LEE COUNTY

Water and Wastewater Miscellaneous and Connection Fee Study

Final Report / September 17, 2020 (Revised May 19, 2021)

RAFTELIS

LEE COUNTY
SOUTHWEST FLORIDA

RAFTELIS

September 17, 2020

Ms. Pamela S. Keyes P.E.
Utilities Director
Lee County Utilities Department
P.O. Box 398
Fort Myers, FL 33902-0398

Subject: **Miscellaneous and Connection Fee Study**

Dear Ms. Keyes:

Raftelis Financial Consultants, Inc. ("Raftelis") has completed our review of the connection and miscellaneous fees (the "Study") on behalf of the Lee County Utilities ("LCU") of Lee County, Florida (the "County") and has presented the results of our analyses, assumptions, and findings in this report for your consideration. The focus of the Study was to update the fee calculations of certain selected miscellaneous fees for service last formally reviewed in 2011, and review the County's current connection fees last formally reviewed in 2007.

Since the last formal review of the water and wastewater connection fees, the County has made significant capital infrastructure investments and has identified significant near-term facility expansions. While infrastructure investment has increased, the assumed level of service ("LOS"), which represents the allocated average daily capacity allocated to a typically residential customer is changing which is typical in the industry; specifically, the LOS has declined for the wastewater system. Based on this and the findings of this study, we have estimated that the County may raise the current water connection fee by $455 per ERU. With respect to the wastewater connection fee we have calculated an increase to the wastewater connection fee of $480 per ERU. The identified fee increases resulted in a combined water and wastewater connection fee that is greater but still comparable to that of the survey average of 19 neighboring public utilities. It is not expected that adjusting the County's existing connection fees in line with the findings and recommendations of this evaluation will adversely affect development or growth within the County, however the proposed increase does represent an approximate 18% increase to the fee and therefore the County may wish to consider phasing in such the adjustment over time. It is recommended that the County reevaluate the fees in the next three to five years recognizing the significant near-term capital expansions identified as part of the adopted CIP (e.g., North Lee County Water Treatment Plant and other transmission related water and wastewater system expansions).

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Utility Connection Fee Comparison and Survey [*]

	Water ($/ERU)	Wastewater ($/ERU)	Combined ($/ERU)
Lee County – Existing	$2,440	$2,660	$5,100
Lee County – Recommended	$2,895	$3,140	$6,035
Fee Change – $	$455	$480	$935
Fee Change – %	18.6%	18.0%	18.3%
Survey Average	$2,270	$2,809	$5,078

[*] Survey of 19 public utilities located in the Southwestern portion of the state was performed as of September 2020 and reflects charges for a typical residential single-family home or one (1) ERU.

The miscellaneous fee evaluation included a review of several types of fees as requested by County staff and in many cases, it was identified that a fee increase could be supported. Reference is made to Appendix A at the end of this report for a complete listing of the miscellaneous fees evaluated and the proposed changes. The most significant change being proposed to the miscellaneous fees is associated with the meter installation and tap-in charges and monthly fireline service fees. The principal driver for change in the meter installation and tap-in charges fees is related to the increased cost of meters (i.e., change to AMI metering technology) and increased labor costs. The following provides a summary of the existing and recommended fee changes:

Miscellaneous Fee Evaluation – Meter Installation and Tap-in Charges

Water Meter Installation Fees (Drop-in Charges)	Existing	Calculated	Change Amount	Change Percent
5/8" Meter	$260.00	$425.00	$165.00	63.46%
3/4" Meter	295.00	450.00	155.00	52.54%
1" Meter	325.00	485.00	160.00	49.23%
1.5" Meter	525.00	530.00	5.00	0.95%
2" Meter	595.00	620.00	25.00	4.20%
3" Meter and Above	Actual Cost	Actual Cost		
Tap-in Charges				
5/8" Meter	$1,025.00	$1,230.00	$205.00	20.00%
3/4" Meter	1,060.00	1,255.00	195.00	18.40%
1" Meter	1,090.00	1,290.00	200.00	18.35%
1.5" Meter	1,650.00	1,750.00	100.00	6.06%
2" Meter	1,800.00	1,890.00	90.00	5.00%
3" Meter and Above	Actual Cost	Actual Cost		

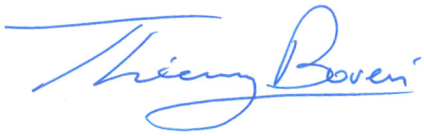
As can be seen above, it is identified that the County may increase the 5/8" meter installation fee by $165.00 from $260.00 to $425.00.

With respect to the monthly fireline service fees, it is recommended that the County consider a change in methodology to set the charge equal to $1/12^{th}$ the water base rate (less customer account charges). The change is expected to increase fireline charges on average by approximately 66% and generate an additional $221,757 annually. Please reference Section 1-12 for a more detailed discussion of the change to fireline charges.

Following this letter is an attached summary report documenting the principal assumptions and our findings for your consideration. A summary of the recommended fees was prepared and can be found in Appendix A at the end of the report. As always, we appreciate the opportunity to be of service to the County and the fine cooperation and valuable assistance given to us by LCU staff in the completion of the study.

Respectfully submitted,

Raftelis Financial Consultants, Inc.



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Attachments

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MISCELLANEOUS AND CONNECTION FEE STUDY

SECTION 1: MISCELLANEOUS SERVICE CHARGE STUDY

1.1 GENERAL

The County charges customer's fees for certain specifically requested services or needs. The County last reviewed the miscellaneous fees in June 2011 or approximately 9 years ago, prompting the desire to review the sufficiency of such fees to recover the estimated costs associated with providing such services. Examples of these fees include, but are not limited to, water meter installation charges, turn-on fees and plan review fees. Revenues from these charges tend to reduce the level of expenditures funded from user fees or rates. Generally, the design of the fees is based on the cost of the specific services requested. This section discusses the review of the miscellaneous service charges and the design of the proposed fees, where applicable.

1.2 METHODOLOGY

The general methodology employed in development of the proposed miscellaneous fees includes the recovery of the direct costs (i.e., labor and materials to perform the specific services) plus general overhead or indirect costs (primarily associated with management and supervision of the services). Unless otherwise noted, the methodology used in development of the proposed fees is consistent with that of the existing fee. Therefore, any recommended changes to the miscellaneous fees are primarily related to changes in the direct and/or the indirect cost of providing service.

1.3 METER ISTALLATION CHARGES (DROP-IN / TAP-IN FEES)

An identifiable service that is provided to the County's water customers deals with the physical connection of a water customer to the water distribution system. This connection can either be in the form of an installation of a water meter (to an existing service line that was constructed at the time of the site development), the installation of a new service and meter (referred to as a tap-in), or a request for a change in meter servicing the property due to a change in level of service. Essentially, this fee is designed to recover the cost of physically connecting a customer to the County's water system. This fee should not be confused with a Connection Fee that is charged to new customers for their share of reserved capacity associated with the recovery of water production, treatment, and transmission plant capacity. The currently effective rates for the installation or connection charge for the County are summarized below:

Meter Size (Inches)	Current Installation	Current Tap-in Charge [*]
5/8	$260.00	$1,025.00
3/4	295.00	1,060.00
1	325.00	1,090.00
1-1/2	525.00	1,650.00
2	595.00	1,800.00
3 and Above	Actual Cost	Actual Cost

[*] Includes cost of meter installation.

As can be seen above, the County's charges for installation-related services are based on the size of the meter or service being installed. The cost associated with the connection to the water system generally increases with the size of the meter due to the increased time of installation and materials costs. The installation charges for meter or service sizes greater than 2" are generally based on the actual time and expense for such facilities. This procedure is used since the cost of such installations can vary quite substantially. This procedure of fee determination is quite common in the utility industry and is recommended to be continued by the County.

As previously discussed, meter connection charges can be categorized as either a meter installation charge or a service line tap-in charge. With respect to the meter installation the County will send a water distribution field services technician on-site to install the new meter into an existing meter box, which is already tapped to the water distribution system. On occasion a new meter box may be required to be installed due to degradation of the original meter box or due to incorrect technical specifications. Generally, installation of a meter requires two trips involving unearthing the meter box and a subsequent or follow-up for restoration after installation (i.e., re-sodding and/or refurbishment to original condition).

The service of meter installation and tap-in requires two (2) water distribution field technicians to perform all the same services as the meter installation; however, also includes additional services related to physically tapping into the water distribution main. The cost associated with tap-in to the water distribution system is contingent upon the proximity of the property to the water distribution line (i.e., on the adjacent or opposing side of the road where the water distribution line is situated). Installation of the service line may require a "long-service" installation through jack and directional bore underneath the roadway. Although the cost for tap-in is greater with connection through directional bore the County bills all customers and average cost for tap-in services, which is a common industry practice and considered equitable since customers may not choose which side of the road a water distribution line may be installed.

The proposed tap-in and meter installation charges were based on the estimated cost to perform such services and markup for overhead costs based on discussions with and information provided by the County. The proposed fees are designed to recover the cost of materials (meter, meter box, service lines, etc.), labor and equipment, customer service charges, and administrative overheads.

Recommendations – Meter Installation and Tap-in Charges

The following table presents the recommended fees:

Proposed Water Installation / Tap-in Charges [1]

			Difference	
	Existing Fee	Proposed Fee	Amount	Percent
Meter Installation Drop-in Charge:				
5/8-inch	$260.00	$425.00	$165.00	63.46%
3/4-inch	295.00	450.00	155.00	52.54%
1-inch	325.00	485.00	160.00	49.23%
1-1/2-inch	525.00	530.00	5.00	0.95%
2-inch	595.00	620.00	25.00	4.20%
3-inch & above	----- Actual Cost -----		----- Actual Cost -----	

Table continued to following page.

Proposed Water Installation / Tap-in Charges [1]

	Existing Fee	Proposed Fee	Difference Amount	Difference Percent
Tap-in Charge [2]:				
5/8-inch	$1,025.00	$1,230.00	$205.00	20.00%
3/4-inch	1,060.00	1,255.00	195.00	18.40%
1-inch	1,090.00	1,290.00	200.00	18.35%
1-1/2-inch	1,650.00	1,750.00	100.00	6.06%
2-inch	1,800.00	1,890.00	90.00	5.00%
3-inch and above	----- Actual Cost -----		----- Actual Cost -----	

[1] Amounts shown derived from Tables 1-2 and 1-3 found at the end of this report.
[2] Under circumstances when the cost to connect a customer materially exceeds the proposed fee it is recommended that the County charge such customers at actual cost.

As can be seen in the prior table, the meter installation and tap-in fees are generally proposed to increase. The principle factor affecting the proposed fee increase relates to the change in metering technology to Advanced Metering Infrastructure (AMI) systems. Additionally, labor and benefits generally have increased due to the continued effects of inflation affecting such costs.

It is recommended that the County charge customers on "an actual cost basis" in lieu of the recommended fee structure under circumstances where the County would incur additional costs beyond what was contemplated in design of the tap-in fee (i.e., installation of long service lines, bore and jack under a major roadway, or any specific factors that would result in a "non-typical" tap-in to water mains). It should be noted and based on discussions with the County, the installation of the service lines (taps) are generally made at the time that major site development occurs; thus the only cost normally incurred by the County is the physical connection of the customer to the system which would only require the installation of the meter or service. However, in some instances when taps are required (such as in the older areas of the County or where services have not been pre-installed in anticipation of connection), the utility should be reimbursed for the cost of such services. This analysis should be under the discretion of the Utilities Division staff and would allow for the complete recovery of costs that would normally be incurred by the Utility.

1.4 PREMISE VISIT / TRIP CHARGE / METER RE-READS AND SPECIAL READS

It is expected that the change in metering technology to the AMI system should reduce and potentially eliminate the need for site visits for meter re-reads and special reads. However, not all customers currently have AMI metering technology and may request a re-read or meter inspection. Moreover, staff may still be requested by the customer to inspect a newly-installed meter or older meter. The associated costs for this service consider the direct and indirect costs of a field visit to the premises including the direct labor costs attributable to the meter reader, vehicle expenses, customer service and accounting expenses, and general administrative costs.

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Recommendations – Premise Visit, Trip Charge, Meter Re-reads, and Special Reads

Based on information provided by the County and information reflected in the County's Fiscal Year 2021 Proposed Budget, the following fee is recommended:

	Fee Calculation [1]
Meter Services:	
Personnel Costs	
Labor and Benefits	$15.96
Departmental Overhead	4.91
Subtotal	$20.87
Vehicle Costs	2.88
Total Meter Services	$23.74
Customer Service	
Personnel Costs	
Labor and Benefits	$10.95
Departmental Overhead	3.22
Total Customer Services	$14.17
Administrative Overhead	$5.60
Total Cost	$43.51
Rounded / Recommended Rate	$45.00
Existing Charges	$35.00
Recommended Change	$10.00

[1] Amounts shown derived from Table 1-4 at the end of this report.

As can be seen in the prior table, the recommended fee of $45.00 represents a $10.00 increase over the current premise visit charges in-service of $35.00.

1.5 TURN-ON AND TURN-OFF CHARGES

A common service provided by all utilities is a request for the turn-on and turn-off of utility services. The customer -requested service can occur for a variety of reasons, including:

- Initiation of service for a new customer;
- Turn-on/-off due to customer request due to seasonal occupancy of residence; and
- Delinquency in the payment of a utility bill.

