Item #110665 RUC 4/9/15



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April 3, 2015

Mr. Scott Schlossman Gainesville Regional Utilities PO Box 147051 Station A110 Gainesville, FL 32614-7051

Dear Mr. Schlossman:

Enclosed is the draft wastewater rate study prepared for Gainesville Regional Utilities (GRU) for the test year ending September 30, 2016.

Based on this study, revenue from wastewater rates requires a \$1,466,733 increase to meet utility costs for fiscal year 2016. The needed increase is 4.17% of revenue at present rates. Baker Tilly calculated the revenue required using the utility basis with a 5.34% return on utility net investment rate base.

As detailed on page 10, the 5.34% rate of return corresponds to a 7.14% return on equity. In recent decisions, the Florida Public Service Commission authorized returns on equity of10.5% for investor owned utilities. An equivalent return on equity for Gainesville Regional Utilities is around 6.5%. Circumstances unique to GRU could justify a return on equity outside this range.

In addition to the overall increase, rates need to be adjusted for each customer class to match revenue to the cost of service. Proposed rates are shown on page 21. The effect of proposed rate changes is illustrated on page 27.

Please call me at 608 240 2361 or email russ.hissom@bakertilly.com to discuss anything contained in the study. Thank you for the opportunity to work with you on this project. We appreciate the effort GRU staff put into making information available for this study.

Sincerely,

BAKER TILLY VIRCHOW KRAUSE, LLP

Russell MX

Russell A. Hissom, CPA, Partner Enclosures

# **GAINESVILLE REGIONAL UTILITIES**

Forecasted Wastewater Revenue Requirement, Cost of Service, and Rate Design

> Prepared as of April 3, 2015

# GAINESVILLE REGIONAL UTILITIES RATE STUDY

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# GAINESVILLE REGIONAL UTILITIES RATE STUDY

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## ACCOUNTANTS' COMPILATION REPORT

Gainesville Regional Utilities Gainesville, Florida

We have compiled the accompanying forecasted schedules as identified in the table of contents of the Gainesville Regional Utilities for the years ending September 30, 2015 and 2016, in accordance with applicable guidelines for a compilation of a financial forecast established by the American Institute of Certified Public Accountants.

The accompanying schedules present, to the best of management's knowledge and belief, the results of wastewater operations of the Gainesville Regional Utilities for the forecast period. This report was prepared to help GRU 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.

The summarized historical financial information presented with the forecast for comparative purposes was taken from the audited financial statements for the years ended September 30, 2013 through September 30, 2014.

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

Madison, Wisconsin April 3, 2015

## **EXECUTIVE SUMMARY**

## INTRODUCTION

The Gainesville Regional Utilities retained Baker Tilly Virchow Krause, LLP (Baker Tilly) to forecast the revenue requirement for fiscal year 2016, analyze cost of service, and design wastewater rates.

Baker Tilly used the utility basis to develop the revenue requirement. The major steps in the rate study are summarized below.

## **REVENUE REQUIREMENT**

Baker Tilly forecasted costs, sales, and revenues for fiscal year 2016. Baker Tilly based the forecast on GRU's budget for fiscal year 2016 and historical trends.

|                              | Forecasted Revenue<br>Requirement |  |  |  |  |
|------------------------------|-----------------------------------|--|--|--|--|
| Revenue from Rates           | \$<br>35,138,376                  |  |  |  |  |
| Expenses                     |                                   |  |  |  |  |
| Operation and Maintenance    | 16,063,299                        |  |  |  |  |
| Depreciation                 | 9,112,973                         |  |  |  |  |
| Transfer to the General Fund | 7,473,327                         |  |  |  |  |
| Return on Rate Base          | 8,971,497                         |  |  |  |  |
| Less Other Revenues          | (5,015,987)                       |  |  |  |  |
|                              | 36,605,109                        |  |  |  |  |
|                              |                                   |  |  |  |  |
| Rate Increase Required       | \$<br>1,466,733                   |  |  |  |  |
|                              |                                   |  |  |  |  |

## EXECUTIVE SUMMARY (cont.)

#### COST OF SERVICE

After identifying the revenue needed, Baker Tilly allocated responsibility for the revenue to the cost functions. Cost functions are the different services provided by the utility for which it incurs costs. The process of allocating costs to different functions is called a cost of service study. The following table presents the cost of service by cost function.

| Cost Function          | Forecasted Cost of<br>Service |            |  |  |  |  |
|------------------------|-------------------------------|------------|--|--|--|--|
| Customer Costs         | \$                            | 11,439,863 |  |  |  |  |
| Volume Costs           |                               | 15,553,587 |  |  |  |  |
| Reclaimed Water Costs  |                               | 136,180    |  |  |  |  |
| Chemical Oxygen        |                               |            |  |  |  |  |
| Demand Costs           |                               | 3,759,200  |  |  |  |  |
| Suspended Solids Costs |                               | 3,419,919  |  |  |  |  |
| Phosphorus Costs       |                               | 1,357,227  |  |  |  |  |
| Ammonia Costs          |                               | 939,135    |  |  |  |  |
| Total Cost of Service  | \$                            | 36,605,109 |  |  |  |  |

## EXECUTIVE SUMMARY (cont.)

## RATE DESIGN

The results of the revenue requirement and cost of service indicates that Gainesville needs to increase some utility rates and decrease others to more accurately match rates to the cost of providing service.

The wastewater rate structure consists of a customer charge and a volume charge, which includes the assumed normal residential pollutant strength. For wastewater exceeding the assumed domestic strength, Baker Tilly developed high strength rates based on the pollutant loadings in pounds for four pollutants, which are listed below.

- > Chemical oxygen demand, abbreviated COD in the study
- > Suspended solids, abbreviated SS in the study
- > Phosphorus, abbreviated Phos in the study
- > Ammonia, abbreviated NH3 in the study

We designed rates to match the revenue recovered from each class to the cost of service. The results are summarized below.

| Rate                  | Current Rate | Proposed Rate |
|-----------------------|--------------|---------------|
| Volume Rate per 1,000 | \$ 6.05      | \$ 5.33       |
| Gallons               |              |               |
| Customer Charge       | 8.40         | 14.65         |
| Reclaimed Rate per    | 0.70         | 0.65          |
| 1,000 Gallons         |              |               |
| COD per Pound         | *            | 0.23          |
| SS per Pound          | *            | 0.35          |
| Phos per Pound        | *            | 2.31          |
| NH3 per Pound         | *            | 0.60          |

\* Current high strength charges are based on the domestic strength volume rate times the ratio of the sampled concentration to the domestic strength concentration. Baker Tilly recommends high strength charges based on pounds of loading, which is calculated from volume and concentration.

## RECOMMENDATIONS

#### ADJUST RATES

Currently some rate components are set above GRU's cost of providing service and others are set below. A realignment of wastewater rates to match cost of service would make rates more equitable.

## Test For High Strength Parameters

Currently GRU only has one customer that is billed for exceeding domestic strength for chemical oxygen demand. Having high strength rates established for all four parameters (chemical oxygen demand, phosphorous, suspended solids, and ammonia) ensures that GRU will recover appropriate revenue from future customers producing high strength wastewater. We recommend that GRU perform regular tests on industrial customers to ensure they are not exceeding the high strength parameters.

#### CONSIDER REVISING WINTER MAX

Because water used outside to water plants is not treated at the wastewater plant, it is reasonable to not apply wastewater rates to this volume. Since the volume of outdoor use is not measured directly, GRU must estimate the volume. Currently GRU assumes that customers only use water indoors during January and February and have the winter max rate based on the water volume of those two months. Although not perfect, this is a reasonable method for estimating outdoor use. Other possible methods to use are listed below:

- 1. Have no winter max and bill for all water used.
- 2. Increase the number of months in the winter max to include December and/or March.
- 3. Add 10-15% to the base winter max amount.
- 4. Bill for 90-95% of water with a cap at 10,000 gallons.

## **GAINESVILLE REGIONAL UTILITIES**

## SUMMARY OF SIGNIFICANT ASSUMPTIONS

#### INTRODUCTION

This section discusses the procedures and assumptions used to prepare this wastewater rate study report for Gainesville.

## FORECASTED OPERATIONS AND MAINTENANCE EXPENSES

Forecasted expenses were based on Gainesville's wastewater budget for fiscal year 2016 and past trends.

Operations and maintenance expenses for fiscal year 2016 are forecasted to increase from the historical average, which is consistent with increasing utility costs.

## FORECASTED REVENUES

Volume sales recorded in Gainesville's billing system from October 2013 through September 2014 was multiplied by current Gainesville wastewater rates to recalculate revenues. The recalculated revenue was compared to actual revenues in Gainesville's financial records, and the difference was within one percent.

Baker Tilly forecasted volume sales and customer counts in fiscal year 2016 based on forecasts by GRU management and historical trends. Compared to fiscal year 2014, GRU is forecasted to add residential and non-residential customers and to receive slightly more wastewater. Improvements in water efficiency may be enough to offset the forecasted increase in customers.

## FORECASTED PLANT ADDITIONS AND RETIREMENTS

Baker Tilly forecasted additions to plant in service for fiscal years 2015 and 2016 based on the revised six year capital budget prepared by GRU management. To forecast retirements, Baker Tilly averaged 2010 and 2014 retirements.

## **GAINESVILLE REGIONAL UTILITIES**

## SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The statements below are required by the American Institute of Certified Public Accountants for the preparation of a financial forecast in this report.

#### NATURE OF FORECAST

The financial forecast presents, to the best of the Gainesville management's knowledge and belief, the expected results of wastewater utility operations for the forecast period. Accordingly, the forecast reflects its judgment as of February 27, 2015, the date of this forecast, of the expected conditions and its expected course of action. 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 because events and circumstances frequently do not occur as expected, and those differences may be material.

#### **REVENUE RECOGNITION**

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

#### **E**XPENSES

Historical operation and maintenance expenses and the forecasted fiscal year 2016 expenses are reported on an accrual basis.

## PLANT

Additions to and replacement of utility plant are recorded at original cost, which includes material, labor, overhead, and an allowance for the cost of funds used during construction when significant. The cost of property replaced, retired, or otherwise disposed of is deducted from plant accounts.

## DEPRECIATION

Depreciation is computed using straight-line rates applied to the average plant investment balances.

