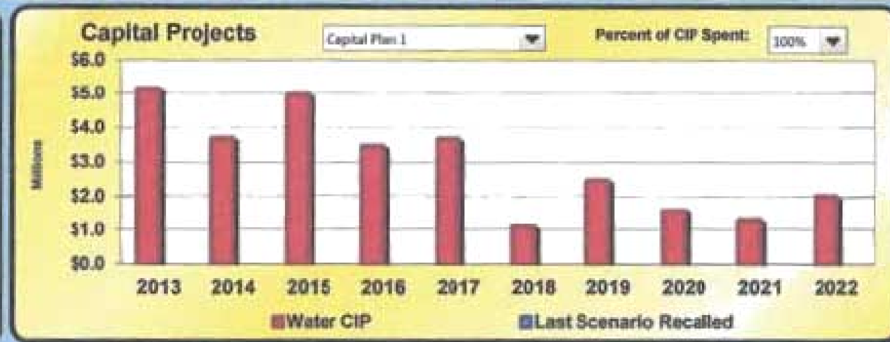
City of Louisville, CO
Water Utility
Alternative #3: Smooth Rate Increases

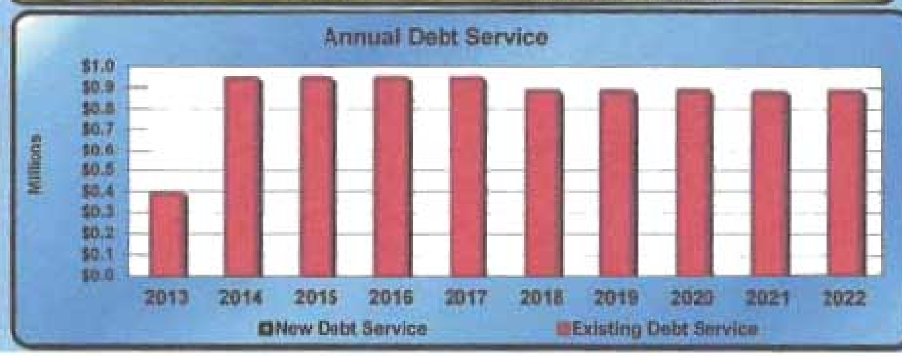
Model Integrity Test		Calc Error
Optimized!	Balanced	OK!

Select Last Year to Solve	Actual Year Solved To	Time
2032	2052	15 Seconds

Description	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Water DSCR w/o Tap Fees	4.23	1.77	1.81	1.82	1.85	2.01	2.01	1.98	1.99	1.79	1.83
Water DSCR with Tap Fees	14.02	5.96	5.89	4.12	4.03	2.92	2.54	2.51	2.52	2.32	2.35
Combined DSC - w/o Tap Fees	7.57	3.41	1.39	1.54	1.70	1.82	1.80	1.76	1.74	1.65	1.65
Combined DSC - w Tap Fees	18.84	7.67	2.80	2.30	2.41	2.14	1.98	1.95	1.92	1.84	1.83
Manual Rate Adjustments		2.00%	2.00%	2.00%	2.50%	2.50%	2.50%	2.50%	2.50%		







City of Louisville - Water Utility
Operating Fund Cash Flow Analysis
Alternative #3: Smooth Rate Increases

Line No.	Description	Budget 2013 $	Projected 2014 $	2015 $	2016 $	2017 $	2018 $
1	**Beginning Operating Fund Balance**	**$6,388,520**	**$4,984,103**	**$5,604,022**	**$4,882,573**	**$4,100,708**	**$3,033,353**
	Revenue						
2	Rate Revenue	4,777,044	4,872,585	5,019,737	5,171,333	5,353,622	5,542,338
3	Unclassified Charges for Services	15,000	15,000	15,150	15,302	15,455	15,609
4	Delinquent Charges	20,000	20,000	20,200	20,402	20,606	20,812
5	Miscellaneous Revenues	50,000	50,000	50,500	51,005	51,515	52,030
6	Interest Earnings	40,000	66,176	65,541	56,146	44,588	41,778
7	Sale of Fixed Asset	2,770	2,796	2,826	2,854	2,882	2,911
8	Solar Power Renewable Energy Credit	16,500	15,000	15,150	15,302	15,455	15,609
9	**Total Revenue**	**4,921,314**	**5,041,558**	**5,189,104**	**5,332,342**	**5,504,123**	**5,691,088**
	Revenue Requirements						
10	Operating Expenses	3,263,350	3,374,080	3,491,614	3,623,425	3,764,597	3,918,039
11	Debt Service - Existing	392,010	943,655	942,867	942,435	945,111	883,441
12	Debt Service - Proposed	0	0	0	0	0	0
13	Transfer Out to Capital Fund	2,670,371	103,905	1,476,071	1,548,347	1,861,770	271,813
14	Transfer Out to Debt Service Reserve	0	0	0	0	0	0
15	**Total Revenue Requirements**	**6,325,731**	**4,421,640**	**5,910,553**	**6,114,208**	**6,571,477**	**5,073,293**
16	**Annual Surplus/(Deficit)**	**(1,404,417)**	**619,919**	**(721,449)**	**(781,865)**	**(1,067,354)**	**617,795**
17	**Ending Operating Fund Balance**	**$4,984,103**	**$5,604,022**	**$4,882,573**	**$4,100,708**	**$3,033,353**	**$3,651,148**
18	*Target Op. Reserve (120 Days Operating Exp.)*	*1,072,882*	*1,109,287*	*1,147,928*	*1,191,263*	*1,237,676*	*1,288,122*
19	**Ending Balance Excess/(Shortfall)**	**3,911,221**	**4,494,735**	**3,734,645**	**2,909,445**	**1,795,678**	**2,363,026**
20	**Debt Service Coverage - Target 1.40**	**4.23**	**1.77**	**1.80**	**1.81**	**1.84**	**2.01**
21	**Projected Revenue Increase**	**0.0%**	**2.0%**	**2.0%**	**2.0%**	**2.5%**	**2.5%**

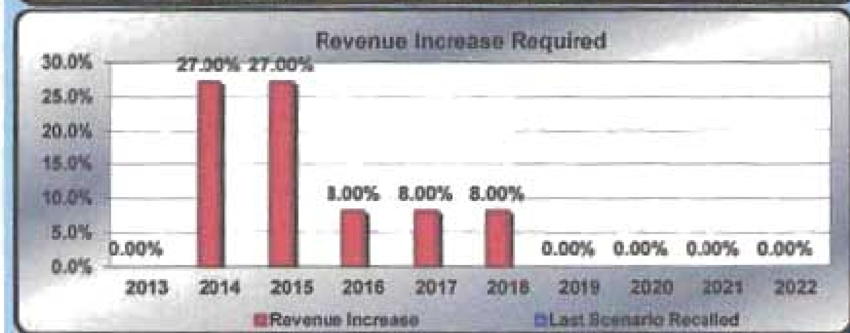
City of Louisville - Water Utility
Capital Fund Cash Flow Analysis
Alternative #3: Smooth Rate Increases

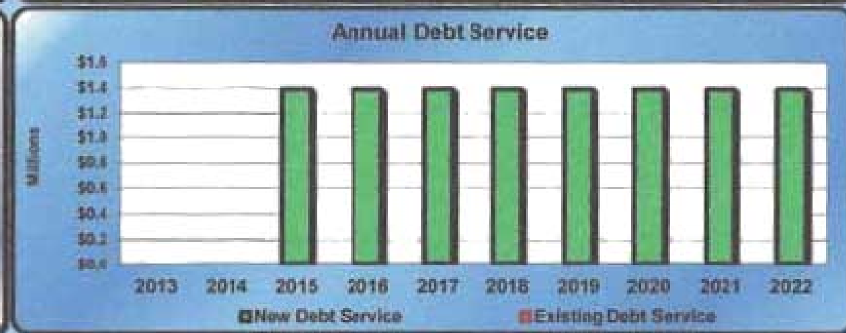
Line No.	Description	Budget 2013 $	Projected 2014 $	2015 $	2016 $	2017 $	2018 $
1	**Beginning Fund Balance**	$0	$1,400,000	$1,410,211	$1,417,594	$1,427,519	$1,434,430
	Sources of Funds						
2	Tap Fee Revenue	3,835,219	3,580,642	3,485,472	1,908,884	1,804,819	806,431
3	Transfer In From Operating Fund	2,670,371	103,905	1,476,071	1,548,347	1,861,770	271,813
4	Bond/Loan Proceeds	-	-	-	-	-	-
5	Interest Earnings	0	16,914	8,448	8,105	6,251	16,277
6	**Total Sources of Funds**	6,505,590	3,701,461	4,969,992	3,465,336	3,672,840	1,094,521
	Uses of Funds						
7	CIP	5,105,590	3,691,250	4,962,609	3,455,411	3,665,930	1,087,189
8	**Total Uses of Funds**	5,105,590	3,691,250	4,962,609	3,455,411	3,665,930	1,087,189
9	**Annual Surplus/(Deficit)**	1,400,000	10,211	7,382	9,925	6,911	7,332
10	**Ending Fund Balance**	$1,400,000	$1,410,211	$1,417,594	$1,427,519	$1,434,430	$1,441,762
11	**Target Fund Balance (2% of Fixed Assets)**	1,400,000	1,410,211	1,417,594	1,427,519	1,434,430	1,441,762
12	**Ending Balance Excess/(Shortfall)**	0	0	0	0	0	0
13	**Projected Tap Fee Increase**	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

City of Louisville, CO
Wastewater Utility
Alternative #3: Smooth Rate Increases

Model Integrity Test		Calc Error	Select Last Year to Solve	Actual Year Solved To	Time
Optimized!	Balanced	OK!	2032	2052	15 Seconds

Description	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Wastewater DSCR w/o Tap Fees	N/A	N/A	1.17	1.32	1.42	1.55	1.50	1.45	1.40	1.34	1.30
Wastewater DSCR with Tap Fees	N/A	N/A	1.61	1.52	1.61	1.62	1.54	1.49	1.44	1.38	1.35
Combined DSC - w/o Tap Fees	7.56	3.41	1.39	1.54	1.70	1.82	1.79	1.76	1.74	1.65	1.65
Combined DSC - w Tap Fees	18.83	7.67	2.80	2.30	2.41	2.13	1.98	1.95	1.92	1.83	1.83
Manual Rate Adjustments		27.00%	27.00%	8.00%	8.00%	8.00%					