With respect to the charge for turn-on and turn-off service, costs vary depending on if service provided is during normal business operations, after normal business hours or related to the non-payment of bills rendered for service (delinquency). During normal hours multiple turn-ons / -offs can be scheduled by geographic zone to increase the efficiency of Utility staff in performing the service reducing the unproductive time spent traveling to and from the job site. In certain circumstances, the County must send field personnel after normal working hours in order to meet the customer demands or needs for service, which is typically unplanned. As a result of this service request, the County incurs higher costs, due primarily to increased labor costs due to higher pay rates and guaranteed hour requirements. Normal working hours are defined by the County to be

that period of time between 7:30 a.m. to 4:30 p.m. Monday through Friday, excluding weekends and holidays.

Recommendations – Turn-on and Turn-off Charges

Based on discussions with Utility staff and the requirements to perform such service, the estimated cost per individual trip to the account location (for a turn-on, turn-off, and special trip) was determined as follows:

Turn-on and Turn-off Charges [1]

	Normal Hours	After Hours [2]
Meter Services:		
Personnel Costs:		
Labor and Benefits	$5.93	$104.64
Departmental Overhead	1.82	1.82
Subtotal	$7.75	$106.46
Vehicle Costs	2.88	2.88
Total Meter Services	$10.63	$109.34
Customer Service:		
Personnel Costs:		
Labor and Benefits	$14.94	$14.94
Departmental Overhead	4.39	4.39
After Hours Call Center	N/A	2.00
Reminder Notices	N/A	N/A
Total Customer Service	$19.33	$21.33
Administrative Overhead	$4.33	$4.33
Total Cost	$34.28	$134.99
Recommended Rounded Rate	$45.00	$135.00
Existing Charges	$45.00	$55.00
Difference to Recommended		
Amount	($0.00)	$80.00
Percent	(0.0%)	145.5%

[1] Amounts shown derived from Table 1-5 at the end of this report.
[2] After hours service assumes minimum of two (2) hours of labor in fee design.

As can be seen above the turn-on/-off fees for normal hours is calculated to be less than the current fees charged by the County due to efficiency gains from scheduling multiple turn-ons/-offs with the County's work order system resulting in the ability to recover the associated job site travel costs over multiple service turn-ons/-offs. Based on discussions with Utility staff and based on expectations for continued inflation in the cost of service it is recommended that the County maintain the existing fee for normal hours and review the fee again in the next 3 – 5 years. It is recommended that the County consider increasing the after-hours fee to account for higher labor

rates and hours assumed for after hour's turn-ons which are not typically scheduled and are generally less efficient than service provision during normal hours of operations.

1.6 CUSTOMER REQUESTED METER TESTING FEE

Another specific request made by a customer is for the testing of water meters. This service is generally performed by the County when a customer is dissatisfied with the results of a meter reading or if the customer needs to verify the accuracy of the meter due to operational concerns.

For utilities that charge a meter-testing fee, the fee is generally retained by the Utility only if the test shows that the meter is registering within the acceptable accuracy limits as established by the Utility. If the meter is determined by the Utility to be registering outside the acceptable accuracy limits, the meter test service fee should be refunded and an adjustment be made to the utility billing for the proper amount of water consumption. In determining actual costs, the following factors should be recognized or included in the determination for billing to the customer:

- Water utility department labor cost plus employee benefits;
- Vehicle and equipment cost; and
- Customer service cost.

The County has an ongoing meter testing and replacement program. Generally, meter testing is requested by a customer due to an abnormally high bill. Based on the discussions with the County, utility personnel are generally sent to the site to assist a customer in the determination if there is a water leak on site or if any other problem is being incurred by the customer and the County does recover funds for such costs (please refer to Section 1.4 – Meter Re-reads and Special Reads).

Recommendations – Meter Testing Fee

Based on data provided by the Utilities and Finance Departments, comparisons of cost compared by other utilities within the State of Florida, and budgetary information for the Fiscal Year 2021, the cost of testing a 5/8" to 1" water meter was estimated as follows:

	Amount [1]
Meter Maintenance Personnel	
Personnel Costs	
Labor and Benefits	$69.18
Departmental Overhead	34.47
Subtotal	$103.65
Vehicle Costs	2.88
Total Cost	$106.53
Rounded / Recommended Rate	$105.00

[1] Amounts shown derived from Table 1-6 at the end of this report.

As can be seen from the prior table, the estimated cost for a meter test for meter sizes ranging from 5/8" to 1" is approximately $105.00 per individual test, which is approximately $35.00 or 50.0% greater than the current charge at $70.00. For test of meters greater than 1", the test may either be

done in the field or done at the meter test facilities (bench test) of the County and may substantially vary in terms of labor and equipment time utilization. Therefore, any tests for a meter in excess of 1" should be based on the actual cost incurred by the County for such services.

1.7 CUSTOMER DEPOSITS

To defray the risk of non-payment for utility services until the negligent customer is disconnected, public utilities generally require all utility customers to post a deposit prior to the receipt of service. Generally, this deposit is in the form of cash but may also be in the form of Surety or Performance Bond, Letter of Credit or other instruments guaranteeing payment. The County currently charges a meter deposit based on the size of the service and class or type of customer served. Generally, the commercial customer class has the highest deposit requirement relative to the other classes since the magnitude of the risk for loss of payment is generally higher for this class of service. Although this class often has the lowest frequency of bad debts or payment losses, the amount of such loss is generally much higher due to the service requirements when compared to the other classes (i.e., the residential class).

The customer or meter deposits should be based on the average level of service risk incurred by the County associated with the non-payment of a service. The following table summarizes the level of service risk estimated for the County for service rendered during one billing cycle based on the current billing and collection policies of the Utilities Division of the County:

Estimated Time Lag		
Average Month of Service	30.42 days	
Time Period for Payment of Bill After Bill Rendition	19.00 days	(includes weekends)
Notification of Delinquent Payment	7.00 days	(includes weekends)
Assumed Period from Delinquent Notification to Disconnect	5.00 days	
Total Estimated Period of Risk (Time)	61.42 days	

As can be seen above, the estimated period of risk is over 60 days. The customer deposit design is based on this period of assumed risk at 60 days. To determine the deposit the average bill under existing rates was calculated for the residential customer. Based on billing data, the average usage level for the residential class is approximately 5,000 gallons per month. This represents a decline since the last time the customer deposits were formally evaluated. Based on the median usage for this class at 5,000 gallons and the current rates for water service, the average deposit for water service would be calculated as follows:

Monthly Residential Bill 5/8"	Typical Residential Water Bill	Typical Residential Wastewater Bill
Base Fee Portion	$12.59	$20.45
Volume Charge [*]	16.35	29.25
Subtotal	$28.94	$49.70
Adjust for Service Risk (x2.0)	$57.88	$99.40
Rounded Rate	$60.00	$100.00

As can be seen from the prior table, the deposit for water-only service for the single-family residential class is calculated at the existing deposit level of $60.00 for each new residential water

customer or existing customer that is required to update their deposit. The monthly deposit for wastewater service for the single-family residential class is calculated at a higher rate of $100.00, representing a $5.00 increase over the existing deposit of $95.00. On a combined basis the recommended deposit for residential water and wastewater service for new customers requesting service would be $160.00 representing an approximate $5.00 increase.

The general service deposits are based on the meter service sizes, while multi-family and RV classes are determined based on the number of units served for the particular water and/or wastewater serviced and represents a percentage of the single-family residential deposit expressed on a "per unit" basis (multi-family and RV classes established based on the 80% and 40%, respectively, of the single-family class percent deposit) and is consistent with the method of billing for the monthly base charge. Since the existing fees do recognize deposit differentials for higher levels of service and customer class relationships, the existing deposit structure is assumed to be maintained.

Recommendations – Customer Deposits

Based on the deposit parameters and the utility service rates, the water and wastewater deposits for the County are recommended as follows:

Minimum Deposits

Meter Size (Inches)	Water Amount	Wastewater Amount
Residential Service:		
Single-Family	$60.00	$100.00
Multi-Family (per Dwelling Unit)	48.00	80.00
Recreational Vehicle (per Dwelling Unit/Lot)	24.00	40.00
Commercial and Non-Residential Service:		
5/8"	$60.00	$100.00
3/4"	90.00	150.00
1"	150.00	250.00
1-1/2"	300.00	500.00
2"	480.00	800.00
3"	960.00	1,600.00
4"	1,500.00	2,500.00
6"	3,000.00	5,000.00
8"	4,800.00	8,000.00
10"	8,700.00	14,500.00

It is recommended that the County adopt the proposed water and wastewater deposit revisions that are based on the size of the service and are derived through the estimation of two (2) months equivalent billing for each customer class.

1.8 SEWER SERVICE LINE TAMPERING AND PENALTY

It has been recognized by the County staff that on occasions, (especially during storm events) customers who have areas of standing water will drain the excess rainfall into the sewer service line thereby increasing the flow to the County's wastewater treatment facilities. Based on an analysis of the costs associated with Utility staff inspecting individual locations on a regular basis to monitor such activities, the estimated cost incurred by the County, which should be incurred by

the violator to reimburse the County for costs associated with cleanout of the line subsequent to the tampering activities, was estimated as follows:

	Proposed Fee [1]
Labor and Benefits	$150.88
Departmental Overhead	27.68
Administrative Overhead	28.52
Vehicle	2.88
Total Cost	$209.95
Rounded / Recommended Rate	$210.00
Fine	500.00
Total Fee and Fine	$710.00
Existing Fee	$135.00
Existing Fine	$400.00
Total Existing Fee and Fine	$535.00
Difference:	
Amount	$175.00
Percent	32.7%

[1] Amounts shown derived from Table 1-8 at the end of this report.

The increase to the existing fee is primarily related to an assumed increase in the total labor hours from two (2) hours for two (2) field technicians to four (4) hours and the addition of identified customer service labor and overhead costs. In addition to the fee associated with the recovery of County costs incurred for cleaning out the collection line of debris caused by the line tampering, a fine should also be implemented to recover restoration costs and curtail individuals from tampering with the service lines in the future.

Recommendations – Sewer Service Line Tampering and Penalty

It is recommended that the County adopt the calculated sewer service line tampering fee at $210.00. For consistency it is recommended that the County set the wastewater tampering penalty equal to the water penalty at $500.00 from the current penalty of $400.00.

1.9 PLAN REVIEW FEES

As part of the development process of the County's service area, all engineering documents for the construction of water, sanitary sewer and/or effluent reuse systems in the County's franchised service area shall be submitted for review to the Engineering Section of LCU. As part of the review and construction process, the Engineering Section incurs the following minimum activities:

1. Pre-design meeting prior to document submittal;

2. Approval of submitted plans;

3. Pre-construction conference and field investigation of existing facilities;

4. Field testing and final inspection by County of facilities, (including T.V. and video tape of lines as required); and

5. Preparation of Resolution of Acceptance, Land Transfer Forms, and BOCC acceptance summary documentation (Blue sheet).

The current review fee charged by the County is 1.0% of the construction cost of the plan under review with a minimum charge of $790.00.

Based on discussion with the Engineering division of the County, the review of the engineering documents and the field inspection of the facilities is labor intensive and varies with the size of the construction project. For example, the cost to review and inspect a commercial connection to the system is generally higher than the requirements associated with a single-family dwelling. Therefore, in order to recognize these cost differentials, it is recommended that the fee structure with a minimum cost and a variable component based on the size of the facilities be maintained by the County. This is consistent with the rate application currently being used by the County as well as that used by other public utilities within the State of Florida.

Recommendations – Plan Review Fee

Based on an analysis of typical costs incurred by the County in the plan review process, it is recommended that the fee based on 1.0% of the contributed asset value be maintained, but the minimum charge be increased to $835.00 based on the estimated minimum time to review and inspect facilities. This minimum fee assumes: i) labor cost allowances for five (5) employees including a Deputy Director, Senior Manager, Development Review Representative, Senior Technician and Customer Service Technician; ii) six (6) hour allowance per employee for in office plan review; and iii) a three (3) hour allowance for on-site visits by the Deputy Director and Senior Manager. The minimum charge assumes a maximum of two (2) preliminary plan reviews by County staff. Subsequent reviews will be billed based on the actual costs incurred by the County for such additional plan reviews. The percent to construction cost approach is typical in the industry as it attempts to mirror the scale of review required based on the size of the project.

1.10 LATE PAYMENT FEES

In order to encourage timely payment of monthly service and to compensate the utility for additional costs associated with increased customer service costs, a late payment or penalty charge has been adopted by several utilities. This fee is usually assessed to customers that are delinquent in the payment of utility bills for monthly service. This fee is very common in the utility industry as well as other industries that extend credit to customers (i.e., credit card companies). In general, the fee can usually be charged as a percentage of the outstanding bill and provides for: i) the lost opportunity cost of interest earnings on cash balances; ii) the administrative costs associated with notification to the delinquent customer, customer accounting, and data processing; iii) the additional costs associated with the need for utilities to have cash working capital balances in the excess of needed levels because of non-payment of bills; and iv) a monetary incentive to compel prompt payment practices.

Recommendations – Late Payment Fee

In order to promote prompt payment, it is recommended that the existing fee of one percent (1%) of the outstanding amount with a minimum penalty of $5.00 be maintained. It is further recommended that the County allow a thirty- (30) day time period from the time the bill is issued (20 calendar days to pay plus a 10-day grace period) before issuing the late payment penalty. In addition, the County should consider the following late payment policies:

1. The late payment fee should be applied to all past due balances for all customers. Exceptions may be approved by a Customer Service Supervisor when a billing error has been made or due to extreme hardship cases.

