

B&E Consulting, LLC

Certified Public Accountants

*(401) 785-0800
Fax (401) 421-5696*

*21 Dryden Lane
Providence, RI 02904*

*dbebyn@beconsulting.biz
wedge@beconsulting.biz*

May 18, 2016

Warwick Sewer Authority
Warwick, RI

Dear Authority Board Members & Management:

The following schedules are presented to assist the WSA in evaluating the proposed FY 2017 thru FY 2021 rate plan based upon this May 2016 Warwick Sewer Rate Study. This study also assisted the WSA in preparing the FY 2017 budget. The study incorporates many of the methodologies presented in B&E Consulting's May 2011 study and the findings of this study are presented in the condensed letter format with accompanying schedules.

SCOPE OF ENGAGEMENT

B&E Consulting (B&E) was engaged by the WSA to provide consulting services and assistance to provide a new 5 year rate plan utilizing B&E prior reports along with changes in assumptions as well as increases and or decreases to projected revenue and expenditures. To complete the engagement, B&E was required to review the existing rate structure, project revenues and expenditures for the future and assist the WSA Management team in addressing the following:

1. B&E reviewed and evaluated the current revenues and expenditures of the WSA and made appropriate adjustments in order to prepare what is commonly referred to in the ratemaking process as a "normalized test year". This first step provides a firm footing on which B&E can develop its subsequent financial models.
2. B&E then calculated by using a B&E developed rate design model the pro-forma revenues and expenses for the WSA for the five year period 2017-2021. These calculations resulted in a pro-forma profit and loss model that could be reviewed, evaluated and amended as needed to obtain one of the initial goals, financial stability for the WSA.
3. B&E reviewed prior year calculations for sewer frontage assessment charges to determine reasonableness of revenue projections. The findings from that review were then entered into the rate model and future assessment revenues were set in order to be revenue neutral.

ASSUMPTIONS USED FOR THE DEVELOPMENT OF THE RATE MODEL

It is an accounting requirement of an “agreed upon procedures” engagement to provide a list of assumptions used in the study. The following is the list of assumptions that were agreed upon by B&E and the WSA.

1. Customer growth is projected at a rate of 250 new sewer customers per year based upon recent history. It was agreed that our projection could have been higher given the significant increases in new sewer construction activity but the assumption made is a conservative one.
2. Flow (gallons per day) will increase by approximately the same as the percentage increase in the number of customers. B&E further assumed that the current customers will have no additional water usage growth (a conservative approach). The FY 2014 and FY 2015 usage was reconciled to the audited financial revenues for the same periods. Furthermore the usage for FY 2017 was set using a two year average of FY 2014 and FY 2015.
3. Renewal and Replacement was projected as \$138,255 of revenue for FY 2017 was calculated using the estimated FY 2017 usage along with the current rate of \$0.63 per 1,000 CF. This study has calculated increase in this revenue source to cover projected capital needs. Furthermore the study, has the R&R fund repaid for the deficit in this fund at June 2015 in the amount of \$2,133,182.
4. Assessments for projects prior to 2016 were calculated from the findings of the prior 5 year rate plan study. The FY 2017 and FY 2018 assessable projects were calculated assuming future assessment revenues that were revenue neutral.
5. Historical levels of expense were increased for inflation rate of between 1% to 3% depending on type expense such as chemicals and utilities.
6. Principal and interest payments are projected to cover actual current debt service and projected debt service for future borrowing.

WSA SEWER USE COST OF SERVICE

The current rate structure was developed in the 2011 study by B&E using a functional cost of service model which allocates each cost based upon what function these expenditures impact. These functions are later used to generate a specific revenue source based on which ratepayers are causing demands to the system.

The initial calculated rates from the 2011 study however would have caused a major rate shock to certain ratepayers since the prior rates had residential rates artificially kept commercial rates too low. The alternative was to phase in the rates over the 5 year period. This phase in of rates was completed during FY 2016.

Since there have not been many changes to usage and expenditures in FY 2017 which caused the cost of service model to yield little change in the overall rate structure, B&E recommends maintaining the current usage rates and current customer service charges.

