

Water and Sewer Rate Study

Prepared for

The Village of Dansville

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Proposed Water and Sewer Rates for the Village of Dansville

This study reviewed past revenues and expenditures, projected future expenditures and developed water and sewer rates to pay for those expenditures. In addition, it considered the poor to negative cash position of the Village in developing the timing for the increases. This report is broken into three sections, one for water, one for sewer and one for some general comments.

Water Rates

1. The water fund has been losing about \$100,000 per year for the past four years and will soon have a negative fund balance. This shortage is shown in Appendix 1. It is essential to stop this loss as soon as possible. In addition, the water budget has no provision for major repairs or replacements. There will be immediate costs to cover dam inspection and maintenance for which there is no money. About \$100,000 is added to the budget each year to cover capital projects and repairs. New meters are needed and plans are underway for replacement. These meters will add about \$65,000 to the annual budget for debt service over the next 10 years. The projected debt service for water is shown in Appendix 8. O and M costs are projected to increase only 2% per year, with the exception of employee benefit costs, which are projected to grow 15% for two years and then 5% per year thereafter. Water costs are projected over the next 4 years. These projections are shown in Appendix 2. The water rates needed to cover these all costs are shown below. The water rates for a Village customer increase on average about 38%.
2. The proposed water rates are [base rates are quarterly]:

	Current	Proposed 2012-13
Village Base	\$68.53	\$83.24
Out of Village Base	\$83.75	\$98.46
Village Usage Residential	\$1.39	\$2.70
Village Commercial	\$0.83	\$2.70
Outside Village Residential	\$1.85	\$3.05
Outside Village Commercial	\$1.10	\$3.05

Note that the discounts are eliminated.

3. The average bill for a Village user of 55,000 gallons per year goes from \$350.57 annually to \$481.46 annually. For a user of 90,000 gallons per year the bill goes from \$399.22 per year to \$575.96 per year. Appendix 3 shows the typical bills and increases for in and out of Village customers using 90,000, 70,000, 55,000 and 40,000 gallons per year. Alternative water rates with higher use charge and lower base charge are shown in Appendix 6.
4. The cash position of the water fund is very poor. At the end of FY 2010-11 there was only \$240,000. That will decrease by about another \$100,000 this year. It is important to raise water rates as soon as possible. New rates should be in effect for all of the fiscal year 2012-13. This means raising the usage charge in April for the July billing.
5. The current billing system is awkward, time consuming and does not collect good management and financial information. It provides information on total water gallons sold, but it does not provide information on sales in and out of the Village and by class of customer. Sewer sales by total gallons and by class had to be estimated. The billing system also does not support good customer service. The Village has decided to replace it. This is a good decision. The new billing system should be implemented as soon as possible. This will take a lot of work and attention by the staff, especially as the metering system will soon also change.
6. Cash capital. In the water expenditure projections, only \$100,000 is included for capital expenditures. This is a very low number. The dam needs money for planning and inspection and maybe for repairs. Water mains, valves, hydrants and equipment fail at times and need to be repaired and replaced. It is very desirable that this cash capital amount be increased another \$50,000 if the Village has any room in rates.

Sewer Rates

1. The sewer fund has a negative balance of \$32,766 as of June 1, 2011. [Appendix 1 shows sewer fund balances] The sewer fund will probably have a small positive balance June 1 of 2012. However, the sewer budget has no provision for emergency repairs, sewer replacement, equipment or I and I investigation and repairs. So even before the plant issues, the Village should raise rates modestly to address the sewer collection issues. Only \$100,000 is allocated annually for cash capital in the budget projections. It

would be much better if this were \$200,000. O and M costs are projected to grow only 2% per year with the exception of employee benefit costs, which are projected to grow 15% for two years and then 5% per year thereafter. In addition some BANs may need an accelerated repayment requiring additional cash in 2012-13. The new plant at \$15,000,000 will require new debt service of about \$1,090,000 per year. The projected annual debt service for the sewer fund is shown in Appendix 9. This will change some as costs and timing become clear, but it essentially describes where debt will be in two years. The projected sewer fund costs are shown in Appendix 4.