## Wastewater Rate Study Report

**Revenue Requirement Summary** 

|   | Forecasted 2016 |               |  |
|---|-----------------|---------------|--|
| Revenue   |                 |               |  |
| Revenue from Rates                                | \$              | 35,138,376    |  |
| Other Revenues - Connection Charges               |                 | 1,976,058     |  |
| Other Revenues - Surcharges                       |                 | 2,730,114     |  |
| Other Revenues - Interest Income                  |                 | 240,784       |  |
| Other Revenues - BABs Subsidy                     |                 | 1,009,441     |  |
| Other Revenues - Rate Stabilization Transfer      |                 | (1,355,725)   |  |
| Other Revenues - Biosolids                        |                 | 312,000       |  |
| Other Revenues - Shands and Innovation Square     |                 | 103,314       |  |
| Total Revenue                                     |                 | 40,154,362    |  |
|   |                 |               |  |
| Operations and Maintenance                        |                 | 16,063,299    |  |
| Depreciation                                      |                 | 9,112,973     |  |
| Transfer to the General Fund                      |                 | 7,473,327     |  |
| Total Expenses                                    |                 | 32,649,598    |  |
| Net Income  |                 | 7,504,764     |  |
|   |                 |               |  |
| Net Investment Rate Base                          |                 |               |  |
| Plant in Service                                  |                 | 305,599,128   |  |
| Accumulated Depreciation                          |                 | (137,635,656) |  |
| Total Rate Base                                   |                 | 167,963,472   |  |
| Forecasted Return on Rate Base (Net Income above) |                 | 7,504,764     |  |
| Target Return on Rate Base                        |                 | 8,971,497     |  |
| Rate Increase Required                            | \$              | 1,466,733     |  |

# Gainesville Regional Utilities Wastewater Rate Study Report

**Cash Flow Forecast** 

|   | F  | Forecasted 2016 at<br>Present Rates                    | <br>casted 2016 with<br>ate Increase                       |
|---|----|--|--|
| Sources of Cash   |    |  |  |
| Revenue from Rates  | \$ | 35,138,376   | \$<br>36,606,129   |
| Other Revenues - Connection Charges   |    | 1,976,058  | 1,976,058  |
| Other Revenues - Surcharges   |    | 2,730,114  | 2,730,114  |
| Other Revenues - Interest Income  |    | 240,784  | 240,784  |
| Other Revenues - BABs Subsidy   |    | 1,009,441  | 1,009,441  |
| Other Revenues - Rate Stabilization Transfer  |    | (1,355,725)  | (1,355,725)  |
| Other Revenues - Biosolids  |    | 312,000  | 312,000  |
| Other Revenues - Shands and Innovation Square   | _  | 103,314  | <br>103,314  |
| Total Sources of Cash   |    | 40,154,362   | 41,622,115   |
| Uses of Cash<br>Operations and Maintenance<br>Debt Service<br>Utility Plant Improvement Fund<br>Transfer to Rate Stabilization Fund<br>Transfer to the General Fund |    | 16,063,299<br>8,346,207<br>9,738,263<br>-<br>7,473,327 | <br>16,063,299<br>8,346,207<br>9,738,263<br>-<br>7,473,327 |
| Total Uses of Cash  |    | 41,621,095   | 41,621,095   |
|   |    |  |  |
| Net Cash Flow   | \$ | (1,466,733)  | \$<br>1,020  |
|   |    |  | <br>   |

## Gainesville Regional Utilities Wastewater Rate Study Report Rate of Return and Capital Structure

|   | Forecasted<br>Cash Basis Cap |            | Forecasted 2016<br>Utility Basis Capital Costs |
|---|------------------------------|------------|--|
| Debt Service                              | \$                           | 8,346,207  | \$ -   |
| Utility Plant Improvement Fund            |                              | 9,738,263  | -  |
| Depreciation                              |                              | <u> </u>   | 9,112,973                                      |
|   |                              | 18,084,470 | 9,112,973                                      |
| Required Return on Rate Base              |                              |            | 8,971,497                                      |
| Total Capital Costs                       |                              | 18,084,470 | 18,084,470                                     |
|   |                              |            |  |
| Rate Base                                 |                              |            | 167,963,472                                    |
| Rate of Return Required for Return of \$8 | 5.34%                        |            |  |
|   |                              |            |  |

|                |                   |                              |              | Weighted     |
|----------------|-------------------|------------------------------|--------------|--------------|
|                | Amount            | Percent of Capital Structure | Return       | Return       |
| Long-term debt | \$<br>147,818,515 | 60.35%                       | 4.15%        | 2.50%        |
| Equity         | <br>97,111,791    | <u>39.65%</u>                | <u>7.15%</u> | <u>2.84%</u> |
| Total          | \$<br>244,930,306 | 100.00%                      |              | 5.34%        |

Please refer to Summary of Significant Assumptions and Summary of Significant Accounting Policies

Wastewater Rate Study Report

Forecasted Operations and Maintenance Expenses

|                                  |    |            |                  | Budgeted         | F  | Forecasted |   |
|----------------------------------|----|------------|------------------|------------------|----|------------|---|
| Collection Expenses              | A  | ctual 2013 | <br>Actual 2014  | <br>2015         |    | 2016       |   |
| Operations and Labor             | \$ | 1,855,714  | \$<br>2,095,368  | \$<br>2,414,391  | \$ | 2,524,867  |   |
| Purchased Power                  |    | 526,439    | 596,539          | 680,100          |    | 700,831    |   |
| Chemicals                        |    | 247,661    | 314,089          | 124,500          |    | 207,000    |   |
| Materials & Supplies             |    | 306,244    | 243,419          | 227,000          |    | 231,760    |   |
| Contract Services                |    | 42,695     | 40,868           | 16,300           |    | 16,800     |   |
| Rent                             |    | 50         | 50               | -                |    | -          |   |
| Vehicle                          |    | 7,755      | 7,178            | -                |    | -          |   |
| Insurance                        |    |            |                  | -                |    | -          |   |
| Misc                             |    | (527)      | (18,910)         | 2,000            |    | 3,000      | - |
| Total Collection Expenses        |    | 2,986,032  | 3,278,600        | 3,464,291        |    | 3,684,258  |   |
|                                  |    |            |                  |                  |    |            |   |
|                                  |    |            |                  |                  |    |            |   |
| Pumping Expenses                 |    |            |                  |                  |    |            |   |
| Operations and Labor             |    | 1,516,519  | 1,499,711        | 1,706,968        |    | 1,835,271  |   |
| Purchased WW                     |    | 858        | 1,089            | -                |    | -          |   |
| Purchased Power                  |    | 1,977,073  | 2,192,656        | 2,485,700        |    | 2,561,469  |   |
| Chemicals                        |    | 490,591    | 543,403          | 565,300          |    | 677,400    |   |
| Materials & Supplies             |    | 322,323    | 336,166          | 328,671          |    | 345,055    |   |
| Contract Services                |    | 162,249    | 125,698          | 91,400           |    | 94,800     |   |
| Misc                             |    | 30,742     | 31,008           | 31,000           |    | 31,500     | - |
| Total Pumping Expenses           |    | 4,500,355  | 4,729,732        | 5,209,040        |    | 5,545,495  |   |
|                                  |    |            |                  |                  |    |            |   |
|                                  |    |            |                  |                  |    |            |   |
| Treatment & Disposal Expenses    |    |            |                  |                  |    |            |   |
| Sludge Removal                   | \$ | 138,287    | \$<br>238,841    | \$<br>190,000    | \$ | 835,200    | А |
| Purchased Power                  |    |            | -                |                  |    | -          |   |
| Materials & Supplies             |    | 2,992      | 50,126           | 4,000            |    | 4,300      |   |
| Vehicle Expense                  |    | 43,514     | 154,516          | 60,600           |    | 62,400     |   |
| Reclaimed Water                  |    | 88,501     | 9,607            | 16,239           |    | 16,726     |   |
| Misc                             |    | (34,499)   | (9,638)          | -                |    | -          | - |
| Total Treatment Expenses         |    | 238,795    | 443,451          | 270,839          |    | 918,626    |   |
|                                  |    |            |                  |                  |    |            |   |
|                                  |    |            |                  |                  |    |            |   |
| Administrative Expenses          |    |            |                  |                  |    |            |   |
| Customer Accounts                |    | 1,057,177  | 1,124,623        | 963,988          |    | 987,247    |   |
| Sales Expense                    |    | 25,212     | 7,502            | 33,328           |    | 34,242     |   |
| Other A&G                        |    | 4,932,946  | <br>4,609,747    | 4,882,783        |    | 4,893,431  | - |
| Total Administrative Expenses    |    | 6,015,335  | 5,741,872        | <br>5,880,100    |    | 5,914,919  |   |
|                                  |    |            |                  |                  |    |            |   |
|                                  |    |            |                  |                  |    |            |   |
| Total Operations and Maintenance | \$ | 13,740,517 | \$<br>14,193,654 | \$<br>14,824,269 | \$ | 16,063,299 |   |
|                                  |    |            |                  |                  |    |            |   |

A - Increase in costs projected Phe204 6 representation for an addition for an addition for an addition for an addition of a second technological Summary of Significant Accounting Policies

Wastewater Rate Study Report

Revenue Forecast for 2016 at Current Rates

|                         |       |                      | Residential |                      | Non-Residential |                     | Reclaimed Water |                   | High   | Strength          | Total     |                      |
|-------------------------|-------|----------------------|-------------|----------------------|-----------------|---------------------|-----------------|-------------------|--------|-------------------|-----------|----------------------|
| Customer Class          | Curre | nt Rates             | Units       | Revenue              | Units           | Revenue             | Units           | Revenue           | Units  | Revenue           | Units     | Revenue              |
| Residential             |       |                      |             |                      |                 |                     |                 |                   |        |                   |           |                      |
| Volume Charge           | 6.05  | per 1,000<br>gallons | 3,321,266   | 20,093,659           |                 |                     |                 |                   |        |                   | 3,321,266 | 20,093,659           |
| Customer Charge         | 8.40  | •                    | 718,668     | 6,036,811            |                 |                     |                 |                   |        |                   | 718,668   | 6,036,811            |
| Non-Residential         |       |                      |             |                      |                 |                     |                 |                   |        |                   |           |                      |
| Volume Charge           | 6.05  | per 1,000<br>gallons |             |                      | 1,327,693       | 8,032,543           |                 |                   |        |                   | 1,327,693 | 8,032,543            |
| Customer Charge         | 8.40  | -                    |             |                      | 52,044          | 437,170             |                 |                   |        |                   | 52,044    | 437,170              |
| Reclaimed Water Service |       |                      |             |                      |                 |                     |                 |                   |        |                   |           |                      |
| Volume Charge           | 0.70  | per 1,000<br>gallons |             |                      |                 |                     | 205,665         | 143,966           |        |                   | 205,665   | 143,966              |
| Customer Charge         | 8.40  | per bill             |             |                      |                 |                     | 10,284          | 86,386            |        |                   | 10,284    | 86,386               |
| High Strength           |       |                      |             |                      |                 |                     |                 |                   |        |                   |           |                      |
| Volume Charge           | 6.05  | per 1,000<br>gallons |             |                      |                 |                     |                 |                   | 45,552 | 275,590           | 45,552    | 275,590              |
| Excess Strength         |       | -                    |             |                      |                 |                     |                 |                   |        |                   |           |                      |
| Surcharge               | 0.94  |                      |             |                      |                 |                     |                 |                   | 34,365 | 32,152            | 34,365    | 32,152               |
| Customer Charge         | 8.40  | per bill             |             |                      |                 |                     |                 |                   | 12     | 101               | 12        | 101                  |
| Volume Revenue          |       |                      |             | 20,093,659           |                 | 8,032,543           |                 | 143,966           |        | 275,590           |           | 28,545,758           |
| Excess Strength Revenue | )     |                      |             | -                    |                 | -                   |                 | -                 |        | 32,152            |           | 32,152               |
| Customer Revenue        |       |                      |             | 6,036,811            |                 | 437,170             |                 | 86,386            |        | 101               |           | 6,560,468            |
| Total 2016 Revenues     |       |                      |             | <u>\$ 26,130,470</u> |                 | <u>\$ 8,469,713</u> |                 | <u>\$ 230,352</u> |        | <u>\$ 307,843</u> |           | <u>\$ 35,138,378</u> |

