

Sewer Connection Fee Study

Prepared for:



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Executive Summary

The City of Sierra Vista has contracted with TischlerBise to update its sewer connection fees for new development.

Connection fees are one-time charges for proportionate usage of the City's sewer system capacity. As documented in this report, the connection fees represent new development's proportionate share of sewer infrastructure capacity which will be used to fund capital improvements that will substantially benefit new development.

There are three basic methods used to calculate the various components of the City's sewer connection fees. The methodologies can be classified as looking at the past, present, and future capacities of infrastructure. In instances where infrastructure is built in advance of new development and will have excess capacity, the **buy-in methodology** is utilized. Under this methodology, new development is anticipated to repay for the excess capacity via the connection fee. The **incremental expansion methodology** is used when a community plans to provide new development the same level-of-service (LOS) that is currently being provided to existing development. The third methodology is called the **plan-based methodology** which is based on existing, adopted plans. Under the plan-based methodology, there are two approaches considered. The *average approach* is used for planned projects that are the result of *both new and existing development*. The planned costs are allocated to both new and existing development which ensures that new growth only pays its share of the costs. The *marginal approach* is used for planned projects that are the result of *only new growth*. The planned costs are allocated to the net increase in new development.

Project improvements normally required as part of the development approval process are not eligible for credits against connection fees. Specific policies and procedures related to site-specific credits for system improvements are addressed in the ordinance that establishes the connection fees. However, the general concept is that developers may be eligible for site-specific credits or reimbursements only if they provide system improvements that have been included in the connection fee calculation schedule.

Figure 1 provides a schedule of the sewer connection fees for the City. All types of development will pay the fees according to the size and type of water meter needed to serve the new development. The City may adopt fees that are less than the amounts shown. However, a reduction in connection fee revenues will necessitate an increase in other revenues, a decrease in planned capital expenditures and/or a decrease in level-of-service standards.

Figure 1: Schedule of Sewer Connection Fees

| <i>Water Meter Size (inches)</i> | <i>Type of Meter</i> | <i>Capacity Ratio</i> | <i>TOTAL</i> |
|----------------------------------|-----------------------|-----------------------|--------------|
| 0.75 | Displacement | 1.0 | \$2,400 |
| 1.00 | Displacement | 1.7 | \$3,913 |
| 1.50 | Displacement | 3.3 | \$7,375 |
| 2.00 | Displacement/Compound | 5.3 | \$11,649 |
| 3.00 | Compound | 11.0 | \$24,022 |
| 3.00 | Turbine | 12.0 | \$26,104 |
| 4.00 | Compound | 17.0 | \$36,976 |
| 4.00 | Turbine | 20.5 | \$44,554 |
| 6.00 | Compound | 33.0 | \$71,612 |
| 6.00 | Turbine | 41.2 | \$89,331 |
| 8.00 | Compound | 53.3 | \$115,558 |
| 8.00 | Turbine | 60.2 | \$130,328 |

All costs in the connection fee calculations are given in current dollars with no assumed inflation rate over time. If cost estimates change significantly, the fees should be recalculated.

A note on rounding: Calculations throughout this report are based on analysis conducted using Excel software. Results are discussed in the report using one-and two-digit places (in most cases), which represent rounded figures. However, the analysis itself uses figures carried to their ultimate decimal places; therefore the sums and products generated in the analysis may not equal the sum or product if the reader replicates the calculation with the factors shown in the report (due to the rounding of figures shown, not due to rounding in the analysis).

Methodology and Components

All three calculation methodologies are used to calculate the various component of the connection fee. A combination of the buy-in and plan-based methodologies is used for the treatment component as the City is in the process of completing the ultimate treatment capacity of the system. The buy-in methodology is used for pieces of infrastructure that were oversized in advance of new development. The interceptor and lines components are calculated using this methodology. The incremental expansion methodology is used for calculating the component support facilities and support vehicles and equipment.