These costs together will require the sewer rates in two years to be more than double what they currently are. The proposed rate increases would take place over two years. The first increase should be implemented soon.

2. The proposed sewer rates are [base rates are quarterly]:

	Current	Proposed 12-13	Proposed 13-14
Village Base	\$55.65	\$97.00	\$135
Out of Village Base	\$68.97	\$112.50	\$150
Village Usage Residential	\$1.65	\$2.80	\$2.95
Village Commercial	\$1.61	\$2.80	\$2.95
Outside Village Residential	\$2.18	\$3.20	\$3.35
Outside Village Commercial	\$2.12	\$3.20	\$3.35

Note that the discounts are eliminated.

The average sewer bill for a Village user of 55,000 gallons per year goes from \$313.35 annually to \$702.25 annually. For a user of 90,000 gallons per year the bill goes from \$371.10 per year to \$805.50 per year. Appendix 5 shows the typical bills and increases for in and out of Village customers using 90,000, 70,000, 55,000 and 40,000 gallons per year. Alternative rates with higher use charges and lower base charges are shown in Appendix 7.

3. The cash position of the sewer fund is very poor. There may a slight positive fund balance in June 2012. However, the Village may need to accelerate its payment on BANs for which it does not have sufficient funds. In addition, the Village will need a strong cash position to be able to issue and pay off new sewer debt. Therefore, it is

important to raise sewer rates as soon as possible. The first increase in rates should be in effect for all of the fiscal year 2012-13. This means raising the usage charge in April for the July billing.

The second rate increase should be made for the 2013-14 fiscal year. This will allow the Village to pay the debt service and to build up a small cash reserve. The amount of the second increase will depend on the final costs for the plant, how much it costs to operate and how much is needed for I and I work. The estimates in the report, however, provide a reasonable expectation of what the rate will need to be.

4. Cash capital. In the sewer expenditure projections, only \$100,000 is included for cash capital expenditures. This is a low number. Infiltration and inflow is a major problem for the plant. It will take a major effort to find the sources of this [mostly] inflow. When that is done, there will be costs to make the necessary corrections. In addition sewers and equipment fail and need to be repaired and replaced. It would be very desirable to increase this cash capital amount by another \$100,000 if the Village has any room in rates.

Other Issues

1. Base Charges versus user rates. There has been discussion about how much of the revenue should be in base charges and how much in user fees. The advantage of user fees is that they make bills more proportional to use. The disadvantage is that bills can be reduced by cutting use, which just then requires more rate increases. The advantage of base charges is that they are a steady source of revenue. They can also be justified because, most of the costs of a water system are necessary just to have water available to the customer, regardless of how much they use. In the proposed rates, the combined water and sewer base charges increase 72% and the combined usage charges increase 98%. As user charges go up, there is more incentive to avoid them. The proposed user charges are not out of line with many other systems. [Dansville's current user charges are low]. Alternate water and sewer rates with lower base charges and higher user fees are shown in Appendices 6 and 7. If the board wants lower base charges and higher user fees, they could use this alternative.

2. All discounts [Commercial and Laundry] are recommended to be eliminated. This has a greater impact on large users. The board may want to review the current billing arrangement for Dansville Properties and the hospital.
3. Late Bill Payments. A number of customers do not pay their bills on time. These bills are then added to Village taxes and if not paid are added to county taxes. They are collected about 2 years after originally billed. The charge to the customer is 10% over the two years. The Village could have a better cash position if these bills were collected on time. The Village should do one of two things. First, it could start shutting off water for those who do not pay. This action will bring prompt payment. Given that there can be two years of back bills; this program needs to be phased in some manner. The new billing system is probably needed to start this as partial payments will need to be accepted. Partial payments should be accepted anyway.

A second option is to charge much more for late payments and to add a fee when the water and sewer bill is added to taxes. The late fee might be 5% per quarter on the unpaid balance and an administrative fee of \$50 when the bill is added to taxes.

Another \$50 could be added if the taxes need to be sent to the county.

Implementation of a new late fee structure also requires the new billing system to be operational.

