

UTILITY ADVISORY BOARD AGENDA

Thursday, November 9, 2017 – 5:15 p.m.
Mendenhall Wastewater Treatment Plant
2009 Radcliffe Rd

I. CALL TO ORDER

II. APPROVAL OF AGENDA

III. APPROVAL OF MINUTES

March 9, 2017 Draft UAB Meeting Minutes

IV. PUBLIC PARTICIPATION

V. ACTION ITEMS

VI. INFORMATION ITEMS

- A. UAB Annual Report to the Assembly – Update from UAB members
- B. Utilities Operational Update
- C. Biosolids Update
- D. Finance Update – 1% Sales Tax
- E. Rate Structure Opening Discussion
- F. Meeting Location and Dates Discussion

VII. NON-AGENDA ITEMS

VIII. ADJOURNMENT – Next Meeting, December 14th

UTILITY ADVISORY BOARD DRAFT MINUTES

Thursday, March 9, 2017 – 5:15 p.m.
Mendenhall Wastewater Treatment Plant
2009 Radcliffe Rd

Board Members Present: Leon Vance – Chair, Geoff Larson – Vice-Chair; Grant Ritter; David Hanna; Bryan Farrell; Andrew Campbell

Board Members Absent: Janet Hall Schempf

Staff Present: Roger Healy, Samantha Stoughtenger; Autumn Sapp; Marissa Capito; Holly Kveum

I. CALL TO ORDER

The meeting was called to order at 5:17p.m. by Chair Vance.

II. APPROVAL OF AGENDA

Agenda approved without amendment.

III. APPROVAL OF MINUTES

December 8, 2016 Draft UAB Meeting Minutes- approved without amendment.

IV. PUBLIC PARTICIPATION

None.

V. ACTION ITEMS

A. *UAB Annual Report to the Assembly*- Chair Vance provided a quick overview of the cover memorandum and report to the board, noting that some requested chart revisions had been incorporated. The board and staff continued discussion of the report and reviewed various project costs. The board requested that a disclaimer be added under “Major CIPS Under Construction” so as to note that the provided costs do not include design or administration costs. Vice-Chair Larson requested three minor edits to the cover report: change the

wording regarding fund balance from exhaustion to depletion, to update the fiscal years for the Wastewater Utility from 2020 to 2018 and the Water Utility from 2023 to 2022, and to add “the” in the sentence before the last two bullet points. Chair Vance made a motion to approve the FY16 UAB Annual Report with the requested edits and to forward to the Committee of the Whole. The board approved the motion.

VI. INFORMATION ITEMS

- A. *Review Resolution #2299 Establishing the UAB*- The resolution is to be reviewed each year by the board; Ms. Stoughtenger noted that staff would be asking the board to revisit one of their key objectives: reviewing utility rates. Staff and the board then discussed the competitiveness of funding, potential state sales tax and the overall palatability of increased taxes for the average rate payer.
- B. *Utilities Financial Update*- Staff provided a short presentation of the financial health of the Utilities including necessary infrastructure repairs/improvements and spending/funding scenarios. The board mentioned showing a list of needed projects to emphasize the actual need of the Utilities. The board and staff then discussed various funding scenarios and what is reasonable for the rate payers to expend.
- C. *PWF Committee Presentation*- The PWF Committee was presented an update of the biosolids dryer project by Ms. Stoughtenger. The goal of the presentation was to provide historical information for new Assembly Members and to bring the Committee back up to speed. Staff and the board then discussed site size constraints, potential pellet use, and smell containment.
- D. *Utilities Operational Update*- Mr. Farrell noted that the calculations for the Mendenhall Treatment Plant were off and for staff to review.
- E. *Biosolids Public Meeting*- Staff informed the board that there will be an informational session to inform interested parties on the progress of the biosolids update and is scheduled to be held at 6 p.m. in the Alaska Room of the Juneau International Airport.

VII. NON-AGENDA ITEMS

None.

VIII. ADJOURNMENT

Chair Vance adjourned the meeting at 5:53 p.m.



MEMORANDUM

DATE: November 9, 2017

TO: Utility Advisory Board
 Leon Vance, Chair

FROM: Roger Healy – Engineering & PW Director
 Autumn Sapp – Engineering & PW Business Manager

SUBJECT: CBJ Utility Business Unit Monthly Report

CRUISE SHIP WASTEWATER DISCHARGE

For the 2017 cruise ship season two CBJ cruise ship docks began accepting wastewater discharges at the new Alaska Steamship and the Cruise Ship Terminal Docks. These additions, along with the rate increase that went into effect in July, attributed to an increase compared to the 2016 cruise ship wastewater revenue of \$102,042.92 for the months of May through September. The following is a summary of the May through September 2016 and 2017 cruise ship seasons:

2016, May – September

Dock	Average BOD Con. (mg/l) / Month
Franklin	20,114
AJ	2,959

Total Revenue = \$376,715

2017, May – September

Dock	Average BOD Con. (mg/l) / Month
Franklin	15,988
AJ	0
Alaska Steamship	4,370
Cruise Ship Terminal	258

Total Revenue = \$519,980

Cruise Ship Wastewater Disposal

2017 Season

May	Franklin Dock	AJ Dock	AK Steamship	Cruise Ship Terminal
Number of ships	15	-	3	-
BOD conc (mg/l)	2,860	-	1730	-
Total Discharge (gal)	1,511,773	-	448,120	-
Total	\$ 75,620.93	\$ -	\$ 11,286.60	\$ -

June	Franklin Dock	AJ Dock	AK Steamship	Cruise Ship Terminal
Number of ships	18	-	4	1
BOD con (mg/l)	25380	-	4580	1000
Total Discharge (gal)	1566243	-	683156	49712
Total	\$ 93,221.34	\$ -	\$ 33,072.86	\$ 2,137.62