Sewer Usage and Demand

CURRENT ESTIMATES

Based on the City’s billing records, there are 12,139 sewer customers producing 3,000,000 gallons of wastewater on an average day.

Figure 2: Current Total Daily Sewer Customers and Demand

| SEWER CUSTOMERS | |
|------------------------|---------------|
| Residential* | 11,432 |
| Nonresidential* | 707 |
| TOTAL | 12,139 |

| AVERAGE DAILY SEWER DEMAND | |
|-----------------------------------|------------------|
| Residential | 2,186,402 |
| Nonresidential | 813,598 |
| TOTAL* | 3,000,000 |

* City of Sierra Vista billing records.

FUTURE PROJECTIONS

The City’s *Wastewater Master Plan* serves as the blueprint for planning the wastewater system. For residential development, the Plan utilizes a figure of 75 gallon per person per day. Based on the current persons per household estimate of 2.55 persons, this equates to 191 gallons per household per day (2.55 persons per household x 75 gallons per day = 191 gallons per day). The Plan utilizes a figure of 1,000 gallons per acre per day for nonresidential development.

Figure 3: Average Daily Sewer Demand per Customer

| | |
|-----------------------------|-------|
| Residential (per unit)* | 191 |
| Nonresidential (per acre)** | 1,000 |

* Based on current estimate of 2.55 persons per household multiplied by 75 gallons per person day from City of Sierra Vista Wastewater Master Plan.

** City of Sierra Vista Wastewater Master Plan.

The total sewer customers and demand projections shown in Figure 4 are the product of residential and nonresidential sewer demand factors in Figure 3 multiplied by the projected number of housing units and nonresidential square footage from Appendix A of the City’s Infrastructure Improvements Plan and Development Fee Study.

Figure 4: Projected Sewer Customers and Demand

| NEW SEWER CUSTOMERS ADDED ANNUALLY | | | | | | 5 Year Increments | | | | |
|------------------------------------|-------------|------------|------------|------------|------------|-------------------|------------|------------|------------|------------|
| | During FY=> | 2010 | 2011 | 2012 | 2013 | 2014 | 2019 | 2024 | 2029 | 2030 |
| Residential | | 205 | 216 | 235 | 251 | 263 | 305 | 310 | 329 | 332 |
| Nonresidential | | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 |
| TOTAL | | 217 | 227 | 247 | 262 | 275 | 316 | 322 | 340 | 344 |

Source: Development projections from Appendix A, *Infrastructure Improvement Plan and Development Fee Study prepared for City of Sierra Vista*, TischlerBise, Inc., 2009.

| TOTAL SEWER CUSTOMERS | | | | | | 5 Year Increments | | | | | |
|-----------------------|---------------|---------------|---------------|---------------|---------------|-------------------|---------------|---------------|---------------|---------------|---------------|
| | Start of FY=> | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2020 | 2025 | 2030 | 2031 |
| Residential | | 11,432 | 11,637 | 11,853 | 12,088 | 12,338 | 12,601 | 14,051 | 15,554 | 17,163 | 17,495 |
| Nonresidential | | 707 | 719 | 730 | 742 | 753 | 765 | 823 | 881 | 939 | 950 |
| TOTAL | | 12,139 | 12,356 | 12,583 | 12,830 | 13,092 | 13,366 | 14,874 | 16,435 | 18,102 | 18,445 |

Total sewer customers at start of FY2010 based on City billing records.

| AVERAGE DAILY DEMAND PER CUSTOMER | | | | | | | | | | |
|-----------------------------------|----------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | During of FY=> | 2009 | 2010 | 2011 | 2012 | 2013 | 2018 | 2023 | 2028 | 2029 |
| Residential (per unit) | | 191 | 191 | 191 | 191 | 191 | 191 | 191 | 191 | 191 |
| Nonresidential (per acre) | | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 |