4. Effect of new meters. New meters usually measure more water and accordingly water and sewer revenue increases. Very large rate increases have customers reduce usage. In this report, these factors are assumed to be offsetting. Over time, the new meters will probably raise the revenue as efforts to save water will fade in many households.
5. Inside versus outside the Village. The increases for inside and outside the Village are about the same dollar amount. The percentage is less for the outside the Village customers because they are increased from a larger base. Individual customers vary as the usage changes.
6. The general fund is paying some water and sewer costs. This report does not recommend that the water and sewer funds pick up some general fund costs that could be charged to them. These costs include such things as labor and materials on water and sewer projects done by general fund employees. But the board should be aware of the issue.

7. Spread Sheets. The spread sheets used for budget projections and rate calculations have been provided to the Mayor, Village Clerk and Public Works Director. With these sheets, one can study the effect of changes in expenditures or rate structure.

Appendix 1

Dansville Water and Sewer Fund Balances

	Water Fund Balances				
	2006-07	2007-08	2008-09	2009-10	2010-11
Beginning Balance	820,639	679,271	527,806	433,553	391,519
Revenue	1,019,938	979,943	955,568	964,343	932,292
Expense	1,161,306	1,131,408	1,049,821	1,006,377	1,083,706
Ending Balance	679,271	527,806	433,553	391,519	240,105

	Sewer Fund Balances				
	2006-07	2007-08	2008-09	2009-10	2010-11
Beginning Balance	(104,491)	(216,172)	(254,477)	(244,724)	(152,563)
Revenue	463,644	547,717	559,331	501,840	791,300
Expense	575,325	586,022	549,578	409,679	671,503
Ending Balance	(216,172)	(254,477)	(244,724)	(152,563)	(32,766)

Note: The \$791,300 of sewer revenue in 2010-11 included \$55,416 of unclassified revenue, which does not repeat. Likely from 2009-10

Appendix 2

Village of Dansville, Water Expense Budget and Projections

Assume 2% inc

Assume 15% benefits for 2 years, then 5%

Budget	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
Admin, Misc, Tax, Ins	51,931	45,555	41,465	44,140	48,364	49,331	50,318	51,324	52,351
Admin Salaries	97,685	36,982	38,092	39,229	13,340	13,607	13,879	14,157	14,440
Admin Equipment	5,100	3,000	3,000	3,000	2,000	2,040	2,081	2,122	2,165
Admin, Contractual	13,500	10,500	10,500	10,500	10,500	10,710	10,924	11,143	11,366
System Operator, Salaries	98,630	102,560	105,635	108,803	110,999	113,219	115,483	117,793	120,149
Source of Supply, Equip	-	-	-	-	-	-	-	-	-
Source of Supply, Contract	7,000	7,500	7,500	7,500	6,500	6,630	6,763	6,898	7,036
Purification, Equipment	18,000	-	-	-	-	-	-	-	-
Purification, Contractual	72,745	59,620	66,570	67,570	67,570	68,921	70,300	71,706	73,140
Trans and Dist, Salaries	94,416	98,171	96,652	99,533	99,200	101,184	103,208	105,272	107,377
Trans and Dist, Equipment	3,000	3,000	3,000	2,500	2,500	2,550	2,601	2,653	2,706
Trans and Dist, Contractual	38,900	38,900	38,900	38,705	37,400	38,148	38,911	39,689	40,483
Employee Benefits	165,947	125,963	86,231	103,524	135,674	156,025	179,429	188,400	197,820
Debt Service	569,584	533,479	558,805	564,271	525,399	584,715	557,741	567,129	566,586
Total	1,236,438	1,065,230	1,056,350	1,089,275	1,059,446	1,147,081	1,151,637	1,178,286	1,195,618
Cash Capital						120,000	115,000	95,000	80,000
Total with cash capital						1,267,081	1,266,637	1,273,286	1,275,618
Actual Expense	1,131,408	1,049,821	1,006,377	1,083,706					

