

ASHLAND WASTEWATER DEPARTMENT
Ashland, Wisconsin

FORECASTED WASTEWATER RATE STUDY

Prepared as of
December 21, 2012

ASHLAND WASTEWATER DEPARTMENT

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ACCOUNTANTS' COMPILATION REPORT

Ashland Wastewater Department
Ashland, Wisconsin

We have compiled the accompanying forecasted schedules as identified in the table of contents of the Ashland Wastewater Department for the years ending December 31, 2012 and 2013, in accordance with applicable guidelines for a compilation of a financial forecast established by the American Institute of Certified Public Accountants attestation standards.

The accompanying schedules present, to the best of management's knowledge and belief, the results of wastewater operations of the Ashland Wastewater Department for the forecast period. This report was prepared to help Ashland establish wastewater rates and should not be used for any other purposes. It is not intended to be a forecast of financial position, changes in net assets, or cash flows in accordance with generally accepted accounting principles.

As disclosed in the Summary of Significant Accounting Policies, in some instances, these forecasted schedules include departures from generally accepted accounting principles. The effect of those departures has not been determined.

A compilation is limited to presenting, in the form of a forecast, information that is the representation of management and does not include evaluation of the support for the assumptions underlying the forecast. We have not examined the forecast and, accordingly, do not express an opinion or any other form of assurance on the accompanying statements or assumptions. Furthermore, there will usually be differences between the forecast and actual results since some assumptions inevitably will not materialize and unanticipated events and circumstances may occur, and the variations may be material. We have no responsibility to update this report for events and circumstances occurring after the date of this report.

We have also compiled the summarized historical financial information presented with the forecast for comparative purposes which was taken from the audited financial statements for the years ended December 31, 2009 through December 31, 2011, which we prepared.

Management is responsible for the preparation and fair presentation of the historical information and for designing, implementing, and maintaining internal control relevant to the preparation and fair presentation of the historical financial information.

Our responsibility is to conduct the compilation in accordance with Statements on Standards for Accounting and Review Services issued by the American Institute of Certified Public Accountants. The objective of a compilation is to assist management in presenting financial information in the form of historical information without undertaking to obtain or provide any assurance that there are no material modifications that should be made to the financial information.

This report is intended solely for the information and use of Ashland Wastewater Department management and is not intended to be, and should not be, used by anyone other than the specified parties.

Baker Tilly Virchow Krause LLP

Madison, Wisconsin
December 21, 2012

ASHLAND WASTEWATER DEPARTMENT

MANAGEMENT INFORMATION

WASTEWATER REVENUE REQUIREMENT

The proposed wastewater rates for the Ashland Wastewater Department (the utility) are designed to fund operations and maintenance, debt service, and required reserve contributions and to maintain a margin above debt coverage as required by bond covenants.

The revenue required from rates to meet these needs is summarized below.

	<u>2013</u>
Operation and Maintenance Expenses	\$ 1,253,860
Debt Service	267,121
Equipment Replacement Fund	103,805
Provision for Collection System Replacement	246,156
Other Revenues	<u>(149,215)</u>
Total Revenue Required	<u>\$ 1,721,726</u>

WASTEWATER COST OF SERVICE

The cost of service study apportions responsibility for the revenue requirement to the functions driving utility costs. These cost drivers are:

1. Volume
2. Strength
 - a. Biological oxygen demand (BOD)
 - b. Suspended solids (SS)
 - c. Phosphorous (Phos)
3. Customer Demand
4. Customer Fixed

Volume costs depend on the total volume of influent to the treatment plant. Operating costs for systems and facilities sized on the basis of total volume, such as mains and pumps, are in this category.

Strength costs depend on the total loading of pollutants in the influent to the treatment plant. Operating costs for systems and facilities required for the removal or reduction of BOD, SS, and Phos loads fall in this category. For example, the cost of treatment chemicals is a strength related cost.

Customer demand costs depend on the size of the customer but not the volume of wastewater. For instance, a larger customer needs a larger service lateral even if the customer produces no wastewater during a given month.

Customer fixed costs depend on the number of customers independent of the volume or strength of wastewater produced. The cost of billing and customer service are fixed customer costs because they are incurred equally for a large or small customer.

ASHLAND WASTEWATER DEPARTMENT

MANAGEMENT INFORMATION

WASTEWATER RATE DESIGN

Current wastewater rates consist of a domestic strength volume rate, a customer charge based on water meter size, and high strength charges. High strength charges apply to customers producing wastewater with BOD over 250 mg/L, SS over 250 mg/L, or Phos over 6 mg/L. Currently no customers exceed these thresholds.

Current wastewater rates treat residences as "benefitted users" and other customers as "non-benefitted users". The benefit refers to a grant received in 1999/2000 from the Farmers Home Administration and Rural Development for wastewater plant improvements. The Farmers Home Administration required that the benefit of the grant accrued only to residences, and Ashland implemented differential customer charges to reflect the benefit.

Although the current and proposed rates include a surcharge for excessive phosphorus, Ashland's sanitary sewer user ordinance, Ordinance 712, does not specifically mention phosphorus as an additional pollutant to which surcharges apply. Amending the ordinance to explicitly include phosphorus may improve clarity.

The table below summarizes the differences between existing and proposed rates. The cost of service suggests customer charges could decrease and volume charges increase. Baker Tilly recommends keeping customer charges at the current level for continuity with existing rates. Proposed suburban rates are 1.25 times proposed rates within the city of Ashland. The proposed volume charge is adjusted accordingly.

	Existing Rates	Proposed Rates
Domestic strength volume charge per 100 cubic feet	\$ 3.71	\$ 4.17
Customer charge per month		
<1 Inch Benefitted	13.52	13.52
1 Inch Benefitted	34.00	34.00
1.5 Inch Benefitted	68.00	68.00
2 Inch Benefitted	108.00	108.00
3 Inch Benefitted	203.00	203.00
4 Inch Benefitted	338.00	338.00
<1 Inch Non-Benefitted	13.52	13.52
1 Inch Non-Benefitted	66.00	66.00
1.5 Inch Non-Benefitted	132.00	132.00
2 Inch Non-Benefitted	211.00	211.00
3 Inch Non-Benefitted	396.00	396.00
4 Inch Non-Benefitted	661.00	661.00
High strength surcharges per pound		
Biological Oxygen Demand	0.35	0.46
Suspended Solids	0.32	0.42
Phosphorus	8.14	10.80

ASHLAND WASTEWATER DEPARTMENT

MANAGEMENT INFORMATION

FIVE YEAR FINANCIAL FORECAST

Schedule 2 shows the five year financial forecast prepared by Baker Tilly.

With the rate increase proposed, Ashland can maintain positive cash flow while borrowing \$780,000 for capital projects in 2013 and \$606,000 per year for ongoing capital projects in 2014 through 2017. After 2017, Ashland should reevaluate rates to maintain positive cash flow.

