

1662

July 26, 2013

Mr. Dan Blanchette, Administrative Assistant
Town of Eliot
1333 State Road
Eliot, ME 03903

Re: ***Sewer Rate Study***
Town of Eliot, Maine

Dear Mr. Blanchette:

Underwood Engineers is pleased to provide you with the Eliot Sewer Rate Study. In accordance with our scope of work, we have prepared a sewer rate model to project rates for the next 5 years.

The goals of this study included:

- Review and estimate the Town's expenses for the next five years and compare to projected revenues.
- Provide rate adjustment recommendations to meet revenues.
- Consider the capital reserve needs of the system.
- Consider the rate impact due to the Route 236 sewer expansion.

A summary of recent history is as follows:

- Eliot currently applies a unit charge which is the same regardless of the size of the water meter and a consumption charge based on the water used.
- Historically, rates have only increased once in the past 5 years.
- The 2012 rate increase was to consumption only, changing the rate from \$0.95 to \$2.94.

Table 1. Current Water Rates

Year	Quarterly Flat Fee	Consumption Charge
2012	\$50	\$2.94 / 100 CF

- The Kittery Water District Reads the water meter and provides data to Eliot
- There are 5 accounts that have no water meter. They are charged based on a fixed estimate of use.
- There are 3 accounts that Eliot reads manually because they are not part of the Kittery Water District.
- There are 41 multiunit accounts that serve a total of 111 units.

- A summary of certain account information is listed below:

Table 2. Account Data

Meter Size	Connections
5/8"	528
3/4"	42
1"	6
2"	2
Meters with Multiple Units	41
Flat Fee Accounts	5
Set Rate Accounts	5
Manual Read Accounts	3

Production/Consumption History

Over the past four years the volume of water used by sewer customers in Eliot has been relatively flat, with an average yearly sewage "consumption" volume of 32,630,000 gallons produced per year. Over the same time period, the average amount of Eliot sewage that is ultimately treated by the Kittery wastewater treatment plant on an annual basis is 45,915,000 gallons per year. Between 2011 and 2012 Elliot's sewage discharged to the wastewater treatment plant was reduced by 19%. The difference between the amount of sewage produced by customers and the amount of sewage treated at the wastewater treatment plant is primarily due to inflow and infiltration, or groundwater that is entering the sewer system through cracks in the sewer lines. I/I appears to be decreasing since 2010 which may be due to changes in rainfall and as a result of efforts by the Town to improve the system.

Based on sewer consumption data for residential customers as determined by a representative sample of total users, it was determined that the average household in Eliot produces approximately 120 gpd of sewage as follows (see Table 5 in the water rate model):

Table 3. Equivalent Dwelling Unit Calculation (2010 and 2011 data)

Estimated domestic consumption (gallons per year)	22,082,500
Estimated domestic consumption (gallons per day)	60,500
Number of single family homes (non seasonal)	513
Estimated per dwelling unit -typical house (gpd)	118 (round to 120)

1. EDU = Equivalent Dwelling Unit
2. Information provided by the Town and based on a representative sample of residential users.



Capital Reserves

The cumulative capital reserves (existing as of April 2013) of the Eliot Sewer department are as follows:

- Current reserves = \$264,000
- Sewer Betterment = \$22,000
- Total Reserves = \$286,000

Currently, \$7.50 of the \$50.00 quarterly flat fee is dedicated to funding this reserve fund. The rate model includes an additional reserve contribution of \$50,000 starting in 2014 making the total contribution \$70,000 for the existing system.

The \$50,000 additional capital reserve contribution is based on considerations of the existing age of the sewer collection system. The contribution would be intended to cover portions of the replacement costs as the system reaches the end of its useful life.

Existing Rates

A sewer user in Eliot is charged a quarterly flat fee of \$50, and a consumption charge of \$2.95/100 cf. The average user in Eliot (based on 120 gpd) currently pays a sewer rate of \$372 per year.

Revenues

Since the 2012 rate adjustment, revenues have been adequate to meet current expenses. 2012 revenues were approximately \$269,000 (including the current capital reserve portion). As additional capital reserve set asides are established, a rate adjustment will be needed.

The Route 236 sewer system expansion will result in increased revenue as additional users are connected to the system. For the model, it was assumed that 75 equivalent dwelling units (EDU's) would connect to the expanded system in 2015 and another 65 would connect in 2016 resulting in a total increase of 140 EDUs as a result of this project. For consumption, 15,000 gpd was used in the model. Note: EDUs are equivalent to single family homes (120 gpd). One commercial connection such as a restaurant using 2,000 gpd is equivalent to 17 EDUs.

Using the assumptions outlined above and the existing sewer rates, the revenue generated by users connecting to the system as a result of the route 236 expansion would be as follows (approximate):



- 2014 = \$0
- 2015 = \$28,000
- 2016 = \$52,000
- 2017 = \$52,000

These revenues closely match the anticipated expenses.

Operating Expenses

Budgeted operating expenses (existing) in 2012 and 2013 were provided by the Town. Projected operating expense increases were based on the 2013 budget with a 1% increase per year starting in 2014 (see table 12 in the rate model) and capital reserve contributions as previously discussed (\$50,000 per year additional starting in 2014).

**Table 5. Operating Expenses and Capital Reserve Contributions Used in the Model
 (To Establish User rates) – Existing System**

Period	Operating Expenses and Capital Reserve Contributions	Notes
2010	\$194,000	Actual
2011	\$187,000	Actual
2012	\$256,000	Actual
2013	\$240,000	Budgeted
2014	\$301,000	Projected
2015	\$303,000	Projected
2016	\$304,000	Projected
2017	\$306,000	Projected

For the expansion, expenses were estimated to include the treatment and disposal costs with Kittery, pumping station O&M and an additional capital reserve of \$20,000. The model assumes the capital reserve contributions will be “ramped” in as follows: \$10,000 contribution in 2015 and \$20,000 starting in 2016. The following total additional expenses were used in the model:

- 2014 = \$0
- 2015 = \$27,000
- 2016 = \$55,000
- 2017 = \$55,000

Debt Service/Expense Offsets

The Town offsets Sewer Department debt service using Betterment Fees, General Fund, and, if the sewer expansion project moves forward, TIF revenues. Sewer Department offsets to be paid by the Town are summarized in the table below. Future debt service was estimated and included in the model for the Route 236 sewer expansion project only. No other future debt was included in the sewer model.

Table 6. Town (Non-user Revenue) Offsets Used in the Model (Debt).

Period	Non-expansion	Expansion	Total
2013	\$37,000	\$0	\$37,000
2014	\$33,000	\$110,000	\$143,000
2015	\$0	\$484,000	\$484,000
2016	\$0	\$476,000	\$476,000
2017	\$0	\$466,000	\$466,000

Conclusions

- An average residential user in Eliot uses ~120 gpd
- Approximately \$19,000 per year is set aside for capital reserves based on the existing rates.
- After the 2012 rate adjustment, current revenues are adequate to meet the current budget.
- To fund the additional \$50,000 capital reserve contributions a rate increase will be needed whether the sewer expansion project is constructed or not.
- The sewer expansion project on Rte. 236 should not require a rate adjustment if new users are connected such that they generate around 15,000 gpd of additional flow (assuming TIF revenues cover the debt service).
- Current trends suggest that sewer inflow and infiltration is decreasing.

Rate Recommendations

Rate adjustments are recommended to not only meet expenses (in Eliot's case for additional capital reserves), but to also establish greater equity in the rate structure, and to generate a greater fixed revenue stream. The following should be considered when adjusting rates in the future:

- Make sure all multiple units are charged the flat fee even if there is only one meter.



- Currently, in Eliot, all sewer service sizes are assessed the same flat fee. This untiered connection fee places a greater financial burden on smaller users. Eliot does not have many meters above ¾", however, it is recommended that a tiered rate structure be established to charge larger meters a larger flat fee.
- Eliot should establish an asset management strategy to manage infrastructure capital assets in the most cost effective manner. Based on similar systems, Capital Reserve increases are recommended and incorporated in the model as follows (for Eliot's system):
 - Existing system: \$70,000 per year (~\$20,000 existing plus \$50,000 additional)
 - Sewer Expansion (if constructed): \$20,000
- The Town should continue to monitor I/I flows and continue to make efforts to reduce it. This will reduce costs of disposal in Kittery. It is recommended that the savings due to I/I reductions be set aside for additional capital reserves to establish a fund for future capital projects at the Kittery wastewater treatment facility.
- The Town should continue to monitor consumption and revenues to determine if they are as projected in this study.
- Town regulations and ordinances should be updated to reflect current industry standards.
- A rate review is recommended at least every 2 years.
- Other system service charges (and surcharges) should be reviewed to see that they are currently covering the Town's expenses.
- The betterment fees for new connections should be reviewed. It may be appropriate to re-establish the fee as a System Development Charge (SDC). An SDC is based on the equity of the entire system. As new users connect and pay the SDC, they become at an equal equity position with the existing users. The Town also has greater flexibility in how the SDC funds are used.
- Confirm why there is a significant spike in consumption in summers compared to the WWTF flow during the same period (Table 5).
- Certain capital improvements (i.e., pumping station repairs will be needed even if the Rte. 236 Sewer Expansion is not constructed. Rate increases will be necessary to fund the work if the costs are not supported by TIF revenues.
- A rate adjustment is recommended as follows:



Table 7. Proposed Rate Adjustments for \$50,000 additional Capital Reserves

	Current	With No Expansion	With Expansion
Consumption Charge (per 100 cf)	\$2.94	\$3.62	\$3.62
5/8" or 3/4" Meter (per qtr)	\$50	\$61	\$61
1" Meter (per qtr)	\$50	\$85	\$85
1-1/2" Meter (per qtr)	\$50	\$110	\$110
2" Meter (per qtr)	\$50	\$177	\$177
3" Meter (per qtr)	\$50	\$671	\$671
4" Meter (per qtr)	\$50	\$854	\$854
6" Meter (per qtr)	\$50	\$1,281	\$1,281
8" Meter (per qtr)	\$50	\$3,000	\$3,000

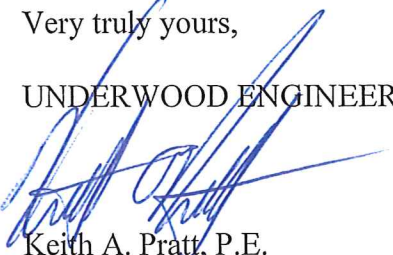
The above results in approximately +/-23% rate increase for the average user (see Table 15). It does not include the increases necessary to support pumping station improvements.

