

Town of Superior



Wastewater Rate Analysis 2016

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SECTION I: STUDY PURPOSE

Arizona Revised Statutes § 9-240(B)(5) and (6) authorizes the Town Council, of the Town of Superior, to construct and maintain sewer facilities within the Town's corporate limits.

The purpose of this report is to summarize the findings and recommendations related to the analysis for updating the Town of Superior's sewer rates.

The management and administration of a wastewater utility as an enterprise fund, requires a financial structure of which user fees, rates and charges are assessed to offset operational, capital and debt service expenses. To adequately manage sewer enterprises, the wastewater user fees, rates, and charges must be sufficient to develop revenues which exceed annual operational, capital and debt service expenses by, at least, twenty percent (20%). Revenues exceeding annual operational, capital and debt service expenses are retained by the enterprise fund for the development and maintenance of a capital reserve fund, which provides contingency funding for system improvements, emergency needs, and rate stabilization; and a debt service reserve fund, which should, at minimum, provide contingency payment for one year's worth of debt service. This is a standard condition required by most lenders or financing organizations.

The Town's wastewater facilities require significant, and long delayed maintenance and capital improvements. The Town's wastewater facilities are permitted by the Arizona Department of Environmental Quality to treat wastewater flows up to 140,000 gallons per day. Current usage is significantly below that average daily wastewater flows. However, based upon the long delayed system improvements, and nonexistent capital reserve fund, the Town is in jeopardy of catastrophic failure unless immediate action is taken to establish a user fee, rate and charges structure which will meet the requirements described previously. Town administration reports the need for one million, two hundred thousand dollars (\$1.2M) in immediate improvements. Since there is no reserve funding, a review of the current financial structure is required. Based upon that review, adjustments will be required to avoid catastrophic system failure.

Currently, the Town's wastewater user's rates, fees and charges fail to generate sufficient revenue to offset current operational, capital, and debt service expenses. Therefore, the Town proposes to increase wastewater user fees, rates, and charges, as more fully described in this report, to support the wastewater operational, capital and debt service expenses.

SECTION II: FINANCIAL STATUS

For extended years, the Town has failed to complete annual financial audits and have failed to establish a uniform mechanism for development of user fees, capital funds, and debt service funds. As such, this report is focused on the preceding three (3) fiscal years - 2014-2016. The 2014-2016 financial recordings reflect the most current and verifiable revenue and expense fund totals. The following charts demonstrate the financial reports for FY2014-2016:

Fiscal Year 2014	\$
Total all Town Revenues	5,728,241.00
Total Enterprise Fund Revenues	2,026,450.00
Total Sewer Actual Revenue	312,000.00
Includes Interfund Transfer (#\$34K), Dumping Fees (\$ 0), Company Payments (\$80,986)	
Actual Sewer Expenses	(370,607.00)
Bad Debt	(214,560.00)
Total Fund actual	(273,167.00)

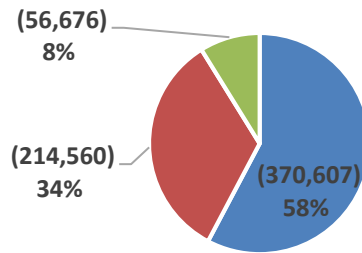
Fiscal Year 2015	
Total all Town Revenues	7,096,711.00
Total Enterprise Fund Revenues	1,505,000.00
Total Sewer Actual Revenue	573,624.00
Includes Interfund Transfer (\$300K grant), Dumping Fees (\$65,555), Company Payments (\$117,943)	
Actual Sewer Expenses	(209,603.00)
Bad Debt	(209,479.00)
Total Fund actual	154,542.00

Fiscal Year 2016	
Total all Town Revenues	7,353,003.00
Total Enterprise Fund Revenues	1,405,900.00
Total Sewer Actual Revenue	264,003.00
Includes Interfund Transfer (\$34K), Dumping Fees (\$86,693), Company Payments (\$76,963)	
Actual Sewer Expenses	(232,021.00)
Bad Debt	(223,462.00)
Total Fund actual	(191,480.00)

Wastewater Fund Balances / Last three (3) years:

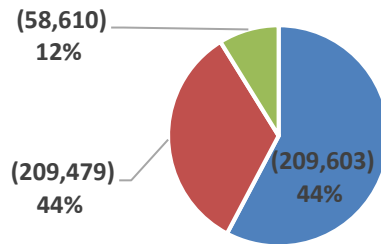
2014 ending	(273,167)
2015 ending	\$154,542
<u>2016 ending</u>	<u>(191,480)</u>
Balance	(310,105)