ASHLAND WASTEWATER DEPARTMENT

SUMMARY OF SIGNIFICANT ASSUMPTIONS

GENERAL DISCUSSION

NATURE OF FORECAST

This financial forecast presents, to the best of management's knowledge and belief, the utility's expected results of wastewater operations for the forecast period. Accordingly, the forecast reflects its judgment of the expected conditions and its expected course of action as of December 21, 2012, the date of this forecast. The assumptions disclosed herein are those that management believes are significant to the forecast. There will usually be differences between the forecasted and actual results. Events and circumstances frequently do not occur as expected, and those differences may be material.

REVENUES

Volume and number of customers for all classes are forecasted to continue at the same level as the most recent 12 months. A customer analysis and forecast are shown on Schedules 3 and 4.

Laboratory charges for landfill leachate are not included in the rate study. These costs should be charged directly to the relevant customers.

OPERATION AND MAINTENANCE EXPENSES

Forecasted 2013 expenses are based on discussions with utility management, the 2013 utility budget, and trends over 2009 through 2011.

Labor Expenses: Collection and treatment labor accounts are forecasted slightly lower in 2013 than in 2012. In 2013, it is expected that more labor expense will be allocated to the water utility, resulting in lower labor expenses for the wastewater utility.

Maintenance of Collection System Expense: Baker Tilly forecasted this account to increase from \$9,030 in 2012 to \$49,202 in 2013, representing an inflationary increase plus \$40,000 for televising of collection mains. The effect of main televising is also seen in the expense for 2011.

Maintenance of Lift Station Buildings and Grounds Expenses: Baker Tilly forecasted an increase in this account due to normalizations of a \$100,000 lift station rehabilitation project and a \$45,000 maintenance lift rehabilitation project over 10 years. Completion of both projects is expected in 2013.

Maintenance of Treatment Equipment Expense: Baker Tilly forecasts an increase in this expense because of pump rebuilds and parts and normalization of valve rebuild expenses.

Utility Locates Labor and Expense: Ashland budgets expenses in these accounts but records the expenses incurred in other accounts.

Administrative and General Labor: The expense incurred in 2010 was unusually low because Ashland did not have a utility superintendent at that time. Baker Tilly forecasted an inflationary increase over 2012 because Ashland is expected to fill the now recently vacant post of superintendent.

ASHLAND WASTEWATER DEPARTMENT

SUMMARY OF SIGNIFICANT ASSUMPTIONS

OPERATION AND MAINTENANCE EXPENSES (cont.)

Administrative and General Expense: Ashland budgeted 2012 and 2013 lower than 2009 through 2011. In 2009 through 2011 retirement payouts in the City Finance Department were allocated partly to the wastewater utility. Additional retirements are not expected in 2012 and 2013.

Outside Professional Services: Ashland is hiring a new city attorney after the retirement of the former city attorney. It expects to pay significantly more for the new attorney.

Employee Benefits: Baker Tilly forecasted an increase in 2012 and a decrease in 2013. The increase in 2012 reflects a non-recurring \$30,000 retirement payout. The decrease in 2013 reflects savings due to employee pension contributions.

FIVE YEAR FORECAST

Revenues are assumed to increase 1% per year due to customer growth.

Operations and maintenance expenses are assumed to grow at 2% per year due to inflation.

Capital additions for 2013 are those forecasted by utility management, except clarifier component replacements funded out of the Equipment Replacement Fund. Capital additions for 2014 through 2017 are calculated to be the maximum amount that will maintain positive cash flow through 2017. All capital additions are assumed to be funded by the issuance of 15 year revenue debt at 1.80% interest through the subsidized Clean Water Fund loan program.

FINANCING CAPITAL ADDITIONS

Ashland does not have sufficient cash reserves to fund the capital additions forecasted for 2013 without additional financing. The five year forecast on Schedule 2 includes the effect of borrowing \$780,000 over 15 years at 1.8% interest in 2013 to fund capital additions.

Provided that Ashland implements the proposed rate increase, Baker Tilly estimates that Ashland can maintain positive cash flow while borrowing \$606,000 per year from 2014 through 2017 without further rate increases.

ASHLAND WASTEWATER DEPARTMENT

SUMMARY OF SIGNIFICANT ASSUMPTIONS

EQUIPMENT REPLACEMENT FUND

Ashland's Equipment Replacement Fund is currently funded above the required level. Because Ashland will draw down the Equipment Replacement Fund to fund clarifier component replacement or rehabilitation in 2013, Baker Tilly recommends continuing contributions to maintain adequate funding.

The revenue requirement includes the equipment replacement fund contribution calculated for 2012 and 2013 by Ashland, which we determined is reasonable.

PROVISION FOR COLLECTION SYSTEM REPLACEMENT

To maintain Ashland's wastewater collection system, the revenue requirement includes \$246,156 as a provision for collection system replacement. The source of this value is the utility's calculation of depreciation on the collection system and collection system pumping installations.

ASHLAND WASTEWATER DEPARTMENT

SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

NATURE OF OPERATIONS

The utility provides wastewater service to customers within the City of Ashland, WI.

The utility is not regulated for wastewater service.

REVENUE RECOGNITION

Revenues are recorded for service rendered based on meter readings, with billings made to customers monthly.

EXPENSES

Historical operation and maintenance expenses are reported on the accrual basis. Forecasted expenses also generally are reported on the accrual basis with the exception of certain non-recurring major expenses which are normalized for rate-making purposes. Accounting for non-recurring expenses differs from generally accepted accounting principles.

TAXES

No property taxes or property tax equivalents are included in the wastewater revenue requirement.

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SCHEDULES

City of Ashland Wastewater Division
Wastewater Rate Study
Revenue Requirement Summary

Schedule 1

	<u>Forecasted 2012</u>	<u>Forecasted 2013</u>
Revenue		
Revenue from Rates	\$ 1,625,889	\$ 1,625,889
Other Revenue - Forfeited Discounts	20,034	20,034
Other Revenue - Unmetered Sales	60,000	60,000
Other Revenue - Interest Income	32,115	32,115
Other Revenue - Build America Bond Subsidy	2,192	2,067
Other Revenue - Miscellaneous Services	<u>35,000</u>	<u>35,000</u>
Total Revenue	1,775,230	1,775,105
Operations and Maintenance Expenses		
Collection System	156,579	198,434
Wastewater Treatment	550,462	533,300
Customer Accounts	121,779	123,605
Administrative & General	<u>415,843</u>	<u>398,521</u>
Total Operations and Maintenance Expenses	1,244,663	1,253,860
Debt Service		
General Obligation Debt Service	132,643	98,215
Revenue Debt Service	<u>168,957</u>	<u>168,906</u>
Total Debt Service	301,600	267,121
Capital Expenses		
Cash Funded Capital Additions	-	-
Provision for Collection System Replacement	246,156	246,156
Equipment Replacement Fund	<u>103,805</u>	<u>103,805</u>
Total Capital Additions	349,961	349,961
Net Income (Loss)	<u>(120,994)</u>	<u>(95,837)</u>
Required Revenue Increase		<u>\$ 95,837</u>
Required Revenue Increase Divided by Revenue from Rates		<u>5.9%</u>

City of Ashland Wastewater Division
Wastewater Rate Study
 Cash Flow Five Year Forecast