City of Louisville - Wastewater Utility
Operating Fund Cash Flow Analysis
Alternative #3: Smooth Rate Increases

Line No.	Description	Budget 2013 $	Projected 2014 $	2015 $	2016 $	2017 $	2018 $
1	**Beginning Operating Fund Balance**	**$9,028,301**	**$6,710,781**	**$5,465,290**	**$4,305,058**	**$2,755,142**	**$635,860**
	Revenue						
2	Rate Revenue	1,860,580	2,386,566	3,061,248	3,339,209	3,642,410	3,973,141
3	Unclassified Charges for Services	0	0	0	0	0	0
4	Assessment Fee	0	0	0	0	0	0
5	Delinquent Charges	4,000	4,000	4,120	4,264	4,413	4,590
6	Pretreatment Fees	10,000	10,000	10,300	10,661	11,034	11,475
7	RV Dump Station Fees	5,000	5,000	5,150	5,330	5,517	5,737
8	Miscellaneous Revenues	0	0	0	0	0	0
9	Interest Earnings	60,000	76,100	61,065	44,126	21,194	10,488
10	Net Increase (Decrease) in Fair Value	0	0	0	0	0	0
11	Biosolids Revenue	690	600	618	640	662	688
12	Solar Power Renewable Energy Credit	8,250	6,000	6,180	6,396	6,620	6,885
13	Sale of Fixed Assets	0	0	0	0	0	0
14	Transfer from Golf Course	180,000	180,000	185,400	191,889	198,605	206,549
15	**Total Revenue**	**2,128,520**	**2,668,266**	**3,334,081**	**3,602,516**	**3,890,455**	**4,219,553**
	Revenue Requirements						
16	Operating Expenses	1,546,040	1,655,050	1,715,131	1,781,047	1,919,290	2,077,128
17	Debt Service - Existing	0	0	0	0	0	0
18	Debt Service - Proposed	0	0	1,389,591	1,389,591	1,389,591	1,389,591
19	Transfer Out to Capital Fund	2,900,000	2,258,707	-	1,981,793	2,700,855	346,528
20	Transfer Out to Debt Service Reserve			1,389,591			
21	**Total Revenue Requirements**	**4,446,040**	**3,913,757**	**4,494,313**	**5,152,431**	**6,009,737**	**3,813,248**
22	**Annual Surplus/(Deficit)**	**(2,317,520)**	**(1,245,491)**	**(1,160,233)**	**(1,549,916)**	**(2,119,282)**	**406,306**
23	**Ending Operating Fund Balance**	**$6,710,781**	**$5,465,290**	**$4,305,058**	**$2,755,142**	**$635,860**	**$1,042,166**
24	***Target Operating Reserve (120 Days Operating Exp.)***	***508,287***	***544,126***	***563,879***	***585,550***	***631,000***	***682,891***
25	**Ending Balance Excess/(Shortfall)**	**6,202,494**	**4,921,164**	**3,741,179**	**2,169,592**	**4,860**	**359,274**
26	**Debt Service Coverage - Target 1.30**	**N/A**	**N/A**	**1.17**	**1.31**	**1.42**	**1.54**
27	**Projected Revenue Increase**	**0.0%**	**27.0%**	**27.0%**	**8.0%**	**8.0%**	**8.0%**
28	**Cumulative Revenue Increase**						

City of Louisville - Wastewater Utility
Capital Fund Cash Flow Analysis
Alternative #3: Smooth Rate Increases

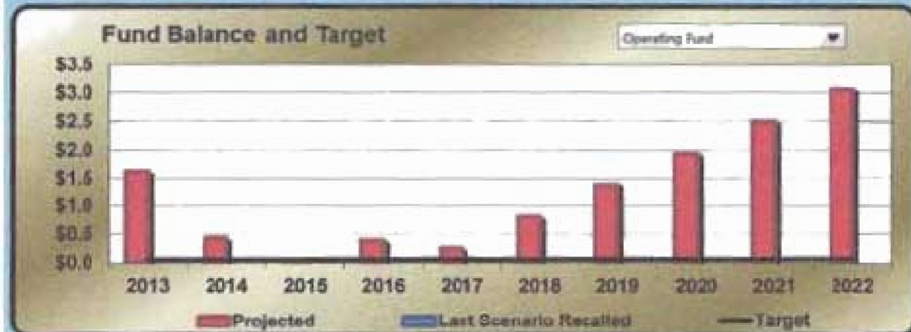
Line No.	Description	Budget 2013 $	Projected 2014 $	2015 $	2016 $	2017 $	2018 $
1	**Beginning Fund Balance**	$0	$928,632	$282,239	$9,649,474	$308,159	$330,355
	Sources of Funds						
2	Tap Fee Revenue	584,392	439,000	618,135	286,827	263,460	102,437
3	Transfer In From Operating Fund	2,900,000	2,258,707	-	1,981,793	2,700,855	346,528
4	Bond/Loan Proceeds	-	-	18,605,500	-	-	-
5	Interest Earnings	0	0	0	49,849	0	1,998
6	**Total Sources of Funds**	3,484,392	2,697,707	19,223,635	2,318,469	2,964,315	450,963
	Uses of Funds						
7	CIP	2,555,760	3,344,100	9,856,400	11,659,784	2,942,119	445,499
8	**Total Uses of Funds**	2,555,760	3,344,100	9,856,400	11,659,784	2,942,119	445,499
9	**Annual Surplus/(Deficit)**	928,632	(646,393)	9,367,235	(9,341,315)	22,196	5,464
10	**Ending Fund Balance**	$928,632	$282,239	$9,649,474	$308,159	$330,355	$335,819
11	**Target Fund Balance (2% of Fixed Assets)**	277,128	282,239	288,927	308,159	330,355	335,819
12	**Ending Balance Excess/(Shortfall)**	651,504	0	9,360,547	(0)	0	(0)
13	**Projected Tap Fee Increase**	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

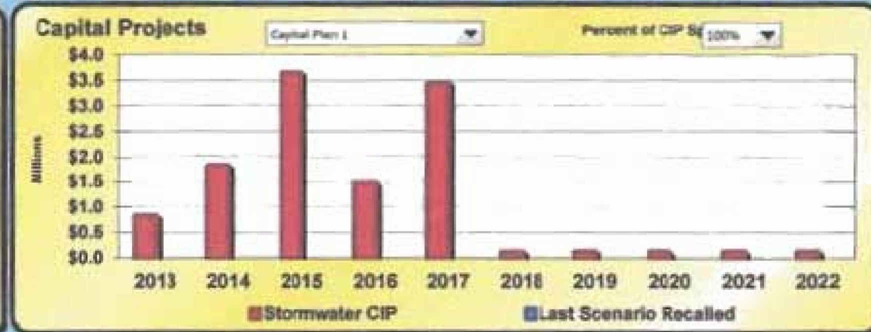
City of Louisville, CO
Stormwater Utility
Alternative #3: Smooth Rate Increases

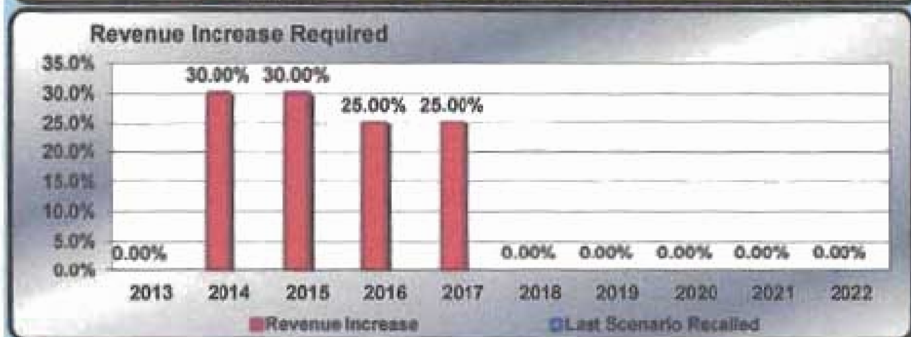
Model Integrity Test		Calc Error
Optimized!	Balanced	OK!

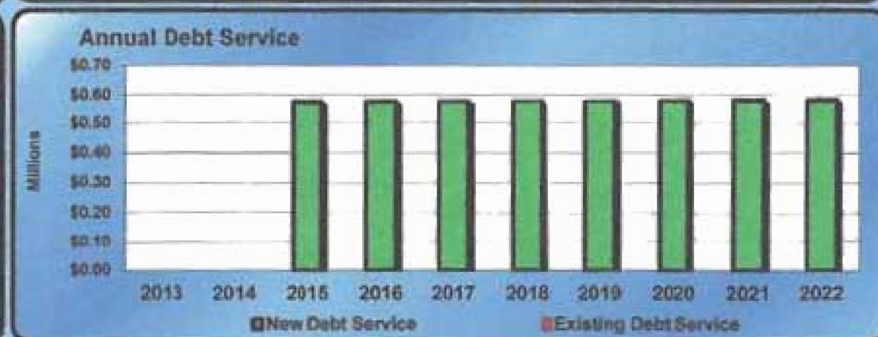
Select Last Year to Solve	Actual Year Solved To	Time
2032	2052	15 Seconds

Description	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Stormwater DSCR w/o Tap Fees	N/A	N/A	1.28	1.67	2.18	2.19	2.20	2.20	2.21	2.21	2.22
Stormwater DSCR with Tap Fees	N/A	N/A	1.28	1.67	2.18	2.19	2.20	2.20	2.21	2.21	2.22
Combined DSC - w/o Tap Fees	7.56	3.41	1.39	1.54	1.70	1.82	1.79	1.76	1.74	1.65	1.65
Combined DSC - w Tap Fees	18.83	7.67	2.80	2.30	2.41	2.13	1.98	1.95	1.92	1.83	1.83
Manual Rate Adjustments		30.00%	30.00%	25.00%	25.00%						









City of Louisville - Stormwater Utility
Operating Fund Cash Flow Analysis
Alternative #3: Smooth Rate Increases