2. The bill for an account with a previous balance should include the following information at a minimum:

    a. Amount due;

    b. Date payment to be posted to avoid disconnect; and

    c. Date payment to be posted to avoid additional late payment fee (if different than disconnect period).

3. The establishment of a policy that to the extent a customer does not pay the late payment fees, but does pay for utility service, that the service will be discontinued at a certain threshold (e.g., at an amount equal to one month of service).

1.11 LIEN SEARCHES AND LIEN PLACEMENT / RELEASE FEE

LCU does not currently charge a lien search, placement, or lien release fee. LCU incurs cost associated with staff time and clerk of court charges to record the lien. Based on discussions with staff, it is assumed that lien searches often requested by banks or realtors requires approximately 15 min of customer service labor, while processing and releasing a lien requires approximately one (1) hour. To recover these costs the following lien placement and release fee is determined:

Description [1]	Lien Search	Lien Placement or Release
Customer Service:		
Personnel Costs:		
Labor and Benefits	$8.30	$33.19
Departmental & Administrative Overhead	4.15	16.61
Total Customer Services	$12.45	$49.80
Clerk Charges	N/A	$10.00
Total Cost	$12.45	$59.80
Rounded Rate	$12.00	$60.00

[1] Amounts shown derived from Table 1-9 at the end of this report.

Recommendations – Lien Search, Placement, and Release Fee

It is recommended that the County adopt the lien search fee at the calculated $12.00 and the lien placement or release fee of $58.00.

1.12 MONTHLY FIRELINE SERVICE FEE

The County currently charges a monthly fireline service fee to predominantly commercial and multi-family customers. Based on our review of the fees it is recommended that the County consider setting charges based on 1/12th of the current water base rate (exclusive of any customer account charges). This is a common industry practice in the determination of such charges and also recognized as a ratemaking practice by the Florida Public Service Commission (FPSC) pursuant to Florida Administrative Code, Rule 25-30.465. The methodology contained in this Rule (for the establishment of rates by the FPSC) essentially assumes that the cost to maintain infrastructure to provide fireline protection services equates to 1/12th of the cost of the base facility charge of the various meter sizes for the water system. Based on discussions with County staff, fireline bills are separately generated and therefore it is recommended that the County also include an account service charge to recover the cost of billing and customer service. The County's current account charge is $3.44 per water bill. The following table provides a summary of the proposed change and estimated financial impacts:

Monthly Fireline Service Fee

Line Size	Existing Fee	1/12th Water Base	Account Fee	Proposed Fee	Average Accounts	Existing Revenue	Proposed Revenue	Change in Revenue	% Change in Rev / Fee
5/8"	$4.98	N/A	N/A	N/A	0	N/A	N/A	N/A	N/A
3/4"	4.98	N/A	N/A	N/A	0	N/A	N/A	N/A	N/A
1"	4.98	$1.91	$3.44	$5.35	9	$538	$577	$40	7.4%
1-1/2"	4.98	3.81	3.44	7.25	9	538	783	245	45.6%
2"	4.98	6.10	3.44	9.54	74	4,422	8,472	4,049	91.6%
3"	9.96	12.20	3.44	15.64	147	17,569	27,589	10,020	57.0%
4"	14.95	19.06	3.44	22.50	576	103,334	155,537	52,203	50.5%
6"	29.89	38.13	3.44	41.57	496	177,905	247,395	69,490	39.1%
8"	48.76	61.00	3.44	64.44	210	122,875	162,389	39,514	32.2%
10"	59.78	110.56	3.44	114.00	71	50,933	97,130	46,198	90.7%
12"	59.78	163.94	3.44	167.38	0	0	0	0	0.0%
Total						$478,115	$699,872	$221,757	46.4%

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Recommendations – Monthly Fireline Service Fee

It is recommended that the County adopt the proposed fees to as follows:

Line Size	Recommended Monthly Fee
1"	$5.35
1-1/2"	$7.25
2"	$9.54
3"	$15.64
4"	$22.50
6"	$41.57
8"	$64.44
10"	$114.00
12"	$167.38

1.13 TEMPORARY HYDRANT METER AND SERVICE FEE DEPOSIT

The County currently loans out temporary hydrant meters with backflow prevention devices to customers on an as needed basis. These customers, primarily building contractors, request the County supply them with the appropriately sized meter needed to gain access to and measure the usage of the hydrant water. To deter misuse or inadvertent loss of the meter during construction use, it has been determined that a deposit amount be developed and held by the County until the hydrant meter and backflow prevention devices are returned. Based on the current cost of such equipment as identified by staff the following increases to deposit amounts are recommended:

			Difference	
Meter Size	Existing	Recommended	Amount	Percent
1"	370.00	450.00	80.00	21.6%
1-1/2"	730.00	910.00	180.00	24.7%
2"	840.00	1,170.00	330.00	39.3%
3"	N/A	Actual Cost	Actual Cost	N/A

Additionally, to account for the cost to test, clean and flush each meter after use an $85.00 service fee is recommended. The fee assumes 1.5 hours of crew supervisor to perform the cleanout and inspection, including any replacement of parts. The task also includes approximately 15 minutes of customer service staff time to field inquires, account for the meter, and collect payment. The complete fee design is as follows:

Description [1]	Crew Supervisor	Customer Service	Total Fee Design	Rounded Fee
Personnel Costs				
Labor and Benefits	$50.41	$8.30	$58.71	
Departmental and Administrative Overhead	14.64	8.04	22.68	
Total Personnel and Departmental Overhead	$65.05	$16.34	$81.39	$85.00

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Recommendations – Temporary Hydrant Meter and Service Fee

It is recommended that the County adopt the calculated hydrant meter deposit and service fee as noted above.

1.14 MISCELLANEOUS FEE DESIGN CONCLUSIONS

While many of the miscellaneous fees evaluated in this study support a fee increase, the most significant change is associated with: i) the meter installation and tap-in charges and ii) monthly fireline service fees. The principal driver for change to the meter installation and tap-in charges is related to the increased cost of meters (i.e., change to AMI metering technology) and increased labor costs. The principal driver for the increase in fireline fees is based on the change in methodology to set such charges equal to $1/12^{th}$ the water base rate (excluding service account charges).

SECTION 2: CONNECTION FEES

2.1 GENERAL

The purpose of connection fees (also referred to as impact fees) are to assign, to the extent practical, the proportionate treatment and transmission capital costs required to provide service to those new customers. The County last adjusted the connection fees in 2007 pursuant to Resolution No. 07-08-70 or approximately 13 years ago. Since 2007, the County has made significant capital improvements to the water and wastewater system (the "System"), which has prompted this evaluation.

2.2 FLORIDA IMPACT FEE LAW

Based on Section 163.31801 of the Florida Statutes and existing Florida case law, certain conditions are required to develop a valid impact fee. Generally, it is our understanding that these conditions involve the following issues:

- The impact fee must meet the "dual rational nexus" test. First, impact fees are valid when a reasonable impact or rationale exists between the anticipated need for capital facilities and the growth in population. Second, impact fees are valid when a reasonable association, or rational nexus, exists between the expenditure of the capital charge proceeds and the benefits accruing to the growth from the use of those proceeds.

- The application of the fees and charges to new users or development should be established so that there is not an intentional windfall to existing users.

- The impact fees should only cover the capital cost of construction and related costs (engineering, legal, financing, administrative, etc.) incurred by the utility system for capital expenditures or other additional capital requirements that are required solely due to serve new growth. Therefore, expenditures for rehabilitation or replacement of a facility benefiting the existing customers (e.g., replacement of a capital asset) or an increase in the level of service should be borne by all users of the facility (i.e., existing and future users to the extent that capacity is available in such facilities that is available and allocated to serve growth). Likewise,

increased expenses due to operation and maintenance of that facility should be borne by the existing users of the utility and are not a cost component of the derivation of the impact fees.

- An impact fee resolution or ordinance should be maintained that recognizes the accounting or use of impact fees collected.

- A public hearing must be held for adoption of an increase in existing impact fees, and advanced public notice of not less than ninety (90) days before the effective date of a resolution or ordinance amending (increasing) the existing impact fees should be provided. No heading or advance public notice is required for a reduction to existing impact fees.

The proposed water and wastewater connection fees presented in this report should meet these objectives. Based on information provided by the County and the assumptions and considerations outlined in this report, Raftelis Financial Consultants, Inc. considers the proposed charges to be cost-based, reasonable, and representative of the cost of the capital requirements of the County to serve new development requiring water and wastewater capacity.

2.3 METHODOLOGY

In the development of the proposed fees, the "System Buy-in" approach was recognized using the original cost method. This method allocates the estimated proportionate share of capacity at cost (value) of the existing assets, which does recognize the immediate facilities adjustments associated with the implementation (construction and placement into service) of the System ten-year capital improvement plan, as applicable. Pursuant to this method, the applicant requesting capacity pays (buys) for its share of the infrastructure constructed to serve the property (i.e., System growth). It should be noted that this method does not impart or transfer ownership to the customer but is generally considered to provide access to capacity in the amount purchased at a status equal to that of the existing customers of the System. Based on the use of this method and in order to assess the existing fees, Raftelis performed a detailed review of the fixed asset records associated with installed / constructed infrastructure and the ten-year capital improvement program (the "CIP") with staff to functionalize costs by utility classification (i.e., treatment, supply, transmission, collection, etc.). The functionalized costs associated with supply, storage treatment and "backbone" transmission were then divided by the applicable water and wastewater system treatment capacities to determine the "per-unit cost" of capacity per gallon per day. The cost per gallon is then applied to the assumed level of service (also expressed on a gallon per day basis) to calculate the applicable connection fees to be charged per equivalent residential unit ("ERU"). An ERU represents the average daily capacity allocable to an individually metered residential customer receiving service through a 5/8-inch service. Generally, a typical residence would equate to 1.0 ERU with all other accounts / development being expressed as a multiple of ERUs. The connection fees for service are applied on an ERU basis. The figure below provides an overview of the connection fee calculation. The charges are based on the identified capital costs per unit of treatment and primary (backbone) transmission capacity times the assumed level of service to determine the fee for an ERU.

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Capital Costs

The capital costs included within the fee design are based on: i) the actual costs of existing infrastructure determined pursuant to the fixed asset records in-service as of September 30, 2019; and ii) the projected near-term expansion related capital improvements pursuant to the County's capital improvement program encompassing the Fiscal Years 2020 through 2029 ("CIP"). Not all capital costs are included in the fee design with only those costs directly attributable to the treatment and primary transmission / collection functions included. Primary transmission and collection infrastructure is sometimes referred to as backbone transmission and collection infrastructure ("Backbone T&C"). The Backbone T&C is generally classified based on line size and represents the larger lines in the System that generally provide benefit to all customers and serve to convey service to (water) / from (wastewater) the ancillary or smaller lines serving specific neighborhoods or developments. Specific capital costs excluded from the connection fees include, but are not limited to: developer contributed assets (e.g., collection / distribution infrastructure generally serving the specific property – referred to as "on-site facilities" located within a development), grant funded assets, local development lift stations, hydrants, meters, manholes, and general plant, which typically represents recurring assets (limited or short service lives), such as vehicles, equipment, and machinery. Essentially, any asset that does not service a majority or material number of existing or future customers or is funded from a different source (i.e., developer contribution, a fee for installing a water meter, etc.) would be generally excluded.

Capacity and Cost per Gallon

After identifying the capital costs to be included in the fee design, the capacity must be identified to calculate the cost per gallon of water production and wastewater treatment. For purposes of this evaluation the cost is recognized in terms of average daily flow ("adf") gallons per day ("gpd") basis in order to be consistent with the level of service assumed per ERU. The System capacity is derived from the reported permitted capacity of the treatment facilities. It is adjusted for any near-term expansions assumed in the CIP. Since it is impractical to identify the capacity of the Backbone T&C, it is assumed that such capacity is equal to the System-wide treatment capacity. Pursuant to the County's Water and Wastewater Engineer of Record FY18 Comprehensive Report dated November 2019 (the "EOR Report"), the water system capacity is permitted on a maximum daily flow basis ("mdf"), while the wastewater capacity is generally permitted on an adf basis. The permitted water capacity was adjusted from a mdf to an adf basis through an assumed peaking factor based on the historical relationship as noted in the EOR Report. The identified capital costs included in the fee evaluation can then be divided by the System capacity to calculate a cost per gallon on an adf-gpd basis.

Level of Service (LOS) and Fee Application

The level of service ("LOS") represents the amount of flow on an adf-gpd basis that a typical single family residential unit or ERU is assumed to require or reserve in the System. The LOS is used to apportion the cost per gallon to an ERU. For new residential connections the County assumes a single-family residential property is equal to 1.0 ERU, while each multi-family unit is considered 0.8 ERUs and each Recreational Vehicle Lot or Unit is 0.4 ERUs. Since new commercial customers can have a wide range of demands the County relies on the Florida Administrative Code Chapter 64E-6.008 to determine the assumed capacity reservation requirement on a per gallon per day basis. The County can then assign a connection fee to a new customer based on their respective number of ERUs or gallons per day of capacity reservation.

2.4 CAPITAL COSTS

The capital costs recognized in determination of the connection fees included a review of the current assets in service and near-term infrastructure expansions and improvements (which would affect the future installed cost of the infrastructure required to serve new development) identified in the County's adopted CIP. The identified capital costs were then functionalized to: i) identify those assets which should be included in the determination of the connection fees; and ii) to match existing plant type to the capital improvements to meet future service needs. Examples of plant functions would include water production and treatment and transmission services.