It should be noted that 15,000 gpd of sewage generated by 140 EDU's was assumed to be generated in the sewer expansion by 2015/2016. However, if it takes longer to reach that point, expenses will be greater than revenues. This could be offset by decreasing the \$20,000 in capital reserve contributions until the user base exists to support it.

Please call us if you have any questions.

Very truly yours,

UNDERWOOD ENGINEERS, INC.



Keith A. Pratt, P.E.
President

KAP/kap

Encl.



SEWER RATE STUDY

FOR

Town of Eliot ME

PREPARED BY:

UNDERWOOD ENGINEERS, INC.
25 Vaughan Mall
Portsmouth, NH 03801
603-436-6192

May 15, 2013

Revised:

June 17, 2013

Printed

July 30, 2013

UEI #1662

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1. Notes

Town of Eliot, ME

DRAFT
June 17, 2013

Notes

2. REVISION INFORMATION

Town of Eliot, ME

Original Creation:

Keith A. Pratt
Underwood Engineers, Inc., Portsmouth, NH
603-436-6192

June 17, 2013

Revision Made:

	Description of Revision	Made By:	Date:
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

3. INSTRUCTIONS

Town of Eliot, ME

The following are directions for use of this rate setting program.

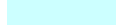
- 1 Values should only be entered in cells that contain numbers... they are indicated as follows:

12 Blue Text



Yellow shading is critical to the rate setting

Information important to the table (i.e., the basis of a calculation) are highlighted as follows:



Blue shading

- 2 Confirm that the cell does not contain a formula before entering text or numbers.
- 3 The rate study is set up to enter baseline (existing) information first.
- 4 The second step is to enter projected information such as expenditures.
- 5 The last step is entering the proposed rates such that it meets proposed budgets (expenditures).
Rates are sufficiently high if total of account balances is maintained and expenses are met.

4. WATER ACCOUNT DATA

Town of Eliot, ME

4.1 Service Connection billing labels

Residential	
Commercial	
Industrial	
Municipal	
Sewer onWater	
Seasonal	

Total

Remarks

0 Not comparable to below

4.2 Service connections (Multi-Unit Customers)

Accounts w/ multiple meters	41
Number of additional units	70

Total units

111

Remarks

70 additional units on top of the 41 meters

on 41 meters

4.3 Summary of Customers

	Accounts (est.)	Units
Single Meter Connections	534	534
Multi-Meter Connections	41	111
Total	575	645

Remarks

Includes flats (delta = 70)

4.4 Meters

Size	Number
(no meter)	
5/8"	528
3/4"	42
1"	6
1 1/2"	
2"	2
3"	0
4"	0
6"	
8"	
Flat Fee	5
Sets	5
Manual	3
Total	591

Remarks

Notes

"Flat Fee" Not connected.

"Sets" have a preset consumption rate that is used in billings.

"Manual" reads are meters that are read by Eliot and used for billing.

The "summary of customers" and "meters" closely reconcile, but differ slightly based on the data reported by the Town.

5. WATER CONSUMPTION RECORDS

Town of Eliot, ME

Water Billing (Gallons)
Based on Meter Records from Department

Notes:

WWTP Reading		Quarterly Consumption (gal)		Monthly Avg
Month	(gal)	Green Acres and Spinney Creek ¹	All other accounts ²	
Jan-10				2,158,672
Feb-10				2,158,672
Mar-10	17,340,700	92,140	6,383,875	2,158,672
Apr-10				2,578,827
May-10				2,578,827
Jun-10	11,530,300	92,140	7,644,342	2,578,827
Jul-10				4,045,009
Aug-10				4,045,009
Sep-10	8,329,700	92,140	12,042,888	4,045,009
Oct-10				2,424,978
Nov-10				2,424,978
Dec-10	10,945,300	92,140	7,182,794	2,424,978
Jan-11				2,162,412
Feb-11				2,162,412
Mar-11	13,507,938	92,140	6,395,096	2,162,412
Apr-11				2,361,643
May-11				2,361,643
Jun-11	12,977,700	92,140	6,992,789	2,361,643
Jul-11				3,810,620
Aug-11				3,810,620
Sep-11	10,787,200	92,140	11,339,719	3,810,620
Oct-11				2,418,744
Nov-11				2,418,744
Dec-11	12,935,000	92,140	7,164,093	2,418,744
Jan-12				2,132,989
Feb-12				2,132,989
Mar-12	10,952,400	92,140	6,306,826	2,132,989
Apr-12				2,563,866
May-12				2,563,866
Jun-12	11,148,800	92,140	7,599,459	2,563,866
Jul-12				3,608,304
Aug-12				3,608,304
Sep-12	8,322,400	92,140	10,732,772	3,608,304
Oct-12				2,364,194
Nov-12				2,364,194
Dec-12	8,968,400	92,140	7,000,442	2,364,194

Eliot Avg Daily Flow to Kittery WWTF

	2010	2011	2012	AVG
Gallons Per Year =	48,146,000	50,207,838	39,392,000	45,915,279
Period =	365	365	366	
Gallons per Day =	131,907	137,556	107,628	125,697

Eliot Avg Daily Consumption

Gallons Per Year =	33,622,459	32,260,257	32,008,058	32,630,258
Gallons per Day =	92,116	88,384	87,454	89,318

I/I Estimate (gpd) =	39,791	49,171	20,175	36,379
I/I Estimate (%) =	30%	36%	19%	28%

Residential Consumption (gpd)

Residential Units

EDU's on system

From Town

Verbal

60,500

513

118

Rep. sample

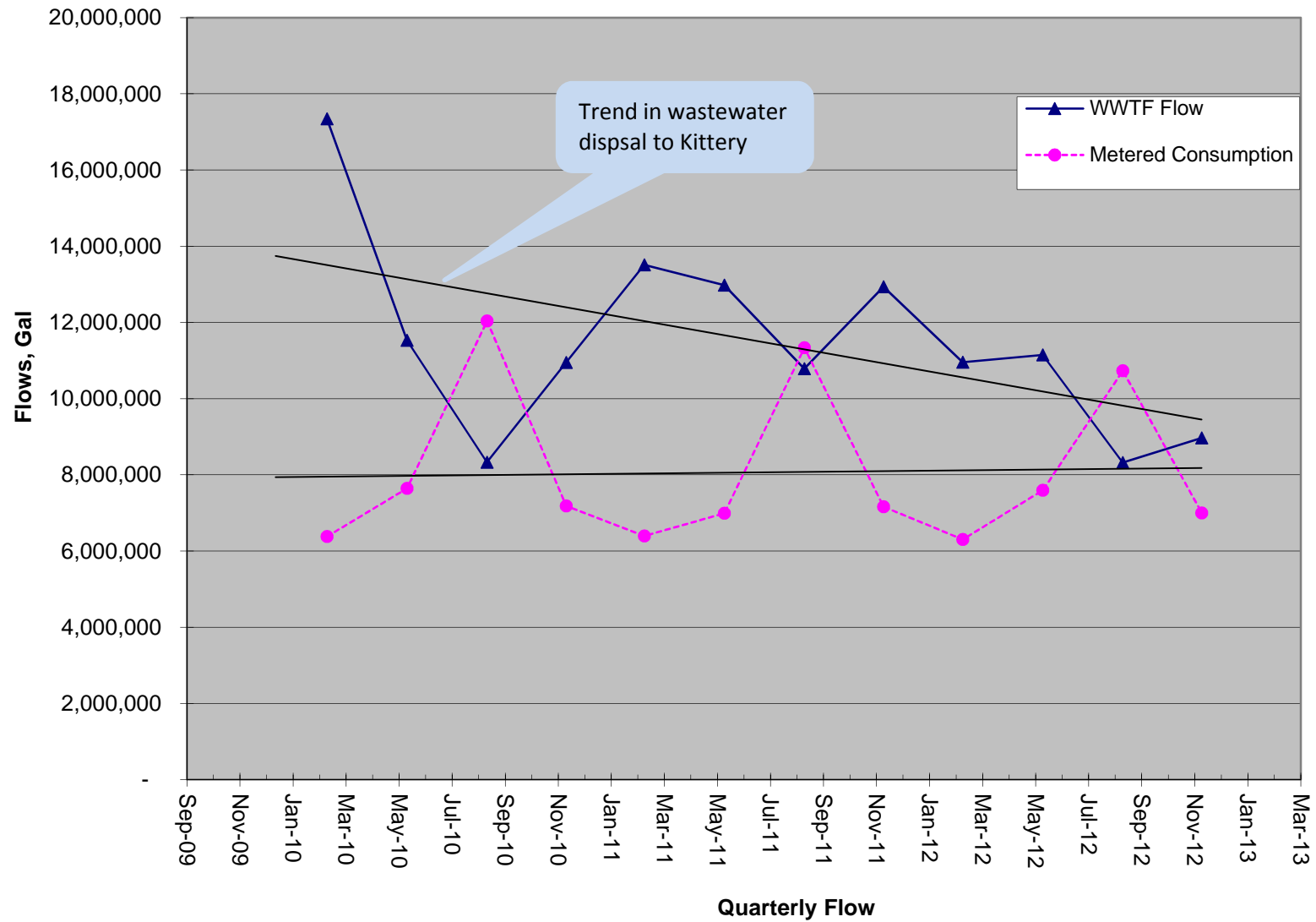
Use 120 gpd

¹ Manual readings do not include consumption associated with Green Acres (acc. #10) or Spring Cree. Consumption associated with these accounts has been added in its own column.

