



Agenda Work Session of the City Commission

City of Kalamazoo

Monday, November 28, 2016

6:00 PM

Conference Room A at the Harrison Street Facility - 1415 North Harrison Street

- A. CALL TO ORDER/ROLL CALL
- B. ADOPTION OF FORMAL AGENDA
- C. COMMUNICATIONS
- D. CONSENT AGENDA
- E. REGULAR AGENDA
- F. DISCUSSION TOPICS
 - 1. Discussion of Utility Infrastructure and Rates
- G. CITIZEN COMMENTS
- H. MISCELLANEOUS COMMENTS AND CONCERNS BY COMMISSIONERS
- I. ADJOURNMENT



Commission Agenda Report

City of Kalamazoo

TO: Mayor Hopewell, Vice Mayor Cooney, and City Commissioners

FROM: James K. Ritsema, ICMA-CM, City Manager

DATE: 11/22/2016

SUBJECT: Utility Rates Background Information

INFORMATIONAL ITEMS

Attached for your information is a memo from Bart Foster, the City's utility rates consultant.

ATTACHMENTS:

Type	Description
▣ Background Material	2017 Water Utility Revenue Requirements and Preliminary Long-Term Financial Forecast



THE FOSTER GROUP

P.O. BOX 26282
LEAWOOD, KS 66225
TEL: (913) 345-1410
FAX: (913) 345-1640

THE FOSTER GROUP, LLC
BART FOSTER, PRESIDENT
CELL: (913) 530-6240
BFOSTER@FOSTERGROUPLLC.COM

MEMORANDUM

2017 Water Utility Revenue Requirements
And Preliminary Long-Term Financial Forecast

November 8, 2016

To: Thomas Skrobola, James Baker

From: Bart Foster

The intent of this memorandum is to summarize the results of our initial revenue requirement analyses for the Water Utility for the 2017 budget year, and to introduce recommended actions to take with respect to a schedule of water rates to support the 2017 budget. Together with the attached exhibits, this document serves as our observations and commentary regarding the financial plans for the Water Utility for the ten-year period beginning with 2017, with specific focus on recommended rate adjustments to be implemented for 2017.

Introduction and Background

The City's existing Water and Wastewater rates were implemented in June 2014. Those rates were developed by THE FOSTER GROUP and documented in reports dated February 2014 (*the "2014 Rate Reports"*). The 2014 rates were designed to produce revenue increases of 3% for the Water Utility and 2% for the Wastewater Utility compared to the prior rates, which were originally implemented in March 2012. The financial projections included in the 2014 Rate Reports projected additional rate increases of 3% annually for each utility system, but no such additional increases have been proposed nor implemented.

The City's Budget for 2016 contemplated an increase in Water rates designed to generate approximately 7.5% of additional water revenue, and this assumption was included in the Official Statement accompanying issuance by the City of the 2015 Water System Revenue Bonds in December 2015. The City's Budget did not contemplate any adjustments to Wastewater rates during 2016, as the existing rates were deemed to provide satisfactory revenues to address revenue requirements. However, the 1998 Wastewater Rate Settlement Agreement requires that the City modify Wastewater Rates not less than every two years, even if no adjustment in revenues is deemed necessary.

We were engaged by the City to conduct Water and Wastewater Rate Studies for 2016. Our assignment also included preparing Wastewater True-Up Studies¹ for 2013 and 2014, with

¹ *The 1998 Wastewater Rate Settlement Agreement also requires that True-Up studies be conducted and implemented not less than every two years. There is no True-Up requirement for the Water Utility.*

the intent to implement findings of such studies concurrent with the 2016 Wastewater Rates. Our original goal was to provide rate recommendations that could be implemented during the first quarter of 2016. As our analysis progressed it became apparent that there were developments that merited delay in completing the studies as originally planned, including:

- Negotiations were underway (and continue) between the City and representatives of the Townships to establish a new Water service agreement, and such negotiations could potentially result in modifications to existing Water Rate methodologies;
- The City's Public Services Director and executive management identified potential capital and operating programs designed to enhance level of utility service. Revenue requirements associated with these programs were not entirely included in the 2016 budget;
- Financial results for 2015 became available, triggering a decision to add the 2015 Wastewater True-Up analysis to the overall implementation plan.

In July 2016 we came to the realization that any potential changes in Water Rate methodologies contemplated by the contract negotiations would not be agreed to in time to impact Water rates for 2016. At that time it had also become apparent that programs designed to enhance utility service levels, while not initiated until 2017, would require material increases in Water and Wastewater revenue levels. We recommended that the City consider increases in Water and Wastewater rates as soon as possible in order to provide stability to future rate adjustments.