The only change B&E is recommending regarding rate design is to increase the renewal and replacement rate to cover additional capital needs once the Renewal and Replacement Fund is repaid.

PROJECTED REVENUE, RATE INCREASES and RATEPAYER IMPACT

B&E has prepared seven schedules for this section of the study as follows:

- Schedule 1 – Multi Year Comparative Summary.
- Schedule 2 - Projected Sewer Revenue at Current and Projected Rates.
- Schedule 3 - Sewer Current and Projected Rates.
- Schedule 4 - Projected Expenditures.
- Schedule 5 - Projected Debt service.
- Schedule 6 - Projected Capital Expenditures
- Schedule 7 - Impact on Average User.

Schedule 1 - shows the impact of the new 5 year rate plan. With the currently approved usage rates and customer service charges scheduled for FY 2017 along with two minor increases in the renewal and replacement rate for FY 2018 and FY 2020 the WSA will be financially solvent through 2021.

The focus of the past five years of the rate plan was among, other goals, to repay the City General Fund for a deficit which had accumulated over the prior decade due to major capital projects funded by rates and drops in usage. Please note that the \$3,556,182 balance due to the City General Fund at 6/30/15 only represents the actual account balance in the User Fund's Trail Balance. Utilizing the approximate \$6 million in the user funds cash checking and cash lockbox accounts the Sewer fund would completely repay the City and have a \$2.4 million of working capital available for a 48 day period. A working capital balance of 60 days would be ideal a goal and which is achieved by FY 2021 in this study.

Over the same period that the sewer fund accumulated the balance to the general fund it had also accumulated a \$2 million deficit in its sewer renewal and replacement fund. This deficit is technically owed from one portion of the sewer fund to another. Thus the balance is owed to the fund itself. The budgeted funding for the account which were never transferred from the sewer use fund to the sewer R&R fund, but the liability was set up. With the repayment of the general fund in FY 2016 the WSA should be able to fully fund the renewal and replacement deficit by the end of 2018 with the current rate structure along with the minor increases in the renewal and replacement rate for FY 2018.

If this renewal and replacement reserve is fully funded, it would give the WSA the ability to address renewal and replacement projects without either postponing them into the

future or funding them by borrowing funds. However, since the utility is capital asset intensive and has no adequate cash (investment) reserves to handle emergencies such as a major main break, damage to the facility, or contamination from untreated discharge, B&E is recommending that WSA not drawdown the R&R fund after 2018 but make the minor increases in the renewal and replacement rate for FY 2020 and a new bond for FY 2020 to cover the next five years' capital budget.

Schedule 2 - contains the project revenue based on the 5 year rate plan.

Schedule 3 - contains a summary of the proposed rates and used to calculate the revenues presented on Schedule 2. The only increase in rates recommended is to the renewal and replacement rate (covers both residential and commercial) \$3.50 per 1,000 CF for FY 2018 to and to \$6.00 per 1,000 CF for FY 2020.

Schedule 4 - contains a review of the WSA expenditures and other revenues. The figures for FY 2017 have been reviewed in conjunctions with the WSA projected FY 2017 budget.

Schedule 5 - contains a review of the WSA current debt service structure and payments on future borrowing. Since sewer assessment revenue is used to repay debt this revenue source is presented on this schedule.

Schedule 6 - contains a review of the WSA Capital projections are presented in detail on this schedule and were obtained from WSA management. The major capital projects were not assigned by WSA management on their report however this study includes these projects as the renewal and replacement fund is repaid.

Schedule 7 - provides a ratepayer impact table that shows that residential ratepayers would receive a less than 5% increase for FY 2018 in their overall rates and a less than 4% increase for FY 2020 in their overall rates. Furthermore it shows that commercial ratepayers would receive a less than 4% increase for FY 2018 in their overall rates and about a 3% increase for FY 2020 in their overall rates. When these increases are averaged over the 5 year rate plan, they only represent a less than 2% increase per year.