Line No.	Description	Budget 2013 $	Projected 2014 $	2015 $	2016 $	2017 $	2018 $
1	**Beginning Operating Fund Balance**	**$1,845,570**	**$1,621,300**	**$429,969**	**$10,903**	**$396,476**	**$251,170**
	Revenue						
2	Rate Revenue	516,280	677,876	890,051	1,123,689	1,418,657	1,432,844
3	Stormwater Permit Fees	2,000	2,000	2,060	2,132	2,207	2,295
4	Grant Revenues	350,000	0	0	0	0	0
5	Assessment Fees	0	0	0	0	0	0
6	Delinquent Charges	900	900	927	959	993	1,033
7	Miscellaneous Revenue	0	0	0	0	0	0
8	Interest Earnings	15,000	12,820	2,755	2,546	4,048	6,625
9	Net Increase (Decrease) in Fair Value	0	0	0	0	0	0
10	**Total Revenue**	**884,180**	**693,596**	**895,793**	**1,129,327**	**1,425,905**	**1,442,796**
	Revenue Requirements						
11	Operating Expenses	158,450	154,940	160,656	166,652	173,275	180,253
12	Debt Service - Existing	0	0	0	0	0	0
13	Debt Service - Proposed	0	0	577,102	577,102	577,102	577,102
14	Transfer Out to Capital Fund	950,000	1,729,987	0	0	820,835	127,839
15	Transfer Out to Debt Service Reserve			577,102			
16	**Total Revenue Requirements**	**1,108,450**	**1,884,927**	**1,314,860**	**743,754**	**1,571,211**	**885,194**
17	**Annual Surplus/(Deficit)**	**(224,270)**	**(1,191,331)**	**(419,066)**	**385,573**	**(145,306)**	**557,602**
18	**Ending Operating Fund Balance**	**$1,621,300**	**$429,969**	**$10,903**	**$396,476**	**$251,170**	**$808,772**
19	***Target Operating Reserve (120 Days Operating Exp.)***	*52,093*	*50,939*	*52,818*	*54,790*	*56,967*	*59,261*
20	**Ending Balance Excess/(Shortfall)**	**1,569,207**	**379,030**	***(41,915)***	**341,686**	**194,203**	**749,510**
21	**Debt Service Coverage - Target 1.25**	**N/A**	**N/A**	**1.27**	**1.67**	**2.17**	**2.19**
22	**Projected Revenue Increase**	**0.0%**	**30.0%**	**30.0%**	**25.0%**	**25.0%**	**0.0%**
23	**Cumulative Revenue Increase**						

City of Louisville - Stormwater Utility
Capital Fund Cash Flow Analysis
Alternative #3: Smooth Rate Increases

Line No.	Description	Budget 2013 $	Projected 2014 $	2015 $	2016 $	2017 $	2018 $
1	**Beginning Fund Balance**	$0	$112,790	$2,777	$4,080,277	$2,640,903	$16,397
	Sources of Funds						
2	System Development Fee Revenue	0	0	0	0	0	0
3	Transfer In From Operating Fund	950,000	1,729,987	-	-	820,835	127,839
4	Bond/Loan Proceeds	-	-	7,726,500	-	-	-
5	Interest Earnings	0	0	0	42,007	11,478	0
6	**Total Sources of Funds**	950,000	1,729,987	7,726,500	42,007	832,313	127,839
	Uses of Funds						
7	CIP	837,210	1,840,000	3,649,000	1,481,381	3,456,819	121,419
8	**Total Uses of Funds**	837,210	1,840,000	3,649,000	1,481,381	3,456,819	121,419
9	**Annual Surplus/(Deficit)**	112,790	(110,013)	4,077,500	(1,439,374)	(2,624,506)	6,420
10	**Ending Fund Balance**	$112,790	$2,777	$4,080,277	$2,640,903	$16,397	$22,817
11	**Target Fund Balance (2% of Fixed Assets)**	1,102	2,777	6,457	13,577	16,397	22,817
12	**Ending Balance Excess/(Shortfall)**	111,688	(0)	4,073,820	2,627,326	(0)	(0)
13	**Projected System Development Fee Increase**	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Section 3: Water Cost of Service Analysis

TABLE WCOS-1

Water Utility
Revenue Requirements
2014 Test Year

Line No.		Amount ($)
	OPERATING COSTS	
1	Operation and Maintenance Expense	3,374,080
	CAPITAL COSTS	
2	Capital Improvements	103,905
3	Debt Service	943,655
4	Total Capital Costs	1,047,560
5	**TOTAL COST OF SERVICE**	**4,421,640**
	Revenue From Non-rate Sources	
6	Miscellaneous Revenue	102,798
7	Interest	66,176
8	Subtotal	168,973
9	Decrease (Increase) in Operating Reserves	(965,055)
10	Total Revenue from Non-Rate Sources	(796,082)
11	**NET COST OF SERVICE**	**5,217,721**

TABLE WCOS-2

Water Utility
Units Of Service
2014 Test Year

				Maximum Day Requirements			Maximum Hour Requirements					
Line No.	Class	Annual Usage 1,000 gal	Average Daily Usage 1,000 gpd	Demand Factor	Total Demand 1,000 gpd	Extra Demand 1,000 gpd	Demand Factor	Total Demand 1,000 gpd	Extra Demand 1,000 gpd	Number of Monthly Bills	Equivalent 3/4-in Meters (meter capacity)	Equivalent 3/4-in Meters (meter cost)
1	Single Family	582,278	1,595	200%	3,191	1,595	400%	6,381	3,191	73,520	73,520	73,520
2	Multifamily	75,676	207	150%	311	104	300%	622	311	2,060	7,836	4,800
3	Commercial	214,433	587	180%	1,057	470	360%	2,115	1,057	4,315	13,918	7,882
4	Irrigation	114,128	313	260%	813	500	520%	1,626	813	1,624	3,103	2,364
5	City	51,439	141	240%	338	197	480%	676	338	121	442	282
6	Public Fire Flow				300	300		3,600	3,300			
7	Total	1,037,954	2,844		6,010	3,167		15,020	9,010	81,640	98,818	88,848

45

TABLE WCOS-3

Water Utility
Allocation of O&M to Cost Components
2014 Test Year

				Extra Capacity		Customers		
Line No.	Description	Total ($)	Base ($)	Max Day ($)	Max Hour ($)	Local Dist. Lines ($)	Billing ($)	Meters ($)
	OPERATING EXPENSES							
1	Source of Supply	955,477	955,477	-	-	-	-	-
2	Treatment	1,819,089	909,545	909,545	-	-	-	-
3	Transmission	234,656	117,328	117,328	-	-	-	-
4	Distribution	234,656	-	-	-	234,656	-	-
	Customer							
5	Billing	65,100	-	-	-	-	65,100	-
6	Meters	65,100	-	-	-	-	-	65,100
7	**Total Operating Expenses**	3,374,080	1,982,350	1,026,873	-	234,656	65,100	65,100

TABLE WCOS-4

Water Utility
Allocation of Capital to Cost Components
2014 Test Year

Line No.	Description	Existing Assets	Planned Assets	Total	Base	Extra Capacity		Customer		
						Maximum Day	Maximum Hour	Local Distribution Lines	Meters and Services	Billing
		$	$	$	$	$	$	$	$	$
1	Source of Supply / Water Rights	$29,471,798	$1,322,010	$30,793,808	$30,793,808	$0	$0	$0	$0	$0
2	Treatment	15,614,989	2,421,500	18,036,489	9,018,245	9,018,245	0	0	0	0
3	Storage	9,297,048	1,000,000	10,297,048	2,574,262	2,574,262	5,148,524	0	0	0
4	Meters	25,135	157,850	182,985					182,985	
	Transmission and Distribution Lines									
5	Constructed Water Lines - Transmission	2,789,852	176,512	2,966,364	1,483,182	1,483,182	0	0	0	0
6	Constructed Water Lines - Distribution	11,893,580	752,498	12,646,078	0	0	0	12,646,078	0	0
7	**Total Transmission and Distribution Lines**	14,683,432	929,010	15,612,442	1,483,182	1,483,182	0	12,646,078	0	0
8	**Subtotal of All Above**	69,092,401	5,830,370	74,922,771	43,869,496	13,075,689	5,148,524	12,646,078	182,985	0
	General Plant									
9	Miscellaneous / Admin	762,124	2,966,470	3,728,594	2,183,202	650,723	256,221	629,343	9,106	0
10	**Total General Plant**	762,124	2,966,470	3,728,594	2,183,202	650,723	256,221	629,343	9,106	0
11	**Total Water System Assets**	$69,854,526	$8,796,840	$78,651,366	$46,052,698	$13,726,411	$5,404,744	$13,275,420	$192,091	$0

TABLE WCOS-5

Water Utility
Unit Cost Of Service
2014 Test Year

Line No.	Description	Total ($)	Base ($)	Extra Capacity: Max Day ($)	Extra Capacity: Max Hour ($)	Customers: Local Dist. ($)	Customers: Billing ($)	Customers: Meters ($)
1	Operating Expenses	3,374,080	1,982,350	1,026,873	0	234,656	65,100	65,100
2	Capital Costs	1,047,560	613,378	182,822	71,986	176,816	0	2,558
3	**Total Revenue Requirements**	4,421,640	2,595,728	1,209,695	71,986	411,472	65,100	67,658
	ADJUSTMENTS TO COST OF SERVICE							
4	Miscellaneous Revenue	(168,973)	(113,119)	(52,717)	(3,137)	-	-	-
5	Annual Surplus (Deficit)	965,055	646,055	301,083	17,917	-	-	-
6	**Total Adjustments**	796,082	532,936	248,366	14,780	-	-	-
7	**NET COST OF SERVICE**	5,217,721	3,128,664	1,458,061	86,766	411,472	65,100	67,658
			(1,000 gal)	(1,000 gpd)	(1,000 gpd)	(Equiv 3/4-in. meters- meter capacity)	Monthly Bills	(Equiv 3/4-in. meters- meter capacity)
8	**UNITS OF SERVICE**		1,037,954	3,167	9,010	98,818	81,640	88,848
9	**UNIT COST OF SERVICE- $ per unit**		3.0143	460.4610	9.6297	4.1639	0.7974	0.7615