Due to the ongoing discussions regarding the Water contract, and to important developments regarding other regional initiatives, no rate adjustments were pursued during 2016, and the Water and Wastewater rates established in 2014 remain in place today. As the end of the year approaches, the City has recognized the importance of increasing revenue levels for the Water Utility for 2017 as soon as possible. On October 21, we were tasked with the following assignment:

1. Prepare an updated financial forecast for the Water Utility, based in large part on the preliminary budget figures for 2017 and the updated long-term capital improvement program (CIP);
2. With respect to the initial year of the forecast period, recommend a revenue level designed to **immediately** achieve two fundamental policy goals:
 - *Return to, and maintenance of, Reserve Fund balances in accordance with the dictates of the Utility Financial Policy;*
 - *Achievement of debt service coverage ratios of approximately 200%.*
3. Allocate the 2017 revenue requirements to City and Township customer classes based on cost of service principles envisioned in the current version of "Article 7" of the draft contract being negotiated with the Townships, which seeks to establish the methodology for determining future Water rates to the Townships;
4. Recommend a schedule of Water rates designed to recover the costs of service allocated to each customer class.

The results of items 3 and 4 noted above were designed to serve as the “Dry Run” envisioned by the parties negotiating the possible new Water service agreement.

We were asked to complete this assignment on a timeline that supported review by internal City and Township stakeholders by November 18, in order to facilitate City Commission review and approval for an early January 2017 implementation of the proposed Water rates. While the timeline for the assignment is daunting, we accepted it with confidence in being able to deliver.

Our immediate assignment does not include any analyses of Wastewater Rates or financial plans. Based on the analyses we prepared in July, the need to increase revenue levels for the Wastewater Utility is less urgent. It is our understanding that a similar assignment to that noted herein for the Water Utility is likely to occur in the first quarter of 2017.

Executive Summary Findings and Recommendations

We provide the following observations, presented in sequential order to support the ultimate recommended action on Water rates for 2017:

- In order to immediately achieve the financial objectives set forth in item 2 of our assignment, Water rates would need to be increased by **15%** for 2017, and additional annual increases of 5% would be required in subsequent years. These projected rate increases reflect:
 - *Rates have not been adjusted for 3 consecutive years;*
 - *The proposed increased service levels will require a significant amount of enhanced capital investment; and*
 - *The higher debt service coverage target, designed to maintain and improve credit ratings for the Water Utility.*
- While there are significant areas of potential agreement, the current version of “Article 7” of the Water service agreement still contains material differences of opinion, most specifically in the definition of the rate of return applicable to Township Water rates;
 - *In order to complete the “Dry Run” we must make assumptions that are not “agreed to” by the parties.*
- Even if such terms could be “agreed to” for purposes of the “Dry Run”, there is likely to be differential impact on rates between City and Township customers, and that differential is likely to be more volatile with a 15% increase than it would be with a smaller increase.
- There are important other elements set forth in Article 7 that have yet to be accomplished – most importantly the “Schedule of the Public Water Supply Systems Current Capital Assets” that forms the foundation for allocating capital revenue requirements amongst the customer classes.

- *Completing a “Dry Run” for consideration by stakeholders that professes to indicate the impact of Article 7, without giving consideration to other important aspects of the “agreement” strikes us as being imprudent.*
 - *We remain concerned that acting on Water rates determined via contractual terms that have yet to be agreed to by the City is not good public policy.*
- In the final analysis, we believe that the City and the Townships would both be better served by executing a “Dry Run” once the fundamental exhibits envisioned by the service agreement are available. We believe that such a process can be completed during 2017, and implemented with the second rate increase envisioned by the projections contained herein.
- In the meantime, we recommend that the City increase (preferably by January 1, 2017) Water rates by **8%** uniformly “across the board” to all customer classes;
 - *This increase is designed to be the first in a series of increases to support financing of capital improvement programs and operating programs designed to enhance service levels. See accompanying projections.*
- To the extent that the parties successfully execute a services agreement that contains the “true-up” mechanism envisioned by the current draft agreement, they can establish whether or not the 2017 Water rates would be subject to true-up.

The 2017 revenue requirement plan is largely designed to initiate a long-term series of revenue adjustments in a stabilized manner, and support programs designed to produce enhanced service levels to all utility customers. An understanding of the long-term plan (*discussed in the following pages*) is essential in consideration of our recommendations for 2017. The “phased” strategy supported by this forecast takes advantage of reduced levels of debt service on existing bonds starting in 2019 to achieve the financial policy goals, rather than seeking to do so immediately.