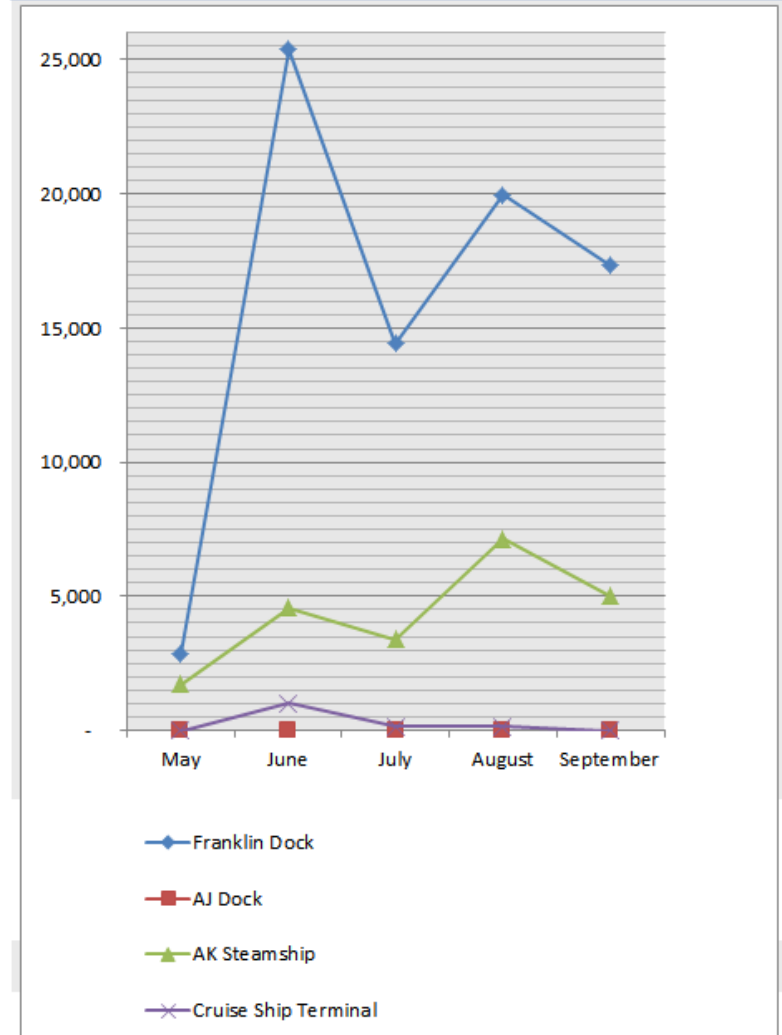
July	Franklin Dock	AJ Dock	AK Steamship	Cruise Ship Terminal
Number of ships	17	-	3	2
BOD con (mg/l)	14410	-	3400	150
Total Discharge (gal)	1457648	-	529602	33493
Total	\$ 55,261.80	\$ -	\$ 26,721.52	\$ 388.52

August	Franklin Dock	AJ Dock	AK Steamship	Cruise Ship Terminal
Number of ships	17	-	5	1
BOD con (mg/l)	19970	-	7140	140
Total Discharge (gal)	1508171	-	827439	99574
Total	\$ 70,350.72	\$ -	\$ 49,822.20	\$ 1,155.06

September	Franklin Dock	AJ Dock	AK Steamship	Cruise Ship Terminal
Number of ships	13	-	3	-
BOD con (mg/l)	17,320	-	5,000	-
Total Discharge (gal)	1,200,563	-	484,325	-
Total	\$ 65,144.62	\$ -	\$ 35,796.15	\$ -

Total Charges	Franklin Dock	AJ Dock	AK Steamship	Cruise Ship Terminal
	\$ 359,599.40	\$ -	\$156,699.32	\$ 3,681.19

BOD Concentrations (mg/l)



CRUISE SHIP WATER CONSUMPTION

2017 Season

Cruise Ship Water Usage

May	Franklin Dock	AJ Dock	AK Steamship	Cruise Ship Terminal
Gallons	4,375,000	1,500,000	1,933,000	1,260,000
Total	\$ 12,872.56	\$ 4,420.06	\$ 5,693.08	\$ 3,714.46

June	Franklin Dock	AJ Dock	AK Steamship	Cruise Ship Terminal
Gallons	4,695,000	2,180,000	2,770,000	2,405,000
Total	\$ 13,813.36	\$ 6,419.26	\$ 8,153.86	\$ 7,080.76

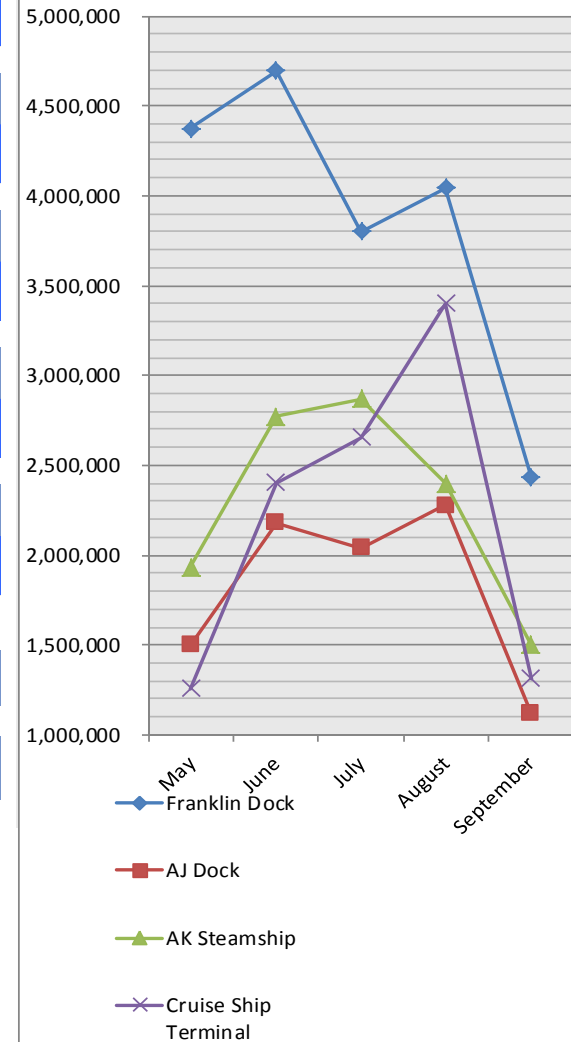
July	Franklin Dock	AJ Dock	AK Steamship	Cruise Ship Terminal
Gallons	3,800,000	2,040,000	2,872,000	2,654,000
Total	\$ 11,904.71	\$ 6,395.91	\$ 9,000.07	\$ 8,317.73