² Set readings are accounts that include 5 "set" consumption values associated with 5 accounts (Acc #1 = 2100 cf/qr, Acc #4 = 3200 cf/qr, Acc #5 = 3200 cf/qr, Acc #11 = 200 cf/qr)

² Manual readings include Kennebunk savings

5A - Eliot, ME
Wasetwater Disposal to Kittery vs. Consumption



6. CURRENT WASTE WATER RATE STRUCTURE

Town of Eliot, ME

6/17/2013

Code	Description	Unit	Current Rates	Ratio
CONSUMPTION/USAGE CHARGES				
	All services		\$2.94	Per 100 CF
Flat Fee				
	5/8" meter		\$50.00	per quarter 1.0
	3/4" meter		\$50.00	per quarter 1.0
	1" meter		\$50.00	per quarter 1.0
	1 1/2 " meter		\$50.00	per quarter 1.0
	2" meter		\$50.00	per quarter 1.0
	3" meter		\$50.00	per quarter 1.0
	4" meter		\$50.00	per quarter 1.0
	6" meter		\$50.00	per quarter 1.0
	8" meter		\$50.00	per quarter 1.0
	Flat fee		\$50.00	per quarter 1.0
	Multiple Units Charge		\$50.00	per quarter 1.0
Notes: 1 \$7.50 of the \$50 quarterly charge is designated for capital reserves. 2 The consumption charge was increased from \$0.95 to \$2.94 in 2012 3 Betterment fees currently =				

7. PRIOR SEWER DEPT REVENUE & ACCOUNT BALANCE

Description	Actual	Actual	Actual	Average	Estimated
	FY 2010	FY 2011	FY 2012		2013
REVENUES (sales only)					
Sewer Sales	\$177,006.04	\$170,078.44	\$250,128.00	\$202,988	See Rate Sheet
Supplemental		-\$80.04	\$0.00	#DIV/0!	\$0
Adjustments (ADJ)				#DIV/0!	\$0
Betterment			\$19,000.00	#DIV/0!	\$0
Connection fee				#DIV/0!	\$0
Interest				#DIV/0!	\$0
Costs/service fees				#DIV/0!	\$0
Other				#DIV/0!	
Other				#DIV/0!	
Other				#DIV/0!	
Capital Reserve Withdrawal (If Need)				#DIV/0!	
TOTAL USERS	\$177,006	\$169,998	\$269,128	#DIV/0!	\$0
General Fund	\$32,481	\$38,200	\$40,918		
TOTAL (USERS AND GF)	\$209,487	\$208,198	\$310,046		
GENERAL INFORMATION					
Total Capital Assets					
Cumulative Cash Reserves (Balance)					
Sewer Capital Reserves			\$264,000		
Sewer Betterment			\$22,000		
Capital Reserve Fund (Balance)					
Other					
Other					
System Development Fees					
TOTAL RESERVES	\$0	\$0	\$286,000		

Notes:

1. Revenue figures do not show general fund contributions or betterment fees.

8. PRIOR SEWER DEPT. EXPENDITURES

Town of Eliot ME

Acct. No.	Description	Actual 2010	Actual 2011	Actual 2012	Average	Staff Projected 2013
Sewer Department						
<u>OPERATING BUDGET - Existing</u>						
70-01	General	\$37,999	\$34,210		\$36,105	\$50,000
	Payroll			\$3,299		
	Contract Fee			\$12,473		
	Supplies			\$3,415		
	Repairs			\$25,050		
	Service Fees			\$4,093		
70-05	Pump Station #1	\$600	\$665	\$26,734	\$9,333	\$30,000
70-10	Pump Station #2	\$66	\$432	\$25,511	\$8,670	\$25,000
70-15	Pump Station #3	\$560	\$870	\$13,307	\$4,912	\$15,000
	Wastewater Disposal to Kittery (approx)	\$155,000	\$150,000	\$141,696	\$148,899	\$100,000
	Debt - Principal	\$21,517	\$28,925	\$33,286		\$32,431
	Debt - Interest	\$10,964	\$9,275	\$7,632		\$5,019
	Existing Capital Reserve contributions	\$19,000	\$19,000	\$19,000		\$20,000
	Additional Capital Reserve Recommendations					
SUBTOTAL:		\$245,706	\$243,377	\$315,498	\$268,194	\$277,451

Note 1. Expenses include actual expenses plus encumbered debt

Note 2. 2010 and 2011 needs to be confirmed

9. Existing Long Term Debt - Sewer Fund

Town of Eliot ME

General Obligation Bonds	BAL	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019
2007 Issue \$592,990 07B Part of total of \$4,701,600	P I	\$33,286 \$7,632	\$32,431 \$5,019	\$31,510 \$2,474					
<i>Principal</i>	\$0	\$33,286	\$32,431	\$31,510	\$0	\$0	\$0	\$0	\$0
<i>Interest</i>	\$0	\$7,632	\$5,019	\$2,474	\$0	\$0	\$0	\$0	\$0
TOTAL PRINCIPAL AND INTEREST	\$0	\$40,918	\$37,451	\$33,983	\$0	\$0	\$0	\$0	\$0
TOTAL PRINCIPAL AND INTEREST USED IN MODEL FOR RATES		\$40,918	\$37,451	\$33,983	\$0	\$0	\$0	\$0	\$0
Offset by Betterment Fund and General Fund									

10. SEWER CAPITAL IMPROVEMENT PROGRAM (DRAFT)

Town of Eliot ME

For Planning Only (not in model)									
Capital Project	Possible Funding Source	Staff Priority	YEAR						
			2012	2013	2014	2015	2016	2017	
Pumping Station #1	Budget				\$40,000				
Pumping Station #2	Budget					\$75,000			
Pumping Station #3	Budget			\$10,000					
Assett Management Plan	Budget			\$30,000					
Ongoing TV Inspection	Budget			\$10,000		\$10,000		\$10,000	
I/I Improvements	Debt					\$800,000			
Capital Reserve	Budget			\$10,000	\$20,000	\$40,000	\$50,000	\$50,000	
TOTAL				\$60,000	\$60,000	\$925,000	\$50,000	\$60,000	
Funding Sources:			Period Total	Period Ave.					
Bonded Debt			\$800,000	\$114,286	\$0	\$0	\$800,000	\$0	\$0
Other funding (grant, developer, etc)									
Capital Reserves Expeditures or Warrant			\$295,000	\$59,000	\$60,000	\$60,000	\$125,000	\$50,000	\$60,000

Notes: Capital Improvement Plan shown here is draft
 Work shown for pumping Station (#1, #2, and #3) will not be needed if TIF project passes
 Capital reserve reccomendations are provided in Tabel 12

11A. ESTIMATED DEBT SCHEDULE - SEMIANNUAL PAYMENTS

Town of Eliot, ME

Project: **2013 - Rte 236 (TIF Funded)**

Loan Origination Date (Est.):

Project Cost:

Term (years):

No. of Payments:

Interest Rate:

\$5,500,000
20

Amortization Calculation

Princ. \$5,500,000
No. Payments
Interest
Payment

Used In Model

Date	Principal	Rate	Interest	Total Payment	FY Total
5/1/2014			\$109,901.00	\$109,901.00	\$109,901.00
11/1/2014	\$275,000.00	3.00%	\$106,700.00	\$381,700.00	
5/1/2015			\$102,575.00	\$102,575.00	\$484,275.00
11/1/2015	\$275,000.00	3.30%	\$102,575.00	\$377,575.00	
5/1/2016			\$98,037.50	\$98,037.50	\$475,612.50
11/1/2016	\$275,000.00	3.35%	\$98,037.50	\$373,037.50	
5/1/2017			\$93,431.25	\$93,431.25	\$466,468.75
11/1/2017	\$275,000.00	3.45%	\$93,431.25	\$368,431.25	
5/1/2018			\$88,687.50	\$88,687.50	\$457,118.75
11/1/2018	\$275,000.00	3.50%	\$88,687.50	\$363,687.50	
5/1/2019			\$83,875.00	\$83,875.00	\$447,562.50
11/1/2019	\$275,000.00	3.60%	\$83,875.00	\$358,875.00	
5/1/2020			\$78,925.00	\$78,925.00	\$437,800.00
11/1/2020	\$275,000.00	3.70%	\$78,925.00	\$353,925.00	
5/1/2021			\$73,837.50	\$73,837.50	\$427,762.50
11/1/2021	\$275,000.00	3.80%	\$73,837.50	\$348,837.50	
5/1/2022			\$68,612.50	\$68,612.50	\$417,450.00
11/1/2022	\$275,000.00	3.90%	\$68,612.50	\$343,612.50	
5/1/2023			\$63,250.00	\$63,250.00	\$406,862.50
11/1/2023	\$275,000.00	4.00%	\$63,250.00	\$338,250.00	
5/1/2024			\$57,750.00	\$57,750.00	\$396,000.00
11/1/2024	\$275,000.00	4.05%	\$57,750.00	\$332,750.00	
5/1/2025			\$52,181.25	\$52,181.25	\$384,931.25
11/1/2025	\$275,000.00	4.10%	\$52,181.25	\$327,181.25	
5/1/2026			\$46,543.75	\$46,543.75	\$373,725.00
11/1/2026	\$275,000.00	4.15%	\$46,543.75	\$321,543.75	
5/1/2027			\$40,837.50	\$40,837.50	\$362,381.25
11/1/2027	\$275,000.00	4.20%	\$40,837.50	\$315,837.50	
5/1/2028			\$35,062.50	\$35,062.50	\$350,900.00
11/1/2028	\$275,000.00	4.25%	\$35,062.50	\$310,062.50	
5/1/2029			\$29,218.75	\$29,218.75	\$339,281.25
11/1/2029	\$275,000.00	4.25%	\$29,218.75	\$304,218.75	
5/1/2030			\$23,375.00	\$23,375.00	\$327,593.75
11/1/2030	\$275,000.00	4.25%	\$23,375.00	\$298,375.00	
5/1/2031			\$17,531.25	\$17,531.25	\$315,906.25
11/1/2031	\$275,000.00	4.25%	\$17,531.25	\$292,531.25	
5/1/2032			\$11,687.50	\$11,687.50	\$304,218.75
11/1/2032	\$275,000.00	4.25%	\$11,687.50	\$286,687.50	
5/1/2033			\$5,843.75	\$5,843.75	\$292,531.25
11/1/2033	\$275,000.00	4.25%	\$5,843.75	\$280,843.75	
TOTALS	\$5,500,000.00		\$2,359,126.00	\$7,859,126.00	