RECOMMENDATIONS AND CONCLUSIONS

The following recommendations are presented to assist the WSA to improve its overall operations. They are intended to be helpful and not critical. B&E is prepared to assist the WSA in the implementation of any or all of the following recommendations.

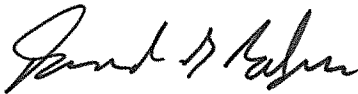
1. Because the WSA is a stand-alone enterprise fund, it is important that each ratepayer pay all of the cost incurred in providing them with sewer disposal. The WSA appears to have been able to repay the balance due to the city and have sufficient rates in effect to be able 1) cover the repayment of the balances due to the Renewal and Replacement fund, 2) establish a debt service sinking fund and 3) increase its working capital. As a result, B&E recommends maintaining the usage rates and customer service charges for the 5 year rate plan.

2. It is important for a stand-alone utility which is capital asset intensive to have adequate revenues to cover the substantial renewal and replacement needs of this aging system. Over the years the WSA had only been earmarking in its rates about \$150,000 to cover these capital needs. This has led to a shortfall in the Renewal and Replacement fund where by 2015 the user fund owed the R&R fund \$2,133,182. Now that the balance due to the City General Fund there are sufficient usage rates to replenish this fund. However to cover the additional capital needs of the WSA, B&E recommends that the WSA increase renewal and replacement rate (covers both residential and commercial) for FY 2018 at \$3.50 per 1,000 CF and FY 2020 at \$6.00 per 1,000 CF.
3. B&E's five year implementation plan is a guide for the future. Facts and circumstances will change with the passage of time. An annual review of the five year plan should be completed by the WSA, its accountant or B&E.

B&E recommends that the WSA adopt the **multi-year rate plan presented on Schedule 1**. The rates for FY 2017 were already approved and no additional increase above what has already been approved will be required for FY 2017.

With the completion of the five year plan, we would like to thank the Board, the financial officer, management and staff of the WSA who provided excellent assistance to B&E during this engagement.

Respectfully Submitted,



David G Bebyn CPA
President

Proforma Cash Flow Projections
with Proposed Rates
Warwick Sewer Authority

Schedule 1

	FY 2015	Projected FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Sewer Revenues							
Use	\$ 11,631,331	\$ 11,985,928	\$ 11,790,259	\$ 11,863,579	\$ 11,956,184	\$ 12,049,179	\$ 12,142,564
Renewal/Replacement	99,217	140,393	138,255	770,538	776,828	1,342,532	1,353,405
Minimum Service Charge	3,917,580	4,153,124	4,178,500	4,210,219	4,241,939	4,291,238	4,340,663
Other	1,167,252	671,332	764,300	759,300	759,300	759,300	759,300
Assessments **	-	-	-	-	-	-	-
Total Sewer Revenues	\$ 16,815,380	\$ 16,950,777	\$ 16,871,314	\$ 17,603,636	\$ 17,734,251	\$ 18,442,249	\$ 18,595,932
Sewer Expenses							
Personnel	\$ 2,727,933	\$ 2,683,001	\$ 3,262,626	\$ 3,344,192	\$ 3,427,796	\$ 3,513,491	\$ 3,601,329
Commodities	1,612,175	1,556,175	1,690,000	1,725,650	1,762,152	1,799,527	1,837,798
Services	1,885,291	1,816,191	1,972,331	2,001,606	2,031,365	2,061,617	2,092,370
Misc Capital Exp & WW WWTP	328,956	674,000	597,000	753,000	805,000	1,035,000	1,645,000
Repayment of R&R reserve	-	1,213,246	884,945	34,991	-	-	-
Renew Replace	10,000	10,000	-	-	-	-	-
Debt Service	8,033,706	8,680,537	8,309,216	8,931,055	9,107,578	9,358,474	8,772,239
Net Operating Reserve	-	-	-	157,189	100,360	168,193	143,530
Debt Service Sinking Fund	-	-	-	623,941	500,000	500,000	500,000
General Fund Repayment	-	-	-	-	-	-	-
Total Sewer Expenses	\$ 14,598,061	\$ 16,633,150	\$ 16,716,118	\$ 17,571,624	\$ 17,734,251	\$ 18,436,302	\$ 18,592,265
Sewer Net	\$ 2,217,319	\$ 317,627	\$ 155,196	\$ 32,012	\$ 0	\$ 5,947	\$ 3,667