August	Franklin Dock	AJ Dock	AK Steamship	Cruise Ship Terminal
Gallons	4,045,000	2,280,000	2,398,000	3,399,000
Total	\$ 12,872.56	\$ 7,147.11	\$ 7,516.45	\$ 10,649.58

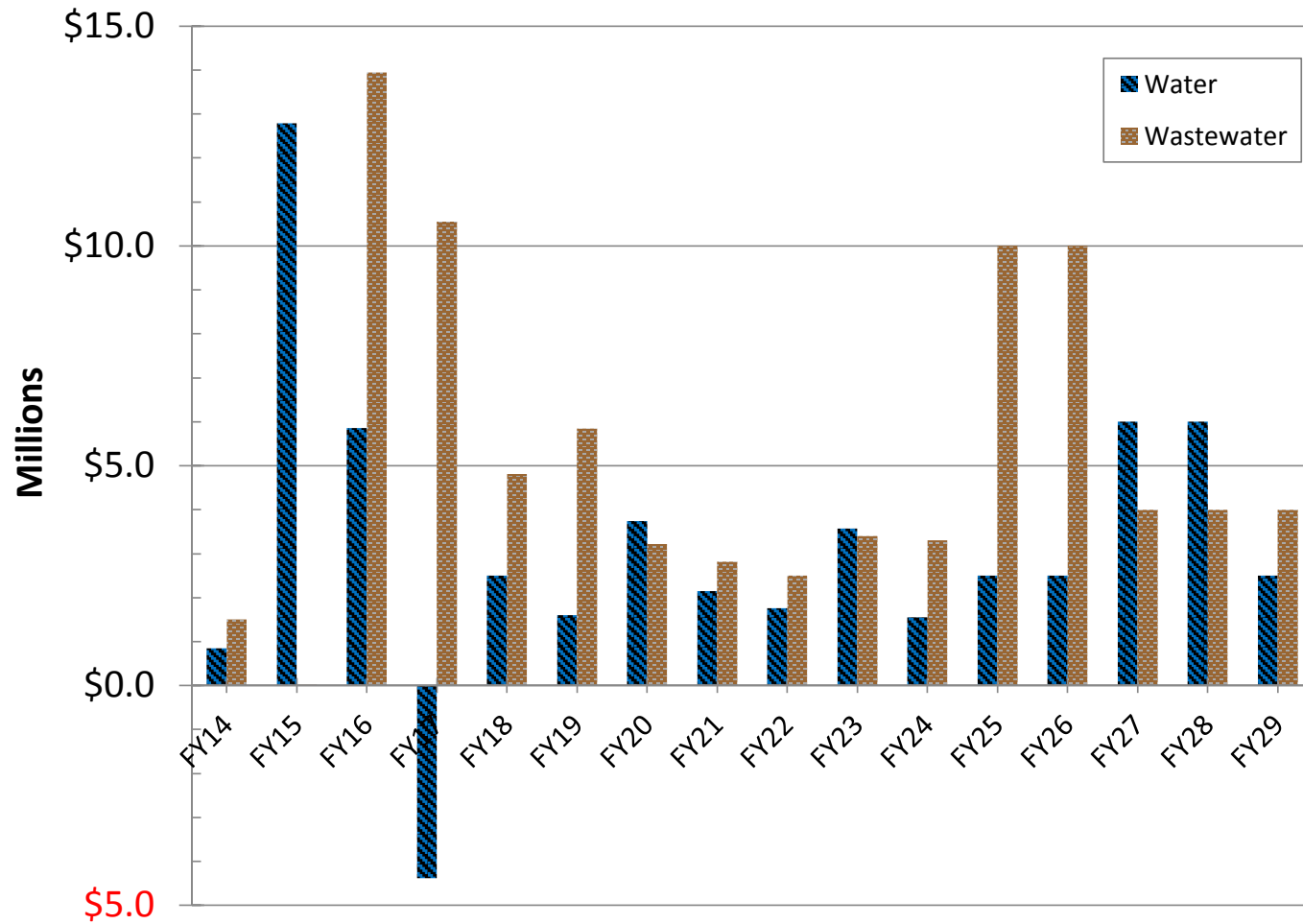
September	Franklin Dock	AJ Dock	AK Steamship	Cruise Ship Terminal
Gallons	2,430,000	1,120,000	1,498,000	1,315,000
Total	\$ 7,616.61	\$ 3,516.31	\$ 4,669.45	\$ 5,660.00

2017 Total	Franklin Dock	AJ Dock	AK Steamship	Cruise Ship Terminal
Gallons	19,345,000	9,120,000	11,471,000	11,033,000
Total	\$ 59,079.80	\$ 27,898.65	\$ 35,032.91	\$ 35,422.53