The County provided Raftelis a copy of the utility fixed asset listing as of September 30, 2019 (the most recent asset listing during the preparation of the fee analysis) that served as the basis of the functionalization of the existing plant in service. Table 2-1 at the end of this report provides a summary of the functionalization of the existing plant in service for each specific utility service. The classification of the plant assets to each utility function was based on the description (use) of the asset as contained in the County's accounting records, discussions with the County, and judgment. As previously discussed, the adopted Fiscal Year 2020 and 2021 ten- (10) year capita budgets served the basis of the CIP and were considered in determination of the connection fees. As with the existing fixed asset records, the CIP projects were functionalized to identify near-term expansion related treatment and transmission capital expenditures for inclusion in the fee design. Table 2-2 at the end of this report provides a summary of the expansion related CIP projects assumed in the fee evaluation.

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The ensuing table provides a summary of the functionalized capital costs from Table 2-3 with the underlying data derived from Tables 2-1 and 2-2:

FUNCTIONALIZED CAPITAL COSTS FOR CONNECTION FEE DETERMINATION (1)

Description	Fixed Asset Records as of 9/30/19 (2)	Expansion Related CIP Projects (3)	Exclusions (4)	Assets for Connection Fee Determination
Water System:				
Treatment and Transmission	$380,739,608	$92,114,668	$0	$472,854,276
Distribution, Hydrants, & Other	175,144,587	N/A	(175,144,587)	0
Total Water System	$555,884,195	$92,114,668	($175,144,587)	$472,854,276
Wastewater System:				
Treatment and Transmission	$431,538,737	$76,548,001	$0	$512,686,738
Reclaimed Transmission	3,040,309	N/A	0	3,040,309
Collection and Other	224,711,446	N/A	(224,711,446)	0
Total Wastewater System	$659,290,492	$76,548,001	($224,711,446)	$515,727,047
Other Assets [4]	$23,576,041	N/A	($23,576,041)	$0
TOTAL CAPITAL COSTS	$1,238,750,728	$168,662,669	($423,432,073)	$983,981,323

(1) Amounts shown derived from table 2-3.
(2) Amounts shown derived from Table 2-1.
(3) Amounts shown derived from Table 2-2.
(4) Connection fee design excludes fixed asset records not directly attributable to treatment and backbone transmission.

As can be seen above, approximately $984 million in existing and additional near-term treatment and transmission-related capital was identified in determination of the connection fees. It should be noted that the amounts shown include capacity rights associated with the City of Fort Myers Central and South WWTP and the FGUA Del Prado WWTP. Amounts shown are net of the capacity reservations by the Gateway Service District to the County's Gateway WWTP.

In determination of the value of the capacity rights to the City of Fort Myers Central and South WWTP the City's adopted wastewater treatment impact fee cost per gallon on an average daily flow basis was assumed. The wastewater treatment impact fee per gallon is calculated to be $4.884 per gallon of capacity. Recognizing that the County has 11.5 million gallons of capacity reservations, the fee design recognizes the cost of such entitlements to be $56,166,000.

2.5 FACILITY OVERVIEW AND CAPACITY

Water System Capacity

To serve the existing and future customer base of the water service area, the water system consists of 4 wellfields, 1 raw water river intake, 5 water treatment facilities, 14 storage tanks, 5 operational

ASR wells (7 wells in total), 9 booster pump stations and approximately 1,463 miles of water transmission and distribution lines ranging in size from 2-inches to 42-inches in diameter. For purposes of this study the permitted water treatment plant capacity was recognized as the basis in calculating the infrastructure cost per gallon of reserved capacity for both the treatment and transmission system capital costs.

Summary of Lee County Water Treatment Facility Capacity [1]

Facility	Permitted Capacity (mgd)	Annual Average Daily Demand (mgd)	Maximum Day Demand (mgd)	Maximum Day Capacity Utilization
Corkscrew WTP	15.0	9.86	13.5	90%
Green Meadows WTP	9.0	4.77	7.3	82%
North Lee County WTP	11.6	3.87	7.5	65%
Olga WTP	5.0	2.18	4.3	86%
Pinewoods WTP	5.3	3.19	4.2	78%
Total	45.9	23.9	29.7	65%
WTP Expansions: [2]				
Green Meadows WTP	5.0	N/A	N/A	N/A
North Lee County WTP	3.4	N/A	N/A	N/A
Total After Expansion	54.3	23.9	29.7	55%
Peaking Factor [3]			1.243	

[1] Unless otherwise noted, amounts shown were derived from the Engineer of Record FY 16 Annual Comprehensive Report.
[2] Amounts shown based on information provided by County staff. The County is in process of completing an expansion of the Green Meadows WTP, which includes the addition of eight (8) new wells and a change in process from lime softening to low pressure reverse osmosis. The County plans expansion of the North Lee County WTP to be completed within the next five (5) years as identified in the County's current Capital Improvement Plan.
[3] Peaking factor calculated based on maximum day to annual average day demand. The factor was 1.412 as reported in the prior FY15 Engineer of Record Comprehensive Report.

The water treatment capacities are reported on a maximum daily flow basis which were adjusted based on a recognized peaking factor to determine the dependable average daily flow capacity that links to the County's level of service. The determination of the peaking factor is based on the relationship of the Maximum Day to Annual Average Day Demand relationship, which pursuant to the most recent engineer of record report was 1.243 and for the immediately preceding fiscal year was 1.412. For purposes of this report a peaking factor of 1.330 for the water system based on the prior two (2) year peaking factor average was assumed in estimating the dependable average day capacity.

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The following table provides a summary of the existing and planned capacity on an MDF and ADF conversion basis:

Water Treatment Plant Capacity Conversion from Max Day to Average Day

Water System – Existing Capacity:	MDF-MGD	ADF-MGD (1)
Corkscrew WTP	15.0	11.3
Green Meadows WTP	9.0	6.8
North Lee County WTP	11.6	8.7
Olga WTP	5.0	3.8
Pinewoods WTP	5.3	4.0
Water System – Planned Expansion:		
Green Meadows WTP (expected completion FY18)	5.0	3.8
North Lee County WTP (expected completion FY21)	3.4	2.6
Water System Total	54.3	40.8

[1] Conversion to ADF assumes MDF capacity divided by 1.33 peaking factor. The peaking factor is based on the average of the Max Day to Average Annual Day Demand ratio calculated from data reported in the two (2) most recent EOR reports.

Wastewater System

To serve the customer base of the wastewater service area, the wastewater system consists of 6 County-owned wastewater treatment facilities, capacity rights in 2 wastewater treatment facilities owned and operated by the City of Fort Myers, 669 miles of gravity pipelines and 325 miles of force mains with pipe diameters ranging from 1 to 42 inches, 49.5 miles of reclaimed distribution pipelines, 8 reuse storage tanks, 655 lift stations, 15,586 manholes and 2,395 valves. For purposes of this study the permitted water treatment plant capacity was recognized as the basis in calculating the infrastructure cost per gallon of reserved capacity for both the treatment and transmission system capital costs.

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The following table provides a summary of the current and future wastewater treatment capacity assuming implementation of the identified CIP:

Summary of Lee County Wastewater Treatment Facility Capacity [1]

Facility	Permitted Capacity (mgd) [2]	Annual Average Daily Demand (mgd)	Capacity Utilization
Fiesta Village AWWTP	5.000	3.13	63%
Ft. Myers Beach WWTP	6.000	3.71	62%
Gateway WWTP [3]	3.000	1.39	46%
High Point WWTP	0.025	0.01	39%
Pine Island WWTP	0.492	0.13	26%
Three Oaks WWTP	6.000	3.20	53%
Capacity Rights:			
City of Fort Myers Central and South WWTPs	11.500	4.80	42%
FGUA Del Prado WWTP [4]	1.266	1.06	84%
Total	33.28	17.43	52%

[1] Unless otherwise noted amounts shown were derived from the Engineer of Record FY 16 Annual Comprehensive Report.
[2] Permitted capacity is reported on an average annual daily flow basis, with exception to Pine Island WWTP which is a monthly average daily flow basis.
[3] Amounts shown reflect total treatment capacity at the Gateway WWTP. Amounts shown are not net of contractual capacity reservation by the Gateway Services District of 0.743 mgd and therefore such capacity is not available for retail customers of the County.
[4] Amounts shown reflect: i) the capacity rights derived from the County's interlocal agreement with the FGUA; ii) estimated average annual daily flow based implied from the wholesale treatment charges to the County for the Fiscal Year 2016.

2.6 LEVEL OF SERVICE

Pursuant to Chapter 9J-5, Florida Administrative Code, the "level of service" means an indicator of the extent or degrees of service provided by, or proposed to be provided by a facility, based on and related to the operational characteristics of the facility. Level of service shall indicate the capacity per unit of demand for each public facility or service. Essentially, the level of service standards is established in order to ensure that adequate facility capacity will be provided for future development and for purposes of issuing development orders or permits, pursuant to Section 163.3202(2)(g) of the Florida Statutes. As further stated in the Administrative Code, each local government shall establish a LOS standard for each public facility located within the boundary for which such local government has authority to issue development orders or permits. Such LOS standards are set for each individual facility or facility type or class and not on a system wide basis. The level of service assumed for each specific utility service is based on the assumed demand for new growth as reported in the County's most EOR Report and Lee County Comprehensive Plan. The level of service for the water system is currently 250 gallons per day and for the wastewater system is 200 gallons per day, representing a decline from 250 gallons per day for the wastewater system since the last formal review of connection fees.

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2.7 DESIGN OF WATER AND WATEWATER CONNECTION FEE

Recognizing the assumptions and data relied upon for this evaluation, which should be read in its entirety, RAFTELIS calculated the following connection fees:

Comparison of Existing and Calculated Connection Fees[1]

Description	Water	Wastewater
System Capacity (ADF-MGD) [2]	40.827	33.280
Cost of Treatment	$383,618,400	$256,531,852
Cost of Transmission	89,235,876	254,595,195
Total	$472,854,276	$511,127,047
Cost per Gallon	$11.58	$15.71
LOS (ADF-GPD) [3]	250	200
Calculated Fee	**$2,895.47**	**$3,141.53**
Rounded Fee	**$2,895.00**	**$3,140.00**
Existing Fee per ERU	$2,440.00	$2,660.00
Change – Amount	$455.00	$480.00

ADF-MGD = Average Daily Flow in Millions of Gallons per Day
ADF-GPD = Average Daily Flow in Gallons per Day

[1] Amounts shown derived from Table 2-3.
[2] Amounts shown reflect the calculated dependable average daily flow capacity.
[3] Amounts shown reflect the current Level of Service (LOS) as reported per the County's master plan.

As can be seen above and in greater detail within Table 2-3 at the end of this report, the calculated connection fee is $2,895 per ERU for the water system and $3,140 per ERU for the wastewater system.

Utility Connection Fee Recommendation [*]

	Water ($/ERU)	Wastewater ($/ERU)	Combined ($/ERU)
Lee County:			
Existing	$2,440	$2,660	$5,100
Recommended	$2,895	$3,140	$6,035
Fee Change – $	$455	$480	$935
Fee Change – %	18.6%	18.0%	18.3%

[*] Survey of 19 public utilities located in the Southwestern portion of the state was performed as of September 2020 and reflects charges for a typical residential single-family home or 1 ERU.

On a combined basis the proposed connection fee is $6,035, which is approximately $935 or 18.3% greater than the existing connection fees.

2.8 COMPARISON SURVEY

To provide additional information to the County regarding the proposed connection fees, a comparison of the County's existing and proposed connection fees with other neighboring jurisdictions was prepared. This survey provides a comparison of the existing and proposed System connection fees for single-family residential connections (i.e., 1 ERU) for the System relative to

the impact fees or comparable charges currently imposed by other municipal / governmental water and wastewater systems located in neighboring communities. A number of factors can affect the capacity fee charged, including but not limited to, level of treatment required for service, asset age, density of customer base, level of service adopted by local government, amount of grant (contributions) funds received, and other factors. No in-depth analysis has been performed by Raftelis as to the effect these factors could have on the fees charged by other utilities or to determine the methods used in the development of the water and wastewater connection fees imposed by others, nor has any analysis been made to determine whether 100% of the cost of new facilities is recovered from system capacity charges, or some percentage less than 100% with the balance recovered through the user charges. As can be seen below, the overall combined water and wastewater connection fees calculated for the County is competitive with the survey average:

Utility Connection Fee Survey [*]

	Water ($/ERU)	Wastewater ($/ERU)	Combined ($/ERU)
Lee County:			
Existing	$2,440	$2,660	$5,100
Recommended	2,895	3,140	$6,035
Utility Survey:			
City of Boca Raton	$5,195	$4,168	$9,363
Bonita Springs Utilities, Inc.	2,600	3,925	6,525
City of Bradenton	1,183	1,545	2,728
City of Cape Coral	2,551	2,406	4,957
Charlotte County	2,407	2,251	4,658
Collier County	3,382	3,314	6,696
Englewood Water District	1,751	2,754	4,505
FGUA - Lehigh Acres System (Lee County)	2,696	2,839	5,535
City of Fort Myers	2,023	1,966	3,989
Hillsborough County	1,750	1,800	3,550
Manatee County	1,738	3,175	4,913
City of Marco Island	3,740	4,610	8,350
City of Naples	1,416	2,324	3,740
City of North Port	1,872	2,213	4,085
Orange County	1,970	3,570	5,540
Pinellas County	352	2,060	2,412
City of Punta Gorda	2,646	2,677	5,323
City of Sarasota	900	2,577	3,477
Sarasota County	2,950	3,190	6,140
Survey Average	$2,270	$2,809	$5,078

[*] Survey was performed as of September 2020 and reflects charges for a typical residential single-family home or 1 ERU.