Balance owed to General Fund

Cash Balance at 6/30/15	\$ 6,040,850	This balance does not include restricted cash held for debt service reserve but does include \$1.6 Million in Pretreatment escrow.	
Balance due to General Fund	3,556,182		
Working Capital Available	2,484,668		
Working capital in Days	48	49	50
		55	57
		61	

R&R Repayment

	\$ -	\$ 1,213,246	\$ 884,945	\$ 34,991	\$ -	\$ -	\$ -
	\$ 2,133,182	\$ 919,936	\$ 34,991	\$ -	\$ -	\$ -	\$ -

Accumulation of Debt Service Sinking Fund

	\$ -	\$ -	\$ -	\$ 623,941	\$ 1,123,941	\$ 1,623,941	\$ 2,123,941
--	------	------	------	------------	--------------	--------------	--------------

Revenue Check for Proforma Period
Warwick Sewer Authority

Schedule 2

	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
<u>Retail Use Rate</u>							
Residential	\$ 7,868,592	\$ 8,030,744	\$ 7,933,222	\$ 8,006,541	\$ 8,079,861	\$ 8,153,475	\$ 8,227,381
Commercial	\$ 3,762,739	\$ 3,955,185	\$ 3,857,037	\$ 3,857,037	\$ 3,876,323	\$ 3,895,704	\$ 3,915,183
	\$ 11,631,331	\$ 11,985,928	\$ 11,790,259	\$ 11,863,579	\$ 11,956,184	\$ 12,049,179	\$ 12,142,564
<u>Renewal & Replacement Rate</u>							
Residential & Comm	\$ 99,217	\$ 140,393	\$ 138,255	\$ 770,538	\$ 776,828	\$ 1,342,532	\$ 1,353,405
<u>Customer Charge</u>							
Residential per Unit	\$ 3,360,549	\$ 3,406,698	\$ 3,432,074	\$ 3,463,794	\$ 3,495,513	\$ 3,527,360	\$ 3,559,334
Meter Size							
5/8	\$ 150,464	\$ 173,065	\$ 173,065	\$ 173,065	\$ 173,065	\$ 173,326	\$ 173,587
3/4	\$ 43,082	\$ 46,505	\$ 46,505	\$ 46,505	\$ 46,505	\$ 46,862	\$ 47,220
1	\$ 83,107	\$ 96,761	\$ 96,761	\$ 96,761	\$ 96,761	\$ 97,197	\$ 97,633
1 1/2	\$ 48,879	\$ 72,042	\$ 72,042	\$ 72,042	\$ 72,042	\$ 72,825	\$ 73,608
2	\$ 122,664	\$ 164,144	\$ 164,144	\$ 164,144	\$ 164,144	\$ 165,231	\$ 166,318
3	\$ 12,224	\$ 13,372	\$ 13,372	\$ 13,372	\$ 13,372	\$ 14,858	\$ 16,344
4	\$ 16,891	\$ 38,133	\$ 38,133	\$ 38,133	\$ 38,133	\$ 40,376	\$ 42,619
6	\$ 32,792	\$ 66,914	\$ 66,914	\$ 66,914	\$ 66,914	\$ 70,850	\$ 74,786
8	\$ 46,928	\$ 75,489	\$ 75,489	\$ 75,489	\$ 75,489	\$ 82,352	\$ 89,214
10	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	\$ 3,917,580	\$ 4,153,124	\$ 4,178,500	\$ 4,210,219	\$ 4,241,939	\$ 4,291,238	\$ 4,340,663
	\$ 15,648,128	\$ 16,279,445	\$ 16,107,014	\$ 16,844,336	\$ 16,974,951	\$ 17,682,949	\$ 17,836,632