Schedule 2

	Forecasted 2013 at Current Rates	Forecasted 2013 with Increase	Forecasted 2014	Forecasted 2015	Forecasted 2016	Forecasted 2017
Cash from Operations						
Revenue	\$ 1,775,105	\$ 1,870,942	\$ 1,889,651	\$ 1,908,548	\$ 1,927,633	\$ 1,946,909
Operations and Maintenance	(1,253,860)	(1,253,860)	(1,278,937)	(1,304,516)	(1,330,606)	(1,357,218)
Total Cash from Operations	521,245	617,082	610,714	604,032	597,027	589,691
Cash from Capital Financing						
Debt Proceeds	780,000	780,000	606,000	606,000	606,000	606,000
Capital Additions	(780,000)	(780,000)	(606,000)	(606,000)	(606,000)	(606,000)
Equipment Replacement Fund Contribution	(103,805)	(103,805)	(115,505)	(124,595)	(133,685)	(142,775)
General Obligation Debt Service	(98,215)	(98,215)	(98,605)	(92,007)	(80,252)	(78,851)
Revenue Debt Service	(168,906)	(168,906)	(228,653)	(275,059)	(321,463)	(367,866)
Total Cash from Capital Financing	(370,927)	(370,927)	(442,763)	(491,661)	(535,400)	(589,492)
Forecasted Cash Flow	150,318	246,155	167,951	112,371	61,627	199
Less: Normalized Collection System Replacements	(246,156)	(246,156)	(246,156)	(246,156)	(246,156)	(246,156)
Forecasted Cash Flow Less Normalized Collection System Replacements	\$ (95,838)	\$ (1)	\$ (78,205)	\$ (133,785)	\$ (184,529)	\$ (245,957)
Cash from Operations Divided by Revenue Debt Service (Must be >1.10)	3.09	3.65	2.67	2.20	1.86	1.60
Cash From Operations Less General Obligation Debt Service Divided by Revenue Debt Service (Must be >1.00)	2.50	3.07	2.24	1.86	1.61	1.39

Please Refer to Summary of Significant Assumptions and Significant Accounting Policies.

Schedule 3

City of Ashland Wastewater Division

Wastewater Rate Study

Revenues at Current Rates for 12 Months Ending March 31, 2012

	Authorized Rates		Residential		Commercial		Industrial		Public Authority		Suburban		Fort James Leachate		City of Ashland Leachate		Total		
	Units	Revenue	Units	Revenue	Units	Revenue	Units	Revenue	Units	Revenue	Units	Revenue	Units	Revenue	Units	Revenue	Units	Revenue	
Residential																			
Volume		\$																	
<1 Inch Benefitted	3.71 per CCF	117,345	435,350														117,345	435,350	
1 Inch Benefitted	13.52 per bill	2,545	412,901														2,545	412,901	
1.5 Inch Benefitted	34.00 per bill	1	816														1	816	
2 Inch Benefitted	68.00 per bill	-	-														-	-	
3 Inch Benefitted	108.00 per bill	-	-														-	-	
4 Inch Benefitted	203.00 per bill	-	-														-	-	
	338.00 per bill	-	-														-	-	
Commercial																			
Volume	3.71 per CCF	101,055	374,914														101,055	374,914	
<1 Inch Non-Benefitted	13.52 per bill	325	52,728														325	52,728	
1 Inch Non-Benefitted	66.00 per bill	43	34,056														43	34,056	
1.5 Inch Non-Benefitted	132.00 per bill	22	34,848														22	34,848	
2 Inch Non-Benefitted	211.00 per bill	27	66,364														27	66,364	
3 Inch Non-Benefitted	396.00 per bill	9	42,768														9	42,768	
4 Inch Non-Benefitted	661.00 per bill	1	7,932														1	7,932	
1 Inch Benefitted	34.00 per bill	13	5,304														13	5,304	
1.5 Inch Benefitted	68.00 per bill	11	8,976														11	8,976	
2 Inch Benefitted	108.00 per bill	7	9,072														7	9,072	
3 Inch Benefitted	203.00 per bill	2	4,872														2	4,872	
4 Inch Benefitted	338.00 per bill	-	-														-	-	
Industrial																			
Volume	3.71 per CCF	3,183	11,809														3,183	11,809	
<1 Inch Non-Benefitted	13.52 per bill	6	973														6	973	
1 Inch Non-Benefitted	66.00 per bill	3	2,376														3	2,376	
1.5 Inch Non-Benefitted	132.00 per bill	-	-														-	-	
2 Inch Non-Benefitted	211.00 per bill	5	12,660														5	12,660	
3 Inch Non-Benefitted	396.00 per bill	1	4,752														1	4,752	
4 Inch Non-Benefitted	661.00 per bill	-	-														-	-	
Public Authority																			
Volume	3.71 per CCF	7,323	27,168														7,323	27,168	
<1 Inch Non-Benefitted	13.52 per bill	13	2,109														13	2,109	
1 Inch Non-Benefitted	66.00 per bill	7	5,544														7	5,544	
1.5 Inch Non-Benefitted	132.00 per bill	5	7,920														5	7,920	
2 Inch Non-Benefitted	211.00 per bill	4	10,128														4	10,128	
3 Inch Non-Benefitted	396.00 per bill	4	19,008														4	19,008	
4 Inch Non-Benefitted	661.00 per bill	-	-														-	-	
Suburban																			
Volume	4.64 per CCF	648	3,007														648	3,007	
1 Inch Non-Benefitted	82.50 per bill	2	1,980														2	1,980	
1.5 Inch Non-Benefitted	132.00 per bill	1	1,584														1	1,584	
Landfill Leachate																			
Fort James Volume	8.04 per CCF	1,860	14,954														1,860	14,954	
Fort James Fixed	13.00 per bill	1	156														1	156	
City of Ashland Volume	3.71 per CCF	1,860	14,954														1,860	14,954	
City of Ashland Fixed	13.00 per bill	1	156														1	156	
Volume Revenue																			
Customer Charge Revenue			435,350																
Recalculated Revenues			413,717																
			849,067																
Reported Revenues			853,691																
Variance			0.5%																
			-0.3%																
			-1.5%																
			-1.2%																
			-2.9%																
			0.0%																
			0.0%																
			0.1%																

Schedule 4

City of Ashland Wastewater Division
Wastewater Rate Study
Forecasted 2013 Revenues at Current Rates