Appendix 3

Typical Annual Water Bill Increases, 2012-13

Current Village, Residential		
90,000 gallons		
\$68.53	times 4 qtrs is	\$274.12
\$1.39	times 90[000] gal is	\$125.10
	Annual bill	\$399.22

70,000 gallons		
\$68.53	times 4 qtrs is	\$274.12
\$1.39	times 70[000] gal is	\$97.30
	Annual bill	\$371.42

55,000 gallons		
\$68.53	times 4 qtrs is	\$274.12
\$1.39	times 55[000] gal is	\$76.45
	Annual bill	\$350.57

40,000 gallons		
\$68.53	times 4 qtrs is	\$274.12
\$1.39	times 40[000] gal is	\$55.60
	Annual bill	\$329.72

Current Outside Village Residential		
90,000 gallons		
\$83.75	times 4 qtrs is	\$335.00
\$1.85	times 90[000] gal is	\$166.50
	Annual Bill	\$501.50

70,000 gallons		
\$83.75	times 4 qtrs is	\$335.00
\$1.85	times 70[000] gal is	\$129.50
	Annual bill	\$464.50

55,000 gallons		
\$83.75	times 4 qtrs is	\$335.00
\$1.85	times 55[000] gal is	\$101.75
	Annual bill	\$436.75

40000 gallons		
\$83.75	times 4 qtrs is	\$335.00
\$1.85	times 40[000] gal is	\$74.00
	Annual bill	\$409.00

Proposed 2012-13 Village, Residential		
90,000 gallons		
\$83.24	times 4 qtrs is	\$332.96
\$2.70	times 90[000] gal is	\$243.00
	Annual bill	\$575.96

70,000 gallons		
\$83.24	times 4 qtrs is	\$332.96
\$2.70	times 70[000] gal is	\$189.00
	Annual bill	\$521.96

55,000 gallons		
\$83.24	times 4 qtrs is	\$332.96
\$2.70	times 55[000] gal is	\$148.50
	Annual bill	\$481.46

40,000 gallons		
\$83.24	times 4 qtrs is	\$332.96
\$2.70	times 40[000] gal is	\$108.00
	Annual bill	\$440.96

Proposed 2012-13 Out Village Resident		
90,000 gallons		
\$98.46	times 4 qtrs is	\$393.84
\$3.05	times 90[000] gal is	\$274.50
	Annual Bill	\$668.34

70,000 gallons		
\$98.46	times 4 qtrs is	\$393.84
\$3.05	times 70[000] gal is	\$213.50
	Annual bill	\$607.34

55,000 gallons		
\$98.46	times 4 qtrs is	\$393.84
\$3.05	times 55[000] gal is	\$167.75
	Annual bill	\$561.59

40000 gallons		
\$98.46	times 4 qtrs is	\$393.84
\$3.05	times 40[000] gal is	\$122.00
	Annual bill	\$515.84

Appendix 4

Village of Dansville, Sewer Expense, Budget and Projections

up 2%
benefits, 15% for 2 years then 5%

	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
Expense, Budget										
Admin, Misc	9,300	6,300	4,300	4,300	15,093	15,565	15,876	16,194	16,518	16,848
Admin, Pers, Contr	13,149	13,000	-	-	-	13,340	13,607	13,879	14,157	14,440
Sewers, Equipment	1,000	-	8,250	-	-	5,000	5,100	5,202	5,306	5,412
Sewers, Contractual	8,250	8,250	-	9,000	9,000	9,000	9,180	9,364	9,551	9,742
WWTP Personal Serv	97,871	105,353	109,551	112,836	114,288	117,166	119,509	121,900	124,337	126,824
WWTP Equipment	5,000	4,000	-	-	-	-	4,000	4,080	4,162	4,245
WWTP Contractual*	238,648	228,300	233,967	282,750	283,856	283,856	319,533	325,924	332,442	339,091
Compost Savings**									(126,000)	(126,000)
Employee Benefits	41,165	40,707	46,474	36,756	38,025	48,387	55,645	63,992	67,191	68,535
Debt Service***	97,923	120,261	107,260	112,435	143,592	117,588	137,210	634,962	1,169,354	1,167,856
Total	512,306	526,171	509,802	558,077	603,854	609,902	679,660	1,195,495	1,617,018	1,626,993
Increase in operating expense during construction							35,000	35,000		
Cash Capital for Sewer repairs and I and I work							100,000	100,000	100,000	90,000
Total with cash capital							814,660	1,330,495	1,717,018	1,716,993
Accelerated BAN debt Service							215,000	-45000	-45,000	-45,000
Total with Accelerated BANdebt service [1998 Plant, 2006 Heating, 2004 equip]							1,029,660	1,285,495	1,672,018	1,671,993
Actual Expense	575,325	586,022	549,578	409,679	671,503					