As can be seen from the prior table the existing and proposed fees for the County are comparable to the combined survey average. Of the surveyed utilities, the City of Boca Raton had the greatest combined water and wastewater system capacity charge of $9,363, while Pinellas County had the lowest combined system capacity charges in the survey of $2,412.

2.9 CONNECTION FEE DESIGN CONCLUSIONS

Since the last formal review of the water and wastewater connection fees, the County has made significant capital infrastructure investments and has identified significant near-term facility expansions. While infrastructure investment has increased, the assumed level of service for a typically residential customer has declined for the wastewater system. Based on this and the findings of this study, we have estimated that the County may raise the current water connection fee by $455 per ERU and the wastewater connection fee by $480 per ERU. We would recommend that the County to raise the fees to the calculated amounts, however the County may wish to consider phasing in the increase over time since the increase represents an approximate 18.3% increase to such fees. The recommended fee change produces a combined water and wastewater connection fee that is considered comparable but greater than the survey average of 19 neighboring public utilities. It is not expected that adjusting the County's existing connection fees in line with the findings of this evaluation will adversely affect development or growth within the County. It is recommended that the County reevaluate the fees in the next 3 to 5 years recognizing the significant near-term capital expansions identified as part of the adopted CIP.

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LEE COUNTY, FLORIDA

MISCELLANEOUS AND CONNECTION FEE STUDY

LIST OF TABLES

Appendix A
Lee County Division of Utilities
Water and Wastewater Rate Study

Summary of Recommended Fees

Line No.	Description	Existing	Recommended	Change Amount	Change Percent
	Section One - Miscellaneous Service Charges				
	Turn-on / Turn-off Fee (Connection/Disconnection Service Charge)				
	Initiation of Service - By Customer Request				
1	Regular Business Hours	$45.00	$45.00	$0.00	0.00%
2	Non- Business Hours	55.00	135.00	80.00	145.45%
	Premise Visit (Trip Charge)				
3	Meter Re-reads	$35.00	$45.00	$10.00	28.57%
4	Special Meter Reads	35.00	45.00	10.00	28.57%
5	Any other Visit to Customer Location	35.00	45.00	10.00	28.57%
	Water Meter Installation Fees (Drop-In Charges)				
6	5/8" Meter	$260.00	$425.00	$165.00	63.46%
7	3/4" Meter	295.00	450.00	155.00	52.54%
8	1" Meter	325.00	485.00	160.00	49.23%
9	1.5" Meter	525.00	530.00	5.00	0.95%
10	2" Meter	595.00	620.00	25.00	4.20%
11	3" Meter and Above	Actual Cost	Actual Cost		
	Tap-in Charges				
12	5/8" Meter	$1,025.00	$1,230.00	$205.00	20.00%
13	3/4" Meter	1,060.00	1,255.00	195.00	18.40%
14	1" Meter	1,090.00	1,290.00	200.00	18.35%
15	1.5" Meter	1,650.00	1,750.00	100.00	6.06%
16	2" Meter	1,800.00	1,890.00	90.00	5.00%
17	3" Meter and Above	Actual Cost	Actual Cost		
18	Wastewater Main Tap Charge	Actual Cost	Actual Cost		
19	Meter Testing Fee	$70.00	$105.00	$35.00	50.00%
20	Late Payment Fee (Greater of 1% of the balance or =>)	$5.00	$5.00	$0.00	0.00%

Appendix A
Lee County Division of Utilities
Water and Wastewater Rate Study

Summary of Recommended Fees

Line No.	Description	Existing	Recommended	Change Amount	Change Percent
21	Unauthorized Water Tap (Fine)	$500.00	$500.00	$0.00	0.00%
	Wastewater Line Cleanout / Tampering Charge				
22	Fee (Cost)	$135.00	$210.00	$75.00	55.56%
23	Fine (Penalty)	400.00	$500.00	100.00	25.00%
	Lien Search, Placement and Release Fee				
24	Account Status Search	N/A; New Fee	$12.00	$12.00	N/A
25	Lien Placement or Release	N/A; New Fee	$60.00	$60.00	N/A
	Plan Review Fees (Greater of 1% of contributed				
26	asset value or identified fee)	$790.00	$835.00	$45.00	5.70%
	Water Meter Security Deposit Fees for Hydrant Meters				
27	1" Meter	$370.00	$450.00	$80.00	21.62%
28	1.5" Meter	730.00	910.00	180.00	24.7%
29	2" Meter	840.00	1,170.00	330.00	39.3%
30	3" Meter	N/A; New Fee	Actual Cost	N/A	N/A
31	Temporary Hydrant Water Meter Servicing Fee	N/A; New Fee	$85.00	$85.00	N/A
	Water Customer Deposits				
	Residential				
32	Single-Family	$60.00	$60.00	$0.00	0.00%
33	Multi-Family (per Dwelling Unit)	48.00	48.00	0.00	0.00%
34	Recreational Vehicle (per Dwelling Unit/Lot)	24.00	24.00	0.00	0.00%
	Commercial				
35	5/8" Meter	$60.00	$60.00	$0.00	0.00%
36	3/4" Meter	90.00	90.00	0.00	0.00%
37	1" Meter	150.00	150.00	0.00	0.00%
38	1.5" Meter	300.00	300.00	0.00	0.00%
39	2" Meter	480.00	480.00	0.00	0.00%
40	3" Meter	960.00	960.00	0.00	0.00%
41	4" Meter	1,500.00	1,500.00	0.00	0.00%
42	6" Meter	3,000.00	3,000.00	0.00	0.00%
43	8" Meter	4,800.00	4,800.00	0.00	0.00%
44	10" Meter	8,700.00	8,700.00	0.00	0.00%

Appendix A
Lee County Division of Utilities
Water and Wastewater Rate Study

Summary of Recommended Fees

Line No.	Description	Existing	Recommended	Change Amount	Change Percent
	Wastewater Customer Deposits				
	Residential				
45	Single-Family	$95.00	$100.00	$5.00	5.26%
46	Multi-Family (per Dwelling Unit)	76.00	80.00	4.00	5.26%
47	Recreational Vehicle (per Dwelling Unit/Lot)	38.00	40.00	2.00	5.26%
	Commercial				
48	5/8" Meter	$95.00	$100.00	$5.00	5.26%
49	3/4" Meter	142.50	150.00	7.50	5.26%
50	1" Meter	237.50	250.00	12.50	5.26%
51	1.5" Meter	475.00	500.00	25.00	5.26%
52	2" Meter	760.00	800.00	40.00	5.26%
53	3" Meter	1,520.00	1,600.00	80.00	5.26%
54	4" Meter	2,375.00	2,500.00	125.00	5.26%
55	6" Meter	4,750.00	5,000.00	250.00	5.26%
56	8" Meter	7,600.00	8,000.00	400.00	5.26%
57	10" Meter	13,775.00	14,500.00	725.00	5.26%
	Monthly Fireline Service Fees:				
58	1" Line Size	$4.98	$5.35	$0.37	7.36%
59	1.5" Line Size	4.98	7.25	2.27	45.63%
60	2" Line Size	4.98	9.54	4.56	91.57%
61	3" Line Size	9.96	15.64	5.68	57.03%
62	4" Line Size	14.95	22.50	7.55	50.52%
63	6" Line Size	29.89	41.57	11.68	39.06%
64	8" Line Size	48.76	64.44	15.68	32.16%
65	10" Line Size	59.78	114.00	54.22	90.70%
66	12" Line Size	59.78	167.41	107.63	180.05%
	Section Two - Connection Fees				
67	Water Connection Fees per ERU	$2,440.00	$2,895.00	$455.00	18.65%
68	Wastewater Connection Fee per ERU	2,660.00	3,140.00	480.00	18.05%

Table 1-1
Lee County Division of Utilities
Water and Wastewater Rate Study

Development of General and Direct Overhead Cost Factors [1]

Line No.	Description	Budget	Adjustment [2]	Adjusted
	Water Meter Services:			
	Departmental Overhead:			
1	Salaries and Wages	$863,206	($863,206)	$0
2	Health Insurance	$336,510	(336,510)	0
3	Other Benefits	$180,215	(180,215)	0
4	Professional Services	$35,000	0	35,000
5	Other Contracted Services	$206,591	(206,591)	0
6	Travel and Per Diem	$2,000	(2,000)	0
7	Communication	$12,670	0	12,670
8	Freight and Postage	$500	0	500
9	Equipment Rental	$189,914	(165,000)	24,914
10	Self-Insurance Assessment	$69,979	0	69,979
11	Repair and Maintenance	$414,500	(414,500)	0
12	Printing	$0	0	0
13	Indirect Costs	$161,989	(161,989)	0
14	General Office Supplies	$1,500	0	1,500
15	Operating Supplies	$39,894	(39,894)	0
16	Subscriptions, Memberships and Educational Expenses	$6,500	0	6,500
17	Capital Outlay - Furniture and Equipment	$70,000	0	70,000
18	Capital Outlay - Vehicle and Rolling Stock	$0	0	0
19	Total	$2,590,968	($2,369,905)	$221,063
	Departmental Management Salaries & Benefits:			
20	Superintendent			$109,193
21	Manager [3]			60,644
22	Total Salaries			$169,837
23	Total Direct Overhead			$390,900
	Departmental Salaries			
24	Total Departmental Salaries & Benefits			$1,379,931
25	Less Applicable Management Salaries & Benefits [4]			(109,193)
26	Net Salaries			$1,270,738
27	Direct Departmental Overhead %			30.76%

Footnotes on Page 4 of 4.

Table 1-1
Lee County Division of Utilities
Water and Wastewater Rate Study

Development of General and Direct Overhead Cost Factors [1]

Line No.	Description	Budget	Adjustment [2]	Adjusted
	Customer Services and Collections:			
	Departmental Overhead:			
28	Salaries and Wages	1,221,435	($1,221,435)	$0
29	Health Insurance	467,825	(467,825)	0
30	Other Benefits	254,533	(254,533)	0
31	Professional Services	480,000	(480,000)	0
32	Other Contracted Services	1,382,196	(1,382,196)	0
33	Travel and Per Diem	4,000	0	4,000
34	Communication	53,006	0	53,006
35	Freight and Postage	405,000	(405,000)	0
36	Water and Sewer	11,000	0	11,000
37	Trash, Garbage & Sludge Removal	0	0	0
38	Equipment Rental	5,100	0	5,100
39	Self-Insurance Assessment	62,419	0	62,419
40	Repair and Maintenance	9,800	0	9,800
41	Printing	3,900	0	3,900
42	Indirect Costs	185,131	(185,131)	0
43	Other Administrative Fees	7,300	0	7,300
44	General Office Supplies	7,000	0	7,000
45	Operating Supplies	8,100	0	8,100
46	Subscriptions, Memberships and Educational Expenses	10,000	0	10,000
47	Capital Outlay - Furniture and Equipment	0	0	0
48	Total	$4,577,745	($4,396,120)	$181,625
	Departmental Management Salaries & Benefits:			
49	Superintendent I and II			$226,605
50	Manager [3]			60,644
51	Total Salaries			$287,249
52	Total Direct Overhead			$468,874
	Departmental Salaries			
53	Total Departmental Salaries & Benefits			$1,943,793
54	Less Applicable Management Salaries & Benefits [4]			(347,893)
55	Net Salaries			$1,595,900
56	Direct Departmental Overhead %			29.38%

Footnotes on Page 4 of 4.

Table 1-1
Lee County Division of Utilities
Water and Wastewater Rate Study

Development of General and Direct Overhead Cost Factors [1]

Line No.	Description	Budget	Adjustment [2]	Adjusted
	Water Distribution:			
	Departmental Overhead:			
57	Salaries and Wages	1,802,779	($1,802,779)	$0
58	Health Insurance	601,951	(601,951)	0
59	Other Benefits	356,577	(356,577)	0
60	Professional Services	135,000	(135,000)	0
61	Other Contracted Services	192,787	(192,787)	0
62	Travel and Per Diem	1,500	(1,500)	0
63	Communication	26,918	0	26,918
64	Freight and Postage	700	0	700
65	Electric	0	0	0
66	Water and Sewer	10,000	0	10,000
67	Trash, Garbage & Sludge Removal	0	0	0
68	Equipment Rental	302,058	(302,058)	0
69	Self-Insurance Assessment	100,763	0	100,763
70	Repair and Maintenance	480,000	(480,000)	0
71	Printing	0	0	0
72	Other Administrative Fees	3,500	0	3,500
73	Indirect Costs	235,270	(235,270)	0
74	General Office Supplies	2,000	0	2,000
75	Operating Supplies	217,489	(217,489)	0
76	Subscriptions, Memberships and Educational Expenses	6,000	0	6,000
77	Capital Outlay - Furniture and Equipment	20,000	0	20,000
78	Capital Outlay - Vehicle and Rolling Stock	0	0	0
79	Total	$4,495,292	($4,325,411)	$169,881
	Departmental Management Salaries & Benefits:			
80	Supervisor & Manager			$232,439
81	Senior Manager [4]			50,741
82	Total Salaries			$283,180
83	Total Direct Overhead			$453,061
	Departmental Salaries			
84	Total Departmental Salaries & Benefits			$2,761,307
85	Less Applicable Management Salaries & Benefits [5]			(232,439)
86	Net Salaries			$2,528,868
87	Direct Departmental Overhead %			17.92%

Footnotes on Page 4 of 4.