Authorized Rates	Residential		Commercial		Industrial		Public Authority		Suburban		Fort James Leachate		City of Ashland Leachate		Total	
	Units	Revenue	Units	Revenue	Units	Revenue	Units	Revenue	Units	Revenue	Units	Revenue	Units	Revenue	Units	Revenue
Volume		435,350		374,914		11,809		27,168		648		14,954		6,704		873,906
<1 Inch Benefitted	117,345	435,350	101,055	52,728	3,183	973	7,323	2,109	648	3,007	1,980	1,860	1,807	6,704	1	156
1 Inch Benefitted	2,545	412,901	325	34,056	6	2,376	13	5,544	2	1,980	7	7,920	1	156	2	751,983
1.5 Inch Benefitted	-	-	43	34,848	3	-	7	7,920	1	1,584	5	10,128	4	6,704	1	6,704
2 Inch Benefitted	1	816	22	68,364	5	12,680	4	19,008	1	3,007	4	19,008	1	156	1	156
3 Inch Benefitted	-	-	9	42,768	1	-	-	-	-	-	-	-	-	-	-	-
4 Inch Benefitted	-	-	1	7,932	1	-	-	-	-	-	-	-	-	-	-	-
Commercial																
Volume				374,914		11,809		27,168		648		14,954		6,704		873,906
<1 Inch Non-Benefitted			101,055	52,728	3,183	973	7,323	2,109	648	3,007	1,980	1,860	1,807	6,704	1	156
1 Inch Non-Benefitted			325	34,056	6	2,376	13	5,544	2	1,980	7	7,920	1	156	2	751,983
1.5 Inch Non-Benefitted			43	34,848	3	-	7	7,920	1	1,584	5	10,128	4	6,704	1	6,704
2 Inch Non-Benefitted			22	68,364	5	12,680	4	19,008	1	3,007	4	19,008	1	156	1	156
3 Inch Non-Benefitted			9	42,768	1	-	-	-	-	-	-	-	-	-	-	-
4 Inch Non-Benefitted			1	7,932	1	-	-	-	-	-	-	-	-	-	-	-
Public Authority																
Volume						11,809		27,168		648		14,954		6,704		873,906
<1 Inch Non-Benefitted				52,728	3,183	973	7,323	2,109	648	3,007	1,980	1,860	1,807	6,704	1	156
1 Inch Non-Benefitted				34,056	6	2,376	13	5,544	2	1,980	7	7,920	1	156	2	751,983
1.5 Inch Non-Benefitted				34,848	3	-	7	7,920	1	1,584	5	10,128	4	6,704	1	6,704
2 Inch Non-Benefitted				68,364	5	12,680	4	19,008	1	3,007	4	19,008	1	156	1	156
3 Inch Non-Benefitted				42,768	1	-	-	-	-	-	-	-	-	-	-	-
4 Inch Non-Benefitted				7,932	1	-	-	-	-	-	-	-	-	-	-	-
Suburban																
Volume																
<1 Inch Non-Benefitted						11,809		27,168		648		14,954		6,704		873,906
1 Inch Non-Benefitted				52,728	3,183	973	7,323	2,109	648	3,007	1,980	1,860	1,807	6,704	1	156
1.5 Inch Non-Benefitted				34,056	6	2,376	13	5,544	2	1,980	7	7,920	1	156	2	751,983
2 Inch Non-Benefitted				34,848	3	-	7	7,920	1	1,584	5	10,128	4	6,704	1	6,704
3 Inch Non-Benefitted				68,364	5	12,680	4	19,008	1	3,007	4	19,008	1	156	1	156
4 Inch Non-Benefitted				42,768	1	-	-	-	-	-	-	-	-	-	-	-
Customer Charge Revenue																
Forecasted 2013 Revenues		435,350		374,914		11,809		27,168		648		14,954		6,704		873,906
		412,901		269,520		20,761		44,709		3,564		15,110		6,860		1,625,689
		816		643,834		32,570		71,877		6,571		15,110		6,860		1,625,689

City of Ashland Wastewater Division
Wastewater Rate Study
 Debt Repayment Schedules

Schedule 5

	WI Trust Fund General Obligation Debt		
	Principal	Interest	Total
2012	\$ 3,138	\$ 1,107	\$ 4,245
2013	3,306	939	4,245
2014	3,480	766	4,245
2015	3,662	583	4,245
2016	3,854	392	4,245
2017	3,588	188	3,777
2018	-	-	-
After 2018	-	-	-

	2009A Refunding General Obligation Debt		
	Principal	Interest	Total
	\$ 101,369	\$ 13,147	\$ 114,517
	64,667	10,657	75,324
	64,667	8,717	73,384
	59,423	6,707	66,130
	48,063	4,826	52,889
	48,937	3,006	51,943
	33,207	1,363	34,570

	2009B Build America General Obligation Debt		
	Principal	Interest	Total
	\$ 9,810	\$ 4,071	\$ 13,881
	14,808	3,838	18,647
	17,492	3,484	20,976
	18,603	3,029	21,631
	20,639	2,478	23,117
	21,287	1,845	23,131
	23,045	1,149	24,194

	1998/99 Clean Water Fund Revenue Debt		
	Principal	Interest	Total
2012	\$ 142,103	\$ 26,854	\$ 168,957
2013	145,893	23,013	168,906
2014	149,784	19,070	168,854
2015	153,779	15,022	168,801
2016	157,880	10,867	168,746
2017	162,090	6,600	168,690
2018	166,413	2,219	168,633
After 2018	-	-	-

	2013 Revenue Debt Issuance		
	Principal	Interest	Total
	\$ -	\$ -	\$ -
	-	-	-
	45,759	14,040	59,799
	46,583	13,216	59,799
	47,421	12,378	59,799
	48,275	11,524	59,799
	49,144	10,655	59,799
	542,815	55,175	597,990

	2014 Revenue Debt Issuance		
	Principal	Interest	Total
	\$ -	\$ -	\$ -
	-	-	-
	35,551	10,908	46,459
	36,191	10,268	46,459
	36,842	9,617	46,459
	37,506	8,953	46,459
	459,903	51,146	511,049

	2015 Revenue Debt Issuance		
	Principal	Interest	Total
2012	\$ -	\$ -	\$ -
2013	-	-	-
2014	-	-	-
2015	-	-	-
2016	35,551	10,908	46,459
2017	36,191	10,268	46,459
2018	36,842	9,617	46,459
After 2018	497,409	60,099	557,508

	2016 Revenue Debt Issuance		
	Principal	Interest	Total
	\$ -	\$ -	\$ -
	-	-	-
	-	-	-
	-	-	-
	35,551	10,908	46,459
	36,191	10,268	46,459
	534,251	69,716	603,967

	2017 Revenue Debt Issuance		
	Principal	Interest	Total
	\$ -	\$ -	\$ -
	-	-	-
	-	-	-
	-	-	-
	-	-	-
	35,551	10,908	46,459
	570,442	79,984	650,426

	Total General Obligation Debt Service		
	Principal	Interest	Total
2012	\$ 114,318	\$ 18,325	\$ 132,643
2013	82,781	15,435	98,215
2014	85,638	12,966	98,605
2015	81,688	10,318	92,007
2016	72,555	7,696	80,252
2017	73,812	5,039	78,851
2018	56,252	2,512	58,765
After 2018	-	-	-
Total	\$ 567,045	\$ 72,292	\$ 639,337

	Total Revenue Debt Service		
	Principal	Interest	Total
	\$ 142,103	\$ 26,854	\$ 168,957
	145,893	23,013	168,906
	195,543	33,110	228,653
	235,913	39,146	275,059
	277,043	44,421	321,463
	318,949	48,917	367,866
	361,647	52,620	414,268
	2,604,820	316,120	2,920,940
Total	\$ 4,281,911	\$ 584,201	\$ 4,866,112