Proposed Rates based on May 2016 study
Warwick Sewer Authority

Schedule 3

	Actual FY 2015 Rates	Current FY 2016 Rates	Proposed						
			FY 2017 Rates	FY 2018 Rates	FY 2019 Rates	FY 2020 Rates	FY 2021 Rates		
<u>Retail Use Rate</u>									
Residential	\$ 46.86	\$ 47.80	\$ 47.80	\$ 47.80	\$ 47.80	\$ 47.80	\$ 47.80	\$ 47.80	\$ 47.80
Percent billed	100%	100%	100%	100%	100%	100%	100%	100%	100%
Commercial	\$ 71.81	\$ 73.24	\$ 73.24	\$ 73.24	\$ 73.24	\$ 73.24	\$ 73.24	\$ 73.24	\$ 73.24
Percent billed	100%	100%	100%	100%	100%	100%	100%	100%	100%
<u>Renewal & Replacement Rate</u>									
Residential & Comm	\$ 0.48	\$ 0.63	\$ 0.63	\$ 3.50	\$ 3.50	\$ 6.00	\$ 6.00	\$ 6.00	\$ 6.00
<u>Customer Charge Per Quarter</u>									
Residential per Unit	\$ 31.10	\$ 31.72	\$ 31.72	\$ 31.72	\$ 31.72	\$ 31.72	\$ 31.72	\$ 31.72	\$ 31.72
Meter Size									
Commercial per Unit	\$ 44.10	\$ 65.16	\$ 65.16	\$ 65.16	\$ 65.16	\$ 65.16	\$ 65.16	\$ 65.16	\$ 65.16
5/8	\$ 62.62	\$ 89.43	\$ 89.43	\$ 89.43	\$ 89.43	\$ 89.43	\$ 89.43	\$ 89.43	\$ 89.43
3/4	\$ 77.53	\$ 108.97	\$ 108.97	\$ 108.97	\$ 108.97	\$ 108.97	\$ 108.97	\$ 108.97	\$ 108.97
1	\$ 143.76	\$ 195.77	\$ 195.77	\$ 195.77	\$ 195.77	\$ 195.77	\$ 195.77	\$ 195.77	\$ 195.77
1 1/2	\$ 201.75	\$ 271.76	\$ 271.76	\$ 271.76	\$ 271.76	\$ 271.76	\$ 271.76	\$ 271.76	\$ 271.76
2	\$ 277.82	\$ 371.45	\$ 371.45	\$ 371.45	\$ 371.45	\$ 371.45	\$ 371.45	\$ 371.45	\$ 371.45
3	\$ 422.29	\$ 560.77	\$ 560.77	\$ 560.77	\$ 560.77	\$ 560.77	\$ 560.77	\$ 560.77	\$ 560.77
4	\$ 745.26	\$ 984.03	\$ 984.03	\$ 984.03	\$ 984.03	\$ 984.03	\$ 984.03	\$ 984.03	\$ 984.03
6	\$ 1,303.55	\$ 1,715.66	\$ 1,715.66	\$ 1,715.66	\$ 1,715.66	\$ 1,715.66	\$ 1,715.66	\$ 1,715.66	\$ 1,715.66
8									