Notes: From Maine municipal bond bank debt service estimate. <http://www.mainebondbank.com/Estimates.aspx>

11B. ESTIMATED DEBT SCHEDULE - SEMIANNUAL PAYMENTS

Town of Eliot, ME

Project: **2013 - Rte 236 (TIF Funded)**

Loan Origination Date (Est.):

Project Cost:

Term (years):

No. of Payments:

Interest Rate:

\$5,500,000

20

40

1.000%

Amortization Calculation

Princ. \$5,500,000

No. Payments 40

Interest 1.000%

Payment \$152,050

Sample
Not Used In Model

Semiannual Payment Due	Principle Remaining	Payment			Net Due		
		Principal	Interest	Total			
05/01/14	\$5,500,000	\$0	\$27,500	\$27,500	\$27,500	\$27,500	
11/01/14	\$5,500,000	\$275,000	\$27,500	\$302,500	\$302,500		
05/01/15	\$5,225,000	\$0	\$26,125	\$26,125	\$26,125	\$328,625	
11/01/15	\$5,225,000	\$275,000	\$26,125	\$301,125	\$301,125		
04/30/16	\$4,950,000	\$0	\$24,750	\$24,750	\$24,750	\$325,875	
10/31/16	\$4,950,000	\$275,000	\$24,750	\$299,750	\$299,750		
05/01/17	\$4,675,000	\$0	\$23,375	\$23,375	\$23,375	\$323,125	
11/01/17	\$4,675,000	\$275,000	\$23,375	\$298,375	\$298,375		
05/01/18	\$4,400,000	\$0	\$22,000	\$22,000	\$22,000	\$320,375	
11/01/18	\$4,400,000	\$275,000	\$22,000	\$297,000	\$297,000		
05/01/19	\$4,125,000	\$0	\$20,625	\$20,625	\$20,625	\$317,625	
11/01/19	\$4,125,000	\$275,000	\$20,625	\$295,625	\$295,625		
04/30/20	\$3,850,000	\$0	\$19,250	\$19,250	\$19,250	\$314,875	
10/31/20	\$3,850,000	\$275,000	\$19,250	\$294,250	\$294,250		
05/01/21	\$3,575,000	\$0	\$17,875	\$17,875	\$17,875	\$312,125	
11/01/21	\$3,575,000	\$275,000	\$17,875	\$292,875	\$292,875		
05/01/22	\$3,300,000	\$0	\$16,500	\$16,500	\$16,500	\$309,375	
11/01/22	\$3,300,000	\$275,000	\$16,500	\$291,500	\$291,500		
04/30/23	\$3,025,000	\$0	\$15,125	\$15,125	\$15,125		
11/01/23	\$3,025,000	\$275,000	\$15,125	\$290,125	\$290,125		
04/30/24	\$2,750,000	\$0	\$13,750	\$13,750	\$13,750		
10/31/24	\$2,750,000	\$275,000	\$13,750	\$288,750	\$288,750		
05/01/25	\$2,475,000	\$0	\$12,375	\$12,375	\$12,375		
11/01/25	\$2,475,000	\$275,000	\$12,375	\$287,375	\$287,375		
05/01/26	\$2,200,000	\$0	\$11,000	\$11,000	\$11,000		
11/01/26	\$2,200,000	\$275,000	\$11,000	\$286,000	\$286,000		
04/30/27	\$1,925,000	\$0	\$9,625	\$9,625	\$9,625		
11/01/27	\$1,925,000	\$275,000	\$9,625	\$284,625	\$284,625		
04/30/28	\$1,650,000	\$0	\$8,250	\$8,250	\$8,250		
10/31/28	\$1,650,000	\$275,000	\$8,250	\$283,250	\$283,250		
05/01/29	\$1,375,000	\$0	\$6,875	\$6,875	\$6,875		
11/01/29	\$1,375,000	\$275,000	\$6,875	\$281,875	\$281,875		
05/01/30	\$1,100,000	\$0	\$5,500	\$5,500	\$5,500		
11/01/30	\$1,100,000	\$275,000	\$5,500	\$280,500	\$280,500		
04/30/31	\$825,000	\$0	\$4,125	\$4,125	\$4,125		
11/01/31	\$825,000	\$275,000	\$4,125	\$279,125	\$279,125		
04/30/32	\$550,000	\$0	\$2,750	\$2,750	\$2,750		
10/31/32	\$550,000	\$275,000	\$2,750	\$277,750	\$277,750		
05/01/33	\$275,000	\$0	\$1,375	\$1,375	\$1,375		
11/01/33	\$275,000	\$275,000	\$1,375	\$276,375	\$276,375		
		\$5,500,000	\$577,500	\$6,077,500	\$6,077,500		

Notes: Above assumes Bond purchased in 9/13

11C. ESTIMATED DEBT SCHEDULE - SEMIANNUAL PAYMENTS

Town of Eliot, ME

Project: **2013 - Rte 236 (TIF Funded)**

Loan Origination Date (Est.):

Project Cost:

Term (years):

No. of Payments:

Interest Rate:

\$5,500,000

20

40

2.000%

Amortization Calculation

Princ. \$5,500,000

No. Payments 40

Interest 2.000%

Payment \$167,506

Sample

Not Used In Model

Semiannual Payment Due	Principle Remaining	Payment			Net Due		
		Principal	Interest	Total			
05/01/14	\$5,500,000	\$0	\$55,000	\$55,000	\$55,000	\$55,000	
11/01/14	\$5,500,000	\$275,000	\$55,000	\$330,000	\$330,000		
05/01/15	\$5,225,000	\$0	\$52,250	\$52,250	\$52,250	\$382,250	
11/01/15	\$5,225,000	\$275,000	\$52,250	\$327,250	\$327,250		
04/30/16	\$4,950,000	\$0	\$49,500	\$49,500	\$49,500	\$376,750	
10/31/16	\$4,950,000	\$275,000	\$49,500	\$324,500	\$324,500		
05/01/17	\$4,675,000	\$0	\$46,750	\$46,750	\$46,750	\$371,250	
11/01/17	\$4,675,000	\$275,000	\$46,750	\$321,750	\$321,750		
05/01/18	\$4,400,000	\$0	\$44,000	\$44,000	\$44,000	\$365,750	
11/01/18	\$4,400,000	\$275,000	\$44,000	\$319,000	\$319,000		
05/01/19	\$4,125,000	\$0	\$41,250	\$41,250	\$41,250	\$360,250	
11/01/19	\$4,125,000	\$275,000	\$41,250	\$316,250	\$316,250		
04/30/20	\$3,850,000	\$0	\$38,500	\$38,500	\$38,500	\$354,750	
10/31/20	\$3,850,000	\$275,000	\$38,500	\$313,500	\$313,500		
05/01/21	\$3,575,000	\$0	\$35,750	\$35,750	\$35,750	\$349,250	
11/01/21	\$3,575,000	\$275,000	\$35,750	\$310,750	\$310,750		
05/01/22	\$3,300,000	\$0	\$33,000	\$33,000	\$33,000	\$343,750	
11/01/22	\$3,300,000	\$275,000	\$33,000	\$308,000	\$308,000		
04/30/23	\$3,025,000	\$0	\$30,250	\$30,250	\$30,250		
11/01/23	\$3,025,000	\$275,000	\$30,250	\$305,250	\$305,250		
04/30/24	\$2,750,000	\$0	\$27,500	\$27,500	\$27,500		
10/31/24	\$2,750,000	\$275,000	\$27,500	\$302,500	\$302,500		
05/01/25	\$2,475,000	\$0	\$24,750	\$24,750	\$24,750		
11/01/25	\$2,475,000	\$275,000	\$24,750	\$299,750	\$299,750		
05/01/26	\$2,200,000	\$0	\$22,000	\$22,000	\$22,000		
11/01/26	\$2,200,000	\$275,000	\$22,000	\$297,000	\$297,000		
04/30/27	\$1,925,000	\$0	\$19,250	\$19,250	\$19,250		
11/01/27	\$1,925,000	\$275,000	\$19,250	\$294,250	\$294,250		
04/30/28	\$1,650,000	\$0	\$16,500	\$16,500	\$16,500		
10/31/28	\$1,650,000	\$275,000	\$16,500	\$291,500	\$291,500		
05/01/29	\$1,375,000	\$0	\$13,750	\$13,750	\$13,750		
11/01/29	\$1,375,000	\$275,000	\$13,750	\$288,750	\$288,750		
05/01/30	\$1,100,000	\$0	\$11,000	\$11,000	\$11,000		
11/01/30	\$1,100,000	\$275,000	\$11,000	\$286,000	\$286,000		
04/30/31	\$825,000	\$0	\$8,250	\$8,250	\$8,250		
11/01/31	\$825,000	\$275,000	\$8,250	\$283,250	\$283,250		
04/30/32	\$550,000	\$0	\$5,500	\$5,500	\$5,500		
10/31/32	\$550,000	\$275,000	\$5,500	\$280,500	\$280,500		
05/01/33	\$275,000	\$0	\$2,750	\$2,750	\$2,750		
11/01/33	\$275,000	\$275,000	\$2,750	\$277,750	\$277,750		
		\$5,500,000	\$1,155,000	\$6,655,000	\$6,655,000		