	Total Revenue Debt Issuance		
	Principal	Interest	Total
	\$ -	\$ -	\$ -
	-	-	-
	-	-	-
	-	-	-
	-	-	-
	35,551	10,908	46,459
	570,442	79,984	650,426

City of Ashland Wastewater Division
Wastewater Rate Study
Operations and Maintenance Expenses

Schedule 6

	Actual 2009	Actual 2010	Actual 2011	Forecasted 2012	Forecasted 2013
Collection System					
Collection Operation Labor	\$ 25,467	\$ 23,971	\$ 30,058	\$ 21,870	\$ 21,157
Collection Operation Expense	4,009	2,359	4,045	2,000	3,043
Power & fuel for Lift Stations	42,861	47,037	46,971	46,800	49,489
Misc. Collection System Labor	-	-	328	-	-
Misc. Collection System Expense	9,058	4,787	5,555	6,120	6,236
Maint of Collection System Labor	19,362	19,990	16,927	24,450	23,652
Maint of Collection System Expense	11,070	1,550	97,641	9,030	49,202
Maint of Lift Station Buildings & Grounds Labor	3,046	429	1,467	3,185	3,095
Maint of Lift Station Buildings & Grounds Expense	948	717	522	729	15,225
Maint of Lift Station Equipment Labor	7,050	4,039	4,967	9,550	9,284
Maint of Lift Station Equipment Expense	7,374	4,491	3,633	30,000	15,250
Maint of Misc. Collection Equipment Labor	2,347	1,745	2,218	2,545	2,495
Maint of Misc. Collection Equipment Expense	234	369	7,665	300	306
Total Collection System Expense	132,826	111,483	221,996	156,579	198,434
Wastewater Treatment					
Treatment Operation Labor	37,116	28,715	35,726	48,055	46,480
Treatment Operation Expense	45,868	49,488	63,810	55,500	56,703
Power & Fuel for WWTP	\$155,246	151,117	121,867	140,750	140,795
Laboratory & Testing Labor	63,229	60,557	58,677	59,617	58,078
Laboratory & Testing Expense	24,269	26,675	22,503	20,900	21,117
Sludge Treatment/Disposal Labor	13,566	14,688	15,190	17,900	17,368
Sludge Treatment/Disposal Expense	8,801	15,494	11,515	8,330	12,710
Misc. Treatment Plant Labor	4,592	9,715	12,040	7,750	7,484
Misc. Treatment Plant Expense	7,409	5,292	13,147	11,615	11,836
Disinfection Labor	541	1,612	1,956	2,585	2,495
Disinfection Expense	50	4,795	12,607	5,150	12,796
Maint of Treatment Buildings & Grounds Labor	5,599	13,624	6,303	13,440	13,101
Maint of Treatment Buildings & Grounds Expense	19,975	26,230	23,031	21,050	13,438
Maint of Treatment Equipment Labor	31,130	38,016	32,657	42,445	28,344
Maint of Treatment Equipment Expense	31,833	13,311	10,167	55,480	56,312
Maint of Misc. Plant Equipment Labor	7,494	12,507	11,900	6,460	6,237
Maint of Misc. Plant Equipment Expense	1,894	3,870	1,944	5,500	933
Utility Locates Labor	8,350	-	-	26,135	25,246
Utility Locates Expense	1,137	-	-	1,800	1,827
Total Wastewater Treatment Expense	468,098	475,706	455,040	550,462	533,300
Customer Accounts					
Customer Billing & Accounting	99,100	89,876	101,911	93,678	95,083
Meter Reading Expenses	17,311	16,600	17,377	15,886	16,124
Joint Meter Expense	12,664	12,215	17,403	12,215	12,398
Total Customer Accounts Expense	129,075	118,690	136,692	121,779	123,605
Administrative & General					
Administrative & General Labor	51,437	43,744	62,223	62,735	63,996
Administrative & General Expenses	57,444	65,873	44,023	27,330	27,740
Office Supplies & Expense	1,171	1,098	1,079	2,700	3,248
Outside Professional Services	17,626	14,590	19,633	24,950	45,900
Property Insurance	8,736	9,073	10,744	9,875	9,875
Injuries & Damages	15,441	14,347	12,365	15,441	15,673
Employee Benefits	161,408	212,999	193,018	261,467	217,563
Regulatory Expense	6,114	4,756	6,135	6,500	9,598
Misc. General Expense	875	243	337	1,200	1,218
Maintenance of General Plant	2,653	2,571	2,771	2,510	2,510
Rents	1,128	1,134	1,175	1,135	1,200
Total Administrative & General Expense	324,033	370,428	353,504	415,843	398,521
Total Operations and Maintenance Expense	\$ 1,054,032	\$ 1,076,306	\$ 1,167,232	\$ 1,244,663	\$ 1,253,860