Please refer to Summary of Significant Assumptions and Summary of Significant Accounting Policies

Wastewater Rate Study Report

Forecasted Utility Plant in Service

| Acct.           |                             | Actual<br>Balance     | FY 2015              | Forecasted            | Forecasted<br>Balance | Forecasted           | Forecasted<br>Balance |                       |
|-----------------|-----------------------------|-----------------------|----------------------|-----------------------|-----------------------|----------------------|-----------------------|-----------------------|
| No.             | Plant Account               | 9/30/2014             | Additions            | Retirements           | 9/30/2015             | Additions            | Retirements           | 9/30/2016             |
|                 |                             |                       |                      |                       |                       |                      |                       |                       |
| Pumpin          | ng Plant                    |                       |                      |                       |                       |                      |                       |                       |
| 328             | Land&Land Rights-Pumping    | \$ 109,487            | \$-                  | \$-                   | \$ 109,487            | \$-                  | \$-                   | \$ 109,487            |
| 329             | Structures and Improvemen   | 5,052,480             | -                    | (16,607)              | 5,035,873             | -                    | \$ (16,607)           | 5,019,266             |
| 333             | Electric Pumping Equipmen   | 11,558,348            | 907,501              | (135,017)             | 12,330,832            | 523,839              | \$ (135,017)          | 12,719,655            |
| 334             | Pumping Plt-Diesel Pumpin   | 1,183,408             | -                    | (1,069)               | 1,182,339             | · -                  | \$ (1,069)            | 1,181,271             |
| 336             | Receiving Wells             | 6,217,873             | -                    | (91,593)              | 6,126,280             | -                    | \$ (91,593)           | 6,034,687             |
|                 | Total Pumping Plant         | 24,121,595            | 907,501              | (244,285)             | 24,784,811            | 523,839              | (244,285)             | 25,064,365            |
|                 | , ,                         | , ,                   | ,                    | ( , ,                 | , - ,-                | ,                    | ( , )                 | -,                    |
| Water           | Treatment Plant             |                       |                      |                       |                       |                      |                       |                       |
| 337             | Land & Land Rights-Ttrmnt   | 1,055,666             | 22,000               | -                     | 1,077,666             | 22,200               | -                     | 1,099,866             |
| 338             | Structures and Improvemen   | 26,824,055            | 6,456,125            | (333,709)             | 32,946,471            | 2,266,125            | (333,709)             | 34,878,887            |
| 339             | Treatment Plant Equipment   | 45,347,188            | 6,456,125            | (252,280)             | 51,551,033            | 2,266,125            | (252,280)             | 53,564,879            |
|                 | Total Water Treatment Plant | 73,226,910            | 12,934,250           | (585,989)             | 85,575,171            | 4,554,450            | (585,989)             | 89,543,632            |
|                 |                             |                       |                      |                       |                       |                      |                       |                       |
| <u>Collecti</u> | on Plant                    |                       |                      |                       |                       |                      |                       |                       |
| 374             | Land and Land Rights        | 1,136,468             | -                    | -                     | 1,136,468             | -                    | -                     | 1,136,468             |
| 377             | Mains                       | 98,901,477            | 5,107,462            | (434,830)             | 103,574,109           | 4,761,988            | (434,830)             | 107,901,267           |
| 378             | Fire or Force Mains         | 26,527,814            | 1,093,059            | (13,719)              | 27,607,154            | 705,277              | (13,719)              | 28,298,711            |
| 379             | Services                    | 18,684,958            | 1,000,359            | (13,845)              | 19,671,472            | 978,273              | (13,845)              | 20,635,900            |
| 380             | Meters                      | 436,559               | -                    | -                     | 436,559               |                      |                       | 436,559               |
|                 | Total Collection Plant      | 145,687,276           | 7,200,880            | (462,394)             | 152,425,761           | 6,445,538            | (462,394)             | 158,408,905           |
|                 |                             |                       |                      |                       |                       |                      |                       |                       |
| Reuse           | Water Plant                 |                       |                      |                       |                       |                      |                       |                       |
| 386             | Tanks and Installation      | 13,217                | -                    | -                     | 13,217                | -                    | -                     | 13,217                |
| 387             | Reclaimed Water             | 8,549,318             | 891,580              |                       | 9,440,899             | 422,792              |                       | 9,863,691             |
|                 | Total Reuse Water Plant     | 8,562,535             | 891,580              | -                     | 9,454,115             | 422,792              | -                     | 9,876,908             |
|                 |                             |                       |                      |                       |                       |                      |                       |                       |
| <u>Genera</u>   |                             |                       |                      |                       |                       |                      |                       |                       |
| 388             | Land & Land Rights          | 981                   | -                    | -                     | 981                   | -                    | -                     | 981                   |
| 389             | Land and Land Rights        | 681,680               | -                    | -                     | 681,680               | -                    | -                     | 681,680               |
| 390             | Structures&Improvements     | 14,153,388            | 423,654              | -                     | 14,577,042            | 432,582              | -                     | 15,009,623            |
| 391             | Office Furniture & Equipm   | 2,414,385             | 72,270               | (6,043)               | 2,480,612             | 73,793               | (6,043)               | 2,548,362             |
| 391.1           | Computers and Electronics   | 1,385,374             | 41,468               | (3,467)               | 1,423,375             | 42,342               | (3,467)               | 1,462,250             |
| 392             | Transportation Equipment    | 909,238               | 27,216               | (33,962)              | 902,492               | 27,790               | (33,962)              | 896,319               |
| 394             | Tools Shop &Garage Equip    | 186,215               | 5,574                | (4,487)               | 187,302               | 5,691                | (4,487)               | 188,506               |
| 395             | Laboratory&Testing Equip    | 335,194               | 10,033               | (24,369)              | 320,858               | 10,245               | (24,369)              | 306,734               |
| 396             | Power Operated Equipment    | 6,723,684             | 201,260              | (114,105)             | 6,810,839             | 205,501              | (114,105)             | 6,902,235             |
| 397             | Communication Equipment     | 18,168                | 544                  | (1,006)               | 17,706                | 555                  | (1,006)               | 17,255                |
| 398             | Miscellaneous Equipment     | 321,247               | 9,616                | (7,930)               | 322,934               | 9,819                | (7,930)               | 324,823               |
|                 | Total General Plant         | 27,129,553            | 791,636              | (195,370)             | 27,725,820            | 808,318              | (195,370)             | 28,338,768            |
|                 | Total Plant In Service      | <u>\$ 278,727,869</u> | <u>\$ 22,725,848</u> | <u>\$ (1,488,038)</u> | <u>\$ 299,965,678</u> | <u>\$ 12,754,937</u> | <u>\$ (1,488,038)</u> | <u>\$ 311,232,578</u> |

Please refer to Summary of Significant Assumptions and Summary of Significant Accounting Policies Test Year Average Balance