Table 1-1
Lee County Division of Utilities
Water and Wastewater Rate Study

Development of General and Direct Overhead Cost Factors [1]

Line No.	Description	Budget	Adjustment [2]	Adjusted
	General Administrative Overhead:			
88	General Administrative Salaries & Benefits			$1,264,279
89	General Administrative Dept Overhead			321,487
90	Indirect Cost Allocation			2,121,291
91	Total General Administrative Overhead			$3,707,057
92	Total Utility Salaries & Benefits			$23,211,049
93	Total Utility Salaries & Benefits			$23,211,049
94	Administrative Overhead:			15.97%
95	**Mileage recovery cost per mile (IRS Basis)**			$0.58

Footnotes:

[1] Amounts represent current budgeted fiscal year 2021 costs as provided by Utility staff.
[2] Amounts shown reflect reductions for direct costs or inapplicable costs.
[3] Management salary shown services two departments and reflects a 50% allocation of the total salary.
[4] Manager serves 3 departments, amounts shown reflects 33.33% allocation.
[5] Reflects adjustment to reduce total departmental salaries by direct management salaries that are included within the department. It should be noted that not all direct supervisory or management salaries are included within a respective department.

Table 1-2
Lee County Division of Utilities
Water and Wastewater Rate Study

Calculation of Potable Water Meter Installation Charge [1]

Line No.	Description	Meter Sizes 5/8"	3/4"	1"	1.5"	2"
	Water Operations					
	Water Department					
	Trade Worker III					
1	Cost Per Hour	$36.31	$36.31	$36.31	$36.31	$36.31
2	Total Number of Employees Required	1.0	1.0	1.0	1.0	1.0
3	Number of Hours Worked By Each Employee	2.0	2.0	2.0	2.0	2.0
4	Total Base Salaries	$72.62	$72.62	$72.62	$72.62	$72.62
	Direct Departmental Overhead (Water Distribution)					
5	Percent Ratio	17.92%	17.92%	17.92%	17.92%	17.92%
6	Expense	$13.01	$13.01	$13.01	$13.01	$13.01
	Customer Service:					
7	Cost Per Hour	$33.19	$33.19	$33.19	$33.19	$33.19
8	Total Number of Employees Required	1.0	1.0	1.0	1.0	1.0
9	Number of Hours Worked By Each Employee	1.5	1.5	1.5	1.5	1.5
10	Total Base Salaries	$49.79	$49.79	$49.79	$49.79	$49.79
	Direct Departmental Overhead (Customer Service)					
11	Percent Ratio	29.38%	29.38%	29.38%	29.38%	29.38%
12	Expense	$14.63	$14.63	$14.63	$14.63	$14.63
13	Adminstrative Overhead (15.97%)	$23.96	$23.96	$23.96	$23.96	$23.96
14	Labor and Overhead Costs	$174.01	$174.01	$174.01	$174.01	$174.01
	Materials, Parts, and Supplies					
15	Automatic Meter Infrastructure / Solid State Register (AMI / SSR)	$220.09	$245.09	$280.72	$319.77	$406.93
16	Meter Box Cost	$77.31	$77.31	$77.31	$191.86	$191.86
17	Percent of Drop-in Requiring Meter Box	5.0%	5.0%	5.0%	5.0%	5.0%
18	Weighted Meter Box Fee	$3.87	$3.87	$3.87	$9.59	$9.59
19	Vehicle Expense (Flat Fee)	$25.00	$25.00	$25.00	$25.00	$25.00
20	Total Cost	$422.97	$447.97	$483.60	$528.38	$615.54
21	Recommended Charge	$425.00	$450.00	$485.00	$530.00	$620.00
22	Existing Charge	$260.00	$295.00	$325.00	$525.00	$595.00

Footnotes:

[1] Amounts shown are calculated based: i) on material and supply costs provided by the County; and ii) discussions with County staff concenring required labor to perform such services.

Table 1-3
Lee County Division of Utilities
Water and Wastewater Rate Study

Calculation of Potable Water Tap-in Charge [1]

Line No.	Description	Meter Sizes 5/8"	3/4"	1"	1.5"	2"
	Water Operations					
	Water Department					
	Trades Worker III					
1	Cost Per Hour	$36.31	$36.31	$36.31	$36.31	$36.31
2	Total Number of Employees Required	2.0	2.0	2.0	2.0	2.0
3	Number of Hours Worked By Each Employee	4.25	4.25	4.25	4.25	4.25
4	Total Base Salaries	$308.64	$308.64	$308.64	$308.64	$308.64
	Direct Departmental Overhead (Water Distribution)					
5	Percent Ratio	17.92%	17.92%	17.92%	17.92%	17.92%
6	Expense	$55.29	$55.29	$55.29	$55.29	$55.29
	Customer Service:					
7	Cost Per Hour	$33.19	$33.19	$33.19	$33.19	$33.19
8	Total Number of Employees Required	1.0	1.0	1.0	1.0	1.0
9	Number of Hours Worked By Each Employee	0.25	0.25	0.25	0.25	0.25
10	Total Base Salaries	$8.30	$8.30	$8.30	$8.30	$8.30
	Direct Departmental Overhead (Customer Service)					
11	Percent Ratio	29.38%	29.38%	29.38%	29.38%	29.38%
12	Expense	$2.44	$2.44	$2.44	$2.44	$2.44
13	Adminstrative Overhead (15.97%)	$59.84	$59.84	$59.84	$59.84	$59.84
14	Sub-total Labor Cost	$434.51	$434.51	$434.51	$434.51	$434.51
	Materials, Parts, and Supplies					
	Meters:					
15	Automatic Meter Infrastructure / Solid State Register (AMI / SSR)	$220.09	$245.09	$280.72	$319.77	$406.93
16	Meter Box Cost	$77.31	$77.31	$77.31	$191.86	$191.86
17	Other Materials, Parts, and Supplies	$206.49	$206.49	$203.34	$336.12	$468.89
18	Total Materials, Parts, and Supplies	$503.89	$528.89	$561.37	$847.75	$1,067.68
	Vehicle Expense					
19	Total Truck Expense (Flat Fee 2 Days)	$50.00	$50.00	$50.00	$50.00	$50.00
	Small Track Hoe (4 Hours):					
20	Cost per Hour	$35.00	$35.00	$35.00	$35.00	$35.00
21	Hours	4.0	4.0	4.0	4.0	5.0
22	Total	$140.00	$140.00	$140.00	$140.00	$175.00
23	Total Vehicle Expense	$190.00	$190.00	$190.00	$190.00	$225.00
24	**Total Cost**	**$1,128.40**	**$1,153.40**	**$1,185.88**	**$1,472.26**	**$1,727.19**

Footnotes Continued on Page 2 of 2.

Table 1-3
Lee County Division of Utilities
Water and Wastewater Rate Study

Calculation of Potable Water Tap-in Charge [1]

Line No.	Description	Meter Sizes 5/8"	3/4"	1"	1.5"	2"
	Directional Bore Costs					
	Trades Worker					
25	Cost Per Hour	$32.26	$32.26	$32.26	$32.26	$32.26
26	Total Number of Employees Required	2.0	2.0	2.0	2.0	2.0
27	Number of Hours Worked By Each Employee	5.0	5.0	5.0	6.0	6.0
28	Total Base Salaries	$322.60	$322.60	$322.60	$387.12	$387.12
	Direct Departmental Overhead (Water Distribution)					
29	Percent Ratio	17.92%	17.92%	17.92%	17.92%	17.92%
30	Expense	$57.80	$57.80	$57.80	$69.35	$69.35
31	Adminstrative Overhead (15.97%)	$60.75	$60.75	$60.75	$72.90	$72.90
32	Sub-total Labor Cost	$441.15	$441.15	$441.15	$529.38	$529.38
	Materials, Parts, and Supplies					
33	Weighted Meter Cost	$220.09	$245.09	$280.72	$319.77	$406.93
34	Meter Box	$77.31	$77.31	$77.31	$191.86	$191.86
35	Other Materials, Parts, and Supplies	$222.24	$222.24	$219.09	$577.71	$510.64
36	Total Materials, Parts, and Supplies	$519.64	$544.64	$577.12	$1,089.34	$1,109.43
	Vehicle Expense					
37	Total Truck Expense (Flat Fee 2 Days)	$50.00	$50.00	$50.00	$50.00	$50.00
	Small Track Hoe (4 Hours):					
38	Cost per Hour	$35.00	$35.00	$35.00	$35.00	$35.00
39	Hours	5.0	5.0	5.0	6.0	6.0
40	Total	$175.00	$175.00	$175.00	$210.00	$210.00
	Directional Bore					
41	Cost per Hour	$75.00	$75.00	$75.00	$75.00	$75.00
42	Hours	2.0	2.0	2.0	2.0	2.0
43	Total	$150.00	$150.00	$150.00	$150.00	$150.00
44	Total Vehicle Expense	$375.00	$375.00	$375.00	$410.00	$410.00
45	**Total Cost**	**$1,335.79**	**$1,360.79**	**$1,393.27**	**$2,028.72**	**$2,048.81**
	Blended Fee:					
46	**Assumed Occurrence of Directional Bore (Percent)**	50%	50%	50%	50%	50%
47	Weighted Directional Bore Costs	$667.89	$680.39	$696.63	$1,014.36	$1,024.40
48	Tap-In Costs	564.20	576.70	592.94	736.13	863.60
49	Total Costs	$1,232.10	$1,257.10	$1,289.58	$1,750.49	$1,888.00
50	**Recommended Charge (rounded)**	**$1,230.00**	**$1,255.00**	**$1,290.00**	**$1,750.00**	**$1,890.00**

Footnotes:

[1] Amounts shown are calculated based: i) on material and supply costs provided by the County; and ii) discussions with County staff concenring required labor to perform such services.

Table 1-4
Lee County Division of Utilities
Water and Wastewater Rate Study

Calculation of Meter Reads and Other Visits to Premises [1]

Line No.	Description	All Meter Sizes
	Premise Visits (Rereads, Accuracy Tests, etc.)	
	Water Department	
	Meter Reader	
1	Cost Per Hour	$27.52
2	Total Number of Employees Required	1.00
3	Number of Hours Worked By Each Employee	0.58
4	Total Base Salaries - Water Department	$15.96
	Direct Departmental Overhead (Meter Services)	
5	Percent Ratio	30.76%
6	Expense	$4.91
	Billing Personnel	
	Customer Service Technician	
7	Cost Per Hour	$33.19
8	Total Number of Employees Required	1.00
9	Number of Hours Worked By Each Employee	0.33
10	Total Base Salaries - Billing Personnel	$10.95
	Direct Departmental Overhead (Customer Billing Services)	
11	Percent Ratio	29.38%
12	Expense	$3.22
13	Total Labor and Direct Overhead	$35.04
	Vehicle Expense	
	Service Truck	
14	Number of Trucks	1.00
15	Cost Per Mile	$0.58
16	Average per Round Trip	20.0
17	Total Truck Cost	$2.88
18	Subtotal	$37.91
19	Administrative / Indirect	$5.60
20	Total Cost	$43.51
21	Recommended Charge (Rounded)	$45.00

Footnotes:

[1] Amounts shown are calculated based: i) on material and supply costs provided by the County; and ii) discussions with County staff concenring required labor to perform such services.

Table 1-5
Lee County Division of Utilities
Water and Wastewater Rate Study

Calculation of Turn On and Turn Off Fees [1]

Line No.	Description	Initiation of Service Turn On Regular	After Hours
	Turn On / Off		
	Water Department		
	Customer Service Technician		
1	Cost Per Hour	$34.88	$52.32
2	Total Number of Employees Required	1.00	1.00
3	Number of Hours Worked By Each Employee	0.17	2.00
4	Total Base Salaries - Water Department	$5.93	$104.64
	Direct Departmental Overhead (Meter Services)		
5	Percent Ratio	30.76%	30.76%
6	Expense	$1.82	$1.82
	Billing Personnel		
	Customer Service Technician		
7	Cost Per Hour	$33.19	$ 33.19
8	Total Number of Employees Required	1.00	1.00
9	Number of Hours Worked By Each Employee	0.45	0.45
10	Total Base Salaries - Billing Personnel	$14.94	$14.94
	After Hours Call Center		
11	Cost Per Minute	N/A	$1.00
12	Number of Minutes	N/A	2.00
13	Total Base Salaries - Billing Personnel	N/A	$2.00
	Direct Departmental Overhead (Customer Service)		
14	Percent Ratio	29.38%	29.38%
15	Expense	$4.39	$4.39
16	Total Labor and Direct Overhead	$27.08	$127.79
	Vehicle Expense		
	Service Truck		
17	Number of Trucks	1.00	1.00
18	Cost Per Mile	$0.58	$0.58
19	Average per Round Trip	10.0	10.0
20	Total Truck Cost	$2.88	$2.88
21	Mail Reminder Notice	N/A	N/A
22	Subtotal	$29.96	$130.67
23	Administrative / Indirect	$4.33	$4.33
24	**Total Cost**	$34.28	$134.99
25	Recommended Charge	$34.00	$135.00

Footnotes:

[1] Amounts shown are calculated based: i) on material and supply costs provided by the County; and ii) discussions with County staff concenring required labor to perform such services.