City of Ashland Wastewater Division
Wastewater Rate Study
 Cost Allocation

Schedule 7

	Forecasted Expense	Allocation Percentages					Allocated Costs						
		Customer		Volume	BOD	SS	Phos	Customer		Volume	BOD	SS	Phos
		Fixed	Demand					Fixed	Demand				
Operation and Maintenance													
Collection System													
Collection Operation Labor	\$ 21,157	-	0.25	0.75	-	-	-	\$ 5,289	\$ 15,868	\$ -	\$ -	\$ -	-
Collection Operation Expense	3,043	-	0.25	0.75	-	-	761	2,282	-	-	-	-	-
Power & fuel for Lift Stations	49,489	-	0.25	0.75	-	-	12,372	37,117	-	-	-	-	-
Misc. Collection System Labor	-	-	0.25	0.75	-	-	-	-	-	-	-	-	-
Misc. Collection System Expense	6,236	-	0.25	0.75	-	-	1,559	4,677	-	-	-	-	-
Maint of Collection System Labor	23,652	-	0.25	0.75	-	-	5,913	17,739	-	-	-	-	-
Maint of Collection System Expense	49,202	-	0.25	0.75	-	-	12,301	36,901	-	-	-	-	-
Maint of lift Station Buildings & Grounds Labor	3,095	-	0.25	0.75	-	-	774	2,321	-	-	-	-	-
Maint of lift Station Buildings & Grounds Expens	15,225	-	0.25	0.75	-	-	3,806	11,419	-	-	-	-	-
Maint of lift Station Equipment Labor	9,284	-	0.25	0.75	-	-	2,321	6,963	-	-	-	-	-
Maint of lift Station Equipment Expense	15,250	-	0.25	0.75	-	-	3,813	11,437	-	-	-	-	-
Maint of Misc. Collection Equipment Labor	2,495	-	0.25	0.75	-	-	624	1,871	-	-	-	-	-
Maint of Misc. Collection Equipment Expense	306	-	0.25	0.75	-	-	77	229	-	-	-	-	-
Total Collection System Expense	198,434						49,610	148,824					
Wastewater Treatment													
Treatment Operation Labor	46,480	-	0.10	0.41	0.20	0.18	4,648	19,057	9,296	8,366	5,113	-	
Treatment Operation Expense	56,703	-	0.10	0.41	0.20	0.18	5,670	23,248	11,341	10,207	6,237	-	
Power & Fuel for WWTP	140,795	-	0.10	0.41	0.20	0.18	14,080	57,726	28,159	25,343	15,487	-	
Laboratory & Testing Labor	58,078	-	0.10	0.41	0.20	0.18	5,808	23,811	11,616	10,454	6,389	-	
Laboratory & Testing Expense	21,117	-	0.10	0.41	0.20	0.18	2,112	8,658	4,223	3,801	2,323	-	
Sludge Treatment/Disposal Labor	17,368	-	0.10	0.41	0.20	0.18	1,737	7,121	3,474	3,126	1,910	-	
Sludge Treatment/Disposal Expense	12,710	-	0.10	0.41	0.20	0.18	1,271	5,211	2,542	2,288	1,398	-	
Misc. Treatment Plant Labor	7,484	-	0.10	0.41	0.20	0.18	748	3,069	1,497	1,347	823	-	
Misc. Treatment Plant Expense	11,836	-	0.10	0.41	0.20	0.18	1,184	4,853	2,367	2,130	1,302	-	
Disinfection Labor	2,495	-	0.10	0.41	0.20	0.18	250	1,023	499	449	274	-	
Disinfection Expense	12,796	-	0.10	0.41	0.20	0.18	1,280	5,246	2,559	2,303	1,408	-	
Maint of Treatment Buildings & Grounds Labor	13,101	-	0.10	0.41	0.20	0.18	1,310	5,372	2,620	2,358	1,441	-	
Maint of Treatment Buildings & Grounds Expens	13,438	-	0.10	0.41	0.20	0.18	1,344	5,509	2,688	2,419	1,478	-	
Maint of Treatment Equipment Labor	28,344	-	0.10	0.41	0.20	0.18	2,834	11,621	5,669	5,102	3,118	-	
Maint of Treatment Equipment Expense	56,312	-	0.10	0.41	0.20	0.18	5,631	23,089	11,262	10,136	6,194	-	
Maint of Misc. Plant Equipment Labor	6,237	-	0.10	0.41	0.20	0.18	624	2,557	1,247	1,123	686	-	
Maint of Misc. Plant Equipment Expense	933	-	0.10	0.41	0.20	0.18	93	382	187	168	103	-	
Utility Locates Labor	25,246	-	0.10	0.41	0.20	0.18	2,525	10,351	5,049	4,544	2,777	-	
Utility Locates Expense	1,827	-	0.10	0.41	0.20	0.18	183	749	365	329	201	-	
Total Wastewater Treatment Expense	533,300						53,332	218,653	106,660	95,993	58,662		
Customer Accounts													
Customer Billing & Accounting	95,083	1.00	-	-	-	-	-	-	-	-	-	-	-
Meter Reading Expenses	16,124	1.00	-	-	-	-	-	-	-	-	-	-	-
Joint Meter Expense	12,398	1.00	-	-	-	-	-	-	-	-	-	-	-
Total Customer Accounts Expense	123,605						123,605						

Please Refer to Summary of Significant Assumptions and Significant Accounting Policies.

City of Ashland Wastewater Division
Wastewater Rate Study
Cost Allocation

Schedule 7
 (cont.)

	Forecasted Expense	Allocation Percentages						Allocated Costs												
		Customer		Customer		Phos		Customer		Customer		Phos								
		Fixed	Demand	Volume	BOD	SS	Phos	Fixed	Demand	Volume	BOD	SS	Phos							
Administrative & General																				
Administrative & General Labor	\$ 63,996	0.14	0.12	0.44	0.12	0.11	0.07	\$ 8,959	\$ 7,680	\$ 28,157	\$ 7,680	\$ 7,040	\$ 4,480							
Administrative & General Expenses	27,740	0.14	0.12	0.44	0.12	0.11	0.07	3,884	3,329	12,205	3,329	3,051	1,942							
Office Supplies & Expense	3,248	0.14	0.12	0.44	0.12	0.11	0.07	455	390	1,429	390	357	227							
Outside Professional Services	45,900	0.14	0.12	0.44	0.12	0.11	0.07	6,426	5,508	20,196	5,508	5,049	3,213							
Property Insurance	9,875	0.14	0.12	0.44	0.12	0.11	0.07	1,383	1,185	4,345	1,185	1,086	691							
Injuries & Damages	15,673	0.14	0.12	0.44	0.12	0.11	0.07	2,194	1,881	6,996	1,881	1,724	1,097							
Employee Benefits	217,563	0.14	0.12	0.44	0.12	0.11	0.07	30,459	26,108	95,727	26,108	23,932	15,229							
Regulatory Expense	9,598	0.14	0.12	0.44	0.12	0.11	0.07	1,344	1,152	4,222	1,152	1,056	672							
Misc. General Expense	1,218	0.14	0.12	0.44	0.12	0.11	0.07	171	146	536	146	134	85							
Maintenance of General Plant	2,510	0.14	0.12	0.44	0.12	0.11	0.07	351	301	1,105	301	276	176							
Rents	1,200	0.14	0.12	0.44	0.12	0.11	0.07	168	144	528	144	132	84							
Total Administrative & General Expense	398,521							55,794	47,824	175,346	47,824	43,837	27,896							
Total Operations and Maintenance Expense	1,253,860							179,399	150,766	542,823	154,484	139,830	86,558							
Debt Service																				
WI Trust Fund General Obligation Debt	4,245	0.14	0.12	0.44	0.12	0.11	0.07	594	509	1,869	509	467	297							
2009A Refunding General Obligation Debt	75,324	0.14	0.12	0.44	0.12	0.11	0.07	10,545	9,039	33,142	9,039	8,286	5,273							
2009B Build America General Obligation Debt	18,647	0.14	0.12	0.44	0.12	0.11	0.07	2,611	2,237	8,205	2,238	2,051	1,305							
1998/99 Clean Water Fund Revenue Debt	168,906	-	0.25	0.75	-	-	-	-	42,227	126,679	-	-	-							
Total Debt Service	267,122							13,750	54,012	169,895	11,786	10,804	6,875							
Other Capital Costs																				
Provision for Collection System Replacement	246,156	-	0.25	0.75	-	-	-	-	61,539	184,617	-	-	-							
Equipment Replacement Fund	103,805	-	0.10	0.41	0.20	0.18	0.11	-	10,381	42,560	20,761	18,685	11,419							
Total Other Capital Costs	349,961							-	71,920	227,177	20,761	18,685	11,419							
Other Revenues																				
Other Revenue - Forfeited Discounts	(20,034)	0.14	0.12	0.44	0.12	0.11	0.07	(2,805)	(2,404)	(8,815)	(2,404)	(2,204)	(1,402)							
Other Revenue - Unmetered Sales	(60,000)	0.14	0.12	0.44	0.12	0.11	0.07	(8,400)	(7,200)	(26,400)	(7,200)	(6,600)	(4,200)							
Other Revenue - Interest Income	(32,115)	0.14	0.12	0.44	0.12	0.11	0.07	(4,496)	(3,854)	(14,130)	(3,854)	(3,533)	(2,248)							
Other Revenue - Build America Bond Subsidy	(2,067)	0.14	0.12	0.44	0.12	0.11	0.07	(289)	(248)	(910)	(248)	(227)	(145)							
Other Revenue - Miscellaneous Services	(35,000)	0.14	0.12	0.44	0.12	0.11	0.07	(4,900)	(4,200)	(15,400)	(4,200)	(3,850)	(2,450)							
Total Other Revenues	(149,216)							(20,890)	(17,906)	(65,655)	(17,906)	(16,414)	(10,445)							
Total Allocated Costs	\$ 1,721,727							\$ 172,259	\$ 258,792	\$ 874,240	\$ 169,125	\$ 152,905	\$ 94,407							

Please Refer to Summary of Significant Assumptions and Significant Accounting Policies.