Notes: Not in model

11D. ESTIMATED DEBT SCHEDULE - SEMIANNUAL PAYMENTS

Town of Eliot, ME

Project: **2013 - Rte 236 (TIF Funded)**

Loan Origination Date (Est.):

Project Cost:

Term (years):

No. of Payments:

Interest Rate:

\$5,500,000

20

40

3.000%

Amortization Calculation

Princ. \$5,500,000

No. Payments 40

Interest 3.000%

Payment \$183,849

Sample
Not Used In Model

Semiannual Payment Due	Principle Remaining	Payment			Net Due		
		Principal	Interest	Total			
05/01/14	\$5,500,000	\$0	\$82,500	\$82,500	\$82,500	\$82,500	
11/01/14	\$5,500,000	\$275,000	\$82,500	\$357,500	\$357,500		
05/01/15	\$5,225,000	\$0	\$78,375	\$78,375	\$78,375	\$435,875	
11/01/15	\$5,225,000	\$275,000	\$78,375	\$353,375	\$353,375		
04/30/16	\$4,950,000	\$0	\$74,250	\$74,250	\$74,250	\$427,625	
10/31/16	\$4,950,000	\$275,000	\$74,250	\$349,250	\$349,250		
05/01/17	\$4,675,000	\$0	\$70,125	\$70,125	\$70,125	\$419,375	
11/01/17	\$4,675,000	\$275,000	\$70,125	\$345,125	\$345,125		
05/01/18	\$4,400,000	\$0	\$66,000	\$66,000	\$66,000	\$411,125	
11/01/18	\$4,400,000	\$275,000	\$66,000	\$341,000	\$341,000		
05/01/19	\$4,125,000	\$0	\$61,875	\$61,875	\$61,875	\$402,875	
11/01/19	\$4,125,000	\$275,000	\$61,875	\$336,875	\$336,875		
04/30/20	\$3,850,000	\$0	\$57,750	\$57,750	\$57,750	\$394,625	
10/31/20	\$3,850,000	\$275,000	\$57,750	\$332,750	\$332,750		
05/01/21	\$3,575,000	\$0	\$53,625	\$53,625	\$53,625	\$386,375	
11/01/21	\$3,575,000	\$275,000	\$53,625	\$328,625	\$328,625		
05/01/22	\$3,300,000	\$0	\$49,500	\$49,500	\$49,500	\$378,125	
11/01/22	\$3,300,000	\$275,000	\$49,500	\$324,500	\$324,500		
04/30/23	\$3,025,000	\$0	\$45,375	\$45,375	\$45,375		
11/01/23	\$3,025,000	\$275,000	\$45,375	\$320,375	\$320,375		
04/30/24	\$2,750,000	\$0	\$41,250	\$41,250	\$41,250		
10/31/24	\$2,750,000	\$275,000	\$41,250	\$316,250	\$316,250		
05/01/25	\$2,475,000	\$0	\$37,125	\$37,125	\$37,125		
11/01/25	\$2,475,000	\$275,000	\$37,125	\$312,125	\$312,125		
05/01/26	\$2,200,000	\$0	\$33,000	\$33,000	\$33,000		
11/01/26	\$2,200,000	\$275,000	\$33,000	\$308,000	\$308,000		
04/30/27	\$1,925,000	\$0	\$28,875	\$28,875	\$28,875		
11/01/27	\$1,925,000	\$275,000	\$28,875	\$303,875	\$303,875		
04/30/28	\$1,650,000	\$0	\$24,750	\$24,750	\$24,750		
10/31/28	\$1,650,000	\$275,000	\$24,750	\$299,750	\$299,750		
05/01/29	\$1,375,000	\$0	\$20,625	\$20,625	\$20,625		
11/01/29	\$1,375,000	\$275,000	\$20,625	\$295,625	\$295,625		
05/01/30	\$1,100,000	\$0	\$16,500	\$16,500	\$16,500		
11/01/30	\$1,100,000	\$275,000	\$16,500	\$291,500	\$291,500		
04/30/31	\$825,000	\$0	\$12,375	\$12,375	\$12,375		
11/01/31	\$825,000	\$275,000	\$12,375	\$287,375	\$287,375		
04/30/32	\$550,000	\$0	\$8,250	\$8,250	\$8,250		
10/31/32	\$550,000	\$275,000	\$8,250	\$283,250	\$283,250		
05/01/33	\$275,000	\$0	\$4,125	\$4,125	\$4,125		
11/01/33	\$275,000	\$275,000	\$4,125	\$279,125	\$279,125		
		\$5,500,000	\$1,732,500	\$7,232,500	\$7,232,500		

Notes:

12. PROJECTED SEWER DEPT. EXPENDITURES

Town of Eliot ME

1.0%	Annual Adjustment	Fiscal Year					
		Expense Category	Yearly Adjust	Proposed Budget 2013	Projected Budgets...		
					2014	2015	2016
OPERATING BUDGET - Existing							
70-01	General	1.0%	\$50,000	\$50,500	\$51,005	\$51,515	\$52,030
	Payroll						
	Contract Fee						
	Supplies						
	Repairs						
	Service Fees						
70-05	Pump Station #1	1.0%	\$30,000	\$30,300	\$30,603	\$30,909	\$31,218
70-10	Pump Station #2	1.0%	\$25,000	\$25,250	\$25,503	\$25,758	\$26,015
70-15	Pump Station #3	1.0%	\$15,000	\$15,150	\$15,302	\$15,455	\$15,609
	Wastewater Disposal to Kittery (approx)	1.0%	\$100,000	\$110,000	\$110,000	\$110,000	\$110,000
	Existing Capital Reserve contributions	1.0%	\$20,000	\$20,200	\$20,402	\$20,606	\$20,812
	Capital Reserve Recommendations			\$50,000	\$50,000	\$50,000	\$50,000
DEBT - Existing							
	Debt - Principal		\$32,431	\$31,510	\$0	\$0	\$0
	Debt - Interest		\$5,019	\$2,474	\$0	\$0	\$0
OPERATING BUDGET - Expansion							
	Additional O&M including PS at Beech Rd.			\$0	\$10,000	\$20,000	\$20,000
	Wastewater Disposal to Kittery (approx)			\$0	\$7,000	\$15,000	\$15,000
	Capital Reserve Recommendations	1.0%		\$0	\$10,000	\$20,000	\$20,000
DEBT - Expansion							
	TIF Debt 4.34 (TIF Expansion) - From Debt Schedule			\$109,901	\$484,275	\$475,613	\$466,469
TOTAL EXPEDITURES							
Existing							
	Operating expenses		\$240,000	\$301,400	\$302,814	\$304,242	\$305,685
	Debt		\$37,451	\$33,983	\$0	\$0	\$0
	Total		\$277,451	\$335,383	\$302,814	\$304,242	\$305,685
Expansion							
	Operating expenses		\$0	\$0	\$27,000	\$55,000	\$55,000
	Debt		\$0	\$109,901	\$484,275	\$475,613	\$466,469
	Total		\$0	\$109,901	\$511,275	\$530,613	\$521,469
Total Expenditures			\$277,451	\$445,284	\$814,089	\$834,855	\$827,153
Expenditures on Users (existing and expansion)			\$240,000	\$301,400	\$329,814	\$359,242	\$360,685

Notes: The projected cost to Kittery for wastewater treatment due to the expansion is based on 15,000 gpd pluse 20% I/I allowanceand represents a ~15% increase in flow (18/125=14.4)