Table 1-6
Lee County Division of Utilities
Water and Wastewater Rate Study

Calculation of Meter Test Charges [1]

Line No.	Description	All Meter Sizes
	Water Operations	
	Water Department	
	Meter Mechanics (Trade Worker III)	
1	Cost Per Hour	$36.31
2	Total Number of Employees Required	1.00
3	Number of Hours Worked By Each Employee	1.75
4	Total Base Salaries - Water Department	$63.54
	Direct Departmental Overhead (Meter Services)	
5	Percent Ratio	30.76%
6	Expense	$19.55
7	Adminstrative Overhead (15.97%)	$13.27
	Billing Personnel	
	Customer Service Technician	
8	Cost Per Hour	$33.19
9	Total Number of Employees Required	1.00
10	Number of Hours Worked By Each Employee	0.17
11	Total Base Salaries - Billing Personnel	$5.64
	Direct Departmental Overhead (Customer Billing Services)	
12	Percent Ratio	29.38%
13	Expense	$1.66
14	Total Base Salaries	$103.65
	Vehicle Expense	
	Service Truck	
15	Trips 4 x avg 10 miles x $0.50 mile	$2.88
16	**Total Cost**	$106.53
17	Recommended Charge	$105.00

Footnotes:

[1] Amounts shown are calculated based: i) on material and supply costs provided by the County; and ii) discussions with County staff concerning required labor to perform such services.

Table 1-7
Lee County Division of Utilities
Water and Wastewater Rate Study

Calculation of Late Charge [1]

Line No.	Description	All Meter Sizes
	Water Operations	
	Customer Service	
1	Cost Per Hour	$33.19
2	Total Number of Employees Required	1.00
3	Number of Hours Worked By Each Employee	0.08
4	Total Base Salaries - Water Department	$2.77
	Direct Departmental Overhead (Customer Service)	
5	Percent Ratio	29.38%
6	Expense	$0.81
7	Adminstrative Overhead (15.97%)	$0.57
8	Total Base Salaries	$4.16
9	Postage	$0.49
10	**Total Cost**	$4.65
11	Recommended Charge	$5.00

Footnotes:

[1] Amounts shown are calculated based: i) on material and supply costs provided by the County; and ii) discussions with County staff concenring required labor to perform such services.

Table 1-8
Lee County Division of Utilities
Water and Wastewater Rate Study

Calculation of Sewer Line Cleanout and Tampering Fee [1]

Line No.	Description	Fee Calculation
	Wastewater Operations	
	Wastewater Department	
	Field Customer Technician	
1	Cost Per Hour	$36.31
2	Total Number of Employees Required	2.00
3	Number of Hours Worked By Each Employee	2.00
4	Total Base Salaries - Water Department	$145.24
	Direct Departmental Overhead (Water Distribution)	
5	Percent Ratio	17.92%
6	Expense	$26.02
	Customer Service:	
7	Cost Per Hour	$33.19
8	Total Number of Employees Required	1.0
9	Number of Hours Worked By Each Employee	0.17
10	Total Base Salaries	$5.64
	Direct Departmental Overhead (Customer Service)	
11	Percent Ratio	29.38%
12	Expense	$1.66
13	Adminstrative Overhead (15.97%)	$28.52
14	Total Base Salaries	$207.08
15	Service Truck	$2.88
16	**Total Cost**	$209.95
17	Recommended Charge	$210.00

Footnotes:

[1] Amounts shown are calculated based: i) on material and supply costs provided by the County; and ii) discussions with County staff concerning required labor to perform such services.

Table 1-9
Lee County Division of Utilities
Water and Wastewater Rate Study

Calculation of Lien Placement and Lien Release Fee [1]

Line No.	Description	Lien Search	Lien Placement or Release
	Customer Service		
1	Cost Per Hour	$ 33.19	$ 33.19
2	Total Number of Employees Required	1.00	1.00
3	Number of Hours Worked By Each Employee	0.25	1.00
4	Total Base Salaries - Water Department	$8.30	$33.19
	Direct Departmental Overhead (Customer Service)		
5	Percent Ratio	29.38%	29.38%
6	Expense	$2.44	$9.75
7	Adminstrative Overhead (15.97%)	$1.72	$6.86
8	Total Base Salaries	$12.45	$49.80
9	County Clerk Lien Placement and Release Fee	$0.00	$10.00
10	**Total Cost**	$12.45	$59.80
11	Recommended Charge	$12.00	$60.00

Footnotes:

[1] Amounts shown are calculated based on discussions with County staff concerning direct charges to LCU and required labor to perform such services.

Table 2-1
Lee County Utilities
Water & Wastewater Connection Fee Evaluation

Summary of Fixed Assets by Function & Location (Adjusted for Contributed Assets) [1]

Line No	Description	Functionalized Fixed Asset Records as of September 30, 2019								
		Plant	Transmission	Pump / LS Station	Man Hole	Distribution	Fire Hydrant	Collection / LS	Vehicles, Meters & Equip.	Total
	WATER ASSETS									
1	Total Water Assets	$216,849,338	$59,768,888	$0	$0	$147,562,853	$21,101,728	$0	$6,480,006	$451,762,813
2	Additional Water Assets as of 9/30/2019	$104,121,382	$0	$0	$0	$0	$0	$0	$0	$104,121,382
3	TOTAL WATER ASSETS	$320,970,720	$59,768,888	$0	$0	$147,562,853	$21,101,728	$0	$6,480,006	$555,884,195
	WASTEWATER ASSETS									
4	Total Wastewater Assets	$159,785,856	$134,891,533	$40,115,351	$25,777,013	$0	$0	$189,851,341	$4,415,280	$554,836,376
5	Additional Water Assets as of 9/30/2019	$35,156,594	$0	$0	$0	$0	$0	$0	$0	$35,156,594
6	Gateway Service District Adj. [2]	($9,851,668)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	($9,851,668)
7	FGUA Del Prado Capacity Rights [3]	$13,470,240	n/a	n/a	n/a	n/a	n/a	n/a	n/a	$13,470,240
8	City of Fort Myers Capacity Rights [4]	$56,166,000	n/a	n/a	n/a	n/a	n/a	n/a	n/a	$56,166,000
9	TOTAL WASTEWATER ASSETS	$254,727,023	$134,891,533	$40,115,351	$25,777,013	$0	$0	$189,851,341	$4,415,280	$649,777,543
	RECLAIM ASSETS									
10	Total Wastewater Assets	$1,804,829	$3,040,309	$0	$0	$4,667,811	$0	$0	$0	$9,512,950
11	TOTAL WASTEWATER ASSETS	$1,804,829	$3,040,309	$0	$0	$4,667,811	$0	$0	$0	$9,512,950
12	OTHER SHARED ASSETS								$23,576,041	$23,576,041
13	TOTAL SHARED ASSETS	$0	$0	$0	$0	$0	$0	$0	$23,576,041	$23,576,041
14	TOTAL FIXED ASSETS	$577,502,572	$197,700,731	$40,115,351	$25,777,013	$152,230,663	$21,101,728	$189,851,341	$34,471,327	$1,238,750,728

Footnotes:

[1] Amounts shown derived from detailed fixed asset records as of September 30, 2019.

[2] The Gateway Services District has contractual reservations of 0.743 mgd-adf of capacity at the County's Gateway WWTP facility. Amounts shown reflect a proportionate reduction to the wastewater treatment facility attributable to capacity reservations by the Gateway Services District.

[3] Represents contractual cost of retaining capacity in the FGUA Del Prado Wastewater Treatment Facility.

[4] The County has a contractual reservation of 11.5 mgd-adf in the City of Fort Myers Central and South WWTP. Amounts shown reflect allocable debt service payments pursuant to agreement.