City of Ashland Wastewater Division
Wastewater Rate Study
Cost Allocation Summary

Schedule 8

	Forecasted Expense	Allocated Costs					Phos
		Customer Fixed	Customer Demand	Volume	BOD	SS	
Operation and Maintenance	\$ 1,253,860	\$ 179,399	\$ 150,766	\$ 542,823	\$ 154,484	\$ 139,830	\$ 86,558
Debt Service	267,122	13,750	54,012	169,895	11,786	10,804	6,875
Other Capital Costs	349,961	-	71,920	227,177	20,761	18,685	11,419
Less: other revenues	<u>(149,216)</u>	<u>(20,890)</u>	<u>(17,906)</u>	<u>(65,655)</u>	<u>(17,906)</u>	<u>(16,414)</u>	<u>(10,445)</u>
Allocated Costs	<u>\$ 1,721,727</u>	<u>\$ 172,259</u>	<u>\$ 258,792</u>	<u>\$ 874,240</u>	<u>\$ 169,125</u>	<u>\$ 152,905</u>	<u>\$ 94,407</u>

City of Ashland Wastewater Division
Wastewater Rate Study
Volume and Strength Rate Calculation

Schedule 9

<u>Component</u>	<u>Allocated Cost</u>
Volume	\$ 874,240
BOD	\$ 169,125
SS	\$ 152,905
Phos	\$ 94,407

<u>Component</u>	<u>Volume (1,000 Gallons)</u>	<u>Conversion Factor (lb*L)/(gal*mg)</u>	<u>Assumed Strength</u>	<u>Billed Units</u>
Volume	Domestic Strength Leachate			
	171,840 2,743			= 174,583 ,000 gal
BOD	174,583	x 0.00834538	x 250 mg/L	= 364,240 pounds
SS	174,583	x 0.00834538	x 250 mg/L	= 364,240 pounds
Phos	174,583	x 0.00834538	x 6 mg/L	= 8,742 pounds

<u>Cost per Unit:</u>	<u>Allocated Cost</u>	<u>Billed Units</u>	<u>Rate per Unit</u>
Volume cost per 1,000 gallons	\$ 874,240 /	174,583	= 5.01 /1,000 gal
BOD cost per pound BOD	169,125 /	364,240	= 0.46 /lb
SS cost per pound SS	152,905 /	364,240	= 0.42 /lb
Phos cost per pound Phos	94,407 /	8,742	= 10.80 /lb

Calculated Domestic Strength Rates:

<u>Component</u>	<u>Assumed Strength</u>	<u>Conversion Factor (lb*L)/(gal*mg)</u>	<u>Rate per Pound</u>	<u>Rate per 1,000 Gallons</u>
Volume				= 5.01 /1,000 gal
BOD	250 mg/L	x 0.00834538	x \$ 0.460	= 0.96 /1,000 gal
SS	250 mg/L	x 0.00834538	x 0.420	= 0.88 /1,000 gal
Phos	6 mg/L	x 0.00834538	x 10.800	= 0.54 /1,000 gal
Total Calculated Domestic Rate				7.39 /1,000 gal
Total Calculated Domestic Rate				5.53 / CCF
Proposed Domestic Rate				4.17 / CCF

City of Ashland Wastewater Division
Wastewater Rate Study
Customer Charge Calculation

Schedule 10

	<u>Customer Fixed</u>	<u>Customer Demand</u>
Customer Related Costs	\$ 172,259	\$ 258,792

	<u>Meters</u>	<u>Equivalent Ratio</u>	<u>Meter Equivalents</u>
<1 Inch Meter	2,891	1.0	2,891
1 Inch Meter	53	2.5	133
1.5 Inch Meter	29	5.0	145
2 Inch Meter	36	8.0	288
3 Inch Meter	14	15.0	210
4 Inch Meter	1	25.0	25
	<u>3,024</u>		<u>3,692</u>

Customer Fixed Monthly Rate per Meter	\$ 4.75
Customer Demand Monthly Rate per Meter Equivalent	\$ 5.84

<u>Meter Size</u>	<u>Customer Fixed</u>	<u>Customer Demand</u>	<u>Calculated Monthly Customer Charge</u>
<1 Inch Meter	\$ 5.84	\$ 4.75	\$ 10.59
1 Inch Meter	5.84	11.88	17.72
1.5 Inch Meter	5.84	23.75	29.59
2 Inch Meter	5.84	38.00	43.84
3 Inch Meter	5.84	71.25	77.09
4 Inch Meter	5.84	118.75	124.59

<u>Meter Size</u>	<u>Calculated Monthly Customer Charge</u>	<u>Proposed Benefitted Charges</u>	<u>Proposed Non-Benefitted Charges</u>
<1 Inch Meter	\$ 10.59	\$ 13.52	\$ 13.52
1 Inch Meter	17.72	34.00	66.00
1.5 Inch Meter	29.59	68.00	132.00
2 Inch Meter	43.84	108.00	211.00
3 Inch Meter	77.09	203.00	396.00
4 Inch Meter	124.59	338.00	661.00

Schedule 12

City of Ashland Wastewater Division
Wastewater Rate Study
Forecasted 2013 Revenues at Proposed Rates