TABLE WCOS-6

Water Utility
Allocation Of Cost Of Service
To Customer Classes
2014 Test Year

Line No.		Total	Base	Extra Capacity		Customers		
				Max Day	Max Hour	Local Dist.	Billing	Meters
1	ADJUSTED UNIT COSTS OF SERVICE - $ per unit		3.0143	460.4610	9.6297	4.1639	0.7974	0.7615
	Single Family							
2	Units of Service		582,278	1,595	3,191	73,520	73,520	73,520
3	Cost of Service - $	2,941,169	1,755,137	734,565	30,724	306,132	58,625	55,986
	Multifamily							
4	Units of Service		75,676	104	311	7,836	2,060	4,800
5	Cost of Service - $	316,763	228,109	47,734	2,995	32,627	1,643	3,655
	Commercial							
6	Units of Service		214,433	470	1,057	13,918	4,315	7,882
7	Cost of Service - $	940,348	646,357	216,412	10,183	57,953	3,441	6,002
	Irrigation							
8	Units of Service		114,128	500	813	3,103	1,624	2,364
9	Cost of Service - $	598,219	344,011	230,362	7,829	12,922	1,295	1,800
	City							
10	Units of Service		51,439	197	338	442	121	282
11	Cost of Service - $	251,306	155,050	90,849	3,257	1,838	97	215
	Fire Protection							
12	Units of Service			300	3,300			
13	Cost of Service - $	169,916	-	138,138	31,778	-	-	-
14	TOTAL COST OF SERVICE	5,217,721	3,128,664	1,458,061	86,766	411,472	65,100	67,658

TABLE WCOS-7

Water Utility
Comparison of Costs Of Service
With Revenue Under Existing Rates
2014 Test Year

Line No.	Customer Class	Revenue Under Existing Rates $	Cost of Service Findings: Cost of Service $	Cost of Service Findings: Revenue Increase $	Cost of Service Findings: Revenue Increase %	Adjusted Cost of Service Findings: Reallocation of Fire Protection $	Adjusted Cost of Service Findings: Reallocation of 50% of City COS $	Adjusted Cost of Service Findings: Adjusted Cost of Service $	Adjusted Cost of Service Findings: Revenue Increase ($)	Adjusted Cost of Service Findings: Revenue Increase (%)
1	Single Family	$2,332,256	2,941,169	608,913	26.1%	131,120	77,049	3,149,338	817,082	35.0%
2	Multifamily	$351,480	316,763	(34,717)	-9.9%	13,974	8,298	339,035	(12,445)	-3.5%
3	Commercial	$1,405,458	940,348	(465,110)	-33.1%	24,822	24,634	989,805	(415,653)	-29.6%
4	Irrigation	$1,026,219	598,219	(428,000)	-41.7%		15,671	613,891	(412,328)	-40.2%
5	City	$0	251,306	251,306			(125,653)	125,653	125,653	
6	Fire Protection	$0	169,916	169,916		(169,916)		-	-	
	Total City	$5,115,413	$5,217,721	$102,308	2.0%	$0	$0	$5,217,721	$102,308	2.0%

Section 4: Water Rate Design

Development of 2014 Monthly Water Service Charge

Meter Size	Meter Capacity Ratio	Meter Cost Ratio	Distribution Mains Readiness-to-Serve	Fire Protection	Billing	Meters	SF, MF Commercial COS Service Charge	Irrigation COS Service Charge (a)
3/4	1.00	1.00	$ 4.16	$ 1.78	$ 0.80	$ 0.76	$ 7.51	$ 5.72
1	1.78	1.38	$ 7.41	$ 3.17	$ 0.80	$ 1.05	$ 12.44	$ 9.26
1 1/2	4.00	1.80	$ 16.66	$ 7.13	$ 0.80	$ 1.37	$ 25.96	$ 18.82
2	7.11	4.94	$ 29.61	$ 12.68	$ 0.80	$ 3.76	$ 46.84	$ 34.16
3	16.00	5.71	$ 66.62	$ 28.54	$ 0.80	$ 4.35	$ 100.30	$ 71.77
4	28.44	7.45	$ 118.42	$ 50.72	$ 0.80	$ 5.67	$ 175.62	$ 124.89
6	41.67	9.56	$ 173.51	$ 74.32	$ 0.80	$ 7.28	$ 255.90	$ 181.59

(a) Excludes fire protection cost

Development of 2014 Average Water Volume Charge for Customer Classes

	Volume Related COS, per 1000 gal			
	Average Day	Maximum Day	Maximum Hour	Total
Single Family	$3.01	$1.26	$0.05	$4.33
Multifamily	3.01	0.63	0.04	3.68
Commercial	3.01	1.01	0.05	4.07
Irrigation	3.01	2.02	0.07	5.10
City	3.01	1.77	0.06	4.84

TABLE WRATES-1

Water Utility
Existing Water Rates
Effective January 1, 2013

Existing Water Rates (Effective January 1, 2003)								
	Single Family	Commercial, Irrigation, Multi-Family						
Meter Size	All	3/4-inch	1-inch	1-1/2-inch	2-inch	3-inch	4-inch	6-inch
No. of Multi-family units			2	3 - 6	7 - 11	12 - 26	27 - 47	48 +
Minimum ($ per bill)								
	12.08	12.08	24.15	36.24	48.24	96.63	193.24	386.51
Volume Charge ($ per 1,000 gallons)								
1st block	0.00	3.48	3.48	3.48	3.48	3.48	3.48	3.48
2nd block	3.48	8.67	8.67	8.67	8.67	8.67	8.67	8.67
3rd block	8.67	9.36	9.36	9.36	9.36	9.36	9.36	9.36
4th block	9.36	10.00	10.00	10.00	10.00	10.00	10.00	10.00
5th block	10.00	10.67	10.67	10.67	10.67	10.67	10.67	10.67
6th block	10.67							
Monthly Usage in Block (1,000 gallons)								
1st block	5	20	40	80	160	320	640	1280
2nd block	15	10	20	40	80	160	320	640
3rd block	10	10	20	40	80	160	320	640
4th block	10	10	20	40	80	160	320	640
5th block	10	over 50	over 100	over 200	over 400	over 800	over 1600	over 3200
6th block	over 50							

TABLE WRATES-2

Water Utility
Alternative 1 2014 Water Rates
Status Quo (No Rate Structure Changes
2% Revenue Increase

Alternative 1 2014 Water Rates - Status Quo (No Rate Structure Changes) *2% Revenue Increase*								
	Single Family	Commercial, Irrigation, Multi-Family						
Meter Size	All	3/4-inch	1-inch	1-1/2-inch	2-inch	3-inch	4-inch	6-inch
No. of Multi-family units			2	3 - 6	7 - 11	12 - 26	27 - 47	48 +
Minimum ($ per bill)								
	12.32	12.32	24.63	36.96	49.20	98.56	197.10	394.24
Volume Charge ($ per 1,000 gallons)								
1st block	0.00	3.55	3.55	3.55	3.55	3.55	3.55	3.55
2nd block	3.55	8.84	8.84	8.84	8.84	8.84	8.84	8.84
3rd block	8.84	9.55	9.55	9.55	9.55	9.55	9.55	9.55
4th block	9.55	10.20	10.20	10.20	10.20	10.20	10.20	10.20
5th block	10.20	10.88	10.88	10.88	10.88	10.88	10.88	10.88
6th block	10.88							
Monthly Usage in Block (1,000 gallons)								
1st block	5	20	40	80	160	320	640	1280
2nd block	15	10	20	40	80	160	320	640
3rd block	10	10	20	40	80	160	320	640
4th block	10	10	20	40	80	160	320	640
5th block	10	over 50	over 100	over 200	over 400	over 800	over 1600	over 3200
6th block	over 50							

TABLE WRATES-3

Water Utility
Single Family Residential - Alternative Rate Design #2
Service Charge - No Volume Allowance, Varies by Meter Size
Volume Charge - Increasing Rate Structure, Fixed Blocks

Single Family Residential Volumetric Rate Design

Consumption Block	Proposed Blocks	Billed Usage	Distribution of Usage	Proposed Steepness	Forecast Revenue	Calculated Rates
Block 1	0 - 5000	270,843	46.48%	1.00	$600,827	$2.22
Block 2	5001 - 15,000	205,195	35.24%	2.00	$911,064	$4.44
Block 3	15,001 - 25000	72,959	12.53%	4.00	$647,880	$8.88
Block 4	Over 25,000	33,481	5.75%	5.00	$371,639	$11.10
		582,278	100.00%		$2,520,426	$4.33

Single Family Residential Service Charge Revenue

Meter Size	Billable Units	Monthly Service Charge	Revenue
3/4	73,520	$7.60	$558,751
1	0	$12.50	$0
1-1/2	0	$26.00	$0
2	0	$46.90	$0
3	0	$100.40	$0
4	0	$175.70	$0
6	0	$256.00	$0
	73,520		$558,751

Residential COS vs. Forecast Revenue at Proposed Rates

Volumetric Revenue Requirement	$2,520,426
Public Fire Protection	
City Subsidy	
Volumetric Revenue Requirement	$2,520,426
Customer Revenue Requirement	$551,863
Total Revenue Requirement	**$3,072,289**
Forecast Revenue	**$3,079,178**
Excess / (Deficit)	$6,889

TABLE WRATES-4

Multifamily - Alternative Rate Design #2
Service Charge - Varies by Meter Size
Volume Charge - Increasing Rate Structure, Fixed Blocks

Multifamily Residential Volumetric Rate Design						
Consumption Block	Proposed Blocks	Billed Usage	Est Distribution of Usage	Proposed Steepness	Forecast Revenue	Calculated Rates
Block 1	3,000 gallons per unit	35,190	46.50%	1.00	$66,508	$1.89
Block 2	6,000 gallons per unit	26,638	35.20%	2.00	$100,692	$3.78
Block 3	6,000 gallons per unit	9,460	12.50%	4.00	$71,514	$7.56
Block 4	15,000 gallons per unit	4,389	5.80%	5.00	$41,478	$9.45
		75,676	100.00%		$278,838	$3.69

Multifamily Residential Service Charge Revenue			
Meter Size	Billable Units	Monthly Service Charge	Revenue
3/4	461	$7.60	$3,500
1	533	$12.50	$6,666
1-1/2	545	$26.00	$14,180
2	461	$46.90	$21,600
3	61	$100.40	$6,084
4	0	$175.70	$0
6	0	$256.00	$0
	2,060		$52,031