Source: City of Sierra Vista *Wastewater Master Plan*.

| AVERAGE DAILY DEMAND (GALLONS) FROM NEW SEWER CUSTOMERS | | | | | | 5 Year Increments | | | | |
|---|----------------|---------------|---------------|---------------|---------------|-------------------|---------------|---------------|---------------|---------------|
| | During of FY=> | 2010 | 2011 | 2012 | 2013 | 2014 | 2019 | 2024 | 2029 | 2030 |
| Residential | | 39,207 | 41,222 | 44,990 | 47,912 | 50,300 | 58,239 | 59,321 | 62,883 | 63,492 |
| Nonresidential | | 7,346 | 7,346 | 7,346 | 7,346 | 7,346 | 7,346 | 7,346 | 7,346 | 7,346 |
| TOTAL | | 46,553 | 48,568 | 52,336 | 55,258 | 57,646 | 65,585 | 66,668 | 70,229 | 70,838 |

| TOTAL SEWER DEMAND | | | | | | 5 Year Increments | | | | | |
|--------------------|---------------|------------------|------------------|------------------|------------------|-------------------|------------------|------------------|------------------|------------------|------------------|
| | Start of FY=> | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2020 | 2025 | 2030 | 2031 |
| Residential | | 2,186,402 | 2,225,608 | 2,266,830 | 2,311,820 | 2,359,732 | 2,410,032 | 2,687,259 | 2,974,784 | 3,282,463 | 3,345,955 |
| Nonresidential | | 813,598 | 820,945 | 828,291 | 835,637 | 842,983 | 850,329 | 887,060 | 923,791 | 960,522 | 967,868 |
| TOTAL | | 3,000,000 | 3,046,553 | 3,095,121 | 3,147,457 | 3,202,715 | 3,260,361 | 3,574,319 | 3,898,575 | 4,242,985 | 4,313,823 |

Treatment

The City is in the process of building and planning additional treatment capacity of the sewer system. The treatment component of the Sewer Connection Fee is subdivided into two categories: plant capacity and plant upgrades. The plant capacity projects are those which increase the number of gallons of wastewater that can be processed. The plant upgrades improve the performance of the treatment plant.

A combination of the buy-in methodology and plan-based methodology is used to calculate the plant capacity portion of the treatment component. The City has recently completed a capacity expansion of the existing treatment plant which still has capacity available for new development to

utilize. This expansion was the first step of a phased increase in treatment capacity for the City’s system as a whole. The City is planning a 500,000 gallon per day (MGD) package treatment plant at a cost of \$10,000,000. Taken as a whole, these projects will add 1.7 MGD of treatment capacity at a total cost of \$13,327,147. This yields a cost per gallon figure of \$7.84 ($\$13,327,147 / 1,700,000$ gallons = \$7.84 per gallon).

Figure 5: Sewer Treatment - Plant Capacity Component

| | |
|---|---------------------|
| Original Cost of Existing Treatment Plant Expansion | |
| Construction cost | \$3,026,138 |
| Financing cost | \$301,009 |
| Phase 1 of Tribute Package Plant | \$10,000,000 |
| TOTAL | \$13,327,147 |
| | |
| Total Gallons of Capacity Added | 1,700,000 |
| | |
| Cost Per Gallon | \$7.84 |

Source: City of Sierra Vista Department of Public Works and Finance Department.

The second category of projects in the treatment component are for upgrades to the existing plant which will improve its performance and help the City realize the full 6 MGD treatment capacity of the system. The planned cost of the biosolids and clarifier projects totals \$4,525,000. This cost is divided by the total treatment capacity of the system (6,000,000 gallons) which results in a cost per gallon figure of \$0.75 ($\$4,525,000 / 6,000,000$ gallons = \$0.75 per gallon).