13. CURRENT RATES AND PROJECTED REVENUES																		
Town of Eliot, ME																		
Description	# Users Projected Increase	Min Chg Projected Increase	2013			2014			2015			2016			2017			Notes
			# Users	Min Chg \$	Ammount	# Users	Min Chg \$	Ammount	# Users	Min Chg \$	Ammount	# Users	Min Chg \$	Ammount	# Users	Min Chg \$	Ammount	
Sewer Sales																		
<i>Unit Charge (quarterly)</i>																		
5/8 in. meter	0.00%	0.00%	528	\$50.00	\$105,600	528	\$50.00	\$105,600	528	\$50.00	\$105,600	528	\$50.00	\$105,600	528	\$50.00	\$105,600	No change
3/4 in. meter	0.00%	0.00%	42	\$50.00	\$8,400	42	\$50.00	\$8,400	42	\$50.00	\$8,400	42	\$50.00	\$8,400	42	\$50.00	\$8,400	No change
1 in. meter	0.00%	0.00%	6	\$50.00	\$1,200	6	\$50.00	\$1,200	6	\$50.00	\$1,200	6	\$50.00	\$1,200	6	\$50.00	\$1,200	No change
1 1/2 in. meter	0.00%	0.00%	0	\$50.00	\$0	0	\$50.00	\$0	0	\$50.00	\$0	0	\$50.00	\$0	0	\$50.00	\$0	No change
2 in. meter	0.00%	0.00%	2	\$50.00	\$400	2	\$50.00	\$400	2	\$50.00	\$400	2	\$50.00	\$400	2	\$50.00	\$400	No change
3 in. meter	0.00%	0.00%	0	\$50.00	\$0	0	\$50.00	\$0	0	\$50.00	\$0	0	\$50.00	\$0	0	\$50.00	\$0	No change
4 in. meter	0.00%	0.00%	0	\$50.00	\$0	0	\$50.00	\$0	0	\$50.00	\$0	0	\$50.00	\$0	0	\$50.00	\$0	No change
6 in. meter	0.00%	0.00%	0	\$50.00	\$0	0	\$50.00	\$0	0	\$50.00	\$0	0	\$50.00	\$0	0	\$50.00	\$0	No change
8 in. meter	0.00%	0.00%	0	\$50.00	\$0	0	\$50.00	\$0	0	\$50.00	\$0	0	\$50.00	\$0	0	\$50.00	\$0	No change
Expansion Users (EDUs)	0.00%	0.00%	0	\$50.00	\$0	0	\$50.00	\$0	75	\$50.00	\$15,000	140	\$50.00	\$28,000	140	\$50.00	\$28,000	No change
<i>Unit Charge (annual)</i>																		
Flat rate charge		0.00%	3	\$50.00	\$600	3	\$50.00	\$600	3	\$50.00	\$600	3	\$50.00	\$600	3	\$50.00	\$600	No change
Unit (Meter) Charge Subtotal, \$/year			591		\$116,200	581		\$116,200	656		\$131,200	721		\$144,200	721		\$144,200	
Multiple Units (units - meters)		0.00%	66	\$50.00	\$13,200	66	\$50.00	\$13,200	66	\$50.00	\$13,200	66	\$50.00	\$13,200	66	\$50.00	\$13,200	
Adjustment for additional users per year		0.00%				0.00%			0.00%			0.00%			0.00%			No change
TOTAL Unit charge					\$129,400			\$129,400			\$144,400			\$157,400			\$157,400	
<i>Usage Charge (Volumetric)</i>																		
Unit Charge (per 100 cf)					\$2.94			\$2.94			\$2.94			\$2.94			\$2.94	No change
Metered consumption, total, GPD		0.00%			86,500			86,500			93,500			101,500			101,500	No change
Metered consumption, MGY					31.6			31.6			34.1			37.0			37.0	No change
Metered consumption, CF per Year					4220922			4220922			4562500			4952874			4952874	No change
Usage charge subtotal, \$ per year					\$124,095			\$124,095			\$134,138			\$145,615			\$145,615	
Uncollected charges, % and \$			0.0%		\$0			\$0			\$0			\$0			\$0	No change
Water Meter and Usage Net Revenue Subtotal					\$253,495			\$253,495			\$278,538			\$303,015			\$303,015	
Other Revenue																		
<i>Sheet 7</i>																		
Supplemental		0.00%			\$0			\$0			\$0			\$0			\$0	No change
Betterment		0.00%			\$0			\$0			\$0			\$0			\$0	No change
Interest		0.00%			\$0			\$0			\$0			\$0			\$0	No change
Costs/service fees		0.00%			\$0			\$0			\$0			\$0			\$0	No change
Subtotal - Other Projected Revenue					\$0.00			\$0.00			\$0.00			\$0.00			\$0.00	
Subtotal - Water Department Revenue					\$253,495.12			\$253,495			\$278,538			\$303,015			\$303,015	
GF Revenue																		
General Fund - Existing Debt		100%			\$37,451			\$33,983			\$0			\$0			\$0	No change
General Fund - TIF Debt (\$5.5m)		100%			\$0			\$109,901			\$484,275			\$475,613			\$466,469	No change
Subtotal - GF Revenue					\$37,451			\$143,884			\$484,275			\$475,613			\$466,469	
TOTAL REVENUE					\$290,946			\$397,379			\$762,813			\$778,627			\$769,483	
Summary																		
Revenues					\$290,946			\$397,379			\$762,813			\$778,627			\$769,483	
Total Projected Expenditures - See Sheet 12.					\$277,451			\$445,284			\$814,089			\$834,855			\$827,153	
Yearly Net Difference Between Revenue and Expenditures (Note 1)					\$13,495			(\$47,905)			(\$51,277)			(\$56,228)			(\$57,670)	
% of Budget Included																		

- Notes
1. Positive difference means that funds can be added to reserves. Negative means that funds will be drained from reserves.
 2. Model assumes that GF/TIF revenues are adequate to cover TIF debt

14.A RATE OPTION A																					
Town of Eliot, ME																					
Description	# Users	Min Chg	2013 Min Chg \$	Projected Increase	Projected Increase	# Users	Ammount	2014 Min Chg \$	Ammount	# Users	Ammount	2015 Min Chg \$	Ammount	# Users	Ammount	2016 Min Chg \$	Ammount	2017 Min Chg \$	Ammount	Notes	
Sewer Sales																					
Unit Charge (quarterly)																					
5/8 in. meter	0.00%	0.00%	528	\$50.00	\$105,600	528	\$72.00	\$152,064	528	\$72.00	\$152,064	528	\$72.00	\$152,064	528	\$72.00	\$152,064	528	\$72.00	\$152,064	Increased but not tiered
3/4 in. meter	0.00%	0.00%	42	\$50.00	\$8,400	42	\$72.00	\$12,096	42	\$72.00	\$12,096	42	\$72.00	\$12,096	42	\$72.00	\$12,096	42	\$72.00	\$12,096	Increased but not tiered
1 in. meter	0.00%	0.00%	6	\$50.00	\$1,200	6	\$72.00	\$1,728	6	\$72.00	\$1,728	6	\$72.00	\$1,728	6	\$72.00	\$1,728	6	\$72.00	\$1,728	Increased but not tiered
1 1/2 in. meter	0.00%	0.00%	0	\$50.00	\$0	0	\$72.00	\$0	0	\$72.00	\$0	0	\$72.00	\$0	0	\$72.00	\$0	0	\$72.00	\$0	Increased but not tiered
2 in. meter	0.00%	0.00%	2	\$50.00	\$400	2	\$72.00	\$576	2	\$72.00	\$576	2	\$72.00	\$576	2	\$72.00	\$576	2	\$72.00	\$576	Increased but not tiered
3 in. meter	0.00%	0.00%	0	\$50.00	\$0	0	\$72.00	\$0	0	\$72.00	\$0	0	\$72.00	\$0	0	\$72.00	\$0	0	\$72.00	\$0	Increased but not tiered
4 in. meter	0.00%	0.00%	0	\$50.00	\$0	0	\$72.00	\$0	0	\$72.00	\$0	0	\$72.00	\$0	0	\$72.00	\$0	0	\$72.00	\$0	Increased but not tiered
6 in. meter	0.00%	0.00%	0	\$50.00	\$0	0	\$72.00	\$0	0	\$72.00	\$0	0	\$72.00	\$0	0	\$72.00	\$0	0	\$72.00	\$0	Increased but not tiered
8 in. meter	0.00%	0.00%	0	\$50.00	\$0	0	\$72.00	\$0	0	\$72.00	\$0	0	\$72.00	\$0	0	\$72.00	\$0	0	\$72.00	\$0	Increased but not tiered
Expansion Users (EDUs)	0.00%	0.00%	0	\$50.00	\$0	0	\$72.00	\$0	75	\$72.00	\$21,600	140	\$72.00	\$40,320	140	\$72.00	\$40,320	140	\$72.00	\$40,320	Increased but not tiered
Unit Charge (annual)																					
Flat rate charge		0.00%	3	\$50.00	\$600	3	\$72.00	\$864	3	\$72.00	\$864	3	\$72.00	\$864	3	\$72.00	\$864	3	\$72.00	\$864	Increased but not tiered
Unit (Meter) Charge Subtotal, \$/year			591		\$116,200	581		\$167,328	656		\$188,928	721		\$207,648	721		\$207,648	721		\$207,648	
Multiple Units (units - meters)		0.00%	70	\$50.00	\$14,000	70	\$72.00	\$20,160	70	\$72.00	\$20,160	66	\$72.00	\$19,008	66	\$72.00	\$19,008	66	\$72.00	\$19,008	Increased but not tiered
Adjustment for additional users per year		0.00%					0.00%			0.00%			0.00%		0.00%		0.00%		0.00%		
TOTAL Unit charge					\$130,200			\$187,488			\$209,088			\$226,656			\$226,656			\$226,656	
Usage Charge (Volumetric)																					
Unit Charge (per 100 cf)					\$2.94			\$2.94			\$2.94			\$2.94			\$2.94			\$2.94	No change
Metered consumption, total, GPD		0.00%			86,500			86,500			93,500			101,500			101,500			101,500	No change
Metered consumption, MGY					31.6			31.6			34.1			37.0			37.0			37.0	No change
Metered consumption, CF per Year					4220922			4220922			4562500			4952874			4952874			4952874	No change
Usage charge subtotal, \$ per year					\$124,095			\$124,095			\$134,138			\$145,615			\$145,615			\$145,615	
Uncollected charges, % and \$			0.0%		\$0			\$0			\$0			\$0			\$0			\$0	No change
Water Meter and Usage Net Revenue Subtotal					\$254,295			\$311,583			\$343,226			\$372,271			\$372,271			\$372,271	
Other Revenue																					
Sheet 7																					
Supplemental		0.00%			\$0			\$0			\$0			\$0			\$0			\$0	No change
Betterment		0.00%			\$0			\$0			\$0			\$0			\$0			\$0	No change
Interest		0.00%			\$0			\$0			\$0			\$0			\$0			\$0	No change
Costs/service fees		0.00%			\$0			\$0			\$0			\$0			\$0			\$0	No change
Subtotal - Other Projected Revenue					\$0.00			\$0.00			\$0.00			\$0.00			\$0.00			\$0.00	
Subtotal - Water Department Revenue					\$254,295.12			\$311,583			\$343,226			\$372,271			\$372,271			\$372,271	
GF Revenue																					
General Fund - Existing Debt		100%			\$37,451			\$33,983			\$0			\$0			\$0			\$0	No change
General Fund - TIF Debt (\$4.34)		100%			\$0			\$109,901			\$484,275			\$475,613			\$466,469			\$466,469	No change
Subtotal - GF Revenue					\$37,451			\$143,884			\$484,275			\$475,613			\$466,469			\$466,469	
TOTAL REVENUE					\$291,746			\$455,467			\$827,501			\$847,883			\$838,739			\$838,739	
Summary																					
Revenues					\$291,746			\$455,467			\$827,501			\$847,883			\$838,739			\$838,739	
Total Projected Expenditures - See Sheet 12.					\$277,451			\$445,284			\$814,089			\$834,855			\$827,153			\$827,153	
Yearly Net Difference Between Revenue and Expenditures (Note 1)					\$14,295			\$10,183			\$13,412			\$13,028			\$11,586			\$11,586	
% of Budget Included																					