We stress that the projections and recommendations contained herein are largely dependent on assumptions re: capital improvement program and level of service, as discussed herein.

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Background and Approach

We were engaged by the City to conduct Water and Wastewater Rates Studies for 2016. Amongst the deliverables associated with our assignment:

- Revenue requirements analysis, indicating projected operating and capital financing plans for each utility which meet the tenets of the Utility Financial Policy;
- Projected revenue levels for 2016, establishing “overall” rate levels necessary to meet the requirements of the financial plans.
- Development of preliminary projected operating and capital financing plans for each utility for a five year planning period, (which we’ve extended to ten years in this analysis).

The results of our efforts on these assignments for the Water Utility are illustrated by the projections in the attached exhibits, and summarized herein. In order to prepare these projections, we’ve conducted extensive analysis of records and data provided by the City. Our efforts included:

- Review and analysis of detailed monthly billing data for all customer classes for the past 10 years;
- Review and analysis of accounting records, including the records that support the Comprehensive Annual Financial Report for 2015, subsidiary reports for 2015, and interim subsidiary reports for 2016;
- Review and analysis of the City’s fixed asset records;
- Review and analysis of the 2016 budget (and the preliminary 2017 budget) for the Water Utility;
- Review and analysis of the long-term Capital Improvement Program for the Water Utility that were developed in conjunction with the 2016 budget, and subsequent preliminary updates to those programs;
- Discussions with City and Utility management personnel to identify strategies to be employed in the financial plan, particularly related to implementation of the Utility Financial Policy;
- Other analyses as we deemed necessary;
- Application of experience, judgment, and analytical prowess².

² *The projections set forth herein are intended as “forward-looking statements”. In formulating these projections, we have made certain assumptions with respect to conditions, events, and circumstances that may occur in the future. The methodology we utilized in performing these analyses follows generally accepted practices for such projections. Such assumptions and methodologies are reasonable and appropriate for the purpose for which they are used. While we believe the assumptions are reasonable and the projection methodology valid, actual results may differ materially from those projected, as influenced by conditions, events, and circumstances that may actually occur. Such factors may include, among other things, the City’s ability to execute the CIP as scheduled and within budget, regional climate and weather conditions affecting the amount of water sold and wastewater treated, and any adverse legislative, regulatory or legal decisions (including environmental laws and regulations) affecting the City’s ability to manage the utilities and maintain compliance with regulations.*

Results Summary – 2017 Revenue Requirements

The results of our analyses regarding the 2017 revenue requirements for the Water Utility is summarized in Tables 1 and 2 accompanying this memorandum.

Table 1 presents projected water sales and water sales revenues for 2017 for all customer classes of the Water Utility. Water sales shown in Column 1 have been projected assuming “normalized” conditions, based on a review of historical data. The projected revenues shown in Columns 2 through 4 represent the application of the existing water rates and charges schedules to the sales and accounts within each customer class.

Table 3 is designed to serve as an Executive Summary of the 2017 financial plan for the Water Utility.

Capital Financing Plan Summary. Lines 1 through 7 present the projected plan for financing capital improvements. As indicated in the table, these projections anticipate issuance of additional revenue bonds totaling \$5.75 million (to generate approximately \$5.16 million of proceeds) during 2017 to finance the CIP. Additional funding sources from contributions in aid of construction and operating revenue transfers are projected to augment existing balances and result in healthy Improvement Fund balances available for 2018 and beyond.

Operational Financing Plan Summary. Lines 8 through 24 present the projected financing plan for the operational activities of the utilities. Projected service revenues from existing rates and charges (which were delineated in Table 1) are shown on Line 8. Additional revenues from the proposed rate adjustments are computed on Lines 9 through 12, and augmented by projected miscellaneous³ and non-operating revenues. The operation and maintenance expense, OPEB financing elements, debt service, and payment in lieu of taxes (PILOT) amounts included in the 2017 budget are shown on Lines 15 through 19. The revenue financed capital amounts on Line 20 reflect the projected transfer of operating revenues to finance capital improvements, which was also shown on Line 5. Amounts necessary to accommodate the reserve management plan set forth by the Utility Financial Policy are shown on Line 21.

As noted on Line 23, the proposed adjustments to existing Water rates are projected to produce revenues that substantially recover projected revenue requirements for the Water Utility, although a small use of reserve funds would necessary to fully support the transfer of revenues to finance the CIP. The resulting debt service coverage figures from this projected financial plan are presented on Line 18, and are higher than the minimum requirement (1.40x) set forth in the current Utility Financial Policy⁴.