\$ 109,487 5,027,569 12,525,243 1,181,805 <u>6,080,484</u> 24,924,588

> 1,088,766 33,912,679 52,557,956 87,559,401

1,136,468 105,737,688 27,952,932 20,153,686 436,559 155,417,333

13,217 9,652,295 9,665,512

```
981
681,680
14,793,332
2,514,487
1,442,812
899,406
187,904
313,796
6,856,537
17,481
323,878
28,032,294
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\$ 305,599,128

Wastewater Rate Study Report

Forecasted Depreciation Expense

| Acct.<br>No.       | Account Description        | Depreciation<br>Rates |             | 2015<br>Depreciable<br>Balance |    | 2015<br>epreciation<br>Expense |             | 2016<br>Depreciable<br>Balance | D         | 2016<br>epreciation<br>Accrual |
|--------------------|----------------------------|-----------------------|-------------|--------------------------------|----|--------------------------------|-------------|--------------------------------|-----------|--------------------------------|
| Pumpir             | ng Plant                   |                       |             |                                |    |                                |             |                                |           |                                |
| 328                | Land&Land Rights-Pumping   | 0.00%                 | \$          | 109,487                        | \$ | -                              | \$          | 109,487                        | \$        | -                              |
| 329                | Structures and Improvemen  | 2.63%                 | Ψ           | 5,044,176                      | Ψ  | 132,662                        | Ψ           | 5,027,569                      | Ψ         | 132,225                        |
| 333                | Electric Pumping Equipmen  | 5.14%                 |             | 11,944,590                     |    | 613,952                        |             | 12,525,243                     |           | 643,797                        |
| 334                | Pumping Plt-Diesel Pumpin  | 5.25%                 |             | 1,182,873                      |    | 62,101                         |             | 1,181,805                      |           | 62,045                         |
| 336                | Receiving Wells            | 3.05%                 |             | 6,172,077                      |    | 188,248                        |             | 6,080,484                      |           | 185,455                        |
|                    | Total Pumping Plant        | 0.0070                |             | 24,453,203                     |    | 996,963                        |             | 24,924,588                     |           | 1,023,522                      |
|                    | rotari umping riant        |                       |             | 24,400,200                     |    | 000,000                        |             | 24,324,300                     |           | 1,020,022                      |
| Water <sup>-</sup> | Treatment Plant            |                       |             |                                |    |                                |             |                                |           |                                |
| 337                | Land & Land Rights-Ttrmnt  | 0.00%                 |             | 1,066,666                      |    | -                              |             | 1,088,766                      |           | -                              |
| 338                | Structures and Improvemen  | 2.15%                 |             | 29,885,263                     |    | 642,533                        |             | 33,912,679                     |           | 729,123                        |
| 339                | Treatment Plant Equipment  | 2.34%                 |             | 48,449,111                     |    | 1,133,709                      |             | 52,557,956                     |           | 1,229,856                      |
|                    | Total Water Treatment      |                       |             |                                |    |                                | _           |                                |           | <u> </u>                       |
|                    | Plant                      |                       |             | 79,401,040                     |    | 1,776,242                      |             | 87,559,401                     |           | 1,958,979                      |
|                    |                            |                       |             | -, -,                          |    | , -,                           |             | - ,, -                         |           | , ,                            |
| Collect            | ion Plant                  |                       |             |                                |    |                                |             |                                |           |                                |
| 374                | Land and Land Rights       | 0.00%                 |             | 1,136,468                      |    | -                              |             | 1,136,468                      |           | -                              |
| 377                | Mains                      | 3.16%                 |             | 101,237,793                    |    | 3,199,114                      |             | 105,737,688                    |           | 3,341,311                      |
| 378                | Fire or Force Mains        | 2.58%                 |             | 27,067,484                     |    | 698,341                        |             | 27,952,932                     |           | 721,186                        |
| 379                | Services                   | 2.69%                 |             | 19,178,215                     |    | 515,894                        |             | 20,153,686                     |           | 542,134                        |
| 380                | Meters                     | 6.16%                 |             | 436,559                        |    | 26,892                         |             | 436,559                        |           | 26,892                         |
|                    | Total Collection Plant     |                       |             | 149,056,519                    |    | 4,440,241                      |             | 155,417,333                    |           | 4,631,523                      |
|                    |                            |                       |             |                                |    |                                |             |                                |           |                                |
| Reuse              | Water Plant                |                       |             |                                |    |                                |             |                                |           |                                |
| 386                | Tanks and Installation     | 3.69%                 |             | 13,217                         |    | 488                            |             | 13,217                         |           | 488                            |
| 387                | Reclaimed Water            | 2.21%                 |             | 8,995,109                      |    | 198,792                        |             | 9,652,295                      |           | 213,316                        |
|                    | Total Water Reuse Plant    |                       |             | 9,008,325                      |    | 199,280                        |             | 9,665,512                      |           | 213,804                        |
|                    |                            |                       |             |                                |    |                                |             |                                |           |                                |
| Genera             |                            |                       |             |                                |    |                                |             |                                |           |                                |
| 388                | Land & Land Rights         | 0.00%                 |             | 981                            |    | -                              |             | 981                            |           | -                              |
| 389                | Land and Land Rights       | 0.00%                 |             | 681,680                        |    | -                              |             | 681,680                        |           | -                              |
| 390                | Structures&Improvements    | 1.95%                 |             | 14,365,215                     |    | 280,122                        |             | 14,793,332                     |           | 288,470                        |
| 391                | Office Furniture & Equipm  | 7.07%                 |             | 2,447,499                      |    | 173,038                        |             | 2,514,487                      |           | 177,774                        |
| 391.1              | Computers and Electronics  | 9.90%                 |             | 1,404,374                      |    | 139,033                        |             | 1,442,812                      |           | 142,838                        |
| 392                | Transportation Equipment   | 9.00%                 |             | 905,865                        |    | 81,528                         |             | 899,406                        |           | 80,947                         |
| 394                | Tools Shop &Garage Equip   | 6.13%                 |             | 186,758                        |    | 11,448                         |             | 187,904                        |           | 11,519                         |
| 395                | Laboratory&Testing Equip   | 6.25%                 |             | 328,026                        |    | 20,502                         |             | 313,796                        |           | 19,612                         |
| 396                | Power Operated Equipment   | 7.92%                 |             | 6,767,261                      |    | 535,967                        |             | 6,856,537                      |           | 543,038                        |
| 397                | Communication Equipment    | 6.25%                 |             | 17,937                         |    | 1,121                          |             | 17,481                         |           | 1,093                          |
| 398                | Miscellaneous Equipment    | 6.13%                 |             | 322,090                        |    | 19,744                         |             | 323,878                        |           | 19,854                         |
|                    | Total General Plant        |                       |             | 27,427,686                     |    | 1,262,503                      |             | 28,032,294                     |           | 1,285,145                      |
|                    | Total Depreciation Expense |                       | <u>\$</u> : | 289,346,774                    | \$ | 8,675,229                      | <u>\$ 3</u> | 305,599,128                    | <u>\$</u> | 9,112,973                      |

Wastewater Rate Study Report

Forecasted Accumulated Depreciation

| Acct.                 |                             | Actual<br>Balance                        | FY 2015 F                          | orecasted        | Forecasted<br>Balance | FY 2016 F                                   | orecasted               | Forecasted<br>Balance           | Test Year<br>Average     |
|-----------------------|-----------------------------|--|------------------------------------|------------------|-----------------------|---|-------------------------|---------------------------------|--------------------------|
|                       | Plant Account               |  |                                    |                  |                       |   |                         |                                 | -                        |
| No.                   | Plant Account               | 9/30/2014                                | Depreciation                       | Retirements      | 9/30/2015             | Depreciation                                | Retirements             | 9/30/2016                       | Balance                  |
| Pumpin                | a Plant                     |  |                                    |                  |                       |   |                         |                                 |                          |
| <u>- umpin</u><br>328 | Land&Land Rights-Pumping    | \$-                                      | \$-                                | \$-              | \$-                   | ¢ - 2                                       | \$                      | ¢ _ \$                          |                          |
| 329                   | Structures and Improvemen   | φ<br>(1,484,873)                         | (132,662)                          | φ<br>16,607      | φ<br>(1,600,928)      | (132,225)                                   | φ<br>16,607             | (1,716,546)                     | (1,658,737)              |
| 333                   | Electric Pumping Equipmen   | (7,108,437)                              | (613,952)                          | 135,017          | (7,587,372)           | (643,797)                                   | 135,017                 | (8,096,152)                     | (7,841,762)              |
| 334                   | Pumping Plt-Diesel Pumpin   | (468,109)                                | (62,101)                           | 1,069            | (529,141)             | (62,045)                                    | 1,069                   | (590,118)                       | (559,629)                |
| 336                   | Receiving Wells             | (2,783,639)                              | (188,248)                          | 91,593           | (2,880,293)           | (185,455)                                   | 91,593                  | (2,974,155)                     | (2,927,224)              |
| 000                   | Total Pumping Plant         | (11,845,057)                             | (996,963)                          | 244,285          | (12,597,735)          | (1,023,522)                                 | 244,285                 | (13,376,971)                    |                          |
|                       | Total Fumping Flam          | (11,045,057)                             | (990,903)                          | 244,200          | (12,597,755)          | (1,023,322)                                 | 244,203                 | (13,370,971)                    | (12,987,352)             |
| Water T               | reatment Plant              |  |                                    |                  |                       |   |                         |                                 |                          |
| 337                   | Land & Land Rights-Ttrmnt   | -  | -                                  | -                | -                     | -   | -                       | -                               | -                        |
| 338                   | Structures and Improvemen   | (12,553,767)                             | (642,533)                          | 333,709          | (12,862,591)          | (729,123)                                   | 333,709                 | (13,258,005)                    | (13,060,298)             |
| 339                   | Treatment Plant Equipment   | (28,539,782)                             | (1,133,709)                        | 252,280          | (29,421,211)          | (1,229,856)                                 | 252,280                 | (30,398,787)                    | (29,909,999)             |