*Note: Adds \$30,000 to budget to bring waste hauling to 166,000 from budget of 136,000

**Note: Assumes 166,000 hauling savings, but \$40,000 additional labor

***Note: Assumes 6% interest costs on new debt of \$15,000,000

Appendix 5

Typical Annual Sewer Bill Increases for 2012-13 and 2013-14

Inside Village

Current Village, Residential	Proposed for 2012-13 Village Resid	Proposed for 2013-14 Village Resid
90,000 gallons	90,000 gallons	90,000 gallons
\$55.65 times 4 qtrs is \$222.60	\$97.00 times 4 qtrs is \$388.00	\$135.00 times 4 qtrs is \$540.00
\$1.65 times 90[000] gal \$148.50	\$2.80 times 90[000] gal \$252.00	\$2.95 times 90[000] gal is \$265.50
Annual bill \$371.10	Annual bill \$640.00	Annual bill \$805.50
70,000 gallons	70,000 gallons	70,000 gallons
\$55.65 times 4 qtrs is \$222.60	\$97.00 times 4 qtrs is \$388.00	\$135.00 times 4 qtrs is \$540.00
\$1.65 times 70[000] gal \$115.50	\$2.80 times 70[000] gal \$196.00	\$2.95 times 70[000] gal is \$206.50
Annual bill \$338.10	Annual bill \$584.00	Annual bill \$746.50
55,000 gallons	55,000 gallons	55,000 gallons
\$55.65 times 4 qtrs is \$222.60	\$97.00 times 4 qtrs is \$388.00	\$135.00 times 4 qtrs is \$540.00
\$1.65 times 55[000] gal \$90.75	\$2.80 times 55[000] gal \$154.00	\$2.95 times 55[000] gal is \$162.25
Annual bill \$313.35	Annual bill \$542.00	Annual bill \$702.25
40,000 gallons	40,000 gallons	40,000 gallons
\$55.65 times 4 qtrs is \$222.60	\$97.00 times 4 qtrs is \$388.00	\$135.00 times 4 qtrs is \$540.00
\$1.65 times 40[000] gal \$66.00	\$2.80 times 40[000] gal \$112.00	\$2.95 times 40[000] gal is \$118.00
Annual bill \$288.60	Annuual Bill \$500.00	Annuual Bill \$658.00

Appendix 5 Continued

Typical Annual Sewer Bill Increases Outside the Village for 2012-13 and 2013-14, Feb 28

Outside Village

Current Outside Village, Residential

90,000 gallons		
\$68.97	times 4 qtrs is	\$275.88
\$2.18	times 90[000] gal	\$196.20
	Annual bill	\$472.08
70,000 gallons		
\$68.97	times 4 qtrs is	\$275.88
\$2.18	times 70[000] gal	\$152.60
	Annual bill	\$428.48
55,000 gallons		
\$68.97	times 4 qtrs is	\$275.88
\$2.18	times 55[000] gal	\$119.90
	Annual bill	\$395.78
40,000 gallons		
\$68.97	times 4 qtrs is	\$275.88
\$2.18	times 40[000] gal	\$87.20
	Annual bill	\$363.08