³ The large Water miscellaneous revenue figure reflects accounting for interagency allocations, which formerly impacted relative operating expense levels.

⁴ The debt service coverage requirements of the Utility Financial Policy are arguably low relative to current peer analysis. See further discussion in Preliminary Long-Term Financial Forecasts.

Reserve Balances. Lines 25 through 29 present the projected 2017 year-end balances in the various reserve funds of the Water Utility. *Note that we've excluded the Bond Reserve Account from this presentation, as it is restricted and not technically available to be utilized for any of the revenue requirements presented herein.* The subtotals of the Operating and Emergency Capital reserve funds shown on Line 27 are consistent with the tenets of the current Utility Financial Policy.

Summary Recommendations. We recommend that the City:

- Increase (preferably by January 1, 2017) Water rates by **8%** uniformly “across the board” to all customer classes;
 - *This increase is designed to be the first in a series of increases to support financing of capital improvement programs and operating programs designed to enhance service levels. See accompanying projections.*

As noted, the 2017 revenue requirement plan is largely designed to initiate a long-term series of revenue adjustments in a stabilized manner, and support programs designed to produce enhanced service levels to all utility customers. An understanding of the long-term plan (*discussed in the following pages*) is essential in consideration of our recommendations for 2017.

[Remainder of page intentionally left blank]

Results Summary – Preliminary Long-Term Financial Forecasts

We have prepared 10-year projections of utility financial plans to illustrate the overall business plan for the Water Utility. We stress that these projections are largely dependent on assumptions regarding capital improvement programs and operating programs designed to enhance levels of service. Any modifications to the assumptions on these initiatives (particularly the capital improvement programs) would have a material impact on the projections contained herein.

Assumptions and Analysis Approach

We have modeled the capital and operating financing plans of the Water Utility and prepared the accompanying exhibits to illustrate long-term projections of:

- The Capital Improvement Program Financing Plan;
- The Operating Fund Financing Plan;
- Reserve Fund Balances

Capital Improvement Program and Financing Approach

- Overall annual program financing requirements as depicted in recent update provided by City;
- “Preferred” financing source identified on a project by project basis:
 - ***Contribution in Aid*** projects (as stipulated by staff);
 - ***Revenue Funded*** projects – studies and small capital additions;
 - ***Unrestricted*** projects – all other projects, including those long term projects for which issuance of debt is possible.
- General financing plan strategy:
 - Revenue financed capital generated in one year is not available to finance projects until the subsequent year, and adequate revenue generated capital funds must exist at the beginning of the year to finance the Revenue Funded projects in that year. For example, if the CIP identifies \$500,000 in Revenue Funded projects for 2018, the financing plan must be developed to establish a 2017 ending “Improvement Fund” balance of at least \$500,000.
 - All other projects are deemed “debt eligible” and prospective bond sales are sized to balance reserve fund and debt service coverage strategies.

Operating Financing Plan Approach

- Initial annual sales revenues are projected by applying existing Water rates to projected billed volumes;
 - Projected water sales volumes expected to continue recent gradual decline of approximately 0.5%;
- Evaluate ability of projected revenue under existing rates to adequately meet projected revenue requirements, which are summarized below;
- Identify strategic combinations of bond sales, rate increases, and use of reserves to meet projected revenue requirements and implement the goals of the Utility Financial Policy.

- Revenue requirements in these projections include (and are based on the noted assumptions):
 1. Operation and Maintenance Expense;
 - *Includes additional personnel in 2017 and 2018 to enhance level of service issues identified by the City's Public Services Director, then expected to experience inflationary adjustments thereafter;*
 2. Legacy OPEB financing costs;
 - *Per agreement with bargaining units, these amounts include the Water and Utility's share of the OPEB Bond Debt Service, and the fixed annual contribution to OPEB Trust Fund;*
 - *These costs are treated as operation and maintenance expenses for purposes of compliance with the City's Bond Ordinance and reporting on financial (debt service coverage) metrics identified therein.*
 3. Debt Service on Revenue Bonds;
 - *Reflects principal and interest requirements on existing indebtedness and on projected additional bonds assuming a 25-year term and an interest rate of 4.5%.*
 4. Payment in Lieu of Taxes (PILOT);
 - *Expected to increase at inflationary levels.*
 5. Revenue Financed Capital – transfers of revenues to finance capital improvements;
 - *Designed to provide year-end balances in the capital fund that are at a minimum equivalent to the subsequent year's Revenue Funded capital improvement projected expenditures.*
 6. Reserve Fund Deposits;
 - *Designed to produce projected balances in the Operating Reserve Fund and the Emergency Capital Reserve Fund that are within the range established by the Utility Financial Policy;*
 - *Operating Reserve at 90 days of Operation and Maintenance Expense;*
 - *Emergency Capital Reserve at the larger of 15% of annual Operation and Maintenance Expense, or the local share of annual depreciation expense.*
- The overall financial plan is also designed to produce projected debt service coverage ratios of approximately 2.0x, a metric that ratings agencies have encouraged the Utilities to produce to maintain and enhance credit ratings.
 - We note that this ratio is higher than that established by the Utility Financial Policy, and we encourage the City to review existing policy;
 - The projections envision a gradual increase to this ratio for the Water Utility, rather than an immediate ramp up that would create Water rate volatility;