Multifamily COS vs. Forecast Revenue at Proposed Rates	
Volumetric Revenue Requirement	$278,838
Public Fire Protection	
City Subsidy	
Volumetric Revenue Requirement	$278,838
Customer Revenue Requirement	$51,899
Total Revenue Requirement	**$330,737**
Forecast Revenue	**$330,869**
Excess / (Deficit)	$132

TABLE WRATES-5

Commercial - Alternative Rate Design #2
Service Charge - Varies by Meter Size
Volume Charge - Uniform Rate Structure, No Blocks

Commercial Volumetric Rate Design

Consumption Block	Proposed Blocks	Billed Usage	Distribution of Usage	Proposed Steepness	Forecast Revenue	Calculated Rates
Block 1	All	214,433	100.00%	1.00	$874,886	$4.08
		0				
		0				
		0				
		214,433	100.00%		$872,952	$4.08

Commercial Service Charge Revenue

Meter Size	Billable Units	Monthly Service Charge	Revenue
3/4	1,657	$7.60	$12,596
1	1,398	$12.50	$17,476
1-1/2	713	$26.00	$18,537
2	296	$46.90	$13,896
3	194	$100.40	$19,522
4	46	$175.70	$8,134
6	9	$256.00	$2,370
	4,315		$92,531

Commercial COS vs. Forecast Revenue at Proposed Rates

Volumetric Revenue Requirement	$214,433
Public Fire Protection	
City Subsidy	
Volumetric Revenue Requirement	$872,952
Customer Revenue Requirement	$92,218
Total Revenue Requirement	**$965,170**
Forecast Revenue	**$965,483**
Excess / (Deficit)	$313

TABLE WRATES-6

Irrigation - Alternative Rate Design #2
Service Charge - Varies by Meter Size
Volume Charge - Uniform Rate Structure, No Blocks

Irrigation Volumetric Rate Design

Consumption Block	Proposed Blocks	Billed Usage	Distribution of Usage	Proposed Steepness	Forecast Revenue	Calculated Rates
Block 1	All	114,128	100.00%	1.00	$583,193	$5.11
		0				
		0				
		0				
		114,128	100.00%		$582,202	$5.11

Irrigation Service Charge Revenue

Meter Size	Billable Units	Monthly Service Charge	Revenue
3/4	887	$5.80	$5,145
1	487	$9.30	$4,531
1-1/2	137	$18.90	$2,597
2	112	$34.20	$3,845
3	0	$71.80	$0
4	0	$124.90	$0
6	0	$181.60	$0
	1,624		$16,118

Irrigation COS vs. Forecast Revenue at Proposed Rates

Volumetric Revenue Requirement	$582,202
Public Fire Protection	
City Subsidy	
Volumetric Revenue Requirement	$582,202
Customer Revenue Requirement	$16,017
Total Revenue Requirement	$598,219
Forecast Revenue	$598,320
Excess / (Deficit)	$101

TABLE WRATES-7

City - Alternative Rate Design #2
Service Charge - Varies by Meter Size
Volume Charge - Uniform Rate Structure, No Blocks

City Volumetric Rate Design

Consumption Block	Proposed Blocks	Billed Usage	Distribution of Usage	Proposed Steepness	Forecast Revenue	Calculated Rates
Block 1	All	51,439	100.00%	1.00	$249,478	$4.85
		0				
		0				
		0				
		51,439	100.00%		$249,156	$4.85

City Service Charge Revenue

Meter Size	Billable Units	Monthly Service Charge	Revenue
3/4	42	$7.60	$322
1	28	$12.50	$354
1-1/2	17	$26.00	$446
2	31	$46.90	$1,468
3	0	$100.40	$0
4	2	$175.70	$355
6	0	$256.00	$0
	121		$2,946

City COS vs. Forecast Revenue at Proposed Rates	
Volumetric Revenue Requirement	$0
Public Fire Protection	
City Subsidy	
Volumetric Revenue Requirement	$249,156
Customer Revenue Requirement	$2,937
Total Revenue Requirement	$252,093
Forecast Revenue	$252,102
Excess / (Deficit)	$8

TABLE WRATES-8

Water Utility
All Customers - Alternative Rate Design #3
Service Charge - No Volume Allowance, Varies by Meter Size
Volume Charge - Increasing Rate Structure, AWC Blocks

AWC Volumetric Rate Design						
Consumption Block	Proposed Blocks	Billed Usage	Distribution of Usage	Proposed Steepness	Forecast Revenue	Calculated Rates
Block 1	100% AWC	430,904	41.5%	1.00	$930,752	$2.16
Block 2	101% - 300% AWC	428,372	41.3%	2.00	$1,850,568	$4.32
Block 3	301% - 500% AWC	88,432	8.5%	4.00	$764,054	$8.64
Block 4		90,246	8.7%	5.00	$974,653	$10.80
		1,037,954	100.00%		$4,503,574	$4.34

All Customers Service Charge Revenue			
Meter Size	Billable Units	Monthly Service Charge	Revenue
3/4	76,567	$7.60	$581,911
1	2,447	$12.50	$30,586
1-1/2	1,413	$26.00	$36,736
2	901	$46.90	$42,238
3	255	$100.40	$25,606
4	48	$175.70	$8,489
6	9	$256.00	$2,370
	81,640		$727,937

All Customers COS vs. Forecast Revenue at Proposed Rates	
Volumetric Revenue Requirement	$4,503,574
Public Fire Protection	
City Subsidy	
Volumetric Revenue Requirement	$4,503,574
Customer Revenue Requirement	$714,935
Total Revenue Requirement	**$5,218,509**
Forecast Revenue	**$5,231,511**
Excess / (Deficit)	$13,003

Section 5: Wastewater Cost of Service Analysis

TABLE SCOS-1

Sewer Utility
Revenue Requirements
Test Year
2014

Line No.		Amount ($)
	OPERATING COSTS	
1	Operation and Maintenance Expense	1,655,050
	CAPITAL COSTS	
2	Capital Improvement Program	2,258,707
3	Debt Service	0
4	Total Capital Costs	2,258,707
5	**TOTAL COST OF SERVICE**	**3,913,757**
	ADJUSTMENTS	
	Revenue from Other Sources	
6	Miscellaneous Revenues	205,600
7	Interest Earnings	76,100
8	Total Revenue from Other Sources	281,700
9	Decrease (Increase) in Operating Reserves	1,187,660
10	**Total Adjustments**	**1,469,360**
11	**NET COST OF SERVICE**	**2,444,397**

TABLE SCOS-2

Sewer Utility
Allocation of Fixed Assets
Test Year
2014

Line No.	Description	Estimated Replacement Cost $	Volume $	BOD $	TSS $	Customer: Collection System $	Customer: Billing $
	Existing System Assets						
1	Sewer Lines	13,527,000	3,381,750			10,145,250	
2	Treatment Plant	8,269,672	3,307,869	2,480,902	2,480,902	-	-
3	**Total Existing System Assets**	**21,796,672**	**6,689,619**	**2,480,902**	**2,480,902**	**10,145,250**	**0**
	Planned Capital Improvements						
4	Sewer Lines	2,099,777	524,944			1,574,833	
5	Treatment Plant	25,017,060	10,006,824	7,505,118	7,505,118	-	-
6	**Total Planned Capital Improvements**	**27,116,837**	**10,531,768**	**7,505,118**	**7,505,118**	**1,574,833**	**0**
7	**Total Sewer System Assets**	**48,913,509**	**17,221,387**	**9,986,020**	**9,986,020**	**11,720,083**	**0**
8	**Share of Allocated Assets**		***35.2%***	***20.4%***	***20.4%***	***24.0%***	***0.0%***

TABLE SCOS-3

Sewer Utility
Units of Service
Test Year
2014

Line No.	Customer Class	Contributed Volume 1,000 gal	Infiltration/ Inflow 1,000 gal	Total Treated Volume 1,000 gal	Contributed Wastewater Strength BOD mg/l	BOD lbs	TSS mg/l	TSS lbs	Number of Bills	Number of Monthly Equivalent Meters
1	Single Family	298,417	28,321	326,738	324	807,145	324	807,145	73,520	73,520
2	Multifamily	62,916	5,971	68,887	324	170,172	324	170,172	2,060	15,500
3	Commercial	206,186	11,723	217,909	324	557,682	324	557,682	4,181	15,259
4	City	6,467	499	6,966	324	17,492	324	17,492	170	1,075
5	Total	573,986	46,514	620,500		1,552,491		1,552,491	79,931	105,353

TABLE SCOS-4

Sewer Utility
Unit Cost of Service
Test Year
2014

Line No.		Total ($)	Volume ($)	Strength: BOD ($)	Strength: SS ($)	Customer: Collection ($)	Customer: Billing ($)
	OPERATING EXPENSES						
1	Central Charges	341,180	117,699	78,242	78,242	40,128	26,869
2	Utility Billing	103,470	0	0	0	0	103,470
3	Collections	206,040	51,510	0	0	154,530	0
4	Sewer Plant Operations	918,360	367,344	275,508	275,508	0	0
5	Pretreatment	86,000	34,400	25,800	25,800	0	0
6	**Total Operating Expenses**	**1,655,050**	**570,953**	**379,550**	**379,550**	**194,658**	**130,339**
	CAPITAL COSTS						
7	Capital Improvement Program	2,258,707	795,242	461,130	461,130	541,205	0
8	Debt Service	0	0	0	0	0	0
	Transfer to Debt Service Reserve Fund	0	-	-	-	-	-
9	**Total Capital Costs**	**2,258,707**	**795,242**	**461,130**	**461,130**	**541,205**	**0**
10	**TOTAL COST OF SERVICE**	**3,913,757**	**1,366,195**	**840,681**	**840,681**	**735,863**	**130,339**
	LESS ADJUSTMENTS TO COST OF SERVICE						
11	Miscellaneous Revenues	(205,600)	(74,242)	(45,685)	(45,685)	(39,989)	0
12	Interest Earnings	(76,100)	(27,480)	(16,910)	(16,910)	(14,801)	0
13	Decrease (Increase) in Operating Reserves	(1,187,660)	(428,865)	(263,900)	(263,900)	(230,996)	0
14	**Total Adjustments**	**(1,469,360)**	**(530,587)**	**(326,494)**	**(326,494)**	**(285,786)**	**0**
15	**NET COST OF SERVICE**	**2,444,397**	**835,608**	**514,187**	**514,187**	**450,077**	**130,339**
			34.2%	21.0%	21.0%	18.4%	5.3%
	UNITS OF SERVICE		**(1,000 gal)**	**(lbs)**	**(lbs)**	**(equivalents)**	**(bills)**
16	Amount		**620,500**	**1,552,491**	**1,552,491**	**105,353**	**79,931**
17	**UNIT COST OF SERVICE - $ per unit**		**1.3467**	**0.3312**	**0.3312**	**4.2721**	**1.6306**