|                       | Total Water Treatment Plant | (41,093,549)                             | (1,776,242)                        | 585,989          | (42,283,803)          | (1,958,979)                                 | 585,989                 | (43,656,793)                    | (42,970,297)             |
|                       |                             | (11,000,010)                             | (1,110,212)                        | 000,000          | (12,200,000)          | (1,000,010)                                 | 000,000                 | (10,000,100)                    | (12,010,201)             |
| Collection            | on Plant                    |  |                                    |                  |                       |   |                         |                                 |                          |
| 374                   | Land and Land Rights        | -  | -                                  | -                | -                     | -   | -                       | -                               | -                        |
| 377                   | Mains                       | (44,382,125)                             | (3,199,114)                        | 434,830          | (47,146,410)          | (3,341,311)                                 | 434,830                 | (50,052,891)                    | (48,599,650)             |
| 378                   | Fire or Force Mains         | (10,469,148)                             | (698,341)                          | 13,719           | (11,153,770)          | (721,186)                                   | 13,719                  | (11,861,237)                    | (11,507,503)             |
| 379                   | Services                    | (10,641,409)                             | (515,894)                          | 13,845           | (11,143,457)          | (542,134)                                   | 13,845                  | (11,671,746)                    | (11,407,601)             |
| 380                   | Meters                      | (133,260)                                | (26,892)                           |                  | (160,152)             | (26,892)                                    | -                       | (187,044)                       | (173,598)                |
|                       | Total Collection Plant      | (65,625,942)                             | (4,440,241)                        | 462,394          | (69,603,789)          | (4,631,523)                                 | 462,394                 | (73,772,917)                    | (71,688,352)             |
|                       |                             |  |                                    |                  |                       |   |                         |                                 |                          |
| Reuse \               | <u>Nater Plant</u>          |  |                                    |                  |                       |   |                         |                                 |                          |
| 386                   | Tanks and Installation      | (4,035)                                  | (488)                              | -                | (4,523)               | (488)                                       | -                       | (5,011)                         | (4,767)                  |
| 387                   | Reclaimed Water             | (2,565,077)                              | (198,792)                          | -                | (2,763,869)           | (213,316)                                   |                         | (2,977,185)                     | (2,870,527)              |
|                       | Total Reuse Water Plant     | (2,569,112)                              | (199,280)                          | -                | (2,768,392)           | (213,804)                                   | -                       | (2,982,196)                     | (2,875,294)              |
|                       |                             |  |                                    |                  |                       |   |                         |                                 |                          |
| <u>Genera</u>         |                             |  |                                    |                  |                       |   |                         |                                 |                          |
|                       | Land & Land Rights          | -  | -                                  | -                | -                     | -   | -                       | -                               | -                        |
| 389                   | Land and Land Rights        | -  | -                                  | -                | -                     | -   | -                       | -                               | -                        |
| 390                   | Structures&Improvements     | (929,646)                                | (280,122)                          | -                | (1,209,768)           | (288,470)                                   | -                       | (1,498,238)                     | (1,354,003)              |
| 391                   | Office Furniture & Equipm   | (628,443)                                | (173,038)                          | 6,043            | (795,438)             | (177,774)                                   | 6,043                   | (967,169)                       | (881,304)                |
| 391                   | Computers and Electronics   | (345,384)                                | (139,033)                          | 3,467            | (480,950)             | (142,838)                                   | 3,467                   | (620,321)                       | (550,635)                |
| 392                   | Transportation Equipment    | (294,159)                                | (81,528)                           | 33,962           | (341,724)             | (80,947)                                    | 33,962                  | (388,709)                       | (365,217)                |
| 394                   | Tools Shop & Garage Equip   | (94,204)                                 | (11,448)                           | 4,487            | (101,164)             | (11,519)                                    | 4,487                   | (108,196)                       | (104,680)                |
| 395                   | Laboratory&Testing Equip    | (222,550)                                | (20,502)                           | 24,369           | (218,683)             | (19,612)                                    | 24,369                  | (213,926)                       | (216,305)                |
| 396                   | Power Operated Equipment    | (2,829,740)                              | (535,967)                          | 114,105          | (3,251,602)           | (543,038)                                   | 114,105                 | (3,680,535)                     | (3,466,068)              |
| 397                   | Communication Equipment     | (8,718)                                  | (1,121)                            | 1,006            | (8,833)               | (1,093)                                     | 1,006                   | (8,921)                         | (8,877)                  |
| 398                   | Miscellaneous Equipment     | (149,495)                                | (19,744)                           | 7,930            | (161,309)             | (19,854)                                    | 7,930                   | (173,234)                       | (167,272)                |
|                       | Total General Plant         | (5,502,339)                              | (1,262,503)                        | 195,370          | (6,569,472)           | (1,285,145)                                 | 195,370                 | (7,659,248)                     | (7,114,361)              |
| Total Ad              | ccumulated Depreciation     | Please refer to Symr<br>\$ (126,635,999) | mary of Significa<br>\$(8,675,229) | nt Assumptions a | nd Summary of Sign    | ificant Accountin<br><u>\$ (9,112,973</u> ) | g Policies<br>1,488,038 | <u>\$ (141,448,125)</u> <u></u> | (137,635,656)<br>Page 15 |
|                       |                             |  |                                    |                  |                       |   |                         |                                 | 5                        |

Wastewater Rate Study Report Allocation of Operations and Maintenance Expenses to Cost Functions

|                           |               |          |        | Allocati  | on Percenta | ages |      |      |                   |             |           |             |            |            |           |
|---------------------------|---------------|----------|--------|-----------|-------------|------|------|------|-------------------|-------------|-----------|-------------|------------|------------|-----------|
|                           | Forecasted    |          |        |           |             |      |      |      |                   |             |           |             |            |            |           |
| Collection Expenses       | 2016          | Customer | Volume | Reclaimed | COD         | SS   | Phos | NH3  | Customer          | Volume      | Reclaimed | COD         | SS         | Phos       | NH3       |
| Operations and Labor      | \$ 2,524,867  | 0.30     | 0.70   | -         | -           | -    | -    | -    | \$ 757,460        | \$1,767,407 | \$-       | \$-         | \$-        | \$-        | \$-       |
| Purchased Power           | 700,831       | 0.30     | 0.70   | -         | -           | -    | -    | -    | 210,249           | 490,582     | -         | -           | -          | -          | -         |
| Chemicals                 | 207,000       | -        | -      | -         | 0.35        | 0.35 | 0.15 | 0.15 | -                 | -           | -         | 72,450      | 72,450     | 31,050     | 31,050    |
| Materials & Supplies      | 231,760       | 0.30     | 0.70   | -         | -           | -    | -    | -    | 69,528            | 162,232     | -         | -           | -          | -          | -         |
| Contract Services         | 16,800        | 0.30     | 0.70   | -         | -           | -    | -    | -    | 5,040             | 11,760      | -         | -           | -          | -          | -         |
| Rent                      | -             | 0.30     | 0.70   | -         | -           | -    | -    | -    | -                 | -           | -         | -           | -          | -          | -         |
| Vehicle                   | -             | 0.30     | 0.70   | -         | -           | -    | -    | -    | -                 | -           | -         | -           | -          | -          | -         |
| Misc                      | 3,000         | 0.30     | 0.70   | -         | -           | -    | -    | -    | 900               | 2,100       |           |             |            |            |           |
| Total Collection          |               |          |        |           |             |      |      |      |                   |             |           |             |            |            |           |
| Expenses                  | 3,684,258     |          |        |           |             |      |      |      | 1,043,177         | 2,434,081   | -         | 72,450      | 72,450     | 31,050     | 31,050    |
|                           |               |          |        |           |             |      |      |      |                   |             |           |             |            |            |           |
| Pumping Expenses          |               |          |        |           |             |      | <    |      |                   | · · · · ·   |           |             |            |            |           |
| Operations and Labor      | 1,835,271     | 0.30     | 0.70   | -         | -           | -    | -    | -    | 550,581           | 1,284,690   | -         | -           | -          | -          | -         |
| Purchased Power           | 2,561,469     | -        | -      | -         | 0.35        | 0.35 | 0.15 | 0.15 | -                 | -           | -         | 896,515     | 896,514    | 384,220    | 384,220   |
| Chemicals                 | 677,400       | 0.30     | 0.70   | -         | -           | -    | -    | -    | 203,220           | 474,180     | -         | -           | -          | -          | -         |
| Materials & Supplies      | 345,055       | 0.30     | 0.70   | -         | -           | -    | -    | -    | 103,516           | 241,539     | -         | -           | -          | -          | -         |
| Contract Services         | 94,800        | 0.30     | 0.70   | -         | -           | -    | -    | -    | 28,440            | 66,360      | -         | -           | -          | -          | -         |
| Misc                      | 31,500        | 0.30     | 0.70   | -         | -           | -    | -    |      | 9,450             | 22,050      |           |             |            |            |           |
| Total Pumping             |               |          |        |           |             |      |      |      |                   |             |           |             |            |            |           |
| Expenses                  | 5,545,495     |          |        |           |             |      |      |      | 895,207           | 2,088,819   | -         | 896,515     | 896,514    | 384,220    | 384,220   |
| -                         |               |          |        |           |             |      |      |      |                   |             |           |             |            |            |           |
| Treatment & Disposal Expe | enses         |          |        |           |             |      |      |      |                   |             |           |             |            |            |           |
| Sludge Removal            | 835,200       | 0.10     | -      | -         | 0.10        | 0.70 | 0.05 | 0.05 | 83,520            | -           | -         | 83,520      | 584,640    | 41,760     | 41,760    |
| Materials & Supplies      | 4,300         | 0.10     | -      | -         | 0.10        | 0.70 | 0.05 | 0.05 | 430               | -           | -         | 430         | 3,010      | 215        | 215       |
| Vehicle Expense           | 62,400        | 0.10     | -      | -         | 0.10        | 0.70 | 0.05 | 0.05 | 6,240             | -           | -         | 6,240       | 43,680     | 3,120      | 3,120     |
| Reclaimed Water           | 16,726        | -        | -      | 1.00      | -           | -    | -    | -    | -                 | -           | 16,726    |             |            |            |           |
| Total Treatment           |               |          |        |           |             |      |      |      |                   |             |           |             |            |            |           |
| Expenses                  | 918,626       |          |        |           |             |      |      |      | 90,190            | -           | 16,726    | 90,190      | 631,330    | 45,095     | 45,095    |
| -                         |               |          |        |           |             |      |      |      |                   |             |           |             |            |            |           |
| Administrative Expenses   |               |          |        |           |             |      |      |      |                   |             |           |             |            |            |           |
| Customer Accounts         | 987,247       | 1.00     | -      | -         | -           | -    | -    | -    | 987,247           | -           | -         | -           | -          | -          | -         |
| Sales Expense             | 34,242        | 1.00     | -      | -         | -           | -    | -    | -    | 34,242            | -           | -         | -           | -          | -          | -         |