Summary Observations. As noted in the exhibits the preliminary financial forecasts yield these observations:

- The projected capital improvement programs represent a substantial increase in the level of capital investment made to the Water Utility by the City in recent years;
- A large amount of this capital investment is related to “debt eligible” capital projects, and the most prudent means to finance these projects is a combination of issuance of revenue bonds and transfers of revenues – designed to approximately recover of costs of service over the useful life of the investments;
- The projections contemplate a significant increase in Water Utility debt levels to accommodate these capital improvement programs;
- Coupled with the objectives of increasing debt service coverage ratios and maintaining existing approaches regarding reserve fund balances, the new capital programs drive the need for additional revenue via rate increases;
- Our preliminary projections indicate a need to augment the recommended 2017 rate adjustments with additional annual rate adjustments;
 - ***Additional annual 9 percent Water rate increases are projected for 2018 through 2020, then reduced to 5 percent for the remainder of the projection period;***
- As noted earlier, we recommend that any “cost of service” based rate adjustments be deferred until 2018.

We believe the exhibits illustrate a responsible financing plan for the Water Utility, given the assumptions fundamental to their development, and we once again stress that modifications to such assumptions could have a material impact on the projections.

We are prepared to discuss this matter further at your convenience.

**Table 1
Water Utility**

Summary of Projected 2017 Sales and Revenues Under Existing Rates and Charges

Line No.	Customer Class	(1) Volume <i>cu mtr</i>	(2) Revenue		
			(2) Meter Charge \$	(3) Water Sales \$	(4) Total \$
Inside City					
1	Single Family	3,777,000	1,472,100	1,019,800	2,491,900
2	Multi-Family	1,652,900	202,800	413,200	616,000
3	Commercial	4,798,700	472,300	1,305,200	1,777,500
4	Seasonal	463,900	37,700	209,700	247,400
5	Total	10,692,500	2,184,900	2,947,900	5,132,800
Outside City					
6	Single Family	4,869,200	2,262,600	2,697,500	4,960,100
7	Multi-Family	1,554,700	267,300	565,900	833,200
8	Commercial	2,652,600	409,400	1,082,300	1,491,700
9	Seasonal	333,600	28,000	287,900	315,900
10	Total	9,410,100	2,967,300	4,633,600	7,600,900
Fire Protection					
11	Inside City	7,300	134,100	2,000	136,100
12	Outside City	3,000	193,100	1,200	194,300
13	Total	10,300	327,200	3,200	330,400
14	TOTAL	20,112,900	5,479,400	7,584,700	13,064,100