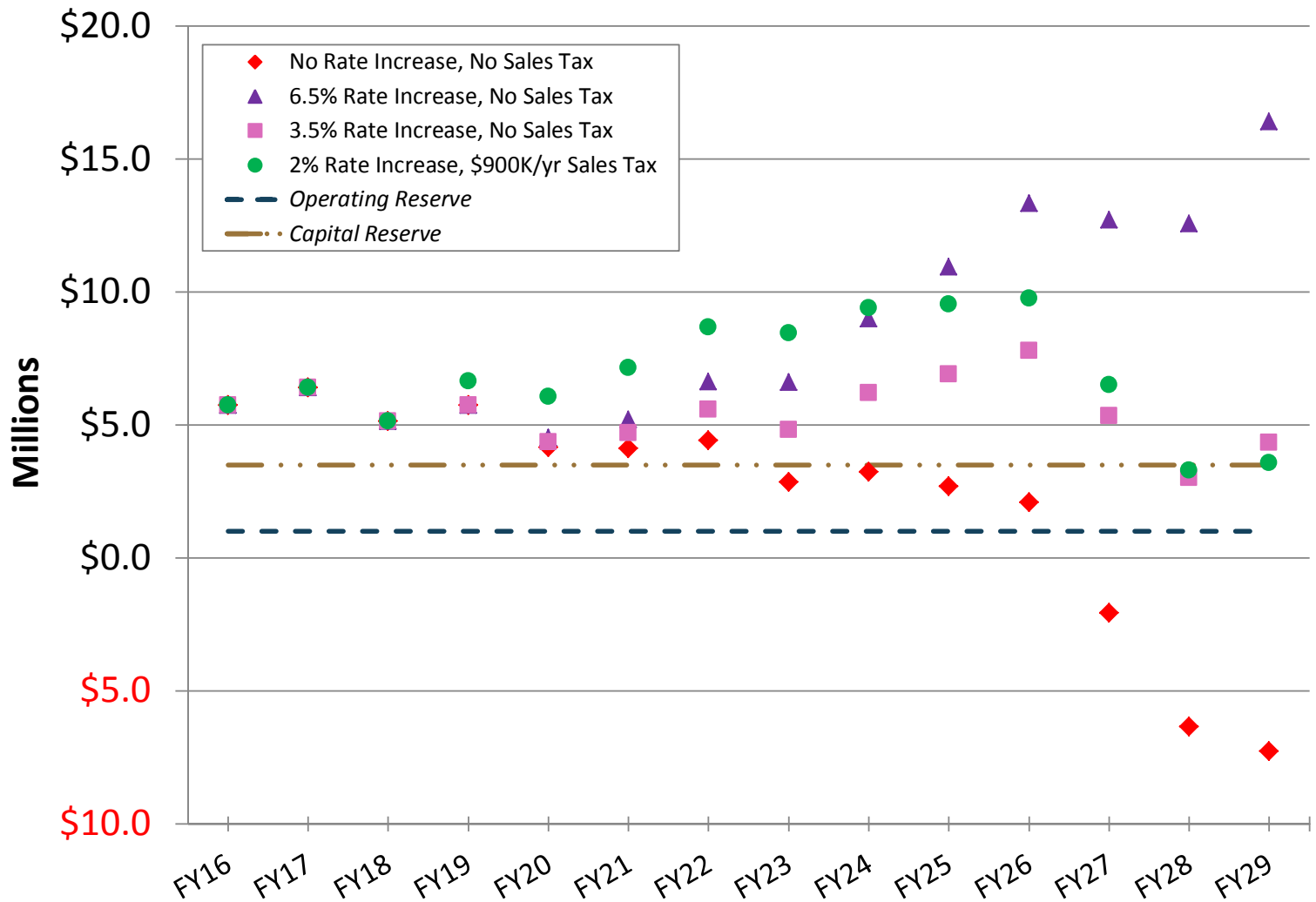
Water Consumption (gal)