| Other A&G                 | 4,893,431     | 0.27     | 0.42   | -         | 0.09        | 0.14 | 0.04 | 0.04 | 1,321,227         | 2,055,241   | -         | 440,409     | 685,080    | 195,737    | 195,737   |
| Total Administrative      |               |          |        |           |             |      |      |      |                   |             |           |             |            |            |           |
| Expenses                  | 5,914,919     |          |        |           |             |      |      |      | 2,342,716         | 2,055,241   | -         | 440,409     | 685,080    | 195,737    | 195,737   |
|                           | . , -         |          |        |           |             |      |      |      |                   | . ,         |           | ,           | , -        |            |           |
| Total Operations and      |               |          |        |           |             |      |      |      |                   |             |           |             |            |            |           |
| Maintenance               | ¢ 16 062 000  |          |        |           |             |      |      |      | ¢ 4 274 200       | ¢6 570 4 44 | ¢ 16 700  | ¢1 400 564  | ¢0 005 074 | ¢ 656 400  | ¢ 656 400 |
| Maintenance               | \$ 16,063,299 |          |        |           |             |      |      |      | <b>⊅4,371,290</b> | \$6,578,141 | \$ 16,726 | \$1,499,564 | φ2,200,374 | \$ 656,102 | φ 000,102 |

Gainesville Regional Utilities Wastewater Rate Study Report Allocation of Depreciation Expense to Cost Functions

|            |                           |              |          |        | Al        | locations |      |      |      |                         |              |                 | Allocated Costs     | 8                 |                   |                          |
|------------|---------------------------|--------------|----------|--------|-----------|-----------|------|------|------|-------------------------|--------------|-----------------|---------------------|-------------------|-------------------|--------------------------|
|            |                           | Forecasted   |          |        |           |           |      |      |      |                         |              |                 |                     |                   |                   |                          |
| Account    |                           | 2016         |          |        |           |           |      |      |      |                         |              |                 |                     |                   |                   |                          |
| Number     | Account Descriptions      | Depreciation | Customer | Volume | Reclaimed | COD       | SS   | Phos | NH3  | Customer                | Volume       | Reclaimed       | COD                 | SS                | Phos              | NH3                      |
| Pumping F  | Plant                     |              |          |        |           |           |      |      |      |                         |              |                 |                     |                   |                   |                          |
| 328        | Land&Land Rights-Pumping  | \$ -         | -        | _      | _         | _         | _    | _    | _    | \$ -                    | \$ -         | \$-             | \$-                 | \$-               | \$-               | \$ -                     |
| 329        | Structures and Improvemen | Ψ<br>132,225 | 0.40     | 0.60   | _         | _         | _    | _    | _    | Ψ<br>52,890             | Ψ<br>79,335  | Ψ               | Ψ                   | Ψ                 | Ψ                 | Ψ                        |
| 333        | Electric Pumping Equipmen | 643,797      | 0.40     | 0.60   | _         | _         | _    | _    | _    | 257,519                 | 386,278      | _               | _                   | _                 | _                 | _                        |
| 334        | Pumping Plt-Diesel Pumpin | 62,045       | 0.40     | 0.60   | _         |           |      | _    | _    | 237,313                 | 37,227       | _               |                     |                   |                   |                          |
| 336        | Receiving Wells           | 185,455      | 0.40     | 0.60   | -         | -         | -    | -    | -    | 74,182                  | 111,273      | -               | -                   | -                 | -                 | -                        |
| 330        | Total Pumping Plant       | 1,023,522    | 0.40     | 0.00   | -         | -         | -    | -    |      | 409,409                 | 614,113      |                 |                     |                   | <u>-</u>          |                          |
|            |                           | , ,          |          |        |           |           |      |      |      | ,                       | · ·          |                 |                     |                   |                   |                          |
|            | Water Treatment Plant     |              |          |        |           |           |      |      |      |                         |              |                 |                     |                   |                   |                          |
| 337        | Land & Land Rights-Ttrmnt | -            | -        | -      | -         | -         | -    | -    | -    | -                       | -            | -               | -                   | -                 | -                 | -                        |
| 338        | Structures and Improvemen | 729,123      | -        | 0.20   | -         | 0.35      | 0.20 | 0.20 | 0.05 | -                       | 145,825      | -               | 255,192             | 145,825           | 145,825           | 36,456                   |
| 339        | Treatment Plant Equipment | 1,229,856    | -        | 0.15   | -         | 0.50      | 0.20 | 0.10 | 0.05 |                         | 184,478      |                 | 614,928             | 245,971           | 122,986           | 61,493                   |
|            | Total Water Treatment     |              |          |        |           |           |      |      |      |                         |              |                 |                     |                   |                   |                          |
|            | Plant                     | 1,958,979    |          |        |           |           |      |      |      | -                       | 330,303      | -               | 870,120             | 391,796           | 268,811           | 97,949                   |
|            | Collection Plant          |              |          |        |           |           |      |      |      |                         |              |                 |                     |                   |                   |                          |
| 374        | Land and Land Rights      | -            |          |        |           |           |      |      |      | <u> </u>                | -            | -               | -                   | -                 | -                 | -                        |
| 377        | Mains                     | 3,341,311    | 0.50     | 0.50   | -         | -         | -    | _    | _    | 1,670,656               | 1,670,655    | -               | -                   | -                 | -                 | -                        |
| 378        | Fire or Force Mains       | 721,186      | 0.50     | 0.50   | _         | -         | _    | _    | _    | 360,593                 | 360,593      | -               | -                   | -                 | _                 | -                        |
| 379        | Services                  | 542,134      | 0.50     | 0.50   | _         | -         | _    | _    | _    | 271,067                 | 271,067      | -               | -                   | -                 | _                 | -                        |
| 380        | Meters                    | 26,892       | 0.50     | 0.50   | -         |           | _    | _    | -    | 13,446                  | 13,446       | -               | -                   | -                 | -                 | -                        |
| 000        | Total Collection Plant    | 4,631,523    | 0.00     | 0.00   |           |           |      |      |      | 2,315,762               | 2,315,761    |                 |                     |                   |                   |                          |
|            |                           | .,           |          |        |           |           |      |      |      | _,                      | _, ,         |                 |                     |                   |                   |                          |
|            | Reuse Water Plant         |              |          |        |           |           |      |      |      |                         |              |                 |                     |                   |                   |                          |
| 386        | Tanks and Installation    | 488          | -        | 0.80   |           | -         | -    | -    | -    | -                       | 390          | 98              | -                   | -                 | -                 | -                        |
| 387        | Reclaimed Water           | 213,316      | -        | 0.80   | 0.20      | -         | -    | -    | -    |                         | 170,653      | 42,663          |                     |                   |                   |                          |
|            | Total Water Reuse Plant   | 213,804      |          |        |           |           |      |      |      | -                       | 171,043      | 42,761          | -                   | -                 | -                 | -                        |
|            | General Plant             |              |          |        |           |           |      |      |      |                         |              |                 |                     |                   |                   |                          |
| 388        | Land & Land Rights        | -            | 0.35     | 0.44   | 0.01      | 0.11      | 0.05 | 0.03 | 0.01 | -                       | -            | -               | -                   | -                 | -                 | -                        |
| 389        | Land and Land Rights      | -            | 0.35     | 0.44   | 0.01      | 0.11      | 0.05 | 0.03 | 0.01 | -                       | -            | -               | -                   | -                 | -                 | -                        |
| 390        | Structures&Improvements   | 288,470      | 0.35     | 0.44   | 0.01      | 0.11      | 0.05 | 0.03 | 0.01 | 100,965                 | 126,925      | 2,885           | 31,732              | 14,424            | 8,654             | 2,885                    |
| 391        | Office Furniture & Equipm | 177,774      | 0.35     | 0.44   | 0.01      | 0.11      | 0.05 | 0.03 | 0.01 | 62,221                  | 78,220       | 1,778           | 19,555              | 8,889             | 5,333             | 1,778                    |
| 391.1      | Computers and Electronics | 142,838      | 0.35     | 0.44   | 0.01      | 0.11      | 0.05 | 0.03 | 0.01 | 49,993                  | 62,850       | 1,428           | 15,712              | 7,142             | 4,285             | 1,428                    |
| 392        | Transportation Equipment  | 80,947       | 0.35     | 0.44   | 0.01      | 0.11      | 0.05 | 0.03 | 0.01 | 28,331                  | 35,619       | 809             | 8,904               | 4,047             | 2,428             | 809                      |
| 394        | Tools Shop &Garage Equip  | 11,519       | 0.35     | 0.44   | 0.01      | 0.11      | 0.05 | 0.03 | 0.01 | 4,032                   | 5,068        | 115             | 1,267               | 576               | 346               | 115                      |
| 395        | Laboratory&Testing Equip  | 19,612       | 0.35     | 0.44   | 0.01      | 0.11      | 0.05 | 0.03 | 0.01 | 4,0 <u>5</u> 2<br>6,864 | 8,630        | 196             | 2,157               | 981               | 588               | 196                      |
| 396        | Power Operated Equipment  | 543,038      | 0.35     | 0.44   | 0.01      | 0.11      | 0.05 | 0.03 | 0.01 | 190,063                 | 238,938      | 5,430           | 59,734              | 27,152            | 16,291            | 5,430                    |
| 397        | Communication Equipment   | 1,093        | 0.35     | 0.44   | 0.01      | 0.11      | 0.05 | 0.03 | 0.01 | 383                     | 480          | 11              | 120                 | 55                | 33                | 0, <del>4</del> 30<br>11 |
| 398        | Miscellaneous Equipment   | 19,854       | 0.35     | 0.44   | 0.01      | 0.11      | 0.05 | 0.03 | 0.01 | 6,949                   | 8,734        | 199             | 2,184               | 993               | 596               | 199                      |
| 000        | Total General Plant       | 1,285,145    | 0.00     | 0.44   | 0.01      | 0.11      | 0.00 | 0.00 | 0.01 | 449,801                 | 565,464      | 12,851          | 141,365             | 64,259            | 38,554            | 12,851                   |
|            |                           |              |          |        |           |           |      |      |      |                         |              |                 |                     |                   |                   |                          |
| Total Depi | reciation Expense         | \$ 9,112,973 |          |        |           |           |      |      |      | \$ 3,174,972            | \$ 3,996,684 | <u>\$55,612</u> | <u>\$ 1,011,485</u> | <u>\$ 456,055</u> | <u>\$ 307,365</u> | <u>\$ 110,800</u>        |

## Gainesville Regional Utilities Wastewater Rate Study Report Summary of Costs by Function

|   |                  |                      |                      |                      |                   |                     | High St     | trength      |                       |
|---|------------------|----------------------|----------------------|----------------------|-------------------|---------------------|-------------|--------------|-----------------------|
| Revenue Requirement   |                  | Forecasted           |                      |                      |                   |                     |             |              |                       |
| Component   | Allocation Basis | 2016                 | Customer             | Volume               | Reclaimed         | COD                 | SS          | Phos         | NH3                   |
| Operation and Maintenance<br>Expenses                       |                  | \$ 16,063,299        | \$ 4,371,290         | \$ 6,578,141         | \$ 16,726         | \$ 1,499,564 \$     | 6 2,285,374 | \$ 656,102   | \$ 656,102            |
| Depreciation  |                  | 9,112,973            | 3,174,972            | 3,996,684            | 55,612            | 1,011,485           | 456,055     | 307,365      | 110,800               |
| Return on Rate Base   |                  | 8,971,497            | 3,125,682            | 3,934,636            | 54,749            | 995,782             | 448,975     | 302,593      | 109,080               |
| Subtotal  |                  | 34,147,769           | 10,671,944           | 14,509,461           | 127,087           | 3,506,831           | 3,190,404   | 1,266,060    | 875,982               |
| Cabiciai  |                  | 01,111,100           | 10,011,011           | 11,000,101           | 121,001           | 0,000,001           | 0,100,101   | 1,200,000    | 010,002               |
| Average Allo  | cation Weighting | 100.0%               | 31.25%               | 42.49%               | 0.37%             | 10.27%              | 9.34%       | 3.71%        | 2.57%                 |