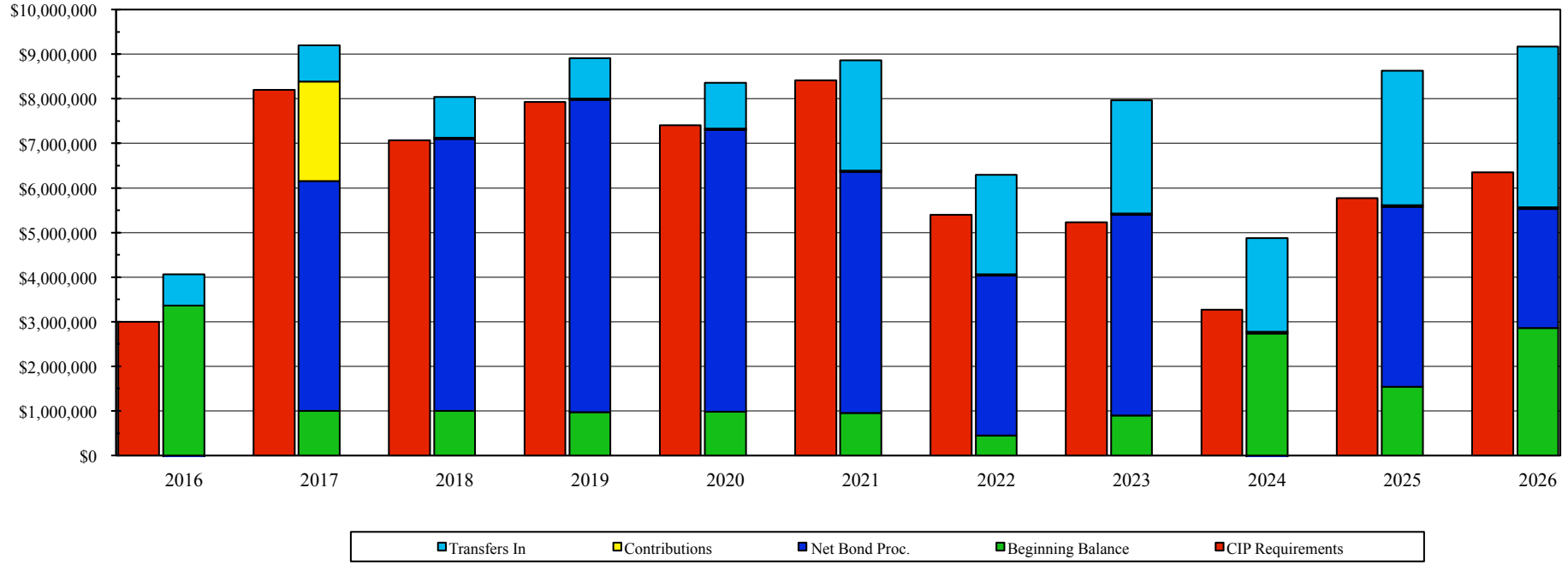
Table 2
Projected FY 2017 Financing Plan / Revenue Requirement Summary
Water Utility

		2017 Projections \$
Capital Financing Plan Summary		
1	CIP Financing Requirements	8,198,800
<u>Financing Sources</u>		
2	Beginning Balance	996,500
3	Net Bond Proceeds	5,157,000
4	Contributions in Aid	2,233,000
5	Transfers from Operating Funds	816,000
6	Total Sources	9,202,500
7	Ending Balance	1,003,700
Operational Financing Plan Summary		
<u>Revenue</u>		
8	Revenue Under Existing Rates & Charges	13,064,100
9	Rate Increase	8.0%
10	Effective for __ Months	12
11	Revenues from Rate Increase	1,045,100
12	Total Rate Revenue	14,109,200
13	Miscellaneous & Non-Operating Revenue	1,472,100
14	Total Revenue	15,581,300
<u>Revenue Requirements</u>		
15	Operation and Maintenance Expense	11,160,800
16	OPEB Amortization (<i>Debt Service on OPEB Bonds</i>)	551,300
17	OPEB Contribution	298,200
18	Debt Service	2,230,000
19	PILOT	601,700
20	Revenue Transfers to Capital Fund	816,000
21	Reserve Deposits	(76,700)
22	Total Revenue Requirements	15,581,300
23	Balance	0
24	Debt Service Coverage	1.60
Reserve Balances (a)		
25	Operating Reserve (b)	3,250,500
26	Emergency Capital Reserve	2,022,500
27	Subtotal	5,273,000
28	Improvement Fund	1,003,700
29	Total	6,276,700