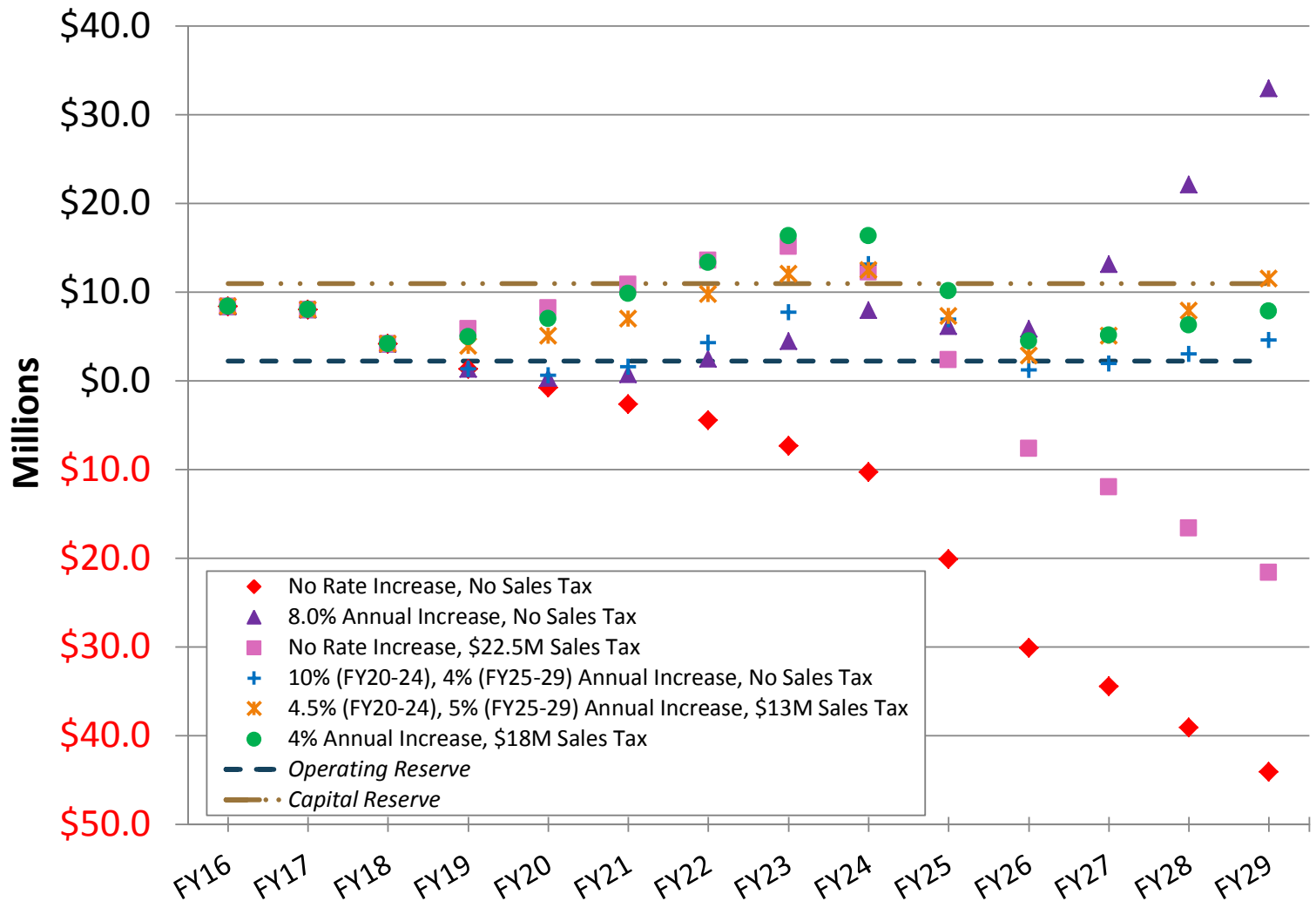
CIPs Spending - Extended



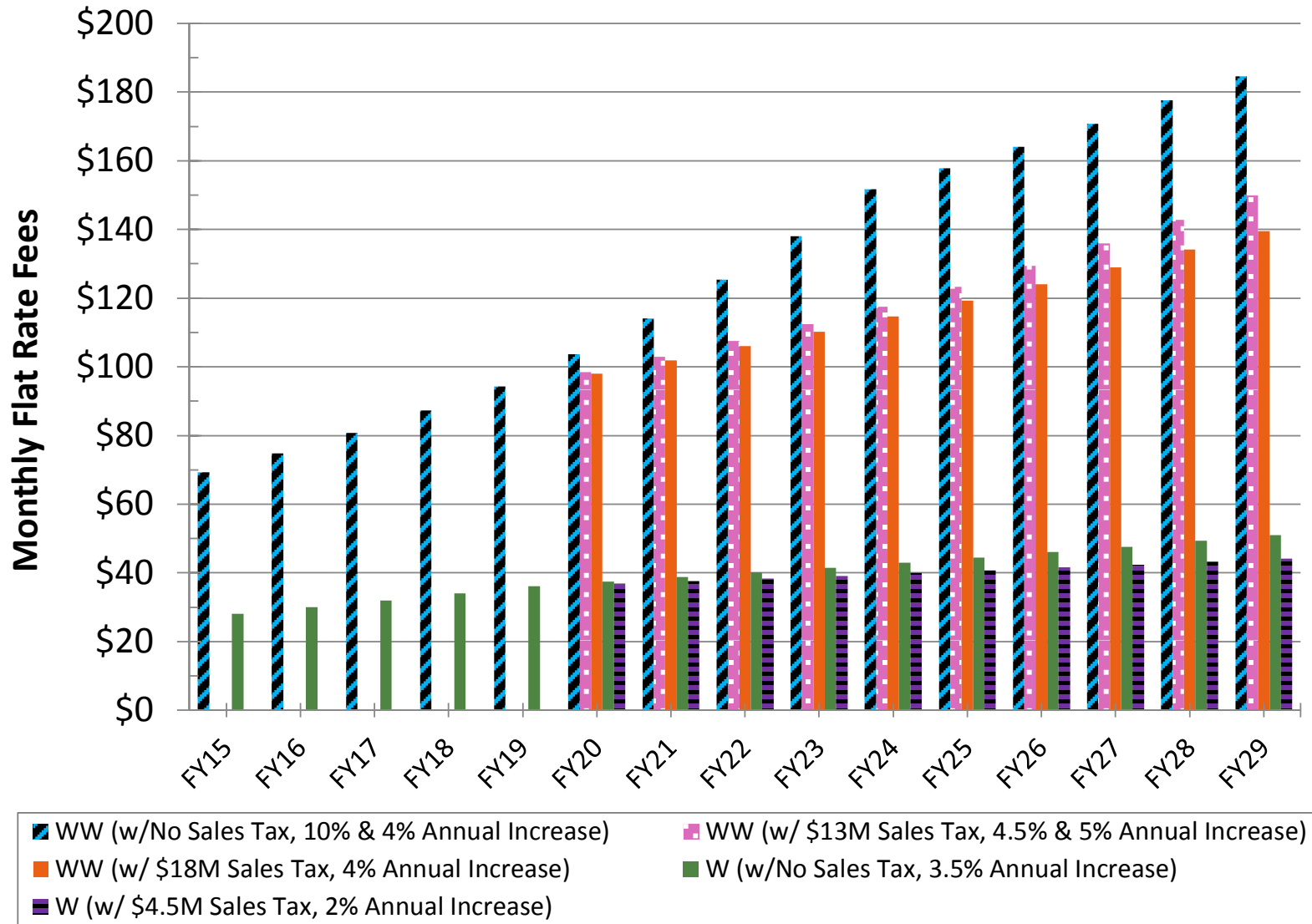
Water Fund Balance



Wastewater Fund Balance



Utility Rates



UTILITY RATES

The last adopted utility rate increase will be taking place on July 1, 2018. The 2014 Rate Model forecasted utility operations through 2024. For the purposes of the 1% Sales Tax proposition on the October 3' 2017 ballot, CBJ staff extrapolated operations into FY 2029. In the attachment the extended capital/operations expenditures are shown. With the assistance of CBJ staff, the UAB must determine a rate plan to take before the CBJ Assembly to be considered in the next budget cycle occurring this spring. I am proposing that staff will gather data and evaluate possible scenarios offered by UAB and staff over the next few months. Once the UAB agrees upon possible rate scenario(s), the UAB should report the findings and make appropriate recommendations to the Assembly in support of any changes to the rate structure.