|   |                  |                      |                      |                      |                   |                     |             |              |                       |
| Transfer to the General Fund<br>Other Revenues - Connection | Above Allocation | 7,473,327            | 2,335,415            | 3,175,416            | 27,651            | 767,511             | 698,009     | 277,260      | 192,064               |
| Charges   | Above Allocation | (1,976,058)          | (617,518)            | (839,627)            | (7,311)           | (202,941)           | (184,564)   | (73,312)     | (50,785)              |
| Other Revenues - Surcharges<br>Other Revenues - Interest    | Above Allocation | (2,730,114)          | (853,161)            | (1,160,025)          | (10,101)          | (280,383)           | (254,993)   | (101,287)    | (70,164)              |
| Income  | Above Allocation | (240,784)            | (75,245)             | (102,309)            | (891)             | (24,729)            | (22,489)    | (8,933)      | (6,188)               |
| Other Revenues - BABs<br>Subsidy<br>Other Revenues - Rate   | Above Allocation | (1,009,441)          | (315,450)            | (428,911)            | (3,735)           | (103,670)           | (94,282)    | (37,450)     | (25,943)              |
| Stabilization Transfer                                      | Above Allocation | 1,355,725            | 423,664              | 576,048              | 5,016             | 139,233             | 126,625     | 50,297       | 34,842                |
| Other Revenue - Biosolids                                   | Above Allocation | (312,000)            | (97,500)             | (132,568)            | (1,154)           | (32,042)            | (29,141)    | (11,575)     | (8,018)               |
| Other Revenues - Shands and Innovation Square               | Above Allocation | (103,314)            | (32,286)             | (43,898)             | (382)             | (10,610)            | (9,650)     | (3,833)      | (2,655)               |
| Allocated Costs   |                  | <u>\$ 36,605,109</u> | <u>\$ 11,439,863</u> | <u>\$ 15,553,587</u> | <u>\$ 136,180</u> | <u>\$ 3,759,200</u> | 3,419,919   | \$ 1,357,227 | <u>\$     939,135</u> |

# Wastewater Rate Study Report

**Customer and Reclaimed Water Rates** 

|                                   | Source |            |            |
|-----------------------------------|--------|------------|------------|
| Customer Cost                     | -      | \$         | 11,439,863 |
| Customers * Months                | -      | . <u> </u> | 781,008    |
| Monthly Charge per Customer       |        | <u>\$</u>  | 14.65      |
|                                   | Source |            |            |
| Reclaimed Water Cost              |        | \$         | 136,180    |
| Reclaimed Sales (1,000s Gallons)  |        | —          | 205,665    |
| Calculated Reclaimed Water Charge |        | <u>\$</u>  | 0.66       |

Note: In calculating the reclaimed water rate, we are assuming no change in sales volume despite the increase in rate.

# Wastewater Rate Study Report

**Domestic Volume and Excess Strength Rates** 

| Volume COD                  | SS   |   | Phos             |       | NH3              |   | Total          |                   |
|-----------------------------|--|---|------------------|-------|------------------|---|----------------|-------------------|
| \$ 15,553,587 \$ 3,759,200  | \$ 3,419,919   |   | \$ 1,357,227     |       | \$ 939,135       |   | \$ 25,029,068  |                   |
|                             |  |   |                  |       |                  |   |                |                   |
|                             |  |   | Conversion       |       | Assumed          |   |                |                   |
|                             | Volume   |   | Factor           |       | Domestic         |   |                |                   |
|                             | (1,000s Gallons)   |   | (lb*L)/(kgal*mg) |       | Strength (mg/L)  |   |                |                   |
|                             |  |   |                  |       |                  |   |                |                   |
|                             | ength Volume   |   |                  |       |                  |   | 4,648,959      | per 1,000 gallons |
| Sivance                     |  |   |                  |       |                  |   | 45,552         | per 1,000 gallons |
| Total V                     | /olume   |   |                  |       |                  |   | 4,694,511      | per 1,000 gallons |
| COD Domestic                | 4,694,511  | х | 0.00834538       | x     | 375              | = | 14,691,554.33  | Pounds            |
| Sivance Exce                |  | ~ |                  |       |                  |   | 34,365         | Pounds            |
| Total C                     | •  |   |                  |       |                  |   | 14,725,920     | Pounds            |
|                             |  |   |                  |       |                  |   | , ,            |                   |
| SS                          | 4,694,511  | Х | 0.00834538       | x     | 250              | = | 9,794,370      | Pounds            |
| Disa                        |  |   | 0 0000 4500      |       | 45               |   | 507.000        | Describ           |
| Phos                        | 4,694,511  | Х | 0.00834538       | х     | 15               | = | 587,662        | Pounds            |
| NH3                         | 4,694,511  | х | 0.00834538       | x     | 40               | = | 1,567,099      | Pounds            |
|                             |  |   |                  |       |                  |   |                |                   |
| Component Dates             |  |   | Cast             |       | Linita           |   |                |                   |
| Component Rates             |  |   | Cost             |       | Units            |   |                |                   |
| Volume cost per 1,000 gallo | ons  |   | 15,553,587       | 1     | 4,694,511        | = | 3.31           | per 1,000 gallons |
| Chemical Oxygen Demand      |  |   | 3,759,200        | 1     | 14,725,920       | = | 0.26           | per Pound         |
| Suspended Solids            |  |   | 3,419,919        | 1     | 9,794,370        | = | 0.35           | per Pound         |
| Phosphorus                  |  |   | 1,357,227        | /     | 587,662          | = | 2.31           | per Pound         |
| Ammonia                     |  |   | 939,135          |       | 1,567,099        |   | 0.60           | per Pound         |
| Domestic Strength Rate      |  |   |                  |       |                  |   |                |                   |
| Volume                      |  |   |                  |       |                  | = | 3.31           | per 1,000 gallons |
|                             | mg/L   | х | 0.00834538       | х     | 0.26             |   |                | per 1,000 gallons |
| SS 250                      | No. In the second s | x | 0.00834538       |       | 0.35             |   | 0.73           | per 1,000 gallons |
| Phos 15                     | •  | x | 0.00834538       |       | 2.31             |   | 0.29           | per 1,000 gallons |
| NH3 40                      | •  | x | 0.00834538       |       | 0.60             |   | 0.20           | per 1,000 gallons |
|                             | č  |   |                  |       |                  |   |                |                   |
|                             |  |   | Total Calcu      | ulate | ed Domestic Rate |   | <u>\$ 5.34</u> | per 1,000 gallons |

## Gainesville Regional Utilities Wastewater Rate Study Report Forecasted Revenues at Calculated Rates

|                         |           |                    |         |            | Resid      | lential       | Non-Re    | sidential    | Reclaim | ed Water   | High S  | Strength   |
|-------------------------|-----------|--------------------|---------|------------|------------|---------------|-----------|--------------|---------|------------|---------|------------|
|                         |           |                    | Current | Calculated |            | Calculated    |           | Calculated   |         | Calculated |         | Calculated |
| Customer Class          | Units     |                    | Rates   | Rates      | Current    | Rates         | Current   | Rates        | Current | Rates      | Current | Rates      |
| Residential             |           |                    |         |            |            |               |           |              |         |            |         |            |
| Volume Charge           | 3,321,266 | 1,000 Gallons      | 6.05    | 5.33       | 20,093,659 | 17,702,348    |           |              |         |            |         |            |
| Customer Charge         | 718,668   | Customer<br>Months | 8.40    | 14.65      | 6,036,811  | 10,528,486    |           |              |         |            |         |            |
| Non-Residential         |           |                    |         |            |            |               |           |              |         |            |         |            |
| Volume Charge           | 1,327,693 | 1,000 Gallons      | 6.05    | 5.33       |            |               | 8,032,543 | 7,076,604    |         |            |         |            |
| Customer Charge         | 52,044    | Customer<br>Months | 8.40    | 14.65      |            |               | 437,170   | 762,445      |         |            |         |            |
| Reclaimed Water Service |           |                    |         |            |            |               |           |              |         |            |         |            |
| Volume Charge           | 205,665   | 1,000 Gallons      | 0.70    | 0.65       |            |               |           |              | 143,966 | 133,682    |         |            |
| Customer Charge         | 10,284    | Customer<br>Months | 8.40    | 14.65      |            |               |           |              | 86,386  | 150,661    |         |            |
| High Strength           |           |                    |         |            |            |               |           |              |         |            |         |            |
| Volume Charge           | 45,552    | 1,000 Gallons      | 6.05    | 5.33       |            |               |           |              |         |            | 275,590 | 242,792    |
| COD                     | 34,365    | Pounds             | 0.94    | 0.26       |            |               |           |              |         |            | 32,152  | 8,935      |
| Customer Charge         | 12        | Customer<br>Months | 12.00   | 14.65      |            |               |           |              |         |            | 144     | 176        |
| Volume Revenue          |           |                    |         |            |            | 17,702,348    |           | 7,076,604    |         | 133,682    |         | 242,792    |
| Excess Strength Revenue | 9         |                    |         |            |            | -             |           | -            |         | -          |         | 8,935      |
| Customer Revenue        |           |                    |         |            |            | 10,528,486    |           | 762,445      |         | 150,661    |         | 176        |
| Total 2016 Revenues     |           |                    |         |            |            | \$ 28,230,834 |           | \$ 7,839,049 |         | \$ 284,343 |         | \$ 251,903 |

Wastewater Rate Study Report

**Connection Fees** 

|                           |          |                   |     | Collectio        | on S  | ystem          |       |                 |
|---------------------------|----------|-------------------|-----|------------------|-------|----------------|-------|-----------------|
| Meter Size                | Pre      | esent Rates       | Equ | vivalent Ratios  |       | Meter Capacity | Avera | age Consumption |
| 5/8"                      | \$       | 670               | \$  | 1,081            | \$    | 809            | \$    | 642             |
| 3/4"                      |          | 1,950             |     | 1,190            |       | 1,770          |       | 786             |
| 1"                        |          | 2,180             |     | 1,514            |       | 2,781          |       | 2,906           |
| 1 1/2"                    |          | 5,000             |     | 1,947            |       | 8,090          |       | 6,516           |
| 2"                        |          | 9,590             |     | 3,136            |       | 8,090          |       | 15,074          |
| 3"                        |          |                   |     | 11,896           |       | -              |       | 27,773          |
| 4"                        | \$9,59   | 0 or \$2.508 per  |     | 15,141           |       | -              |       | 57,107          |
| 6"                        | gallo    | on estimated      |     | 22,711           |       | -              |       | 15,693          |
| 8"                        | avera    | age daily flow    |     | 31,363           |       | -              |       | 266,692         |
| Forecasted Revenue over 5 | ¢        | 0 074 070         | ¢   | 0 044 450        | ¢     | 0.040.754      | ¢     | 0.040.774       |
| Years                     | \$       | 2,271,370         | \$  | 2,614,153        | \$    | 2,613,754      | \$    | 2,612,774       |
|                           |          |                   |     | Treatme          | ent l | Plant          |       |                 |
|                           |          |                   |     |                  |       |                |       |                 |
| Meter Size                |          | esent Rates       |     | uivalent Ratios  |       | Meter Capacity |       | age Consumption |
| 5/8"                      | \$       | 3,110             | \$  | 4,487            | \$    | 3,356          | \$    | 2,665           |
| 3/4"                      |          | 9,060             |     | 4,935            |       | 7,342          |       | 3,260           |
| 1"                        |          | 10,510            |     | 6,281            |       | 11,537         |       | 12,061          |
| 1 1/2"                    |          | 23,680            |     | 8,076            |       | 33,562         |       | 27,045          |
| 2"                        |          | 49,060            |     | 13,011           |       | 33,562         |       | 62,563          |
| 3"                        | <b>.</b> |                   |     | 49,353           |       | -              |       | 115,272         |
| 4"                        |          | 0 or \$11.214 per |     | 62,812           |       | -              |       | 237,019         |
| 6"                        | gallo    | on estimated      |     | 94,219           |       | -              |       | 65,132          |
| 8"                        | avera    | age daily flow    |     | 130,111          |       | -              |       | 1,106,885       |
| Forecasted Revenue over 5 |          |                   |     |                  |       |                |       |                 |
| Years                     | \$       | 10,844,120        | \$  | 10,845,017       | \$    | 10,849,574     | \$    | 10,844,116      |
|                           |          |                   |     |                  |       |                |       |                 |
|                           |          |                   |     | Total Collection | on 8  | Treatment      |       |                 |
| Meter Size                | Pre      | esent Rates       | Fai | uivalent Ratios  |       | Meter Capacity | Δver: | age Consumption |
| 5/8"                      | \$       | 3,780             | \$  | 5,568            | ¢     | 4,165          | \$    | 3,307           |