Figure 6: Sewer Treatment - Plant Upgrades Component

| | |
|---------------------------------|-------------|
| Biosolids and Clarifer Projects | \$4,525,000 |
| | |
| Gallons of Capacity | 6,000,000 |
| | |
| Cost per Gallon | \$0.75 |

Source: City of Sierra Vista Department of Public Works.

Interceptors

The City has constructed a series of sewer interceptors which collectively have sufficient capacity to serve both existing and new development. The total, original cost to the City to construct these interceptors was \$5,436,714. The collective capacity of these interceptors is approximately 3.25 MGD. This yields a cost per gallon of \$1.67 ($\$5,436,714 / 3,250,000$ gallons = \$1.67 per gallon).

Figure 7: Sewer Interceptors Component

| | <i>Original Cost</i> |
|------------------------------|--------------------------|
| Charleston Sewer Interceptor | \$756,755 |
| K-mart Reimbursement | \$141,686 |
| PDS/Golden Acres | \$1,349,849 |
| Wilcox Drive Augmentation | \$447,235 |
| Coyote Wash Sewer Line | \$1,900,000 |
| SR90 Augmentation | \$841,189 |
| TOTAL | \$5,436,714 |

Gallons of Capacity 3,250,000

Cost per Gallon \$1.67

Source: City of Sierra Vista Public Works Department and Finance Department.

Lines

The City has constructed a several sewer lines which collectively have sufficient capacity to serve both existing and new development. Note these lines are part of the larger network of sewer lines and not site specific lines which are the responsibility of the developer. The total, original cost to the City to construct these lines was \$96,203. The collective capacity of these lines is approximately 1,040,000. This yields a cost per gallon of \$0.09 (\$96,203/1,040,000 gallons = \$0.09 per gallon).

Figure 8: Sewer Lines Component

| | <i>Original Cost</i> |
|-----------------|--------------------------|
| Roto Rooter | \$28,600 |
| Little Michigan | \$67,603 |
| TOTAL | \$96,203 |

Gallons of Capacity 1,040,000

Average Cost per Gallon \$0.09

Source: City of Sierra Vista Public Works Department and Finance Department.

Support Facilities

This component of the Sewer Connection Fee is considered a “non-capacity” component because it does not add gallons of capacity to the system. However, additional sewer customers and need for additional sewer infrastructure does impact these support facilities and thus are appropriate to include in the connection fee.

Since this component does not add gallons of capacity to the system, assessing it on a per gallon basis does not accurately depict the impact of new development on these support facilities. This component is assessed on a per customer basis

The City has 6,116 square feet of facilities supporting the sewer system. The City plans to maintain the current LOS, thus the incremental expansion methodology is used to calculate this component of the Sewer Connection Fee. These facilities serve the current base of 12,139 customers, which yields a current LOS of 0.50 square feet per customer (6,116 square feet/12, 139 customers = 0.50 square feet per customer).

The City’s Public Works Department estimates the current replication value of these support facilities to be \$203 per square foot. This results in a cost per customer of \$102.28 (0.50 square feet x \$203 per square foot = \$102.28).

Figure 8: Sewer Support Facilities Component

| | <i>Square Feet*</i> |
|---|-------------------------|
| Office | 2,640 |
| Storage | 1,460 |
| Garage | 2,016 |
| TOTAL | 6,116 |
| | |
| Current sewer customers | 12,139 |
| | |
| Current Level-of-service | |
| Square feet per customer | 0.50 |
| | |
| Cost per square foot for comparable facility* | \$203 |
| | |
| Cost | |
| Per customer | \$102.28 |

* City of Sierra Vista Public Works Department.

Support Vehicles and Equipment

Similar to the support facilities component, the support vehicles and equipment component is assessed on a per customer basis.

The City has a fleet of 39 vehicles and pieces of equipment supporting the sewer system. The City plans to maintain the current LOS, thus the incremental expansion methodology is used to calculate this component of the Sewer Connection Fee. This fleet serve the current base of 12,139 customers, which yields a current LOS of 0.0003 vehicles/pieces of equipment per customer (39 vehicles/pieces of equipment/12, 139 customers = 0.0003 vehicles/pieces of equipment per customer).