14.B RATE OPTION B																		
Town of Eliot, ME																		
			2013			2014			2015			2016			2017			
# Users	Min Chg		Min			Min			Min			Min			Min			
Projected	Projected		Chg			Chg			Chg			Chg			Chg			
Increase	Increase		\$	Ammount		\$	Ammount		\$	Ammount		\$	Ammount		\$	Ammount		Notes
Description			# Users			# Users			# Users			# Users			# Users			
Sewer Sales																		
Unit Charge (quarterly)																		
5/8 in. meter	0.00%	0.00%	528	\$50.00	\$105,600	528	\$61.00	\$128,832.00	528	\$61.00	\$128,832	528	\$61.00	\$128,832	528	\$61.00	\$128,832	Increased by 23%
3/4 in. meter	0.00%	0.00%	42	\$50.00	\$8,400	42	\$61.00	\$10,248.00	42	\$61.00	\$10,248	42	\$61.00	\$10,248	42	\$61.00	\$10,248	Increased by 23%
1 in. meter	0.00%	0.00%	6	\$50.00	\$1,200	6	\$61.00	\$1,464.00	6	\$61.00	\$1,464	6	\$61.00	\$1,464	6	\$61.00	\$1,464	Increased by 23%
1 1/2 in. meter	0.00%	0.00%	0	\$50.00	\$0	0	\$61.00	\$0.00	0	\$61.00	\$0	0	\$61.00	\$0	0	\$61.00	\$0	Increased by 23%
2 in. meter	0.00%	0.00%	2	\$50.00	\$400	2	\$61.00	\$488.00	2	\$61.00	\$488	2	\$61.00	\$488	2	\$61.00	\$488	Increased by 23%
3 in. meter	0.00%	0.00%	0	\$50.00	\$0	0	\$61.00	\$0.00	0	\$61.00	\$0	0	\$61.00	\$0	0	\$61.00	\$0	Increased by 23%
4 in. meter	0.00%	0.00%	0	\$50.00	\$0	0	\$61.00	\$0.00	0	\$61.00	\$0	0	\$61.00	\$0	0	\$61.00	\$0	Increased by 23%
6 in. meter	0.00%	0.00%	0	\$50.00	\$0	0	\$61.00	\$0.00	0	\$61.00	\$0	0	\$61.00	\$0	0	\$61.00	\$0	Increased by 23%
8 in. meter	0.00%	0.00%	0	\$50.00	\$0	0	\$61.00	\$0.00	0	\$61.00	\$0	0	\$61.00	\$0	0	\$61.00	\$0	Increased by 23%
Expansion Users (EDUs)	0.00%	0.00%	0	\$50.00	\$0	0	\$61.00	\$0.00	75	\$61.00	\$18,300	140	\$61.00	\$34,160	140	\$61.00	\$34,160	Increased by 23%
Unit Charge (annual)																		
Flat rate charge		0.00%	3	\$50.00	\$600	3	\$61.00	\$732	3	\$61.00	\$732	3	\$61.00	\$732	3	\$61.00	\$732	Increased by 23%
Unit (Meter) Charge Subtotal, \$/year																		
			591		\$116,200	581		\$141,764	656		\$160,064	721		\$175,924	721		\$175,924	
Multiple Units (units - meters)		0.00%	70	\$50.00	\$14,000	70	\$61.00	\$17,080	70	\$61.00	\$17,080	66	\$61.00	\$16,104	66	\$61.00	\$16,104	No change
Adjustment for additional users per year		0.00%																
TOTAL Unit charge																		
					\$130,200			\$158,844			\$177,144			\$192,028			\$192,028	
Usage Charge (Volumetric)																		
Unit Charge (per 100 cf)																		
				\$2.94			\$3.62			\$3.62			\$3.62			\$3.62		Increased by 23%
Metered consumption, total, GPD		0.00%		86,500			86,500			93,500			101,500			101,500		No change
Metered consumption, MGY				31.6			31.6			34.1			37.0			37.0		No change
Metered consumption, CF per Year				4220922			4220922			4562500			4952874			4952874		No change
Usage charge subtotal, \$ per year																		
				\$124,095			\$152,797			\$165,163			\$179,294			\$179,294		
Uncollected charges, % and \$	From Billing Record Review		0.0%	\$0			\$0			\$0			\$0			\$0		No change
Water Meter and Usage Net Revenue Subtotal																		
				\$254,295			\$311,641			\$342,307			\$371,322			\$371,322		
Other Revenue																		
Sheet 7																		
Supplemental		0.00%		\$0			\$0			\$0			\$0			\$0		No change
Betterment		0.00%		\$0			\$0			\$0			\$0			\$0		No change
Interest		0.00%		\$0			\$0			\$0			\$0			\$0		No change
Costs/service fees		0.00%		\$0			\$0			\$0			\$0			\$0		No change
Subtotal - Other Projected Revenue																		
				\$0.00			\$0.00			\$0.00			\$0.00			\$0.00		
Subtotal - Water Department Revenue																		
				\$254,295.12			\$311,641			\$342,307			\$371,322			\$371,322		
GF Revenue																		
General Fund - Existing Debt		100%		\$37,451			\$33,983			\$0			\$0			\$0		No change
General Fund - TIF Debt (\$4.34)		100%		\$0			\$109,901			\$484,275			\$475,613			\$466,469		No change
Subtotal - GF Revenue																		
				\$37,451			\$143,884			\$484,275			\$475,613			\$466,469		
TOTAL REVENUE																		
				\$291,746			\$455,526			\$826,582			\$846,935			\$837,791		
Summary																		
Revenues				\$291,746			\$455,526			\$826,582			\$846,935			\$837,791		
Total Projected Expenditures - See Sheet 12.				\$277,451			\$445,284			\$814,089			\$834,855			\$827,153		
Yearly Net Difference Between Revenue and Expenditures (Note 1)																		
				\$14,295			\$10,241			\$12,493			\$12,080			\$10,637		
% of Budget Included																		

Notes

1. Positive difference means that funds can be added to reserves. Negative means that funds will be drained from reserves.