Proforma Expenditure Projections
Warwick Sewer Authority

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
O&M Expense					
80-100 Sick Leave		2,265,068	2,321,694	2,379,737	2,439,230
80-101 Salaries	2,209,822	87,125	89,303	91,536	93,824
80-106 Mun Overtime	10,000	10,250	10,506	10,769	11,038
80-107 Overtime Storm	7,000	7,175	7,354	7,538	7,727
80-140 Temporary Services	950,804	974,574	998,938	1,023,912	1,049,510
80-150 Fringe Benefits	3,262,626	3,344,192	3,427,796	3,513,491	3,601,329
Personnel					
80-201 Office Supplies	11,800	11,918	12,037	12,158	12,279
80-202 Printing, Bind & Reproduction	18,200	18,382	18,566	18,751	18,939
80-203 Advertising	3,500	3,535	3,570	3,606	3,642
80-205 Postage	35,000	35,350	35,704	36,061	36,421
80-210 Lab Supplies	22,500	22,725	22,952	23,182	23,414
80-220 Fuel	50,000	50,500	51,005	51,515	52,030
80-222 Natural Gas	44,000	44,440	44,884	45,333	45,787
80-224 Electricity	600,000	618,000	636,540	655,636	675,305
80-234 Safety Equipment	6,500	6,565	6,631	6,697	6,764
80-243 Chem. Polymer	120,000	122,400	124,848	127,345	129,892
80-245 Chem. Chlorine	54,000	55,080	56,182	57,305	58,451
80-246 Chem. - Dechlor	39,000	39,780	40,576	41,387	42,215
80-247 Chem. - Potassium	207,000	211,140	215,363	219,670	224,063
80-248 Chem. - Alum	86,000	87,720	89,474	91,264	93,089
80-249 Chem. - Caustic	169,000	172,380	175,828	179,344	182,931
80-260 Clothing	8,000	8,080	8,161	8,242	8,325
80-281 Maint Materials	100,000	101,000	102,010	103,030	104,060
80-298 Other Equipment	3,000	3,030	3,060	3,091	3,122
80-286 Deduc meter	5,000	5,050	5,101	5,152	5,203
80-296 Grinder Pumps	100,000	101,000	102,010	103,030	104,060
80-299 Other Commodities	7,500	7,575	7,651	7,727	7,805
Commodities	1,690,000	1,725,650	1,762,152	1,799,527	1,837,798
80-300 Travel	500	505	510	515	520
80-301 Training & Education	7,500	7,575	7,651	7,727	7,805
80-303 Telephone	22,000	22,220	22,442	22,667	22,893
80-304 Water Usage	8,000	8,080	8,161	8,242	8,325
80-313 Equip Repair	80,000	80,800	81,608	82,424	83,248

Proforma Expenditure Projections
Warwick Sewer Authority

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
80-323 Tax Sale	25,000	25,250	25,503	25,758	26,015
80-325 Insurance	210,358	212,462	214,586	216,732	218,899
80-330 Auto Maintenance	22,000	22,220	22,442	22,667	22,893
80-340 Service Contracts	83,945	84,784	85,632	86,489	87,354
80-353 Implementation Service	-	-	-	-	-
80-360 Professional Service	84,000	84,840	85,688	86,545	87,411
80-370 Construction Serv.	135,000	136,350	137,714	139,091	140,482
80-371 Nutrient Reduction	-	-	-	-	-
80-378 Sludge Removal	955,200	974,304	993,790	1,013,666	1,033,939
80-379 Administration	114,158	115,300	116,453	117,617	118,793
80-380 Gen Service	-	-	-	-	-
81-381 DEM-User Fees	3,370	3,404	3,438	3,472	3,507
80-384 Testing & Lab Samples	46,400	46,864	47,333	47,806	48,284
80-392 Engineering Service	80,000	80,800	81,608	82,424	83,248
Sewer Connection Grants	41,100	41,511	41,926	42,345	42,769
81-398 Public Out Reach	4,000	4,040	4,080	4,121	4,162
80-399 Services - Other	49,800	50,298	50,801	51,309	51,822
Services	1,972,331	2,001,606	2,031,365	2,061,617	2,092,370

Capital					
80-799 Misc Capital Exp	550,000	753,000	805,000	1,035,000	1,645,000
West Warwick WWTP	47,000	-	-	-	-
Capital Reserve	884,945	34,991	-	-	-
80-560 Renew Replace	-	-	-	-	-
Capital	1,481,945	787,991	805,000	1,035,000	1,645,000