TABLE SCOS-5

Sewer Utility
Allocation of Cost of Service
to Customer Classes
Test Year
2014

Line No.		Total	Volume	Strength BOD	Strength SS	Customer Collection	Customer Billing
1	**ADJUSTED UNIT COSTS OF SERVICE - $ per unit**		**1.3467**	**0.3312**	**0.3312**	**4.2721**	**1.6306**
	Single Family						
2	Units		326,738	807,145	807,145	73,520	73,520
3	**Cost of Service - $**	**1,408,629**	**440,008**	**267,327**	**267,327**	**314,082**	**119,884**
	Multifamily						
4	Units		68,887	170,172	170,172	15,500	2,060
5	**Cost of Service - $**	**275,068**	**92,768**	**56,361**	**56,361**	**66,218**	**3,360**
	Commercial						
6	Units		217,909	557,682	557,682	15,259	4,181
7	**Cost of Service - $**	**734,865**	**293,451**	**184,705**	**184,705**	**65,186**	**6,818**
	City						
8	Units		6,966	17,492	17,492	1,075	170
9	**Cost of Service - $**	**25,835**	**9,381**	**5,793**	**5,793**	**4,591**	**277**
10	**TOTAL COST OF SERVICE**	**$2,444,397**	**$835,608**	**$514,187**	**$514,187**	**$450,077**	**$130,339**

TABLE SCOS-6

Sewer Utility
Comparison of Cost of Service
with Revenue Under Existing Rates
Test Year
2014

Line No.		Revenue Under Existing Rates	Cost of Service Findings			Adjusted Cost of Service Findings			
			Cost of Service	Revenue Increase	Revenue Increase	Reallocation of City COS	Adjusted Cost of Service	Revenue Increase	Revenue Increase
		$	$	$	%	$	$	$	%
1	Single Family	1,197,639	1,408,629	210,990	17.6%	15,047	1,423,675	226,036	18.9%
2	Multifamily	360,713	275,068	(85,645)	-23.7%	2,938	278,007	(82,706)	(22.9%)
3	Commercial	366,370	734,865	368,495	100.6%	7,850	742,715	376,345	102.7%
4	City	-	25,835	25,835		(25,835)	-	0	
5	**Total**	**1,924,722**	**2,444,397**	**519,675**	**27.0%**	**0**	**2,444,397**	**519,675**	27.0%

Section 6: Wastewater Rate Design

Development of 2014 Cost-of-Service Wastewater Rates

Billing Charge Cost Component

Meter Reading / Billing
per bill
$ 1.63

Readiness-to-Serve Charge Cost Components

Meter Size	Demand Ratio	Collection System	Customer Infiltration / Inflow	Total
		per bill / unit	*per bill / unit*	*per bill / unit*
3/4	1.00	$4.28	$0.30	$4.58
1	1.78	$7.62	$0.53	$8.15
1 1/2	4.00	$17.12	$1.20	$18.32
2	7.11	$30.43	$2.13	$32.56
3	16.00	$68.48	$4.80	$73.28
4	28.44	$121.72	$8.53	$130.25
6	41.67	$178.35	$12.50	$190.85

Volume Charge Cost Components

Contributed Volume	Volume Infiltration / Inflow	Biochemical Oxygen Demand	Total Suspended Solids	Total
per K gals	*per K gals*	*per K gals*	*per K gals*	*per K gals*
$1.35	$0.05	$0.90	$0.90	$3.20

Projected Wastewater Cost-of-Service Rates

	Cost of Service Rates				
	2014	2015	2016	2017	2018
Billing Charge, per month					
All Customers	$ 1.70	$ 1.70	$ 1.80	$ 1.80	$ 1.80
Residential Readiness-to-Serve Charge, per unit					
Single Family and Multifamily Customers	$ 4.57	$ 5.46	$ 6.59	$ 7.16	$ 6.69
Nonresidential Readiness-to-Serve Charge, per month					
Meter Size					
3/4	$ 4.57	$ 5.46	$ 6.59	$ 7.16	$ 6.69
1	$ 8.20	$ 9.80	$ 11.80	$ 12.80	$ 12.00
1 1/2	$ 18.30	$ 21.90	$ 26.40	$ 28.70	$ 26.80
2	$ 32.50	$ 38.80	$ 46.90	$ 50.90	$ 47.60
3	$ 73.20	$ 87.30	$ 105.40	$ 114.50	$ 107.10
4	$ 130.00	$ 155.20	$ 187.40	$ 203.50	$ 190.30
6	$ 190.50	$ 227.30	$ 274.50	$ 298.20	$ 278.80
Volume Charge, per 1000 gallons					
All Customers (b)	$ 3.20	$ 4.21	$ 4.47	$ 4.88	$ 5.52

TABLE SRATES-1

Sewer Utility
Existing Sewer Rates
Effective January 1, 2013

Description	Residential	Commercial	
		May - Sep	Oct - Apr
Monthly Charge $ per unit	16.29		
Monthly Minimum, $		20.43	19.58
Volume Charge, $ per Kgal			
1st block		0.00	0.00
2nd block		1.13	1.21
3rd block		1.16	1.34
4th block		1.26	1.51
5th block		1.34	1.62
6th block		1.51	1.77
7th block		1.61	1.89
8th block		1.68	2.09
9th block		1.82	2.22
10th block			2.37
Monthly Usage in Block, Kgals			
1st block		20	15
2nd block		10	5
3rd block		10	10
4th block		10	10
5th block		10	10
6th block		10	10
7th block		10	10
8th block		10	10
9th block		over 90	10
10th block			over 90

Sewer Utility
Alternative 1 Rates
Status Quo (No Rate Structure Changes)
27% Revenue Increase

Description	Residential	Commercial	
		May - Sep	Oct - Apr
Monthly Charge $ per unit	20.69		
Monthly Minimum, $		25.95	24.87
Volume Charge, $ per Kgal			
1st block		0.00	0.00
2nd block		1.44	1.54
3rd block		1.48	1.71
4th block		1.61	1.92
5th block		1.71	2.06
6th block		1.92	2.25
7th block		2.05	2.41
8th block		2.14	2.66
9th block		2.32	2.82
10th block			3.01
Monthly Usage in Block, Kgals			
1st block		20	15
2nd block		10	5
3rd block		10	10
4th block		10	10
5th block		10	10
6th block		10	10
7th block		10	10
8th block		10	10
9th block		over 90	10
10th block			over 90

TABLE SRATES-3

Wastewater Rates - Alternative 2
2014 Test Year

	Meter Size		Cost of Service		Adjusted Cost of Service (a)
Billing Charge, per month					
All Customers		$	1.70		1.72
Residential Readiness-to-Serve Charge, per unit					
Single Family and Multifamily Customers		$	4.57		4.62
Nonresidential Readiness-to-Serve Charge, per month					
	3/4	$	4.57	$	4.62
	1	$	8.20	$	8.30
	1 1/2	$	18.30	$	18.50
	2	$	32.50	$	32.90
	3	$	73.20	$	74.00
	4	$	130.00	$	131.40
	6	$	190.50	$	192.60
Volume Charge, per 1000 gallons					
All Customers (b)		$	3.20	$	3.24

(a) Adjusted Cost of Service rates assume City accounts are not charged.
(b) Volume charges applicable to average winter water usage (January, February and March) of single family and multifamily accounts and actual water usage of nonresidential customers.