The rate increases taking place on July 1, 2018 will continue the trend of water rates increasing 6.5% and sewer rates increasing 8.0%. The existing rate study completed in 2014 by the FCS Group (cost - \$214,978.00) continues this trend through 2024.

Water Utility Rate Schedule													
Customer Class	Monthly Allowance (Gallons)	RATES Effective 7/1/11		RATES Effective 1/1/15		RATES Effective 7/1/15		RATES Effective 7/1/16		RATES Effective 7/1/17		Rates Effective 7/1/18	
		Base (per month)	Volume Charge (per 1,000 gallons)	Base (per month)	Volume Charge (per 1,000 gallons)	Base (per month)	Volume Charge (per 1,000 gallons)	Base (per month)	Volume Charge (per 1,000 gallons)	Base (per month)	Volume Charge (per 1,000 gallons)	Base (per month)	Volume Charge (per 1,000 gallons)
Flat Residential	—	\$26.40	—	\$28.12	—	\$29.94	—	\$31.89	—	\$33.96	—	\$36.17	—
Metered Residential	4,000	\$18.06	\$2.43	\$19.23	\$2.59	\$20.48	\$2.76	\$21.82	\$2.94	\$23.23	\$3.13	\$24.74	\$3.33
Flat Commercial	—	\$26.40	—	\$28.12	—	\$29.94	—	\$31.89	—	\$33.96	—	\$36.17	—
Metered Commercial	4,000	\$18.06	\$2.43	\$19.23	\$2.59	\$20.48	\$2.76	\$21.82	\$2.94	\$23.23	\$3.13	\$24.74	\$3.33
Large Commercial	500,000	\$347.42	\$0.70	\$370.00	\$0.75	\$394.05	\$0.79	\$419.67	\$0.85	\$446.94	\$0.90	\$476.00	\$0.96
Bulk Water	—	\$18.06	\$2.43	\$19.23	\$2.59	\$20.48	\$2.76	\$21.82	\$2.94	\$23.23	\$3.13	\$24.74	\$3.33
Percent Increase:		6.5%		6.5%		6.5%		6.5%		6.5%		6.5%	

Wastewater Utility Rate Schedule													
Customer Class	Monthly Allowance (Gallons)	RATES Effective 7/1/2011		RATES Effective 1/1/15		RATES Effective 7/1/15		RATES Effective 7/1/16		RATES Effective 7/1/17		RATE Effective 7/1/18	
		Base (per month)	Volume Charge (per 1,000 gallons)	Base (per month)	Volume Charge (per 1,000 gallons)	Base (per month)	Volume Charge (per 1,000 gallons)	Base (per month)	Volume Charge (per 1,000 gallons)	Base (per month)	Volume Charge (per 1,000 gallons)	Base (per month)	Volume Charge (per 1,000 gallons)
Flat Residential	–	\$64.13		\$69.26		\$74.80		\$80.79		\$87.25		\$94.23	
Metered Residential	4,000	\$64.13	\$8.53	\$69.26	\$9.21	\$74.80	\$ 9.95	\$80.79	\$10.75	\$87.25	\$11.60	\$94.23	\$12.53
Flat Commercial	–	\$64.13		\$69.26		\$74.80	–	\$80.79		\$87.25		\$94.23	
Metered Commercial (Domestic)	4,000	\$64.13	\$8.53	\$69.26	\$9.21	\$74.80	\$ 9.95	\$80.79	\$10.75	\$87.25	\$11.60	\$94.23	\$12.53
Metered Commercial (High)	4,000	\$64.13	\$8.53	\$69.26	\$9.21	\$74.80	\$ 9.95	\$80.79	\$10.75	\$87.25	\$11.60	\$94.23	\$12.53
Septage Hauling	–		\$24.35		\$26.30	–	\$ 28.40	–	\$30.67	–	\$33.13	–	\$35.78
Percent Increase:		8.0%		8.0%		8.0%		8.0%		8.0%		8.0%	

The following is the presentation given by FCS Group to the Assembly February 10, 2014 showing the preliminary results of the rate study:
https://www.juneau.org/beta_transfer/assemblyftp/COW/documents/2014-02-10_CBJ_Rate_Study_Presentation_Cost_of_Service.pdf

Water

Capital Funding - FYE	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Total Capital Projects	\$ 775,000	\$ 2,184,050	\$ 6,846,997	\$ 2,362,214	\$ 1,699,339	\$ 1,601,344	\$ 3,746,602	\$ 2,148,801	\$ 1,754,872	\$ 3,574,059	\$ 1,557,628
Other Outside Sources	\$ -	\$ 1,200,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Loan Proceeds	-	-	-	-	-	-	-	-	-	-	-
Bond Proceeds	-	-	1,010,792	1,139,049	422,383	-	1,770,830	195,793	-	488,992	-
Use of Capital Fund Balance	775,000	984,050	5,836,204	1,223,165	1,276,956	1,601,344	1,975,772	1,953,008	1,754,872	3,085,067	1,557,628
Direct Rate Funding	-	-	-	-	-	-	-	-	-	-	-
Total Funding Sources	\$ 775,000	\$ 2,184,050	\$ 6,846,997	\$ 2,362,214	\$ 1,699,339	\$ 1,601,344	\$ 3,746,602	\$ 2,148,801	\$ 1,754,872	\$ 3,574,059	\$ 1,557,628