The City's Public Works Department estimates the current replication value of the support fleet to be \$1,640,490; an average of \$42,064 per unit ($\$1,640,490/39$ vehicles/pieces of equipment = \$42,064 per unit). This results in a cost per customer of \$135.14 (0.0003 units per customer x \$42,064 per unit = \$135.14).

Figure 9: Support Vehicles & Equipment LOS Standards

| | # of Units* | Cost per Unit* | Total Replication Value |
|--------------------------|----------------|-------------------|-------------------------------|
| 1/2 Ton Pickup Truck | 3 | \$26,000 | \$78,000 |
| Sewer Vac | 2 | \$275,000 | \$550,000 |
| Tractor TL-70 | 1 | \$25,000 | \$25,000 |
| Gang Mower | 1 | \$10,000 | \$10,000 |
| Trailer | 3 | \$10,000 | \$30,000 |
| Tractor Mower | 1 | \$45,000 | \$45,000 |
| Trash Pump | 1 | \$5,000 | \$5,000 |
| Tractor Dozer | 1 | \$60,000 | \$60,000 |
| Homelite Blower | 1 | \$500 | \$500 |
| New Holland Tractor | 1 | \$90,000 | \$90,000 |
| John Deere Tractor | 1 | \$145,000 | \$145,000 |
| John Deere Rotary Mower | 1 | \$15,000 | \$15,000 |
| Enclosed Trailer | 1 | \$20,000 | \$20,000 |
| Hydroseeder | 1 | \$65,000 | \$65,000 |
| Van Step Sewer Camera | 1 | \$245,000 | \$245,000 |
| Gator | 2 | \$12,000 | \$24,000 |
| Air Compressor | 1 | \$2,000 | \$2,000 |
| Buckeye Compressor | 1 | \$3,000 | \$3,000 |
| Weed Sprayer | 2 | \$500 | \$1,000 |
| Generator | 1 | \$3,500 | \$3,500 |
| Cement Mixer | 1 | \$2,400 | \$2,400 |
| Whiteman Pump | 2 | \$6,000 | \$12,000 |
| Gas Can Sewers | 3 | \$30 | \$90 |
| Flatbed Truck | 1 | \$45,000 | \$45,000 |
| 3/4 Ton 4X4 Pickup Truck | 4 | \$32,000 | \$128,000 |
| 1 Ton 4x4 Pickup Truck | 1 | \$36,000 | \$36,000 |
| TOTAL | 39 | | \$1,640,490 |

Average cost per piece of equipment/vehicle => \$42,064

Current sewer customers 12,139

Current Level-of-service
Equipment/vehicles per customer 0.003

Cost
Per customer \$135.14

* City of Sierra Vista Public Works Department.

Connection Fee Study

The City should update its connections fees every three years to ensure the methodologies, assumptions, and cost factors used in the calculations are still valid and accurate. As we do with many of our Arizona clients, TischlerBise has included the cost of preparing the current Sewer Connection Fee in the fee calculations in order to create a source of funding to conduct this regular update. This cost (\$28,400) is allocated to the projected increase in sewer demand over the next three years. This results in a connection fee study cost of \$0.19 per gallon.

Sewer Connection Fee

Figure 11 provides a summary of the factors used to calculate the sewer connection fees. All development will be assessed these fees. As shown at the bottom of Figure 11, the capital costs per demand unit are \$11.31 per gallon and \$237.42 per customer.