Section 7: Stormwater Rate Design

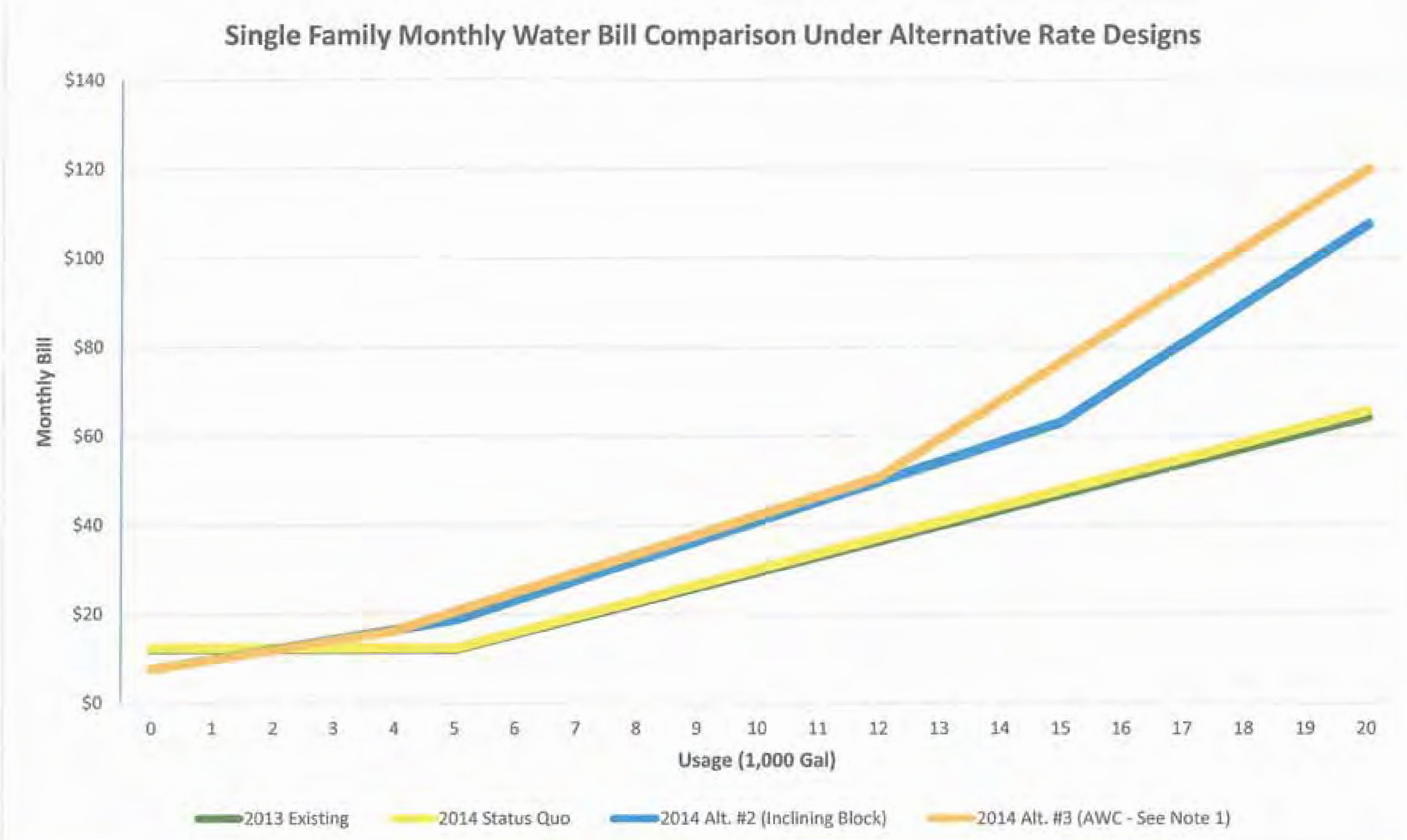
TABLE SWRATES - 1

Proposed Monthly Stormwater Rates

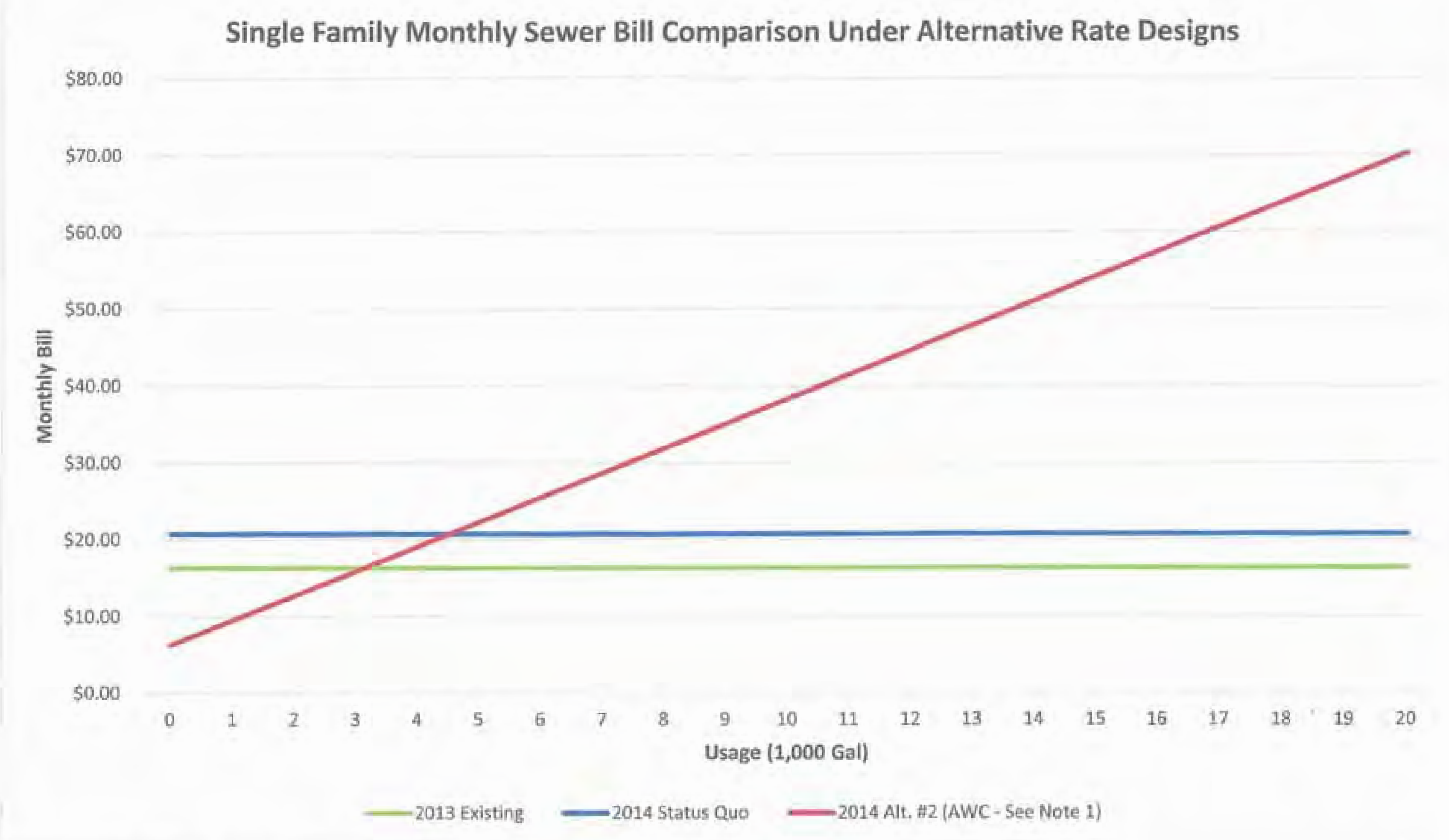
Customer Class	Existing	Proposed 2014
Residential	\$3.25	\$4.23
Commercial	\$3.25 per EQU (a)	\$4.23 per EQU (a)

(a) EQU is equal to 3,500 square feet impervious area

Section 8: Customer Bill Impacts



Note 1: AWC defined as average monthly usage between January – March. Minimum AWC set at 4,000 Gal.



Note 1: AWC defined as average monthly usage between January – March. No minimum AWC.

Single Family Bill Comparison Under Alternative Rate Designs (Single Bill)

Single Family Residential Water				
Consumption	2013 Existing	2014 Status Quo	2014 Alt. #2 (Inclining Block)	2014 Alt. #3 (AWC) (See Note 1)
0	$12.08	$12.32	$7.60	$7.60
1	$12.08	$12.32	$9.82	$9.76
2	$12.08	$12.32	$12.04	$11.92
3	$12.08	$12.32	$14.26	$14.08
4	$12.08	$12.32	$16.48	$16.24
5	$12.08	$12.32	$18.70	$20.56
6	$15.56	$15.87	$23.14	$24.88
7	$19.04	$19.42	$27.58	$29.20
8	$22.52	$22.97	$32.02	$33.52
9	$26.00	$26.52	$36.46	$37.84
10	$29.48	$30.07	$40.90	$42.16
11	$32.96	$33.62	$45.34	$46.48
12	$36.44	$37.17	$49.78	$50.80
13	$39.92	$40.72	$54.22	$59.44
14	$43.40	$44.27	$58.66	$68.08
15	$46.88	$47.82	$63.10	$76.72
16	$50.36	$51.37	$71.98	$85.36
17	$53.84	$54.92	$80.86	$94.00
18	$57.32	$58.47	$89.74	$102.64
19	$60.80	$62.02	$98.62	$111.28
20	$64.28	$65.57	$107.50	$119.92

Single Family Residential Sewer			
Consumption	2013 Existing	2014 Status Quo	2014 Alternate #1
0	$16.29	$20.69	$6.27
1	$16.29	$20.69	$9.47
2	$16.29	$20.69	$12.67
3	$16.29	$20.69	$15.87
4	$16.29	$20.69	$19.07
5	$16.29	$20.69	$22.27
6	$16.29	$20.69	$25.47
7	$16.29	$20.69	$28.67
8	$16.29	$20.69	$31.87
9	$16.29	$20.69	$35.07
10	$16.29	$20.69	$38.27
11	$16.29	$20.69	$41.47
12	$16.29	$20.69	$44.67
13	$16.29	$20.69	$47.87
14	$16.29	$20.69	$51.07
15	$16.29	$20.69	$54.27
16	$16.29	$20.69	$57.47
17	$16.29	$20.69	$60.67
18	$16.29	$20.69	$63.87
19	$16.29	$20.69	$67.07
20	$16.29	$20.69	$70.27

Note #1: Calculated bill is based on average winter consumption of 3,000 gallons. Average winter consumption is defined as the average usage between January - March with a minimum of 4,000 gallons.

Single Family Residential Bill Impacts Under Alternative Rate Design Scenarios (Compared to Existing 2013)

Range of Bill Outcomes		Water		Sewer	Total Bill	
From	To	2014 Alternative #2	2014 Alternative #3	2014 Alternative #2	2014 Water Alternative #2 & 2014 Sewer Alternative #2	2014 Water Alternative #3 & 2014 Sewer Alternative #2
50%	or Greater	17.5%	23.1%	19.3%	17.5%	8.9%
20%	50%	56.6%	40.3%	21.7%	48.3%	57.2%
10%	20%	11.2%	17.4%	15.1%	7.8%	6.5%
5%	10%	0.0%	0.9%	0.0%	8.0%	9.9%
0%	5%	0.0%	1.2%	5.0%	2.7%	1.8%
	Bills with Increase	62,410	60,587	44,653	61,600	61,555
0%	-5%	6.0%	9.1%	10.0%	1.6%	1.5%
-6%	-10%	0.0%	0.3%	4.6%	1.2%	1.2%
-10%	-20%	3.8%	4.5%	4.1%	5.7%	5.7%
-20%	-50%	2.8%	3.2%	16.2%	5.1%	5.3%
-50%	or Greater	0.0%	0.0%	4.0%	2.1%	2.1%
	Bills with Decrease	10,658	12,481	28,415	11,468	11,513
		73,068	73,068	73,068	73,068	73,068

Alternative #1:
2014 Water Bill Increase Under Existing Rate Design = 2% for all customers
2014 Sewer Bill Increase Under Existing Rate Design = 27% for all customers

Multi-Family Bill Impacts Under Alternative Rate Design Scenarios (Compared to Existing 2013)