(a) Excludes restricted Bond Reserve Account

Water Utility Financial Plan Summary

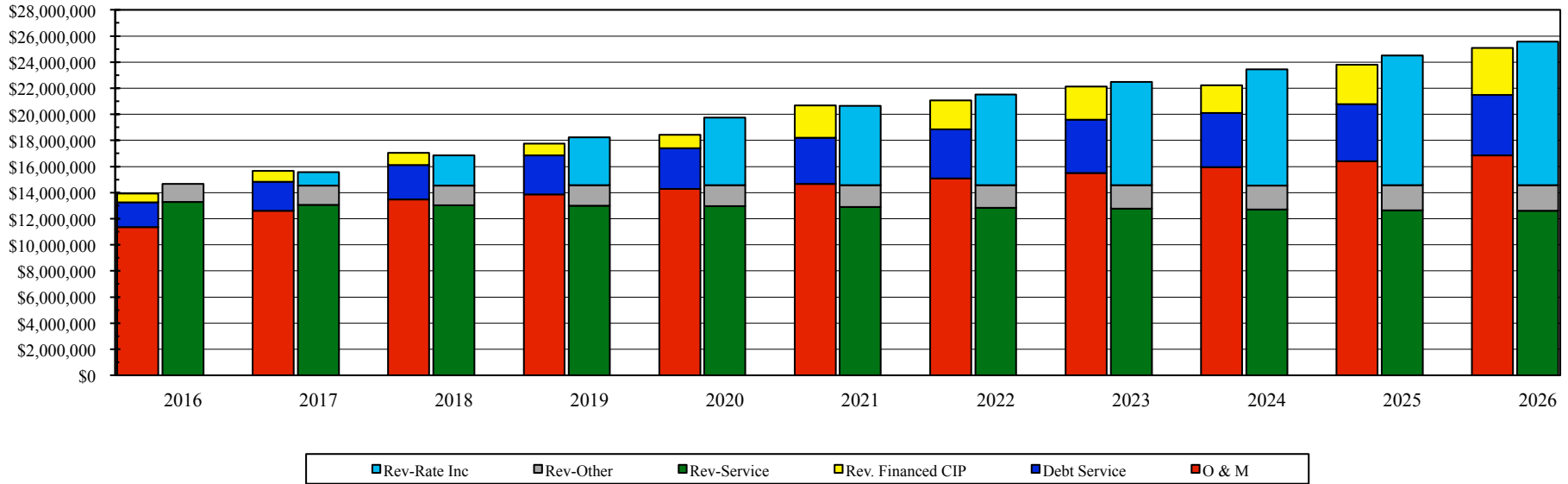
Capital Improvement Program Financing



	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
CIP Req't	3,000,000	8,198,800	7,067,900	7,924,800	7,403,000	8,409,900	5,397,700	5,231,500	3,266,400	5,768,200	6,346,800
<u>Sources</u>											
Beg Balance	3,360,600	996,500	1,003,700	969,500	981,800	952,500	452,300	901,000	2,735,400	1,538,900	2,859,700
Bond Sale	0	5,750,000	6,750,000	7,750,000	7,000,000	6,000,000	4,000,000	5,000,000	0	4,500,000	3,000,000
less: Issue Exp	(70,000)	(593,000)	(660,200)	(747,700)	(682,100)	(594,600)	(419,800)	(507,200)	(70,000)	(463,500)	(332,300)
Revs / Op Funds	705,900	816,000	910,900	901,800	1,022,800	2,471,300	2,232,200	2,538,100	2,103,800	3,015,300	3,602,900
CIAC	0	2,233,000	33,000	33,000	33,000	33,000	34,000	35,000	36,100	37,200	38,300
Total Sources	3,996,500	9,202,500	8,037,400	8,906,600	8,355,500	8,862,200	6,298,700	7,966,900	4,805,300	8,627,900	9,168,600
End Balance	996,500	1,003,700	969,500	981,800	952,500	452,300	901,000	2,735,400	1,538,900	2,859,700	2,821,800