Figure 11: Sewer Connection Fee Factors

| <i>Cost Summary</i> | <i>Factors:</i> |
|--|-----------------|
| Gallons per Day per Residential Connection | 191 |
| Treatment Projects Cost per Gallon | \$8.59 |
| Clarifier and Bio-solids Projects Cost per Gallon | \$0.75 |
| Buy-in Sewer Interceptor Cost per Gallon | \$1.67 |
| Buy-in Sewer Line Cost per Gallon | \$0.09 |
| Connection Fee Study Cost per Gallon | \$0.19 |
| Net Capital Cost per Gallon of Capacity | \$11.31 |
| | |
| Sewer Support Facilities Cost per Customer | \$102.28 |
| Sewer Support Vehicles & Equipment Cost per Customer | \$135.14 |
| Net Capital Cost per Customer | \$237.42 |

Figure 12 contains a schedule of the Sewer Connection Fees by size and type of water meter. A capacity ratio by meter size is used to convert the residential equivalent fee for a 0.75 inch meter into a proportionate fee for larger meter sizes. The capacity ratios by meter size are from the American Water Works Association (see M6, assuming 33% maximum capacity, indexed to .75 inch meter). The cost per customer is then added to this figure.

Using the 0.75 inch water meter as an example: 191 gallons per residential connection x \$11.31 per gallon x 1.0 demand ratio = \$2,162+ \$237 per sewer customer = \$2,400 per 0.75 inch water meter.

Figure 12: Sewer Connection Fees

| Water Meter Size (inches) | Type of Meter | Capacity Ratio | Clarifier and | | | Sewer Lines | Connection Fee Study | Support Facilities | Support Equip./Veh. | TOTAL |
|---------------------------|-----------------------|----------------|---------------|------------------------|-----------------------|----------------|-------------------------|-----------------------|------------------------|-----------|
| | | | Treatment | Bio-solids Projects | Sewer Interceptors | | | | | |
| 0.75 | Displacement | 1.0 | \$1,644 | \$144 | \$320 | \$18 | \$37 | \$102 | \$135 | \$2,400 |
| 1.00 | Displacement | 1.7 | \$2,794 | \$245 | \$544 | \$30 | \$63 | \$102 | \$135 | \$3,913 |
| 1.50 | Displacement | 3.3 | \$5,425 | \$476 | \$1,056 | \$58 | \$122 | \$102 | \$135 | \$7,375 |
| 2.00 | Displacement/Compound | 5.3 | \$8,674 | \$761 | \$1,689 | \$93 | \$194 | \$102 | \$135 | \$11,649 |
| 3.00 | Compound | 11.0 | \$18,079 | \$1,587 | \$3,519 | \$195 | \$405 | \$102 | \$135 | \$24,022 |
| 3.00 | Turbine | 12.0 | \$19,662 | \$1,725 | \$3,827 | \$212 | \$441 | \$102 | \$135 | \$26,104 |
| 4.00 | Compound | 17.0 | \$27,925 | \$2,451 | \$5,436 | \$301 | \$626 | \$102 | \$135 | \$36,976 |
| 4.00 | Turbine | 20.5 | \$33,685 | \$2,956 | \$6,557 | \$363 | \$755 | \$102 | \$135 | \$44,554 |
| 6.00 | Compound | 33.0 | \$54,253 | \$4,761 | \$10,561 | \$584 | \$1,216 | \$102 | \$135 | \$71,612 |
| 6.00 | Turbine | 41.2 | \$67,721 | \$5,943 | \$13,182 | \$729 | \$1,518 | \$102 | \$135 | \$89,331 |
| 8.00 | Compound | 53.3 | \$87,657 | \$7,693 | \$17,063 | \$944 | \$1,965 | \$102 | \$135 | \$115,558 |
| 8.00 | Turbine | 60.2 | \$98,884 | \$8,678 | \$19,249 | \$1,064 | \$2,216 | \$102 | \$135 | \$130,328 |

Appendix A – Cash Flow Analysis

This cash flow analysis is based on the demand projections, methodologies, and cost assumptions listed above. FY2010 (beginning July 1, 2009) is the first projection year (note: all figures are in thousands of dollars).