Superior Wastewater Funds
2014
Actual Expenses



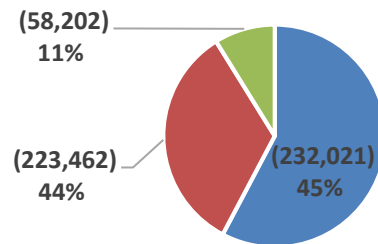
■ Actual Sewer Expenses ■ Bad Debt ■ Annual Utility Costs

Superior Wastewater Funds
2015
Actual Expenses



■ Actual Sewer Expenses ■ Bad Debt ■ Annual Utility Costs

Superior Wastewater Funds
2016
Actual Expenses



■ Actual Sewer Expenses ■ Bad Debt ■ Annual Utility Costs

As is evident, tolerance of bad debt is financially hazardous and is extreme. In most cases, tolerable bad debt loss is no more than 6% of the annual losses/expenses. In the same three-year period, bad debt accounted for the following percent of loss:

- The 2014 bad debt is **34%** of the wastewater actual expenses
- The 2015 bad debt is **44%** of the wastewater actual expenses.
- The 2016 bad debt is **44%** of the wastewater actual expenses

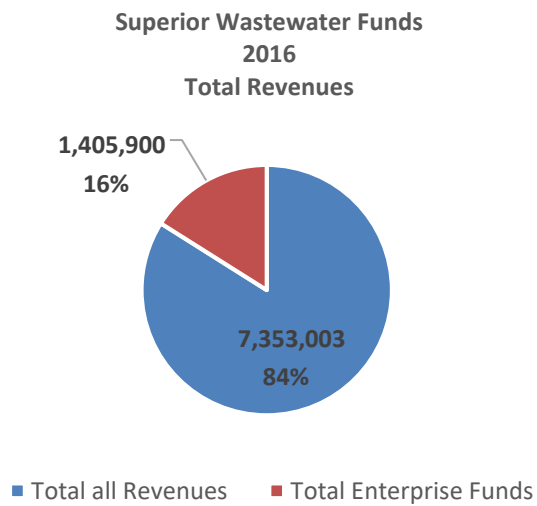
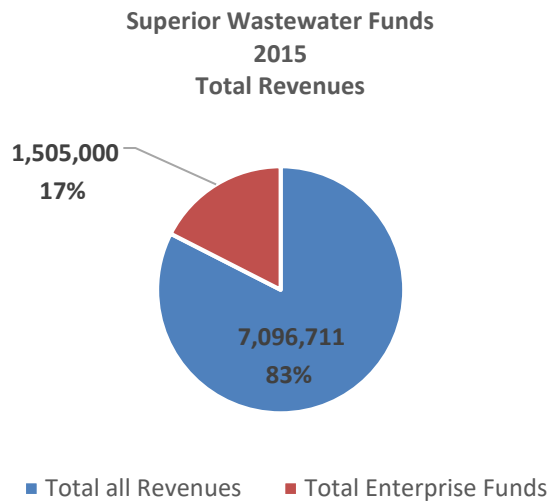
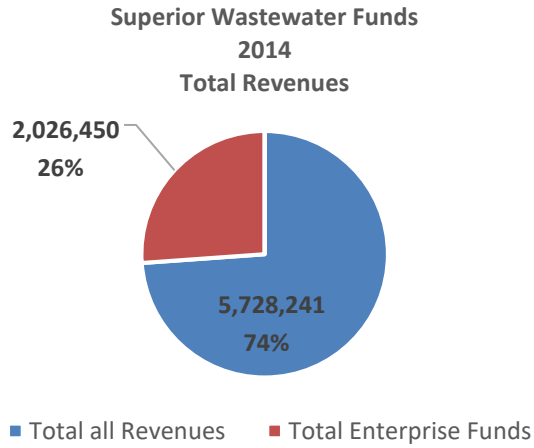
If the goal of tolerating no more than 6% bad debt loss for each year was met, the fund balance would be significantly improved, as shown in the following chart comparing only a 6% loss to the same three-year period:

<i>FY</i>	<i>Total Revenue</i>	<i>Total loss (6%)</i>	<i>Potential Fund balance</i>
2014	\$312,000	(\$392,842)	(\$80,842)
2015	\$573,624	(\$222,179)	\$351,445
2016	\$264,003	(\$245,942)	<u>\$18,061</u>
		TOTAL	\$288,664
		Difference	\$598,769

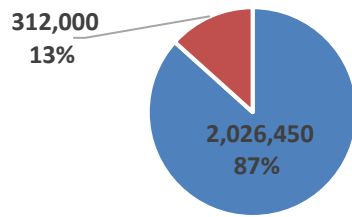
As demonstrated, the Town must reduce tolerance of bad debt losses immediately. The Town does not provide a potable water system which creates a level of difficulty in enforcement of bad debtor collection. However, standard procedures for delinquent collection is paramount to reduce the rising level of bad debt.