Debt Service					
ALL INTEREST SEWER TOTALS:	2,288,832	2,038,900	1,802,148	1,549,279	1,316,576
PRINCIPAL SEWER TOTALS:	10,740,384	10,602,712	10,597,892	10,834,552	9,354,024
SEWER ASSESSMENT CONTRIBUTION	(4,720,000)	(4,228,062)	(4,300,197)	(4,047,110)	(3,303,715)
PRINCIPAL & INTEREST ON NEW CAPITOL PR	-	517,506	1,007,735	1,021,754	1,405,354
Debt Service	8,309,216	8,931,055	9,107,578	9,358,474	8,772,239

Net O&M, Capital & Debt Service	16,716,118	16,790,494	17,133,891	17,768,109	17,948,735
--	-------------------	-------------------	-------------------	-------------------	-------------------

Reserves					
Net Operating Reserve	-	157,189	100,360	168,193	143,530

Proforma Expenditure Projections
Warwick Sewer Authority

Schedule 4
Page 3 of 3

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Debt Service Sinking Fund	-	623,941	500,000	500,000	500,000
General Fund Repayment	-	-	-	-	-
Reserves	-	781,130	600,360	668,193	643,530
Other Revenues					
81-903 Pretreatment Revenues	(359,000)	(359,000)	(359,000)	(359,000)	(359,000)
80-905 Meters	(5,000)	-	-	-	-
80-906 Energy Buyback Revenue	(18,000)	(18,000)	(18,000)	(18,000)	(18,000)
81-906 Monitoring Fees	-	-	-	-	-
81-909 Application Fees	(6,000)	(6,000)	(6,000)	(6,000)	(6,000)
80-914 Cr-Amort. Of Bond	-	-	-	-	-
80-930 Grant Revenue	-	-	-	-	-
80-931 Federal Reimbursement	-	-	-	-	-
80-940 Engineering Review	(6,600)	(6,600)	(6,600)	(6,600)	(6,600)
80-942 Surcharge Revenue	-	-	-	-	-
80-944 Septage Dumping Fees	(44,000)	(44,000)	(44,000)	(44,000)	(44,000)
80-945 Discharge Fees	-	-	-	-	-
80-946 License/Permits	-	-	-	-	-
81-955 Pretreatment Fines	(8,400)	(8,400)	(8,400)	(8,400)	(8,400)
Lease Income	(41,100)	(41,100)	(41,100)	(41,100)	(41,100)
Pretreatment fines	-	-	-	-	-
80-956 Misc Income	(4,000)	(4,000)	(4,000)	(4,000)	(4,000)
80-958 Sewer Connect Fees	(37,500)	(37,500)	(37,500)	(37,500)	(37,500)
80-960 Grinder Pumps	(32,000)	(32,000)	(32,000)	(32,000)	(32,000)
80-966 Sewer Tax Title Fees	(25,000)	(25,000)	(25,000)	(25,000)	(25,000)
80-969 Earnings on Invest.	(1,200)	(1,200)	(1,200)	(1,200)	(1,200)
80-969 Insurance Proceeds	-	-	-	-	-
80-970 Interest Income	(175,000)	(175,000)	(175,000)	(175,000)	(175,000)
80-989 SLA Admin	(500)	(500)	(500)	(500)	(500)
80-990 SLA Inspection	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)
80-999 Misc Dept Credits	-	-	-	-	-
Contribution from Pretreatment	-	-	-	-	-
Contributed Capital	-	-	-	-	-
Total Other Revenue	(764,300)	(759,300)	(759,300)	(759,300)	(759,300)
Net Revenue Requirement	15,951,818	16,812,324	16,974,951	17,677,002	17,832,965