This cash flow analysis is based on several assumptions:

- 100% of all future residential and nonresidential development will pay 100% of the proposed connection fees.
- Future development will occur at the pace and magnitude outlined in the customer and demand section of the report.

To the extent these assumptions change, the cash flow analysis will change correspondingly. Also, the cash flow analysis is based on the proposed fees and LOS over a five year time frame. The City updates its connection fees on a regular basis and thus, it is likely the fee amounts, LOS, and methodologies will change over the course of the cash flow analysis.

SEWER CONNECTION FEE CASH FLOW ANALYSIS

The cash flow summary below indicates total revenues of \$3.2 million over the next five years. The deficits shown at the bottom of the figure are the result of the two treatment components. The Tribute Package Plant will provide sufficient capacity into the future beyond the five year horizon shown in the cash flow analysis. Future development beyond the five years would repay the City via future connection fees for this investment. The biosolids and clarifier project will serve both new and existing development. The connection fees will fund new development's share of these projects, but the City will have to fund existing development's share from another revenue source.

Figure A-1: Cash Flow Analysis

| REVENUES | | | | | | | | <i>Ave.</i> |
|---------------------------------|--------------------|------------------|------------------|------------------|------------------|------------------|--------------------|------------------|
| | <i>Fiscal Year</i> | 2010 | 2011 | 2012 | 2013 | 2014 | TOTAL | <i>Annual</i> |
| Residential Connection Fees | | \$491,934 | \$517,215 | \$564,491 | \$601,162 | \$631,123 | \$2,805,926 | \$561,185 |
| Nonresidential Connections Fees | | \$85,805 | \$85,805 | \$85,805 | \$85,805 | \$85,805 | \$429,026 | \$85,805 |
| TOTAL | | \$577,739 | \$603,020 | \$650,297 | \$686,967 | \$716,929 | \$3,234,952 | \$646,990 |

| EXPENDITURES | | | | | | | | <i>Ave.</i> |
|----------------------------------|--------------------|--------------------|---------------------|------------------|------------------|------------------|---------------------|--------------------|
| | <i>Fiscal Year</i> | 2010 | 2011 | 2012 | 2013 | 2014 | TOTAL | <i>Annual</i> |
| Treatment Projects | | | | | | | | |
| Tribute Package Plant | | \$0 | \$10,000,000 | \$0 | \$0 | \$0 | \$10,000,000 | \$2,000,000 |
| Biosolids and Clarifier Projects | | \$4,525,000 | \$0 | \$0 | \$0 | \$0 | \$4,525,000 | \$905,000 |
| Interceptors | | \$77,876 | \$81,246 | \$87,549 | \$92,438 | \$96,433 | \$435,542 | \$87,108 |
| Lines | | \$4,306 | \$4,493 | \$4,841 | \$5,112 | \$5,332 | \$24,084 | \$4,817 |
| Support Facilities | | \$22,152 | \$23,229 | \$25,244 | \$26,807 | \$28,084 | \$125,518 | \$25,104 |
| Support Vehicles/Equipment | | \$29,270 | \$30,694 | \$33,356 | \$35,421 | \$37,109 | \$165,850 | \$33,170 |
| Connection Fee Study | | \$8,966 | \$9,354 | \$10,080 | \$10,643 | \$11,103 | \$50,145 | \$10,029 |
| TOTAL | | \$4,667,570 | \$10,149,016 | \$161,071 | \$170,421 | \$178,061 | \$15,326,138 | \$3,065,228 |

| | | | | | |
|-------------------------------------|----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Annual Surplus/(Deficit) | (\$4,089,830) | (\$9,545,996) | \$489,226 | \$516,546 | \$538,868 |
| Cumulative Surplus/(Deficit) | (\$4,089,830) | (\$13,635,826) | (\$13,146,600) | (\$12,630,054) | (\$12,091,186) |