It is preferable that system users pay their full share for the service provided. A public awareness campaign can improve user understanding of the system status and the need for financial improvement.

Undesirable methods for collection of bad debt include collection services, credit reporting agencies, and public notification of delinquencies. Each of these separately, or combined, have been found to be an effective tool in many instances.

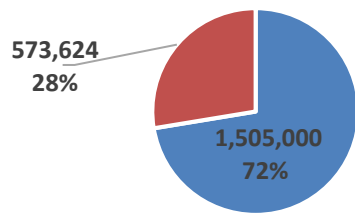


Superior Wastewater Funds
2014
Total Enterprise Revenue



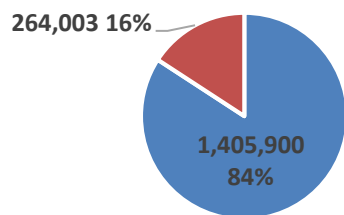
■ Total Enterprise Funds ■ Total Sewer Actual

Superior Wastewater Funds
2015
Total Enterprise Revenue



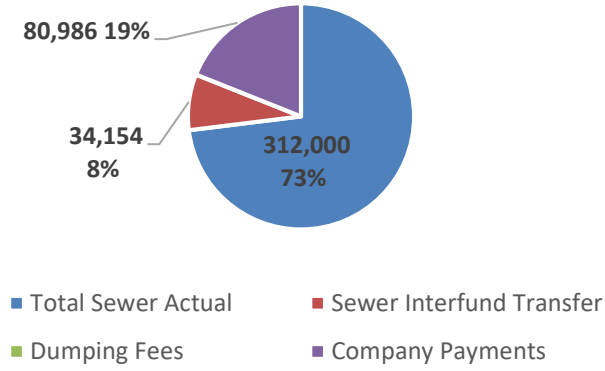
■ Total Enterprise Funds ■ Total Sewer Actual

Superior Wastewater Funds
2016
Total Enterprise Revenue

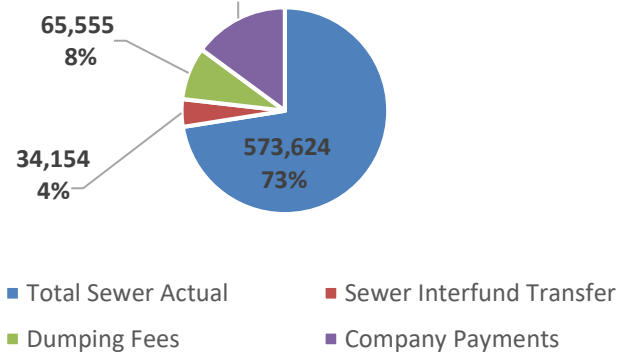


■ Total Enterprise Funds ■ Total Sewer Actual

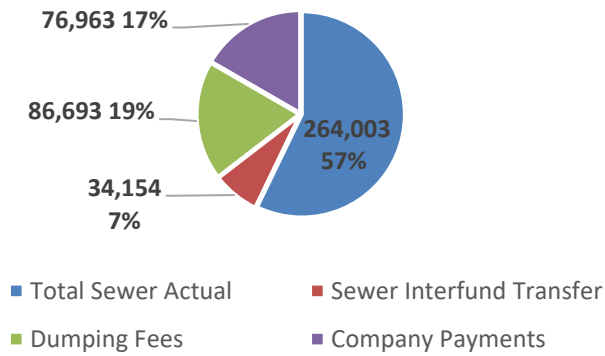
Superior Wastewater Funds
2014
 Total Sewer Revenue Sources



Superior Wastewater Funds
2015
 Total Revenue Sources
117,943 15%



Superior Wastewater Funds
2016
 Total Sewer Revenue Sources



SECTION III: 40 YEAR COMPARISON

The Town is unable to identify the date of the increase of rates to the current \$13 per month. However, the Town was able to identify that wastewater rates in 1976 were \$10 per month. This indicates only a 30% increase adjustment to user rates over a 40-year span.