Proposed 2012-13 Outside Vill Resid

90,000 gallons		
\$112.50	times 4 qtrs is	\$450.00
\$3.20	times 90[000] gal	\$288.00
	Annual bill	\$738.00
70,000 gallons		
\$112.50	times 4 qtrs is	\$450.00
\$3.20	times 70[000] gal	\$224.00
	Annual bill	\$674.00
55,000 gallons		
\$112.50	times 4 qtrs is	\$450.00
\$3.20	times 55[000] gal	\$176.00
	Annual bill	\$626.00
40,000 gallons		
\$112.50	times 4 qtrs is	\$450.00
\$3.20	times 40[000] gal	\$128.00
	Annual bill	\$578.00

Proposed for 2013-14 Out ofVill Resid

90,000 gallons		
\$150.00	times 4 qtrs is	\$600.00
\$3.35	times 90[000] gal	\$301.50
	Annual bill	\$901.50
70,000 gallons		
\$150.00	times 4 qtrs is	\$600.00
\$3.35	times 70[000] gal	\$234.50
	Annual bill	\$834.50
55,000 gallons		
\$150.00	times 4 qtrs is	\$600.00
\$3.35	times 55[000] gal	\$184.25
	Annual bill	\$784.25
40,000 gallons		
\$150.00	times 4 qtrs is	\$600.00
\$3.35	times 40[000] gal	\$134.00
	Annual bill	\$734.00

Appendix 6

Typical Annual Water Bill Increases Alternative Rates, 2012-13

Current Village, Residential [68.53 base charge, \$1.39 usage]

90,000 gallons

\$68.53	times 4 qtrs is	\$274.12
\$1.39	times 90[000] gal is	\$125.10
	Annual bill	\$399.22

70,000 gallons

\$68.53	times 4 qtrs is	\$274.12
\$1.39	times 70[000] gal is	\$97.30
	Annual bill	\$371.42

55,000 gallons

\$68.53	times 4 qtrs is	\$274.12
\$1.39	times 55[000] gal is	\$76.45
	Annual bill	\$350.57

40,000 gallons

\$68.53	times 4 qtrs is	\$274.12
\$1.39	times 40[000] gal is	\$55.60
	Annual bill	\$329.72

Current Outside Village Residential [83.75 base charge, \$1.85 usage]

90,000 gallons

\$83.75	times 4 qtrs is	\$335.00
\$1.85	times 90[000] gal is	\$166.50
	Annual Bill	\$501.50

70,000 gallons

\$83.75	times 4 qtrs is	\$335.00
\$1.85	times 70[000] gal is	\$129.50
	Annual bill	\$464.50

55,000 gallons

\$83.75	times 4 qtrs is	\$335.00
\$1.85	times 55[000] gal is	\$101.75
	Annual bill	\$436.75

40000 gallons

\$83.75	times 4 qtrs is	\$335.00
\$1.85	times 40[000] gal is	\$74.00
	Annual bill	\$409.00

Alternate Proposed

2012-13 Village, Residential

[\$73 base per quarter, \$3.50 usage]

90,000 gallons

\$73.00	times 4 qtrs is	\$292.00
\$3.50	times 90[000] gal is	\$315.00
	Annual bill	\$607.00

70,000 gallons

\$73.00	times 4 qtrs is	\$292.00
\$3.50	times 70[000] gal is	\$245.00
	Annual bill	\$537.00

55,000 gallons

\$73.00	times 4 qtrs is	\$292.00
\$3.50	times 55[000] gal is	\$192.50
	Annual bill	\$484.50

40,000 gallons

\$73.00	times 4 qtrs is	\$292.00
\$3.50	times 40[000] gal is	\$140.00
	Annual bill	\$432.00

Alternate Proposed

2012-13 Out Village Resident

\$88.00 base charge, \$3.85 usage]

90,000 gallons

\$88.00	times 4 qtrs is	\$352.00
\$3.85	times 90[000] gal is	\$346.50
	Annual Bill	\$698.50

70,000 gallons

\$88.00	times 4 qtrs is	\$352.00
\$3.85	times 70[000] gal is	\$269.50
	Annual bill	\$621.50

55,000 gallons

\$88.00	times 4 qtrs is	\$352.00
\$3.85	times 55[000] gal is	\$211.75
	Annual bill	\$563.75