	Proposed Rates	Residential		Commercial		Industrial		Public Authority		Suburban		Fort James Leachate		City of Ashland Leachate		Total	
		Units	Revenue	Units	Revenue	Units	Revenue	Units	Revenue	Units	Revenue	Units	Revenue	Units	Revenue	Units	Revenue
Residential																	
Volume	\$ 4.17 per CCF	117,345	489,329														
<1 Inch Benefitted	13.52 per bill	2,545	412,901														
1 Inch Benefitted	34.00 per bill	-	-														
1.5 Inch Benefitted	68.00 per bill	1	816														
2 Inch Benefitted	108.00 per bill	-	-														
3 Inch Benefitted	203.00 per bill	-	-														
4 Inch Benefitted	338.00 per bill	-	-														
Commercial																	
Volume	4.17 per CCF			101,055	421,399												
<1 Inch Non-Benefitted	13.52 per bill			325	52,728												
1 Inch Non-Benefitted	66.00 per bill			43	34,056												
1.5 Inch Non-Benefitted	132.00 per bill			22	34,848												
2 Inch Non-Benefitted	211.00 per bill			27	68,364												
3 Inch Non-Benefitted	396.00 per bill			9	42,768												
4 Inch Non-Benefitted	661.00 per bill			1	7,932												
1 Inch Benefitted	34.00 per bill			13	5,304												
1.5 Inch Benefitted	68.00 per bill			11	8,976												
2 Inch Benefitted	108.00 per bill			7	9,072												
3 Inch Benefitted	203.00 per bill			2	4,872												
4 Inch Benefitted	338.00 per bill			-	-												
Industrial																	
Volume	4.17 per CCF			3,183	13,273												
<1 Inch Non-Benefitted	13.52 per bill			6	973												
1 Inch Non-Benefitted	66.00 per bill			3	2,376												
1.5 Inch Non-Benefitted	132.00 per bill			-	-												
2 Inch Non-Benefitted	211.00 per bill			5	12,660												
3 Inch Non-Benefitted	396.00 per bill			1	4,752												
4 Inch Non-Benefitted	661.00 per bill			-	-												
Public Authority																	
Volume	4.17 per CCF			7,323	30,537												
<1 Inch Non-Benefitted	13.52 per bill			13	2,109												
1 Inch Non-Benefitted	66.00 per bill			7	5,544												
1.5 Inch Non-Benefitted	132.00 per bill			5	7,920												
2 Inch Non-Benefitted	211.00 per bill			4	10,128												
3 Inch Non-Benefitted	396.00 per bill			4	19,008												
4 Inch Non-Benefitted	661.00 per bill			-	-												
Suburban																	
Volume	5.21 per CCF			648	3,376												
<1 Inch Non-Benefitted	16.90 per bill			2	34												
1 Inch Non-Benefitted	82.50 per bill			1	990												
Landfill Leachate																	
Fort James Volume	4.17 per CCF																
Fort James Fixed	13.00 per bill																
City of Ashland Volume	4.17 per CCF																
City of Ashland Fixed	13.00 per bill																
Summary																	
Volume Revenue		489,329	421,399	13,273	30,537	7,756	7,756	7,535	7,535	3,376	3,376	7,535	7,535	973,205			
Customer Charge Revenue		413,717	268,920	20,761	44,709	1,024	156	156	156	1,024	1,024	156	156	749,443			
Forecasted 2013 Revenues at Proposed Rates		903,046	690,319	34,034	75,246	4,400	7,912	7,691	7,691	4,400	4,400	7,691	7,691	1,722,648			
Forecasted 2013 Revenues at Present Rates		849,067	643,834	32,570	71,877	6,571	15,110	6,860	6,860	6,571	6,571	6,860	6,860	1,625,889			
Change		53,979	46,485	1,464	3,369	(2,171)	(7,199)	831	831	(2,171)	(2,171)	831	831	96,759			
Percent Change		6.4%	7.2%	4.5%	4.7%	-33.0%	-47.6%	12.1%	12.1%	-33.0%	-33.0%	12.1%	12.1%	6.0%			

Please Refer to Summary of Significant Assumptions and Significant Accounting Policies.

City of Ashland Wastewater Division
Wastewater Rate Study
Representative Bill Impacts

Schedule 13

Customer	Meter Size	Volume (CCF)	Monthly Bill at Current Rates	Monthly Bill at Proposed Rates	Change	Percent Change
Small residential	5/8	2	\$ 20.94	\$ 21.86	\$ 0.92	4%
Small residential	5/8	3	24.65	26.03	1.38	6%
Average residential	5/8	4	28.36	30.20	1.84	6%
Large residential	5/8	12	58.04	63.56	5.52	10%
Commercial	1	25	158.75	170.25	11.50	7%
Industrial	2	30	322.30	336.10	13.80	4%
Commercial	3	40	544.40	562.80	18.40	3%
Commercial	2	50	396.50	419.50	23.00	6%
Industrial	3/4	60	236.12	263.72	27.60	12%
Commercial	3	75	674.25	708.75	34.50	5%
Public Authority	3	90	729.90	771.30	41.40	6%

City of Ashland Wastewater Division
Wastewater Rate Study
Residential Rate Comparison

Schedule 14

Community	Volume Rate (\$ / 100		
	Fixed Monthly Charge	cubic feet)	Bill for 400 Cubic Feet
Washburn	\$ 22.83	\$ 5.08	\$ 43.15
Hurley	15.75	6.73	42.67
DeForest	25.45	1.88	32.97
Elkhorn	17.50	3.70	32.30
Ashland (proposed)	13.52	4.17	30.20
Iron River	6.00	5.61	28.44
Ashland (current)	13.52	3.71	28.36
McFarland	20.57	1.72	27.45
Waupaca	20.17	1.72	27.05
Shawano	8.75	4.32	26.03
Delavan	8.50	4.27	25.58
Kimberly	0.50	5.98	24.42
Jefferson	13.50	2.40	23.10
Tomah	4.00	4.75	23.00
Hayward	6.25	3.96	22.09
Prairie du Chien	11.50	2.58	21.82
Superior	2.00	4.70	20.80
Mellen	14.17	1.12	18.65
Pewaukee	-	4.52	18.08
Plymouth	6.25	2.58	16.57
Park Falls	1.58	3.58	15.90
Rice Lake	4.42	2.30	13.62

City of Ashland Wastewater Division
Wastewater Rate Study
Septic and Holding Tank Rate Calculation

Schedule 11

Assumed holding tank strength is 550 mg/L of BOD, 550 mg/L of SS, and 6 mg/L of Phos.

Component	Concentration (mg/L)	Concentration in Domestic Rate (mg/L)	Conversion Factor (lb*L)/(gal*mg)	Pounds per 1,000 Gallons	Rate per Pound	Rate per 1,000 Gallons
Volume						\$ 7.39
BOD	550	(250)	0.00834538	2.504	\$ 0.460 =	1.15
SS	550	(250)	0.00834538	2.504	0.420 =	1.05
Phos	6	(6)	0.00834538	-	10.800 =	-
Total Rate per 1,000 Gallons						\$ 9.59

Assumed septic strength is 4,500 mg/L of BOD, 12,000 mg/L of SS, and 71 mg/L of Phos.

Component	Concentration (mg/L)	Concentration in Domestic Rate (mg/L)	Conversion Factor (lb*L)/(gal*mg)	Pounds per 1,000 Gallons	Rate per Pound	Rate per 1,000 Gallons
Volume						\$ 7.39
BOD	4,500	(250)	0.00835	35.468	\$ 0.460 =	16.32
SS	12,000	(250)	0.00835	98.058	0.420 =	41.18
Phos	71	(6)	0.00835	0.542	10.800 =	5.86
Total Rate per 1,000 Gallons						\$ 70.75

Administrative Charge per Load

Loaded Labor Rates			
Office Billing and Collection	WWTP Dumping Supervision	Hours	Administrative Charge
\$ 29.13	\$ 32.09	0.25	\$ 15.31