Revenue Requirements - FYE	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Revenues											
Rate Revenues Under Existing Rates	\$ 3,952,064	\$ 3,952,064	\$ 3,952,064	\$ 3,952,064	\$ 3,952,064	\$ 3,952,064	\$ 3,952,064	\$ 3,952,064	\$ 3,952,064	\$ 3,952,064	\$ 3,952,064
Other Revenues	75,000	78,880	77,672	78,186	79,115	78,917	78,990	79,534	79,671	79,800	80,427
Total Revenues	\$ 4,027,064	\$ 4,030,944	\$ 4,029,736	\$ 4,030,250	\$ 4,031,179	\$ 4,030,981	\$ 4,031,054	\$ 4,031,598	\$ 4,031,735	\$ 4,031,864	\$ 4,032,491
Expenses											
Cash Operating Expenses	\$ 3,146,800	\$ 3,229,959	\$ 3,315,792	\$ 3,404,404	\$ 3,495,903	\$ 3,590,402	\$ 3,688,020	\$ 3,788,881	\$ 3,893,115	\$ 4,000,856	\$ 4,112,245
Other Expenses	85,000	86,700	88,434	90,203	92,007	93,847	95,724	97,638	99,591	101,583	103,615
Existing Debt Service	175,915	174,598	176,284	174,312	78,117	73,561	72,549	71,536	70,524	69,512	68,499
New Debt Service	-	-	75,894	161,418	193,132	193,132	326,092	340,793	340,793	377,508	377,508
Rate Funded System Reinvestment	956,374	1,138,929	1,202,385	1,278,861	1,673,894	1,885,319	1,937,298	2,209,691	2,552,990	2,783,418	3,011,833
Total Expenses	\$ 4,364,089	\$ 4,630,186	\$ 4,858,790	\$ 5,109,198	\$ 5,533,052	\$ 5,836,261	\$ 6,119,683	\$ 6,508,539	\$ 6,957,013	\$ 7,332,876	\$ 7,673,700
Annual Surplus / (Deficiency)	\$ (337,025)	\$ (599,242)	\$ (829,054)	\$ (1,078,948)	\$ (1,501,873)	\$ (1,805,280)	\$ (2,088,629)	\$ (2,476,941)	\$ (2,925,278)	\$ (3,301,013)	\$ (3,641,209)
Net Revenue from Rate Increases	-	128,442	530,466	821,830	1,132,133	1,462,606	1,814,560	2,189,390	2,588,585	3,013,727	3,466,503
Net Surplus / (Deficiency)	\$ (337,025)	\$ (470,800)	\$ (298,588)	\$ (257,118)	\$ (369,740)	\$ (342,674)	\$ (274,069)	\$ (287,550)	\$ (336,693)	\$ (287,286)	\$ (174,705)
Annual Rate Adjustment	0.00%	6.50%	6.50%	6.50%	6.50%	6.50%	6.50%	6.50%	6.50%	6.50%	6.50%
Cumulative Annual Rate Adjustment	0.00%	6.50%	13.42%	20.79%	28.65%	37.01%	45.91%	55.40%	65.50%	76.26%	87.71%
Rate Revenues After Rate Increase	\$ 3,952,064	\$ 4,080,506	\$ 4,482,530	\$ 4,773,894	\$ 5,084,197	\$ 5,414,670	\$ 5,766,624	\$ 6,141,454	\$ 6,540,649	\$ 6,965,791	\$ 7,418,567
Full Year Rate Revenues After Rate Increase	3,952,064	4,208,948	4,482,530	4,773,894	5,084,197	5,414,670	5,766,624	6,141,454	6,540,649	6,965,791	7,418,567
Net Cash Flow After Rate Increase	12,975	(120,800)	51,412	92,882	(19,740)	7,326	75,931	62,450	13,307	62,714	175,295
Debt Coverage After Rate Increases	5.23	5.70	5.21	4.38	6.23	7.24	5.49	5.97	6.71	6.91	7.68
Residential Flat Rate	\$ 26.40	\$ 28.12	\$ 29.94	\$ 31.89	\$ 33.96	\$ 36.17	\$ 38.52	\$ 41.03	\$ 43.69	\$ 46.53	\$ 49.56

Ending Fund Balances	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Operating Fund	\$ 387,962	\$ 267,161	\$ 318,573	\$ 411,455	\$ 391,716	\$ 399,042	\$ 453,445	\$ 467,122	\$ 479,973	\$ 542,688	\$ 505,604
Capital Fund	6,601,686	6,822,582	2,256,991	2,335,260	2,755,552	3,067,083	3,080,808	3,417,072	4,249,817	3,990,666	5,697,155
Total	\$ 6,989,648	\$ 7,089,743	\$ 2,575,565	\$ 2,746,715	\$ 3,147,268	\$ 3,466,125	\$ 3,534,254	\$ 3,884,194	\$ 4,729,790	\$ 4,533,353	\$ 6,202,759
Combined Minimum Target Balance	\$ 1,193,744	\$ 1,208,329	\$ 1,258,164	\$ 1,313,640	\$ 1,345,639	\$ 1,370,399	\$ 1,393,608	\$ 1,439,215	\$ 1,468,250	\$ 1,493,587	\$ 1,501,820