Proforma Debt Projections
Warwick Sewer Authority

Schedule 5

Account #	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
ALL INTEREST SEWER TOTALS:	2,617,779	2,433,994	2,288,832	2,038,900	1,802,148	1,549,279	1,316,576
ALL PRINCIPAL SEWER TOTALS:	9,962,510	10,965,633	10,740,384	10,602,712	10,597,892	10,834,552	9,354,024
TOTAL DEBT ON NEW SEWER PROJECTS							
FY 2016 8,000,000 SRF	-	-	-	517,506	530,659	532,553	532,553
FY 2017 7,375,000 SRF					477,076	489,201	490,947
FY 2020 5,903,000 Capital Projects							381,855
SEWER ASSESSMENT REVENUE Assessed thru 2016	(4,546,583)	(4,719,090)	(4,074,127)	(3,928,062)	(3,631,447)	(3,378,360)	(2,634,965)
SEWER ASSESSMENT REVENUE FY 2018				(300,000)	(300,000)	(300,000)	(300,000)
SEWER ASSESSMENT REVENUE FY 2019					(368,750)	(368,750)	(368,750)
SEWER USE DEBT SERVICE	8,033,706	8,680,537	8,955,089	8,931,055	9,107,578	9,358,474	8,772,239

Proforma Capital Projections
Warwick Sewer Authority

Schedule 6

Account #	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Collection System	\$ 75,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 70,000
Loveday Foremain	-	-	-	250,000	-
Pumping Stations	405,000	425,000	565,000	210,000	435,000
Facilities	70,000	127,500	20,000	-	-
Flood Control	-	-	-	-	-
Operations Equipment	50,000	10,000	10,000	60,000	70,000
Laboratory/Sampling Equipment	-	25,000	-	-	-
Maintenance	-	-	-	70,000	-
Vehicle Replacements	50,000	10,000	60,000	-	50,000
Miscellaneous	5,500	-	-	25,000	-
	<u>655,500</u>	<u>647,500</u>	<u>705,000</u>	<u>665,000</u>	<u>625,000</u>
Major Projects					
Cedar Swamp Foremain				2,000,000	*
Warwick Neck Pump Station Improvements				500,000	*
Redundant Main Inflow Pipe				1,500,000	*
Additional Primary Tank				1,000,000	*
New BNR Membranes & Diffusers				563,000	*
North Final Clarifier Drive Mechanism					200,000
Head Works - Diminutor & Macerator					220,000
Primary Clarifier - new flight, chains and sprockets				340,000	*
New Rotary Screen Thickener					130,000
Repairs to Back-up Grit Removal System					50,000
Odor Control for Solids Handling					75,000
Grease/Scum Removal System					75,000
Utility Garage Storage					40,000
GAPS			100,000	370,000	230,000
Total Capital Expenditures by Year:	\$ 655,500	\$ 647,500	\$ 805,000	\$ 6,938,000	\$ 1,645,000
Money Provided from FEMA & Grants					
Money Provided from IPP R&R Fund				5,903,000	
Money Provided from New Debt					
Money Provided from Capital Reserve					
Total Budgeted Expenditure by Year:	\$ 655,500	\$ 647,500	\$ 805,000	\$ 1,035,000	\$ 1,645,000
Projects pushed off to FY 2018	(105,500)	105,500			
Total Capital	\$ 550,000	\$ 753,000	\$ 805,000	\$ 1,035,000	\$ 1,645,000

Total Borrowing	\$ 5,903,000
-----------------	--------------

Yearly Ratepayer Impacts
Warwick Sewer Authority

Schedule 7

	<u>Annual Bill</u>	<u>Annual Net Increase/ (Decrease)</u>	
Impact on 97.6 HCF 5/8" meter Residential User			
FY 2017	599.60		
FY 2018	627.59	27.99	4.67%
FY 2019	627.59	-	0.00%
FY 2020	651.99	24.40	3.89%
FY 2021	651.99	-	0.00%
		<u>52.39</u>	
Impact on 244 HCF 5/8" meter Commercial User			
FY 2017	2,063.23		
FY 2018	2,133.20	69.97	3.39%
FY 2019	2,133.20	-	0.00%
FY 2020	2,194.20	61.00	2.86%
FY 2021	2,194.20	-	0.00%
		<u>130.97</u>	
Impact on 2440 HCF 2" meter Commercial User			
FY 2017	19,112.94		
FY 2018	19,812.63	699.69	3.66%
FY 2019	19,812.63	-	0.00%
FY 2020	20,422.63	610.00	3.08%
FY 2021	20,422.63	-	0.00%
		<u>1,309.69</u>	