Range of Bill Outcomes		Water		Sewer		
From	To	2014 Alternative #2	2014 Alternative #3	2014 Alternative #2	2014 Water Alternative #2 & 2014 Sewer Alternative #2	2014 Water Alternative #3 & 2014 Sewer Alternative #2
50%	or Greater	0.3%	11.7%	3.5%	0.3%	6.9%
20%	50%	0.6%	1.7%	3.0%	1.8%	3.6%
10%	20%	0.5%	0.6%	3.3%	1.3%	1.1%
5%	10%	0.5%	0.3%	1.5%	0.9%	0.7%
0%	5%	1.0%	0.9%	3.9%	2.0%	1.0%
	Bills with Increase	63	308	310	129	274
0%	-5%	1.4%	0.6%	3.2%	2.9%	0.7%
-6%	-10%	2.4%	0.4%	3.2%	3.8%	0.5%
-10%	-20%	7.1%	2.3%	10.2%	11.7%	4.4%
-20%	-50%	83.2%	21.8%	51.4%	64.1%	25.3%
-50%	or Greater	2.8%	59.8%	16.7%	11.2%	55.6%
	Bills with Decrease	1,978	1,733	1,731	1,912	1,767
	Total Bills	2,041	2,041	2,041	2,041	2,041

<u>Alternative #1</u>:

2014 Water Bill Increase Under Existing Rate Design = 2% for all customers

2014 Sewer Bill Increase Under Existing Rate Design = 27% for all customers

Commercial Bill Impacts Under Alternative Rate Design Scenarios (Compared to Existing 2013)

Range of Bill Outcomes		Water		Sewer	Total Bill	
From	To	2014 Alternative #2	2014 Alternative #3	2014 Alternative #2	2014 Water Alternative #2 & 2014 Sewer Alternative #2	2014 Water Alternative #3 & 2014 Sewer Alternative #2
50%	or Greater	0.0%	14.3%	68.2%	8.4%	14.6%
20%	50%	0.0%	1.9%	5.5%	32.2%	4.3%
10%	20%	9.0%	0.7%	2.6%	7.6%	3.4%
5%	10%	12.5%	0.5%	0.5%	4.4%	1.8%
0%	5%	11.8%	0.7%	1.3%	7.1%	2.2%
	Bills with Increase	1,422	775	3,338	2,548	1,121
0%	-5%	7.2%	0.5%	3.7%	3.6%	1.9%
-6%	-10%	6.1%	0.5%	0.5%	2.2%	1.4%
-10%	-20%	13.7%	2.2%	2.9%	11.7%	4.1%
-20%	-50%	35.2%	17.2%	7.0%	19.6%	35.1%
-50%	or Greater	4.5%	61.5%	7.8%	3.2%	31.3%
	Bills with Decrease	2,850	3,497	934	1,724	3,151
	Total Bills	4,272	4,272	4,272	4,272	4,272

<u>Alternative #1:</u>
2014 Water Bill Increase Under Existing Rate Design = 2% for all customers
2014 Sewer Bill Increase Under Existing Rate Design = 27% for all customers

Irrigation Bill Impacts Under Alternative Rate Design Scenarios (Compared to Existing 2013)

Range of Bill Outcomes		Water	
From	To	2014 Alternative #2	2014 Alternative #3
50%	or Greater	0.0%	0.0%
20%	50%	4.6%	0.0%
10%	20%	3.6%	0.0%
5%	10%	0.5%	0.0%
0%	5%	1.8%	0.4%
	Bills with Increase	162	6
0%	-5%	0.5%	0.0%
-6%	-10%	1.3%	-0.4%
-10%	-20%	4.9%	0.0%
-20%	-50%	41.4%	1.3%
-50%	or Greater	41.3%	98.7%
	Bills with Decrease	1,374	1,530
	Total Bills	1,536	1,536

Alternative #1:
2014 Increase Under Existing Rate Design = 2%

Annual Bill Comparisons for Selected Non-Residential Customers

SELECTED COMMERCIAL CUSTOMERS									
		Water					Sewer		
Meter Size	Units	Annual Water Consumption	2013 Annual Bill	2014 Status Quo	2014 Alternative #2 (Uniform)	Annual Bill Alt #3 (AWC)	2013 Existing	2014 Status Quo	2014 Alternative #2
3/4"	----	261,000	$1,348	$1,375	$1,156	$858	$331	$420	$910
3/4"	----	956,000	$8,182	$8,346	$3,992	$3,489	$1,536	$1,950	$3,134
3/4"	----	302,000	$1,797	$1,833	$1,323	$1,266	$387	$491	$1,042
1"	----	569,000	$3,030	$3,090	$2,472	$1,379	$785	$996	$1,940
1 1/2"	----	1,144,000	$5,371	$5,478	$4,980	$2,837	$1,873	$2,378	$3,901

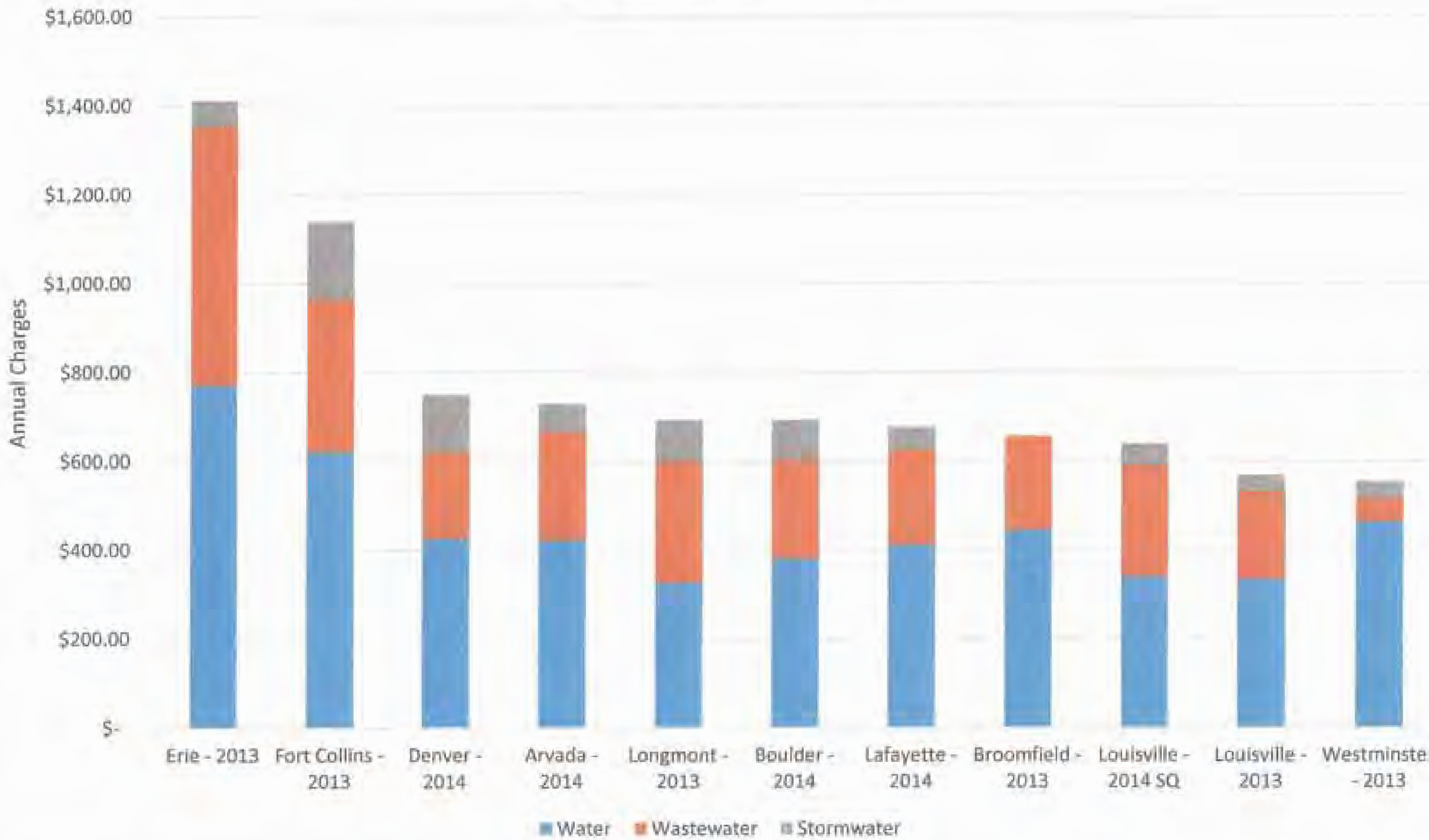
SELECTED MULTI-FAMILY CUSTOMERS									
		Water					Sewer		
Meter Size	Units	Annual Water Consumption	2013 Annual Bill	2014 Status Quo	2014 Alternative #2 (Inclining Block)	Annual Bill Alt #3 (AWC)	2013 Existing	2014 Status Quo	2014 Alternative #2
1"	6	332,000	$1,445	$1,474	$997	$1,173	$971	$971	$975
1"	3	215,000	$1,272	$1,298	$1,069	$586	$1,202	$1,202	$614
1"	19	7591000	$4,423	$4,512	$1,751	$3,714	$2,456	$2,456	$1,872
2"	18	792,000	$3,335	$3,402	$2,345	$3,519	$2,570	$2,570	$2,433

SELECTED IRRIGATION ONLY CUSTOMERS						
		Water				
Meter Size	Units	Annual Water Consumption	2013 Annual Bill	2014 Status Quo	2014 Alternative #2 (Uniform)	Annual Bill Alt #3 (AWC) (Note 1)
3/4"	----	618,000	$5,566	$5,677	$3,228	$2,739
3/4"	----	969,000	$9,089	$9,271	$5,021	$4,256
1"	----	689,000	$5,789	$5,905	$3,632	$3,088
1"	----	1,067,000	$9,471	$9,661	$5,564	$4,721
2"	----	2,366,000	$18,552	$18,923	$12,501	$10,632
2"	----	4,622,000	$40,904	$41,722	$24,029	$20,377

Note 1: Bills for Irrigation customers under Alternative #3 assume that all consumption is billed at the Block 2 rate (i.e., they stay within their assigned water budget and no consumption is billed at the Block 3 rate).

Section 9: Front Range Survey of Utility Rates

Comparison of Annual Water, Wastewater, and Stormwater Rates (Single Family Residential)



Note: Rates used are most current available rates for each community. Annual charges calculated by consolidating charges by month. For each month calculation, assumed water usage level of the Louisville, CO average customer usage for given month. Assume customer is resident of community if charges differ for residents and non-resident customers. For Stormwater calculations, assumed Lot size of 8,000 Sq. Ft, and Impervious Area of 3,500 Sq. Ft.

10/31/2013