Water Utility Financial Plan Summary

Operating Fund Financing Plan

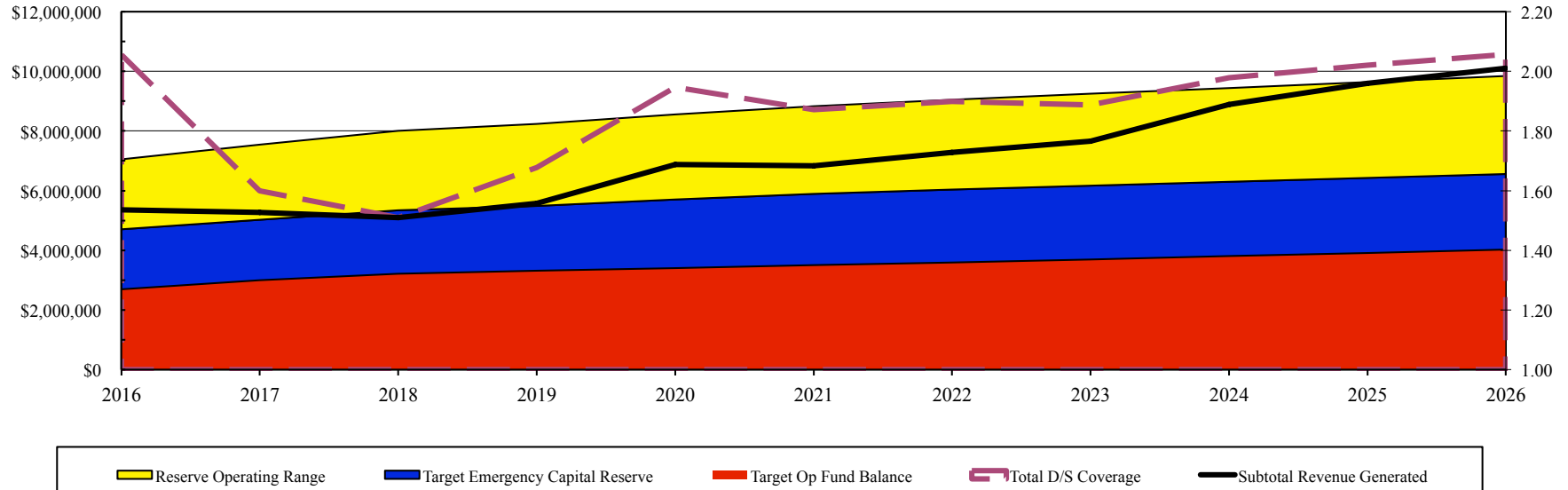


	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>
<u>Revenue</u>											
Rates	13,287,400	13,064,100	13,025,900	12,987,900	12,950,600	12,913,100	12,848,500	12,784,300	12,720,400	12,656,800	12,593,500
Rate Increases	0.00%	8.00%	9.00%	9.00%	9.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
Rate Increases	0	1,045,100	2,308,200	3,677,400	5,162,500	6,050,400	6,963,800	7,914,600	8,904,800	9,936,100	11,010,600
Other	1,368,000	1,472,100	1,522,500	1,574,000	1,626,700	1,673,400	1,711,700	1,786,800	1,821,400	1,912,300	1,972,600
Total Revenue	14,655,400	15,581,300	16,856,600	18,239,300	19,739,800	20,636,900	21,524,000	22,485,700	23,446,600	24,505,200	25,576,700
<u>Revenue Req'ts</u>											
O&M (& PILOT)	11,345,300	12,612,000	13,486,100	13,870,400	14,266,700	14,666,300	15,078,400	15,503,300	15,941,600	16,393,600	16,859,700
Debt Service	1,892,600	2,230,000	2,640,000	2,980,700	3,146,700	3,550,100	3,758,300	4,076,100	4,162,800	4,389,700	4,615,200
Rev. Financed CIP	700,000	816,000	910,900	901,800	1,022,800	2,471,300	2,232,200	2,538,100	2,103,800	3,015,300	3,602,900
Total Rev Req'ts	13,937,900	15,658,000	17,037,000	17,752,900	18,436,200	20,687,700	21,068,900	22,117,500	22,208,200	23,798,600	25,077,800
Balance - Rsrvs	717,500	(76,700)	(180,400)	486,400	1,303,600	(50,800)	455,100	368,200	1,238,400	706,600	498,900
DS Covg	206%	160%	151%	168%	195%	187%	190%	189%	198%	202%	206%
Post OPEB DS Covg	206%	160%	151%	168%	195%	187%	190%	189%	198%	202%	206%

87.4%

Water Utility Financial Plan Summary

Fund Balance Summary (excludes Improvement Fund)



	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	
Fund Balance Mins												
Operating Fund	2,690,200	3,002,600	3,216,600	3,308,000	3,402,300	3,497,300	3,595,200	3,696,200	3,800,400	3,907,800	4,018,600	
Emerg Cap	2,010,900	2,022,500	2,121,800	2,179,600	2,297,800	2,388,200	2,436,400	2,469,900	2,493,600	2,517,500	2,541,600	
Subtotal	4,701,100	5,025,100	5,338,400	5,487,600	5,700,100	5,885,500	6,031,600	6,166,100	6,294,000	6,425,300	6,560,200	
Range Max	7,051,650	7,537,650	8,007,600	8,231,400	8,550,150	8,828,250	9,047,400	9,249,150	9,441,000	9,637,950	9,840,300	
Projections												
Operating Fund	3,338,800	3,250,500	2,970,800	3,399,400	4,584,800	4,443,600	4,850,500	5,185,200	6,399,900	7,082,600	7,557,400	
Emerg Cap	2,010,900	2,022,500	2,121,800	2,179,600	2,297,800	2,388,200	2,436,400	2,469,900	2,493,600	2,517,500	2,541,600	
Subtotal	5,349,700	5,273,000	5,092,600	5,579,000	6,882,600	6,831,800	7,286,900	7,655,100	8,893,500	9,600,100	10,099,000	
DS Covg	206%	160%	151%	168%	195%	187%	190%	189%	198%	202%	206%	
Rate Increase	0.00%	8.00%	9.00%	9.00%	9.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	87.4%