It is well known that costs for services have increased dramatically over the last 40 years, as the following chart shows:

Cost Of Living in the United States 1975 vs 2015

Good or Service	1975 Cost	1975 Cost (In 2015 Money)	Cost 2015
New House ¹	\$48,000	\$209,417	\$270,200
Median Income	\$12,686	\$55,347	\$51,759
New Car	\$3,800	\$16,578	\$31,252
Minimum Wage	\$2.10/hour	\$9.16/hour	\$8.25/hour
Public College ²	\$1,819	\$7,938	\$18,943
Private College ²	\$3,776	\$16,475	\$42,419
Movie Ticket	\$2.03	\$8.86	\$8.17
Gasoline	\$0.59/gallon	\$2.57/gallon	\$2.38/gallon
Postage Stamp	\$0.13	\$0.57	\$0.49
Sugar	\$0.65/5 pounds	\$2.84/5 pounds	\$3.25/5 pounds
Milk	\$1.65/gallon	\$7.20/gallon	\$3.49/gallon
Coffee	\$1.12/pound	\$4.89/pound	\$4.91/pound
Eggs	\$0.84/dozen	\$3.66/dozen	\$2.08/dozen
Bread	\$0.28/pound	\$1.22/pound	\$1.43/pound

Source: David Stockman

<http://www.mybudget360.com>

Between 1975 and 2016, the U.S. dollar experienced inflation of **443.83%**

* (Bureau of Labor Statistic's annual Consumer Price Index), <http://www.in2013dollars.com>.

It is unreasonable to expect the Town to raise rates by 443.83% immediately, so lesser rate amounts will be recommended. However, the adjustments recommended should be revisited in the fifth year after implementation of the adjustments. The Town's lack of a progressive user fee schedule, over four decades, must be corrected.

SECTION IV: SYSTEM USER RATES STATEWIDE

The Arizona Department of Environmental Quality maintains annual data for all wastewater systems within Arizona. The data identifies, among various components, the monthly user base rate. The data report indicates the following:

<u>Number of systems</u>	<u>User Category</u>	<u>Statewide average</u>
131	Residential	\$30.98 p/mo.
126	Commercial	\$48.18 p/mo.
Superior current	Residential	\$13 p/mo.
	Commercial	\$13 p/mo.

SECTION V: SYSTEM USER RATES COMPARATIVE

Within the ADEQ data report, a comparison of user fees was made among similar wastewater systems to that with the Town of Superior. The data report provides the following:

<u>Number of systems</u>	<u>User Category</u>	<u>Comparable average</u>
15	Residential	\$28.82 p/mo.
14	Commercial	\$36.09 p/mo.
Superior current	Residential	\$13 p/mo.
	Commercial	\$13 p/mo.

The community wastewater systems compared were:

Bisbee, Clifton, Duncan, Fredonia, Gila Bend, Hayden, Jerome, Kearny, Mammoth, Miami, Patagonia, Superior, Tombstone, Williams, Winkelman.

SECTION VI: OPTIONS

Option #1, Do nothing.

Immediate impact: NO SYSTEM IMPROVEMENT

Category:	Current (\$ p/mo.)	Increase (%)	Avg. accts	Revenue (\$ p/mo.)	Revenue (\$ p/mo.)
Residential	13	0%	1179	\$ 156	\$ 183,924
Commercial	13	0%	11	\$ 143	\$ 1,716
Industrial	13	0%	1	\$ 1	\$ 156
				Total	\$ 185,796
				Five-year Total	\$ 928,980

Option #2. Immediately establish charges and fees for services; Implement rate changes in all user categories to average comparative level; Establish procedures to reduce the amount of bad debt.

Immediate impact: POSITIVE SYSTEM FINANCIAL IMPROVEMENT

Category:	Current/Full (\$ p/month)	Increase (%)	Avg. accts	Revenue (\$ p/mo.)	Revenue (\$ p/mo.)
Residential	13/28	216%	1179	\$ 336	\$ 396,144
Commercial	13/36	237%	11	\$ 432	\$ 4,752
Industrial	13/36	237%	1	\$ 36	\$ 432
Church, School, Non-profits	N/A	N/A	Unk	\$ Unk	\$ Unknown
				Potential total user revenue:	\$ 401,328
				Potential 5-year user revenue:	\$ 2,006,640

Option #3. Immediately establish charges and fees for services; Implement the average comparative rate change to commercial and industrial users; Incrementally phase rate increases over a five-year period for residential, churches, schools and non-profit users; Establish procedures to reduce the amount of bad debt.