40000 gallons

\$88.00	times 4 qtrs is	\$352.00
\$3.85	times 40[000] gal is	\$154.00
	Annual bill	\$506.00

Appendix 7

Typical Annual Sewer Bill Increases for 2012-13 and 2013-14, Alternative Rates

Inside Village, Alternative

Current Village, Residential [\$55.65 base charge, \$1.65 usage]

90,000 gallons

\$55.65	times 4 qtrs is	\$222.60
\$1.65	times 90[000] gal	\$148.50
	Annual bill	\$371.10

70,000 gallons

\$55.65	times 4 qtrs is	\$222.60
\$1.65	times 70[000] gal	\$115.50
	Annual bill	\$338.10

55,000 gallons

\$55.65	times 4 qtrs is	\$222.60
\$1.65	times 55[000] gal	\$90.75
	Annual bill	\$313.35

40,000 gallons

\$55.65	times 4 qtrs is	\$222.60
\$1.65	times 40[000] gal	\$66.00
	Annual bill	\$288.60

Proposed for 2012-13 Village Resid [\$86.00 base charge, \$3.80 usage]

90,000 gallons

\$86.00	times 4 qtrs is	\$344.00
\$3.80	times 90[000] gal	\$342.00
	Annual bill	\$686.00

70,000 gallons

\$86.00	times 4 qtrs is	\$344.00
\$3.80	times 70[000] gal	\$266.00
	Annual bill	\$610.00

55,000 gallons

\$86.00	times 4 qtrs is	\$344.00
\$3.80	times 55[000] gal	\$209.00
	Annual bill	\$553.00

40,000 gallons

\$86.00	times 4 qtrs is	\$344.00
\$3.80	times 40[000] gal	\$152.00
	Annual Bill	\$496.00

Proposed for 2013-14 Village Resid [\$122.00 base charge, \$4.20 usage]

90,000 gallons

\$122.00	times 4 qtrs is	\$488.00
\$4.20	times 90[000] gal is	\$378.00
	Annual bill	\$866.00

70,000 gallons

\$122.00	times 4 qtrs is	\$488.00
\$4.20	times 70[000] gal is	\$294.00
	Annual bill	\$782.00

55,000 gallons

\$122.00	times 4 qtrs is	\$488.00
\$4.20	times 55[000] gal is	\$231.00
	Annual bill	\$719.00

40,000 gallons

\$122.00	times 4 qtrs is	\$488.00
\$4.20	times 40[000] gal is	\$168.00
	Annual Bill	\$656.00

Appendix 7 Continued

Typical Annual Sewer Bill Increases Outside the Village for 2012-13 and 2013-14, Alternative Rates

Outside Village, Alternative

Current Outside Village, Residential [\$69.86 base charge, \$2.18 usage]

90,000 gallons
 \$68.97 times 4 qtrs is \$275.88
 \$2.18 times 90[000] gal \$196.20
 Annual bill \$472.08

70,000 gallons
 \$68.97 times 4 qtrs is \$275.88
 \$2.18 times 70[000] gal \$152.60
 Annual bill \$428.48

55,000 gallons
 \$68.97 times 4 qtrs is \$275.88
 \$2.18 times 55[000] gal \$119.90
 Annual bill \$395.78

40,000 gallons
 \$68.97 times 4 qtrs is \$275.88
 \$2.18 times 40[000] gal \$87.20
 Annual bill \$363.08

Proposed 2012-13 Outside Vill Resid [\$101.00 base charge, \$4.40 usage]

90,000 gallons
 \$101.00 times 4 qtrs is \$404.00
 \$4.40 times 90[000] gal \$396.00
 Annual bill \$800.00

70,000 gallons
 \$101.00 times 4 qtrs is \$404.00
 \$4.40 times 70[000] gal \$308.00
 Annual bill \$712.00

55,000 gallons
 \$101.00 times 4 qtrs is \$404.00
 \$4.40 times 55[000] gal \$242.00
 Annual bill \$646.00

40,000 gallons
 \$101.00 times 4 qtrs is \$404.00
 \$4.40 times 40[000] gal \$176.00
 Annual bill \$580.00