Wastewater

Capital Funding - FYE	2014	2015	2016	2017	2018	2019	2020	2022	2023	2024
Total Capital Projects	\$ 1,025,000	\$ 3,720,200	\$ 9,440,556	\$ 6,036,769	\$ 19,795,809	\$ 6,068,906	\$ 2,943,108	\$ 2,673,549	\$ 3,343,714	\$ 3,253,471
Other Outside Sources	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,500,000	\$ 4,500,000	\$ 4,500,000	\$ 4,500,000	\$ -
Loan Proceeds	-	-	-	-	-	-	-	-	-	-
Bond Proceeds	-	-	-	2,321,519	18,136,185	145,786	-	-	-	-
Use of Capital Fund Balance	1,025,000	3,720,200	9,440,556	3,715,249	1,659,623	1,423,120	-	-	-	3,253,471
Direct Rate Funding	-	-	-	0	0	-	-	-	-	-
Total Funding Sources	\$ 1,025,000	\$ 3,720,200	\$ 9,440,556	\$ 6,036,769	\$ 19,795,809	\$ 6,068,906	\$ 4,500,000	\$ 4,500,000	\$ 4,500,000	\$ 3,253,471

Revenue Requirements - FYE	2014	2015	2016	2017	2018	2019	2020	2022	2023	2024
Revenues										
Rate Revenues Under Existing Rates	\$ 9,524,746	\$ 9,524,746	\$ 9,524,746	\$ 9,524,746	\$ 9,524,746	\$ 9,524,746	\$ 9,524,746	\$ 9,524,746	\$ 9,524,746	\$ 9,524,746
Other Revenues	11,000	74,447	22,224	22,477	22,802	19,657	20,847	22,470	24,412	24,765
Total Revenues	\$ 9,535,746	\$ 9,599,193	\$ 9,546,969	\$ 9,547,223	\$ 9,547,548	\$ 9,544,403	\$ 9,545,593	\$ 9,547,215	\$ 9,549,158	\$ 9,549,511
Expenses										
Cash Operating Expenses	\$ 8,879,300	\$ 9,103,512	\$ 9,334,540	\$ 9,572,635	\$ 9,818,064	\$ 10,071,099	\$ 10,332,029	\$ 10,878,783	\$ 11,165,247	\$ 11,460,884
Other Expenses	295,000	300,900	306,918	313,056	319,317	325,704	332,218	345,640	352,552	352,552
Existing Debt Service	729,543	684,951	678,377	669,855	608,678	600,662	592,645	544,315	536,791	425,266
New Debt Service	-	-	-	174,308	1,536,034	1,546,980	1,546,980	1,546,980	1,546,980	1,546,980
Rate Funded System Reinvestment	684,930	881,113	950,199	1,296,694	1,406,524	1,775,641	2,565,679	4,127,438	4,196,842	4,250,313
Total Expenses	\$ 10,588,773	\$ 10,970,476	\$ 11,270,034	\$ 12,026,549	\$ 13,688,618	\$ 14,320,086	\$ 15,369,551	\$ 17,443,157	\$ 17,798,413	\$ 18,035,996
Annual Surplus / (Deficiency)	\$ (1,053,027)	\$ (1,371,283)	\$ (1,723,065)	\$ (2,479,326)	\$ (4,141,071)	\$ (4,775,683)	\$ (5,823,958)	\$ (7,895,942)	\$ (8,249,255)	\$ (8,486,485)
Net Revenue from Rate Increases	-	392,545	1,632,988	2,548,717	3,537,705	4,605,812	5,759,367	8,350,714	9,803,862	11,373,261
Net Surplus / (Deficiency)	\$ (1,053,027)	\$ (978,737)	\$ (90,077)	\$ 69,391	\$ (603,365)	\$ (169,871)	\$ (64,591)	\$ 454,773	\$ 1,554,607	\$ 2,886,776
Annual Rate Adjustment	0.00%	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%	8.00% #	8.00%	8.00%
Cumulative Annual Rate Adjustment	0.00%	8.00%	16.64%	25.97%	36.05%	46.93%	58.69% #	85.09%	99.90%	115.89%
Rate Revenues After Rate Increase	\$ 9,813,630	\$ 10,206,175	\$ 11,446,618	\$ 12,362,347	\$ 13,351,335	\$ 14,419,442	\$ 15,572,997	\$ 18,164,344	\$ 19,617,491	\$ 21,186,891
Full Year Rate Revenues After Rate Increase	9,813,630	10,598,720	11,446,618	12,362,347	13,351,335	14,419,442	15,572,997	18,164,344	19,617,491	21,186,891
Net Cash Flow After Rate Increase	(764,143)	(689,853)	198,807	358,275	(314,481)	119,013	224,293	743,657	1,843,491	3,175,660
Debt Coverage After Rate Increases	1.44	1.87	3.32	3.38	1.67	2.04	2.47 #	3.55	4.15	5.07
Residential Flat Rate	\$ 64.13	\$ 69.26	\$ 74.80	\$ 80.79	\$ 87.25	\$ 94.23	\$ 101.77	\$ 118.70	\$ 128.20	\$ 138.45

Ending Fund Balances	2014	2015	2016	2017	2018	2019	2020	2022	2023	2024
Operating Fund	\$ 6,344,717	\$ 1,122,351	\$ 1,147,689	\$ 1,180,188	\$ 865,707	\$ 984,719	\$ 1,209,012	\$ 1,341,220	\$ 1,376,537	\$ 1,409,125
Capital Fund	10,118,398	11,913,007	3,715,249	1,659,623	1,423,120	1,789,872	5,930,342	17,496,724	24,832,992	29,221,237
Total	\$ 16,463,115	\$ 13,035,358	\$ 4,862,939	\$ 2,839,811	\$ 2,288,827	\$ 2,774,592	\$ 7,139,354	\$ 18,837,943	\$ 26,209,530	\$ 30,630,362
Combined Minimum Target Balance	\$ 2,228,559	\$ 2,252,112	\$ 2,287,292	\$ 2,321,243	\$ 2,353,397	\$ 2,415,039	\$ 2,493,109	\$ 2,645,833	\$ 2,726,262	\$ 2,747,988

The completed Excel version of the rate study will be emailed to you. Let us know if you need it in a different format or printed.