| 3/4"                      | Ψ        | 11,010            | Ψ   | 6,125            | Ψ     | 9,111          | Ψ     | 4,046           |
| 5/4<br>1"                 |          | 12,690            |     | 7,795            |       | 14,318         |       | 14,967          |
| 1 1/2"                    |          | 28,680            |     | 10,023           |       |                |       |                 |
| 2"                        |          |                   |     |                  |       | 41,652         |       | 33,561          |
| 2"<br>3"                  |          | 58,650            |     | 16,147           |       | 41,652         |       | 77,637          |
| 3"<br>4"                  | \$58 65  | 0 or \$13.722 per |     | 61,249           |       | -              |       | 143,045         |
|                           |          | on estimated      |     | 77,953           |       | -              |       | 294,126         |
| 6"                        | -        |                   |     | 116,930          |       | -              |       | 80,825          |
| 8"                        | avera    | age daily flow    |     | 161,474          |       | -              |       | 1,373,578       |

13,115,490 \$

13,459,171 \$

13,463,328 \$

13,456,890

## Gainesville Regional Utilities Wastewater Rate Study Report Connection Charge Projects

| Collection Projects Recovered in Connection |                 |                 |               |               |               |                 | Allocation to |     |             |
|---|-----------------|-----------------|---------------|---------------|---------------|-----------------|---------------|-----|-------------|
| Charges                                     | <br><u>2011</u> | <u>2012</u>     | <u>2013</u>   | <u>2014</u>   | <u>2015</u>   | <br>Total       | New Customers | All | ocated Cost |
| LS Upgrades                                 | \$<br>127,463   | \$<br>54,541    | \$<br>100,304 | \$<br>80,000  | \$<br>75,000  | \$<br>437,308   | 60%           | \$  | 262,385     |
| FM Upgrades                                 | 364,072         |                 |               |               |               | 364,072         | 60%           | \$  | 218,443     |
| Urban Core Study                            |                 |                 |               |               |               | -               | 60%           | \$  | -           |
| SewerCAD Model                              | 21,224          | 9,101           | 2,866         | 15,628        |               | 48,819          | 60%           | \$  | 29,291      |
| College Park                                |                 | 5,788           |               | 9,158         |               | 14,946          | 60%           | \$  | 8,968       |
| LS 141 12" FM UPGRADE                       |                 |                 |               |               |               | -               | 60%           | \$  | -           |
| College Park                                |                 |                 | 8,652         |               |               | 8,652           | 100%          | \$  | 8,652       |
| LS92 Upgrade Oversizing                     |                 | 242,654         |               |               |               | 242,654         | 100%          | \$  | 242,654     |
| Oversizing                                  |                 | 4,026           | 7,613         | 11,000        | 200,000       | 222,639         | 100%          |     | 222,639     |
| LS10  |                 |                 |               |               |               | -               | 25%           | \$  | -           |
| LS6   | 1,122,137       | 1,162           |               |               |               | 1,123,299       | 25%           |     | 280,825     |
| LS8   |                 | 26,912          | 167,736       | 280,000       |               | 474,648         | 25%           |     | 118,662     |
| LS1   |                 | 726,130         | 16,625        |               |               | 742,755         | 25%           |     | 185,689     |
| LS7&12                                      |                 |                 | 1,172         |               |               | 1,172           | 25%           |     | 293         |
| Road Projects                               | 27,005          | 100,077         | 37,318        | -             | 50,000        | 214,400         | 25%           |     | 53,600      |
| CRA Main St Streetscape & Recon             |                 |                 |               |               | 100,000       | 100,000         | 25%           |     | 25,000      |
| SE 4th St Recon Depot Ave - Williston Rd    |                 | 26,639          | 11,024        | 3,000         | 45,000        | 85,663          | 25%           |     | 21,416      |
| Depot Ave Seg 2 (SW 11th St to Main St)     |                 |                 | 38,167        | 240,000       | 100,000       | 378,167         | 25%           |     | 94,542      |
| Depot Ave Seg 4 (SE 7th St to Williston Rd) |                 | 230,277         | 11,754        | 6,000         | 125,000       | 373,031         | 25%           |     | 93,258      |
| I District/Urban Core                       |                 | 440,247         | 340,824       | 68,172        | 130,000       | 979,243         | 40%           |     | 391,697     |
| Lobiolly                                    | <br>-           | <br>-           | <br>62,067    | <br>45,658    | <br>44,000    | <br>151,725     | 50%           | \$  | 75,863      |
|   | \$<br>1,661,900 | \$<br>1,867,554 | \$<br>806,122 | \$<br>758,616 | \$<br>869,000 | \$<br>5,963,193 |               |     |             |
|   |                 |                 |               |               |               |                 | Subtotal      |     | 2,333,877   |
|   |                 |                 |               |               |               |                 | Overhead      |     | 280,065     |

2,613,942

## Gainesville Regional Utilities Wastewater Rate Study Report Service Charges and Deposits

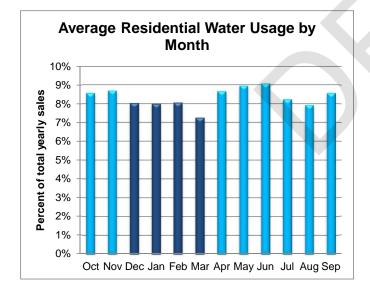
|   |                    | Labor         | Travel        | Labor | Labor                                 | Vehicle    | Vehicle        | Vehicle       |             |
|---|--------------------|---------------|---------------|-------|---------------------------------------|------------|----------------|---------------|-------------|
| Description   | Current Rate       | Hours         | Hours         | Rate  | Cost                                  | Hours      | Rate           | Cost          | Total       |
| Collection Agency Transfer Fee                        | 25% up to \$50     |               |               |       |                                       |            |                | 25%           | up to \$50  |
| Field Visit   | 25.00              | 0.50          | 0.30          | 33.84 | 27.07                                 | 0.80       | 20.00          | 16.00         | 43.00       |
| Conservation Visit - Customer Failed to Show          | 20.00              | 0.50          | 0.30          | 33.84 | 27.07                                 | 0.80       | 20.00          | 16.00         | 43.00       |
| Unauthorized Service Investigation                    | 65.00              | 1.25          | 0.30          | 33.84 | 52.45                                 | 0.80       | 20.00          | 16.00         | 68.00       |
| Residential Deposit                                   | 40.00              |               |               |       |                                       |            | \$8            | 30 or twice m | onthly bill |
| Returned Payment Fee                                  | Greater of \$20 or | 5% of trans   | action amoun  | t     |                                       | Greater    | of \$20 or 5%  | of transactio | on amount   |
| Late Payment Fee                                      | Greater of \$1 or  | 1.5% of delin | quent balance | е     |                                       | Greater of | of \$1 or 1.5% | of delinque   | nt balance  |
| Base Inspection Service Fee                           | 1,250.00           |               |               |       | · · · · · · · · · · · · · · · · · · · |            |                |               | 1,190.00    |
| Inspection Fee per Linear Foot of Developer Installed |                    |               |               |       |                                       |            |                |               |             |
| Distribution Piping                                   | 5.55               |               |               |       |                                       |            |                |               | 5.15        |
| Private Sewerage System Permit                        | 5.00               |               |               |       |                                       |            |                |               | 5.15        |
| Industrial User Fee                                   | 510.00             |               |               |       |                                       |            |                |               | 510.00      |
| Residential Connection Required but not Connected     | 38.65              |               |               |       |                                       |            |                |               | 24.63       |
| Single Unit Residential Private Well Volume           | 38.65              |               |               |       |                                       |            |                |               | 24.63       |
| Single Unit Residential Private Well Customer Charge  | 8.40               |               |               |       |                                       |            |                |               | 14.65       |
| Multi Unit Residential Private Well Volume            | 30.25              |               |               |       |                                       |            |                |               | 24.63       |
| Multi Unit Residential Private Well Customer Charge   | 8.40               |               |               |       |                                       |            |                |               | 14.65       |

| Assumptions                | Pay Rate | Overhead<br>Rate | Loaded<br>Rate |
|----------------------------|----------|------------------|----------------|
| Labor<br>Field Service Rep | 24.00    | 41%              | 33.84          |
| Meter Reader               | 15.00    | 41%              | 21.15          |

## Gainesville Regional Utilities Wastewater Rate Study Report Winter Maximum

As indicated below, water usage is lowest during the winter months of December through March. It is assumed that less of the water usage is treated in the summer months due to watering of lawns.

| -     | Resider | ntial Water S | Sales   |                  |                     |                       |
|-------|---------|---------------|---------|------------------|---------------------|-----------------------|
| Month | FY14    | FY13          | FY12    | 3 Year Total     | <u>3 yr Average</u> | Y <u>ear Aver</u> age |
| Oct   | 346,924 | 321,667       | 406,644 | 1,075,235        | 358,412             | 8.56%                 |
| Nov   | 368,867 | 363,213       | 360,458 | 1,092,538        | 364,179             | 8.70%                 |
| Dec   | 322,663 | 342,295       | 343,583 | 1,008,541        | 336,180             | 8.03%                 |
| Jan   | 329,449 | 330,011       | 344,088 | 1,003,548        | 334,516             | 7.99%                 |
| Feb   | 325,928 | 344,107       | 341,821 | 1,011,856        | 337,285             | 8.06%                 |
| Mar   | 286,674 | 301,956       | 322,312 | 910,942          | 303,647             | 7.25%                 |
| Apr   | 321,076 | 380,938       | 385,588 | 1,087,602        | 362,534             | 8.66%                 |
| May   | 352,206 | 360,159       | 412,137 | 1,124,502        | 374,834             | 8.96%                 |
| Jun   | 353,835 | 383,543       | 400,859 | 1,138,237        | 379,412             | 9.06%                 |
| Jul   | 353,722 | 320,027       | 358,864 | 1,032,613        | 344,204             | 8.22%                 |
| Aug   | 332,249 | 323,998       | 339,538 | 995,785          | 331,928             | 7.93%                 |
| Sep   | 336,386 | 377,937       | 361,451 | <u>1,075,774</u> | 358,591             | 8.57%                 |
|       |         |               |         | 12,557,173       |                     | 100.00%               |



## Gainesville Regional Utilities Wastewater Rate Study Report Sludge Hauling Rates

| High Strength Component                            | Milligrams per<br>Liter | Milligrams per Liter<br>Embedded in<br>Volume Charge | Conversion<br>Factor<br>(lb*L)/(kgal*mg) | Pounds per<br>1,000 Gallons | Rate per Unit     |   | Rate per 1,000<br>Gal |
|--|-------------------------|--|--|-----------------------------|-------------------|---|-----------------------|
| Volume   |                         |  |  |                             |                   |   | 5.34                  |
| Chemical Oxygen Demand                             | 15,000                  | (375)  | 0.00834538                               | 122                         | 0.26              | = | 31.73                 |
| Suspended Solids                                   | 10,000                  | (250)  | 0.00834538                               | 81                          | 0.35              | = | 28.48                 |
| Phosphorus   | 600                     | (15)   | 0.00834538                               | 5                           | 2.31              | = | 11.28                 |
| Ammonia  | 1,600                   | (40)   | 0.00834538                               | 13                          | 0.60              | = | 7.81                  |
|  |                         |  |  | Total Rate p                | per 1,000 Gallons |   | \$ 84.64              |
| Administrative Charge per Loac                     |                         |  | \$ 14.65                                 |                             |                   |   |                       |
| Additional Rate per Additional 1% Suspended Solids |                         |  | \$ 81.33                                 |                             |                   |   |                       |

Wastewater Rate Study Report

Representative Bills

| Customer            | Volume<br>(1,000<br>gallons) | Monthly Bill at<br>Current Rates | Monthly Bill at<br>Cost-Based<br>Rates | Change  | Percent<br>Change |
|---------------------|------------------------------|----------------------------------|--|---------|-------------------|
| Small Residential   | 3                            | 26.55                            | 30.64                                  | 4.09    | 15%               |
| Average Residential | 5                            | 38.65                            | 41.30                                  | 2.65    | 7%                |
| Large Residential   | 15                           | 99.15                            | 94.60                                  | (4.55)  | -5%               |
| Non-Residential     | 20                           | 129.40                           | 121.25                                 | (8.15)  | -6%               |
| Non-Residential     | 26                           | 165.70                           | 153.23                                 | (12.47) | -8%               |
| Non-Residential     | 52                           | 323.00                           | 291.81                                 | (31.19) | -10%              |
| Non-Residential     | 78                           | 480.30                           | 430.39                                 | (49.91) | -10%              |
| Reclaimed Water     | 20                           | 22.40                            | 27.65                                  | 5.25    | 23%               |