2. Model assumes that GF/TIF revenues are adequate to cover TIF debt

2. Model assumes that GF/TIF revenues are adequate to cover TIF debt

14.C RATE OPTION C																		
Town of Eliot, ME																		
Description	# Users	Min Chg	2013 Min Chg \$	Amount	# Users	Min Chg \$	Amount	# Users	Min Chg \$	Amount	# Users	Min Chg \$	Amount	# Users	Min Chg \$	Amount	Notes	
	Projected Increase	Projected Increase																
Sewer Sales																		
Unit Charge (quarterly)																		
5/8 in. meter	0.00%	0.00%	528	\$50.00	\$105,600	528	\$61.00	\$128,832.00	528	\$61.00	\$128,832	528	\$61.00	\$128,832	528	\$61.00	\$128,832	No change
3/4 in. meter	0.00%	0.00%	42	\$50.00	\$8,400	42	\$61.00	\$10,248.00	42	\$61.00	\$10,248	42	\$61.00	\$10,248	42	\$61.00	\$10,248	No change
1 in. meter	0.00%	0.00%	6	\$50.00	\$1,200	6	\$85.00	\$2,040.00	6	\$85.00	\$2,040	6	\$85.00	\$2,040	6	\$85.00	\$2,040	No change
1 1/2 in. meter	0.00%	0.00%	0	\$50.00	\$0	0	\$110.00	\$0.00	0	\$110.00	\$0	0	\$110.00	\$0	0	\$110.00	\$0	No change
2 in. meter	0.00%	0.00%	2	\$50.00	\$400	2	\$177.00	\$1,416.00	2	\$177.00	\$1,416	2	\$177.00	\$1,416	2	\$177.00	\$1,416	No change
3 in. meter	0.00%	0.00%	0	\$50.00	\$0	0	\$671.00	\$0.00	0	\$671.00	\$0	0	\$671.00	\$0	0	\$671.00	\$0	No change
4 in. meter	0.00%	0.00%	0	\$50.00	\$0	0	\$854.00	\$0.00	0	\$854.00	\$0	0	\$854.00	\$0	0	\$854.00	\$0	No change
6 in. meter	0.00%	0.00%	0	\$50.00	\$0	0	\$1,281.00	\$0.00	0	\$1,281.00	\$0	0	\$1,281.00	\$0	0	\$1,281.00	\$0	No change
8 in. meter	0.00%	0.00%	0	\$50.00	\$0	0	\$3,000.00	\$0.00	0	\$3,000.00	\$0	0	\$3,000.00	\$0	0	\$3,000.00	\$0	No change
Expansion Users (EDUs)	0.00%	0.00%	0	\$50.00	\$0	0	\$61.00	\$0.00	75	\$61.00	\$18,300	140	\$61.00	\$34,160	140	\$61.00	\$34,160	No change
Unit Charge (annual)																		
Flat rate charge		0.00%	3	\$50.00	\$600	3	\$61.00	\$732	3	\$61.00	\$732	3	\$61.00	\$732	3	\$61.00	\$732	No change
Unit (Meter) Charge Subtotal, \$/year			591		\$116,200	581		\$143,268	656		\$161,568	721		\$177,428	721		\$177,428	
Multiple Units (units - meters)																		
Adjustment for additional users per year		0.00%	70	\$50.00	\$14,000	70	\$61.00	\$17,080	70	\$61.00	\$17,080	66	\$61.00	\$16,104	66	\$61.00	\$16,104	
TOTAL Unit charge					\$130,200			\$160,348			\$178,648			\$193,532			\$193,532	No change
Usage Charge (Volumetric)																		
Unit Charge (per 100 cf)				\$2.94			\$3.62			\$3.62			\$3.62			\$3.62	Increased to match revenue generated by options A & B	
Metered consumption, total, GPD		0.00%		86,500			86,500			93,500			101,500			101,500	No change	
Metered consumption, MGY				31.6			31.6			34.1			37.0			37.0	No change	
Metered consumption, CF per Year				4220922			4220922			4562500			4952874			4952874	No change	
Usage charge subtotal, \$ per year				\$124,095			\$152,797			\$165,163			\$179,294			\$179,294		
Uncollected charges, % and \$			0.0%	\$0			\$0			\$0			\$0			\$0	No change	
Water Meter and Usage Net Revenue Subtotal				\$254,295			\$313,145			\$343,811			\$372,826			\$372,826		
Other Revenue																		
Sheet 7																		
Supplemental		0.00%		\$0			\$0			\$0			\$0			\$0	No change	
Betterment		0.00%		\$0			\$0			\$0			\$0			\$0	No change	
Interest		0.00%		\$0			\$0			\$0			\$0			\$0	No change	
Costs/service fees		0.00%		\$0			\$0			\$0			\$0			\$0	No change	
Subtotal - Other Projected Revenue				\$0.00			\$0.00			\$0.00			\$0.00			\$0.00		
Subtotal - Water Department Revenue				\$254,295.12			\$313,145			\$343,811			\$372,826			\$372,826		
GF Revenue																		
General Fund - Existing Debt		100%		\$37,451			\$33,983			\$0			\$0			\$0	No change	
General Fund - TIF Debt (\$4.34)		100%		\$0			\$109,901			\$484,275			\$475,613			\$466,469	No change	
Subtotal - GF Revenue				\$37,451			\$143,884			\$484,275			\$475,613			\$466,469		
TOTAL REVENUE				\$291,746			\$457,030			\$828,086			\$848,439			\$839,295		
Summary																		
Revenues				\$291,746			\$457,030			\$828,086			\$848,439			\$839,295		
Total Projected Expenditures - See Sheet 12.				\$277,451			\$445,284			\$814,089			\$834,855			\$827,153		
Yearly Net Difference Between Revenue and Expenditures (Note 1)				\$14,295			\$11,745			\$13,997			\$13,584			\$12,141		
% of Budget Included																		

Notes

1. Positive difference means that funds can be added to reserves. Negative means that funds will be drained from reserves.
2. Model assumes that GF/TIF revenues are adequate to cover TIF debt

15. SAMPLE BILLS

Eliot, ME

Description																								
					2013	2014	2015	2016	2017	2013	2014	2015	2016	2017	2013	2014	2014	2015	2015	2016	2016	2017	2017	
Average					Meter	Meter	Meter	Meter	Meter	Rate	Rate	Rate	Rate	Rate	Annual	Annual	% Inc.	Annual	% Inc.	Annual	% Inc.	Annual	% Inc.	
gpd					Charge/Yr	Charge/Yr	Charge/Yr	Charge/Yr	Charge/Yr	\$/100 CF	\$/100 CF	\$/100 CF	\$/100 CF	\$/100 CF	Cost	Cost	From 2013	Cost	From 2013	Cost	From 2013	Cost	From 2013	
CF/Qtr																								
Meter																								
Size																								
Residential Single Unit (Very low user)																								
Existing rates (Table 13)					57	695	5/8"	\$50.00	\$50.00	\$50.00	\$50.00	\$50.00	\$2.94	\$2.94	\$2.94	\$2.94	\$2.94	\$282	\$282	0%	\$282	0%	\$282	0%
Proposed rates (a) (Table 14A)					57	695	5/8"	\$50.00	\$72.00	\$72.00	\$72.00	\$72.00	\$2.94	\$2.94	\$2.94	\$2.94	\$2.94	\$282	\$370	31%	\$370	31%	\$370	31%
Proposed rates (b) (Table 14B)					57	695	5/8"	\$50.00	\$61.00	\$61.00	\$61.00	\$61.00	\$2.94	\$3.62	\$3.62	\$3.62	\$3.62	\$282	\$345	22%	\$345	22%	\$345	22%
Proposed rates (c) (Table 14C)					57	695	5/8"	\$50.00	\$61.00	\$61.00	\$61.00	\$61.00	\$2.94	\$3.62	\$3.62	\$3.62	\$3.62	\$282	\$345	22%	\$345	22%	\$345	22%
Residential Single Unit (Average EDU in Eliot)																								
Existing rates (Table 13)					120	1464	5/8"	\$50.00	\$50.00	\$50.00	\$50.00	\$50.00	\$2.94	\$2.94	\$2.94	\$2.94	\$2.94	\$372	\$372	0%	\$372	0%	\$372	0%
Proposed rates (a) (Table 14A)					120	1464	5/8"	\$50.00	\$72.00	\$72.00	\$72.00	\$72.00	\$2.94	\$2.94	\$2.94	\$2.94	\$2.94	\$372	\$460	24%	\$460	24%	\$460	24%
Proposed rates (b) (Table 14B)					120	1464	5/8"	\$50.00	\$61.00	\$61.00	\$61.00	\$61.00	\$2.94	\$3.62	\$3.62	\$3.62	\$3.62	\$372	\$456	23%	\$456	23%	\$456	23%
Proposed rates (c) (Table 14C)					120	1464	5/8"	\$50.00	\$61.00	\$61.00	\$61.00	\$61.00	\$2.94	\$3.62	\$3.62	\$3.62	\$3.62	\$372	\$456	23%	\$456	23%	\$456	23%
Residential Single Unit																								
Existing rates (Table 13)					180	2196	5/8"	\$50.00	\$50.00	\$50.00	\$50.00	\$50.00	\$2.94	\$2.94	\$2.94	\$2.94	\$2.94	\$458	\$458	0%	\$458	0%	\$458	0%
Proposed rates (a) (Table 14A)					180	2196	5/8"	\$50.00	\$72.00	\$72.00	\$72.00	\$72.00	\$2.94	\$2.94	\$2.94	\$2.94	\$2.94	\$458	\$546	19%	\$546	19%	\$546	19%
Proposed rates (b) (Table 14B)					180	2196	5/8"	\$50.00	\$61.00	\$61.00	\$61.00	\$61.00	\$2.94	\$3.62	\$3.62	\$3.62	\$3.62	\$458	\$562	23%	\$562	23%	\$562	23%
Proposed rates (c) (Table 14C)					180	2196	5/8"	\$50.00	\$61.00	\$61.00	\$61.00	\$61.00	\$2.94	\$3.62	\$3.62	\$3.62	\$3.62	\$458	\$562	23%	\$562	23%	\$562	23%
3" Multiple Apt. Complex (20 Units)																								
Existing rates (Table 13)					2560	31230	3"	\$50.00	\$50.00	\$50.00	\$50.00	\$50.00	\$2.94	\$2.94	\$2.94	\$2.94	\$2.94	\$3,873	\$3,873	0%	\$3,873	0%	\$3,873	0%
Proposed rates (a) (Table 14A)					2560	31230	3"	\$50.00	\$72.00	\$72.00	\$72.00	\$72.00	\$2.94	\$2.94	\$2.94	\$2.94	\$2.94	\$3,873	\$3,961	2%	\$3,961	2%	\$3,961	2%
Proposed rates (b) (Table 14B)					2560	31230	3"	\$50.00	\$61.00	\$61.00	\$61.00	\$61.00	\$2.94	\$3.62	\$3.62	\$3.62	\$3.62	\$3,873	\$4,766	23%	\$4,766	23%	\$4,766	23%
Proposed rates (c) (Table 14C)					2560	31230	3"	\$50.00	\$671.00	\$671.00	\$671.00	\$671.00	\$2.94	\$3.62	\$3.62	\$3.62	\$3.62	\$3,873	\$7,206	86%	\$7,206	86%	\$7,206	86%
Commercial (e.g. 2" Connection) (Table 13)																								
Existing rates (Table 14A)					2823	34438	2"	\$50.00	\$50.00	\$50.00	\$50.00	\$50.00	\$2.94	\$2.94	\$2.94	\$2.94	\$2.94	\$4,250	\$4,250	0%	\$4,250	0%	\$4,250	0%
Proposed rates (a) (Table 14B)					2823	34438	2"	\$50.00	\$72.00	\$72.00	\$72.00	\$72.00	\$2.94	\$2.94	\$2.94	\$2.94	\$2.94	\$4,250	\$4,338	2%	\$4,338	2%	\$4,338	2%
Proposed rates (b) (Table 14C)					2823	34438	2"	\$50.00	\$61.00	\$61.00	\$61.00	\$61.00	\$2.94	\$3.62	\$3.62	\$3.62	\$3.62	\$4,250	\$5,231	23%	\$5,231	23%	\$5,231	23%
Proposed rates (c)					2823	34438	2"	\$50.00	\$177.00	\$177.00	\$177.00	\$177.00	\$2.94	\$3.62	\$3.62	\$3.62	\$3.62	\$4,250	\$5,695	34%	\$5,695	34%	\$5,695	34%