Immediate impact: POSITIVE SYSTEM FINANCIAL IMPROVEMENT

Category:	Current (\$ p/mo.)	Increase (%)	Avg. accts	Revenue (\$ p/mo.)	Revenue (\$ p/mo.)
Residential					
2018	16	23%	1179	\$ 192	\$ 226,368
2019	19	18.75%	1179	\$ 228	\$ 268,812
2020	22	15.79%	1179	\$ 264	\$ 311,256
2021	25	13.63%	1179	\$ 300	\$ 353,700
2022	28	12%	1179	\$ 336	\$ 396,144
Commercial	13/36	237%	11	\$ 432	\$ 4,752
Industrial	13/36	237%	1	\$ 36	\$ 432

Church, School, Non-profits	N/A	N/A	Unk	\$ Unk	<u>\$ Unknown</u>
	2018	Potential total user revenue:			\$ 231,552
	2019	Potential total user revenue:			\$ 273,996
	2020	Potential total user revenue:			\$ 316,440
	2021	Potential total user revenue:			\$ 358,884
	2022	Potential total user revenue:			\$ 401,298
		Potential 5-year user revenue:			\$ 1,582,170

Service fee:	Proposed	
Connections	Residential	\$ 250
	School	\$ 500
	Church	\$ 500
	Non-profit	\$ 200
	Commercial	\$ 500
	Industrial	\$ 500
	Out of Boundary	\$ 500
	Illegal Connection	\$ 750
Late payment		\$ 5
Returned Check		\$ 25
Extensions		\$ 8 per foot
Bad debt reduction	Target	
	2018	25%
	2019	20%
	2020	15%
	2021	10%
	2022	6%

SECTION VII: RECOMMENDATION

It is the recommendation of this report that the Town of Superior approve option 3, which is described as follows:

Immediately establish charges and fees for services; Implement the average comparative rate change to commercial and industrial users; Incrementally phase rate increases over a five-year period for residential, churches, schools and non-profit users; Establish procedures to reduce the amount of bad debt.

Immediate impact: POSITIVE SYSTEM FINANCIAL IMPROVEMENT

Category:	Current (\$ p/mo.)	Increase (%)	Avg. accts	Revenue (\$ p/mo.)	Revenue (\$ p/mo.)
Residential					
2018	16	23%	1179	\$ 192	\$ 226,368
2019	19	18.75%	1179	\$ 228	\$ 268,812
2020	22	15.79%	1179	\$ 264	\$ 311,256
2021	25	13.63%	1179	\$ 300	\$ 353,700
2022	28	12%	1179	\$ 336	\$ 396,144
Commercial	36	237%	11	\$ 432	\$ 4,752
Industrial	36	237%	1	\$ 36	\$ 432
Church, School, Non-profits	N/A	N/A	Unk	\$ Unk	<u>\$ Unknown</u>

2018	Potential total user revenue:	\$ 231,552
2019	Potential total user revenue:	\$ 273,996
2020	Potential total user revenue:	\$ 316,440
2021	Potential total user revenue:	\$ 358,884
2022	Potential total user revenue:	\$ 401,298

Potential 5-year user revenue: \$ 1,582,170

The implementation of the full rate for commercial and industrial users will have impact, yet due to the small numbers of that category users, the impact will be minimal.

The residential incremental increases will have positive impact, yet are not over burdensome to most residential users. The incremental increases are reasonable and justified by the preceding data.

Additionally, it is the recommendation of this report that the Town of Superior approve a service fee schedule, as follows:

Service fee:	Proposed	
Connections	Residential	\$ 250
	School	\$ 500
	Church	\$ 500
	Non-profit	\$ 200
	Commercial	\$ 500
	Industrial	\$ 500
	Out of Boundary	\$ 500
	Illegal Connection	\$ 750
Late payment		\$ 5
Returned Check		\$ 25
Extensions		\$ 8 per foot
Bad debt reduction	Target	
	2018	25%
	2019	20%
	2020	15%
	2021	10%
	2022	6%

Implementation of the above option will significantly increase the funding over the next five fiscal years. The **increase of \$653,190** will provide satisfactory offset to operational, capital and debt service needs.

Since the Town's wastewater facilities require significant improvements to relieve the Town from catastrophic failure. The Town may leverage system funds for grants/loans to finance these needed improvements.

The approval of the option recommended will demonstrate to potential financial partners that the Town is committed to a secure future of the Superior Wastewater system, which will enhance both further economic growth and the quality of life for the community.