Proposed for 2013-14 Out of Vill Resid [\$137.00 base charge, \$4.75 usage]

90,000 gallons
 \$137.00 times 4 qtrs is \$548.00
 \$4.75 times 90[000] gal \$427.50
 Annual bill \$975.50

70,000 gallons
 \$137.00 times 4 qtrs is \$548.00
 \$4.75 times 70[000] gal \$332.50
 Annual bill \$880.50

55,000 gallons
 \$137.00 times 4 qtrs is \$548.00
 \$4.75 times 55[000] gal \$261.25
 Annual bill \$809.25

40,000 gallons
 \$137.00 times 4 qtrs is \$548.00
 \$4.75 times 40[000] gal \$190.00
 Annual bill \$738.00

Appendix 8

Dansville Water Debt Projections

Existing Debt

Year	Water1	Water 2	Water 3	Water 4	Water 5	Water BAN	Tot Existing	Meters	Total Projected
2,013	94,540	19,520	20,970	358,623	17,862	8,200	519,715	65,000	584,715
2,014	94,695	20,160		361,681	17,705		494,241	63,500	557,741
2,015	95,738	19,755		364,127	17,509		497,129	70,000	567,129
2,016	95,668	20,350		365,806	17,262		499,086	67,500	566,586
2,017	95,508	19,900		366,976	16,984		499,368	65,000	564,368
2,018	94,281	20,450		367,564	16,669		498,964	62,500	561,464
2,019	93,008	19,955		367,623	16,325		496,911	60,000	556,911
2,020	92,668	19,460		367,172	15,951		495,251	57,500	552,751
2,021	92,238	19,965		366,264	20,553		499,020	55,000	554,020
2,022	94,650	19,425					114,075	52,500	166,575
2,023	91,950	19,885					111,835		111,835

Meters: assume \$500,000, 10 years equal principal at 3 % for 2 years as BANs and 5% after as bonds

	Prin	Int	Bal Remaining	Debt Service
2013	50,000	15000	500,000	65,000
2014	50,000	13500	450,000	63,500
2015	50,000	20000	400,000	70,000
2016	50,000	17500	350,000	67,500
2017	50,000	15000	300,000	65,000
2018	50,000	12500	250,000	62,500
2019	50,000	10000	200,000	60,000
2020	50,000	7500	150,000	57,500
2021	50,000	5000	100,000	55,000
2022	50,000	2500	50,000	52,500

Appendix 9

Dansville Sewer Debt Projections

Existing Debt

Year								Total	New Debt 2012 Plant Project	Total Debt
	1998 WWTP Renov	2000 WWTP Renov	2004 WWTP Equip	2006 WWTP Heating	2010 WWTP Study	2010 WWTP DEC Repairs	2011 WWTP Plant Design	Exist Debt		
2013	18,218	-	9,360	28,600	17,172	18,360	45,500	137,210	-	137,210
2014	17,898		9,180	28,080	16,854	18,020	44,930	134,962	500,000	634,962
2015	17,578		-	27,560	16,536	17,680		79,354	1,090,000	1,169,354
2016	17,258			27,040	16,218	17,340		77,856	1,090,000	1,167,856
2017	16,938			26,520	-	-		43,458	1,090,000	1,133,458
2018	16,618			-				16,618	1,090,000	1,106,618
2019	15,158							15,158	1,090,000	1,105,158
2020	-							-	1,090,000	1,090,000
2021									1,090,000	1,090,000
2022									1,090,000	1,090,000
2023									1,090,000	1,090,000

Notes:

BANs are continued at past rate of payment. Should accelerate 1998 and 2006 debt repayments. 1998 has 110,885 principal left
 2006 has \$130,000 left. This would reduce payments for 2014 to 2017 by about \$45,000. Might also pay (9,180 for 2004 equipment.
 2011 Plant Design debt is assumed to be rolled into new plant debt in 2015
 Plant debt is assumed at \$15 million at 6% for 30 years with equal payments. Half is borrowed in FY 2012-13 and the other half is borrowed in FY 2013-14, If borrowed at 5%, the payment would drop about 110,000 per year