Table 2-2

Lee County Utilities
Water and Wastewater Connection Fee Evaluation

Capital Improvement Program (CIP) - Identification of Expansion Projects

Line No.	Project No.	Description	Budgeted Funding Source	Expansion Asset Recognized for Fee Design	Adjusted 2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Total
					Projected Fiscal Year Ending September 30,											
	WATER SYSTEM															
	Departmental Capital Outlay															
1	N/A	Capital Outlay - Improvements Other Than Buildings	WREV		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
2	N/A	Capital Outlay - Furniture and Equipment	WREV		137,359	137,359	137,359	137,359	137,359	137,359	137,359	137,359	137,359	137,359	137,359	1,510,949
3	N/A	Capital Outlay - Vehicle and Rolling Stock	WREV		119,859	119,859	119,859	119,859	119,859	119,859	119,859	119,859	119,859	119,859	119,859	1,318,449
4	N/A	Capital Outlay - Vehicle and Rolling Stock (Small Vehicles)	03		0	0	0	0	0	0	0	0	0	0	0	0
5	N/A	Capital Outlay - Replacement Water Meters	WREV		0	0	0	0	0	0	0	0	0	0	0	0
6	N/A	Total Departmental Capital Outlay			257,218	257,218	257,218	257,218	257,218	257,218	257,218	257,218	257,218	257,218	257,218	2,829,398
	NEW PROJECTS															
7	N/A	CFM Flow Diversions	30		0	0	0	0	0	0	0	0	0	0	0	0
	DOT/FDOT PROJECTS															
8	20063448730	HURRICANE BAY BRIDGE SCOUR PROT - UTIL RELOC	30		968,141	0	0	0	0	0	0	0	0	0	0	968,141
9	20067548730	Corkscrew Road Widening Relocation	30		2,000,000	3,000,000	3,000,000	2,000,000	2,000,000	2,000,000	0	0	0	0	0	14,000,000
10	20719748730	FGCU WATER	30		88,306	150,000	0	0	0	0	0	0	0	0	0	238,306
11	20730448730	FGCU SEWER	30		0	0	0	0	0	0	0	0	0	0	0	0
12	20741648730	DOT PROJECT UTILITY RELOCATIONS	30		671,327	500,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	3,421,327
13	20742648730	WATER / SEWER LINE RELOC. THREE OAKS EXT (THREE OAKS NORTH)	30		150,000	250,000	650,000	1,000,000	0	0	0	0	0	0	0	2,050,000
14	20761448730	ALICO RD 4L / BEN HILL - AIRPORT HAUL RD WM RELOC	30		397,078	0	0	0	0	0	0	0	0	0	0	397,078
15	20927048712	WINKLER ROAD WATERMAIN IMPROVEMENTS	12	WTrans	1,366,388	0	200,000	2,000,000	0	0	0	0	0	0	0	3,566,388
16	20927248720	MARIANA AVE. WATERMAIN REPLACEMENT	20		500,000	596,000	0	0	0	0	0	0	0	0	0	1,096,000
17	20067448730	Colonial Diamond Diversion	30		2,000,000	0	0	0	0	0	0	0	0	0	0	2,000,000
	REPAIR & REPLACEMENT															
18	20709448730	WATER SYSTEM IMPROVEMENTS	30		1,376,120	1,200,000	700,000	700,000	700,000	700,000	700,000	700,000	700,000	700,000	700,000	8,876,120
19	20713848730	WASTEWATER TREATMENT PLANT IMPROVEMENTS	30		0	0	0	0	0	0	0	0	0	0	0	0
20	20714948720	WELL REDEVELOPMENT/UPGRADE & REBUILD	20		$180,000	$130,000	$130,000	$130,000	$130,000	$130,000	$130,000	$130,000	$130,000	$130,000	$130,000	1,480,000
21	20722948730	WASTEWATER SYSTEM IMPROVEMENTS	30		0	0	0	0	0	0	0	0	0	0	0	0
22	20724748720	INFLOW AND INFILTRATION IMPROVEMENTS	20		0	0	0	0	0	0	0	0	0	0	0	0
23	20726848730	WATER TREATMENT PLANT IMPROVEMENTS	30		363,500	325,500	587,500	437,500	187,500	187,500	187,500	187,500	187,500	187,500	187,500	3,026,500
24	20742948730	ELECTRICAL EQUIP, SCADA, & INSTRUMENT UPGRADES & IMPROVEMENTS	30		0	0	0	0	0	0	0	0	0	0	0	0
25	20744448730	LCU GENERATOR REPL/IMPR	30		0	0	0	0	0	0	0	0	0	0	0	0
26	20064348730	Pinewoods NF Wellfield Access Rd Improvements	30		100,000	452,000	0	600,000	2,900,000	0	0	0	0	0	0	4,052,000
27	20065648720	ORTIZ AVE. FM FROM SR82 TO COLONIAL	20		200,000	1,075,000	0	0	0	0	0	0	0	0	0	1,275,000
28	20716248720	SAN CARLOS BLVD WATER MAIN REPLACEMENT (14" WM north of Summerlin to Kelly Rd.)	20		270,000	1,862,483	0	0	0	0	0	0	0	0	0	2,132,483
29	20717048730	US 41 WATERMAIN REPL (ALICO - N. AIRPORT RD)	30		1,787,728	0	0	0	0	0	0	0	0	0	0	1,787,728
30	20062148720	MCGREGOR / TANGLEWOOD FORCE MAIN REPL	20		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	0
31	20762048720	WORK DR INDUSTRIAL PARK WM IMPROVEMENTS	20		2,219,371	260,000	0	0	0	0	0	0	0	0	0	2,479,371
32	20926948720	PINE RIDGE FM REPL - FMB WWTP TO GULF REFLECTIONS DR	20		0	0	0	0	0	0	0	0	0	0	0	0
	GENERAL															
33	20500948730	WILD TURKEY STRAND REGIONAL SITE	30		0	1,251,158	66,955	0	0	0	0	0	0	0	0	1,318,112
34	20708848730	AMI SYSTEM	30		630,002	0	0	0	0	0	0	0	0	0	0	630,002
35	20745448730	OPERATIONS BUILDING REPLACEMENT	30		6,246,676	0	2,500,000	2,500,000	0	0	0	0	0	0	0	11,246,676
36	20745648730	SECONDARY CONTAINMENTS FOR CHEMICAL TANKS	30		4,000	75,000	0	0	0	0	0	0	0	0	0	79,000
37	20762348730	REMOTE TELEMETRY REPLACEMENTS	30		568,511	2,750,000	1,000,000	0	0	0	0	0	0	0	0	4,318,511
38	N/A	Allowance for Unidentified R&R	N/A		0	0	0	0	0	0	3,500,000	7,000,000	11,500,000	12,000,000	15,750,000	49,750,000
	MAJOR MAINTENANCE															
39	40327148720	INFLOW AND INFILTRATION REHAB/REPLACEMENTS (MM)	20		0	0	0	0	0	0	0	0	0	0	0	0
40	40730948720	WASTEWATER COLLECTION SYSTEM REHAB & REPLACEMENT	20		0	0	0	0	0	0	0	0	0	0	0	0
41	40744348720	WATER DISTRIBUTION REHAB AND REPLACEMENTS	20		350,000	350,000	350,000	350,000	350,000	350,000	350,000	350,000	350,000	350,000	350,000	3,850,000
42	40761648720	WELL REHABILITATION & REPLACEMENTS	20		900,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	5,900,000
43	40731748720	WWTP REHABILITATION & REPLACEMENTS	20		0	0	0	0	0	0	0	0	0	0	0	0
44	40760348720	WATER TREATMENT PLANTS REHAB/REPL	20		992,976	1,471,000	1,926,000	1,621,000	1,676,000	1,396,000	2,126,000	1,521,000	1,026,000	721,000	1,276,000	15,752,976
45	40711548720	PLANT DEMOLITIONS (MM)	20		600,000	750,000	650,000	0	0	0	0	0	0	0	0	2,000,000
46	40400748730	ENVIRONMENTAL MITIGATION	30		0	0	0	0	0	0	0	0	0	0	0	0
47	20065248730	Wells D25/S25 Relocation / Replacement (Wild Blue)	30		0	600,000	0	0	0	0	0	0	0	0	0	600,000
	WATER TREATMENT PLANTS															
48	20063348730	NLC WTP EXPANSION TO 15 MGD (last year approved for $39.7	30	NLC WTP	0	4,000,000	11,000,000	14,000,000	0	0	0	0	0	0	0	29,000,000
49	20063348730	NLC WTP EXPANSION TO 15 MGD (last year approved for $39.7	30	NLC WTP	0	0	0	0	4,000,000	0	0	0	0	0	0	4,000,000
50	2074614873O	GREEN MEADOWS WTP SECOND DIW	30		0	0	0	1,000,000	0	3,000,000	5,000,000	3,100,000	0	0	0	12,100,000
51	20062348720	PINEWOODS WTP DEGASIFIERS REPLACEMENT	20		859,000	0	0	0	0	0	0	0	0	0	0	859,000
52	20761848730	NORTH LEE COUNTY WTP DEEP INJECTION WELL #2	30		1,576,489	0	0	0	0	0	0	0	0	0	0	1,576,489
53	20761948712	NLC WTP WELLFIELD EXPANSION TO 15 MGD	12	NLC WTP	2,297,616	7,200,000	6,500,000	0	0	0	0	0	0	0	0	15,997,616
54	20761948730	NLC WTP WELLFIELD EXPANSION TO 15 MGD	30	NLC WTP	5,586,064	0	0	0	0	0	0	0	0	0	0	5,586,064
55	20761948735	NLC WTP WELLFIELD EXPANSION TO 15 MGD	35	NLC WTP	300,000	1,000,000	0	0	0	0	0	0	0	0	0	1,300,000
56	20762248720	CORKSCREWS PRODUCTION WELL PANEL REPL	20		3,200,387	1,800,000	0	0	0	0	0	0	0	0	0	5,000,387
57	20063348712	NLC WTP EXPANSION TO 15 MGD	12	NLC WTP	264,000	0	6,500,000	0	0	0	0	0	0	0	0	6,764,000
	WATER DISTRIBUTION															
58	20063948730	Tice Area WM Replacement (formerly Gibson Circle WM Improvements)	30		1,200,000	500,000	0	0	0	0	0	0	0	0	0	1,700,000
59	20064048730	Carriage Village WM Replacement	30		1,268,691	0	0	0	0	0	0	0	0	0	0	1,268,691
60	20064448720	Principia Watermain Replacement	20		1,093,451	0	0	0	0	0	0	0	0	0	0	1,093,451
61	20067848730	Lazy Days WM Replacement	20		377,747	350,000	350,000	350,000	0	0	0	0	0	0	0	1,427,747
62	20067848730	North US41 (DT) see masterplan 24" MAIN	30	WTrans	0	525,000	0	2,615,000	0	0	0	0	0	0	0	3,140,000
63	20718348712	WWE WATER TRANSMISSION LINE IMPROVE (Pondella between 41s)	12	WTrans	0	203,885	0	1,586,715	0	0	0	0	0	0	0	1,790,600
64	20718448730	SFM WATER TRANSMISSION LINE IMPR (Crystal Dr. Portion)	30		311,912	4,728,208	0	0	0	0	0	0	0	0	0	5,040,120
65	20,719,348,712	RSW TRANSMISSION LINES-BEN HILL/TREELINE	12	WTrans	620,000	1,800,000	7,300,000	4,800,000	0	0	0	0	0	0	0	14,520,000
66	20,745,848,720	FIDDLESTICKS WATERMAIN REPLACEMEN	20		3,365,454	6,000,000	5,000,000	0	0	0	0	0	0	0	0	14,365,454
67	20,746,248,730	HANCOCK BRIDGE PKWY WATERMAIN IMPR (& FORCEMAIN)	30		1,222,098	0	0	0	0	0	0	0	0	0	0	1,222,098
68	20746348712	INTERCONNECT PINEWOODS DISTR. SYSTEM	12	WTrans	0	0	0	0	450,000	0	3,000,000	3,000,000	0	0	0	6,450,000
69	20746448720	NEW POST RD WATERMAIN REPLACEMENT	20		1,100,000	2,500,000	0	0	0	0	0	0	0	0	0	3,600,000
70	20062848730	NORTH-SOUTH 30" WATER MAIN - SR 80 TO AHR	30		2,000,000	0	2,000,000	2,000,000	4,000,000	6,000,000	7,000,000	7,000,000	0	0	0	30,000,000
71		Total Capital Improvement Projects - Water System			51,830,249	48,412,451	51,417,673	38,697,433	17,400,718	14,770,718	23,000,718	23,995,718	14,900,718	15,095,718	19,400,718	318,922,832

Lee County Utilities
Water and Wastewater Connection Fee Evaluation

Capital Improvement Program (CIP) - Identification of Expansion Projects

Line No.	Project No.	Description	Budgeted Funding Source	Expansion Asset Recognized for Fee Design	Projected Fiscal Year Ending September 30, Adjusted 2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Total
	CAPITAL PROJECTS -WASTEWATER SYSTEM															
	Departmental Capital Outlay															
72		Capital Outlay - Improvements Other Than Buildings	WWREV		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
73		Capital Outlay - Furniture and Equipment	WWREV		149,141	149,141	149,141	149,141	149,141	149,141	149,141	149,141	149,141	149,141	149,141	1,640,551
74		Capital Outlay - Vehicle and Rolling Stock	WWREV		130,141	130,141	130,141	130,141	130,141	130,141	130,141	130,141	130,141	130,141	130,141	1,431,551
75		Capital Outlay - Vehicle and Rolling Stock (Small Vehicles)	WWREV		0	0	0	0	0	0	0	0	0	0	0	0
76		Total Departmental Capital Outlay			279,282	279,282	279,282	279,282	279,282	279,282	279,282	279,282	279,282	279,282	279,282	3,072,102
	NEW PROJECTS															
77	N/A	CFM Flow Diversions	30		0	0	0	0	0	0	0	0	0	1,750,000	1,750,000	3,500,000
	DOT/FDOT PROJECTS															
78	20063448730	HURRICANE BAY BRIDGE SCOUR PROT - UTIL RELOC	30		968,141	0	0	0	0	0	0	0	0	0	0	968,141
79	20067548730	Corkscrew Road Widening Relocation	30		0	0	0	0	0	0	0	0	0	0	0	0
80	20719748730	FGCU WATER	30		0	0	0	0	0	0	0	0	0	0	0	0
81	20730448730	FGCU SEWER	30		158,766	500,000	0	0	0	0	0	0	0	0	0	658,766
82	20741648730	DOT PROJECT UTILITY RELOCATIONS	30		671,327	500,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	3,421,327
83	20742648730	WATER / SEWER LINE RELOC. THREE OAKS EXT (THREE OAKS NORTH)	30		150,000	250,000	650,000	1,000,000	0	0	0	0	0	0	0	2,050,000
84	20761448730	ALICO RD 4L / BEN HILL - AIRPORT HAUL RD WM RELOC	30		397,078	0	0	0	0	0	0	0	0	0	0	397,078
85	20927048712	WINKLER ROAD WATERMAIN IMPROVEMENTS	12		0	0	0	0	0	0	0	0	0	0	0	0
86	20927248720	MARIANA AVE. WATERMAIN REPLACEMENT	20		0	0	0	0	0	0	0	0	0	0	0	0
87	20067448730	Colonial Diamond Diversion	30		0	0	0	0	0	0	0	0	0	0	0	0
	REPAIR & REPLACEMENT															
88	20709448730	WATER SYSTEM IMPROVEMENTS	30		0	0	0	0	0	0	0	0	0	0	0	0
89	20713848730	WASTEWATER TREATMENT PLANT IMPROVEMENTS	30		449,223	2,025,000	495,000	495,000	445,000	495,000	145,000	145,000	145,000	145,000	145,000	5,129,223
90	20714948720	WELL REDEVELOPMENT/UPGRADE & REBUILD	20		0	0	0	0	0	0	0	0	0	0	0	0
91	20722948730	WASTEWATER SYSTEM IMPROVEMENTS	30		526,429	350,000	550,000	560,000	570,000	580,000	590,000	600,000	610,000	620,000	630,000	6,186,429
92	20724748720	INFLOW AND INFILTRATION IMPROVEMENTS	20		234,000	0	0	0	0	0	0	0	0	0	0	234,000
93	20726848730	WATER TREATMENT PLANT IMPROVEMENTS	30		0	0	0	0	0	0	0	0	0	0	0	0
94	20742948730	ELECTRICAL EQUIP, SCADA, & INSTRUMENT UPGRADES & IMPROVEMENTS	30		609,968	895,000	520,000	635,000	495,000	345,000	285,000	285,000	285,000	285,000	285,000	4,924,968
95	20744448730	LCU GENERATOR REPL/IMPR	30		780,000	270,000	420,000	275,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	2,095,000
96	20064348730	Pinewoods NF Wellfield Access Rd Improvements	30		0	0	0	0	0	0	0	0	0	0	0	0
97	20065648720	ORTIZ AVE. FM FROM SR82 TO COLONIAL	20		200,000	1,075,000	0	0	0	0	0	0	0	0	0	1,275,000
98	20716248720	SAN CARLOS BLVD WATER MAIN REPLACEMENT (14" WM north of Summerlin to Kelly Rd.)	20		0	0	0	0	0	0	0	0	0	0	0	0
99	20717048730	US 41 WATERMAIN REPL (ALICO - N. AIRPORT RD)	30		0	0	0	0	0	0	0	0	0	0	0	0
100	20062148720	MCGREGOR / TANGLEWOOD FORCE MAIN REPL	20		519,767	3,158,000	0	0	0	0	0	0	0	0	0	3,677,767
101	20762048720	WORK DR INDUSTRIAL PARK WM IMPROVEMENTS	20		0	0	0	0	0	0	0	0	0	0	0	0
102	20926948720	PINE RIDGE FM REPL - FMB WWTP TO GULF REFLECTIONS DR	20		2,139,073	0	0	0	0	0	0	0	0	0	0	2,139,073
	GENERAL															
103	20500948730	WILD TURKEY STRAND REGIONAL SITE	30		0	1,251,158	66,955	0	0	0	0	0	0	0	0	1,318,112
104	20708848730	AMI SYSTEM	30		630,002	0	0	0	0	0	0	0	0	0	0	630,002
105	20745448730	OPERATIONS BUILDING REPLACEMENT	30		6,246,676	0	2,500,000	2,500,000	0	0	0	0	0	0	0	11,246,676
106	20745648730	SECONDARY CONTAINMENTS FOR CHEMICAL TANKS	30		4,000	75,000	0	0	0	0	0	0	0	0	0	79,000
107	20762348730	REMOTE TELEMETRY REPLACEMENTS	30		568,511	2,750,000	1,000,000	0	0	0	0	0	0	0	0	4,318,511
108	N/A	Allowance for Unidentified R&R	N/A		0	0	0	0	0	0	3,500,000	7,000,000	11,500,000	12,000,000	15,750,000	49,750,000
	MAJOR MAINTENANCE															
109	40327148720	INFLOW AND INFILTRATION REHAB/REPLACEMENTS (MM)	20		400,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	5,400,000
110	40730948720	WASTEWATER COLLECTION SYSTEM REHAB & REPLACEMENT	20		742,000	700,000	700,000	700,000	700,000	700,000	700,000	700,000	700,000	700,000	700,000	7,742,000
111	40744348720	WATER DISTRIBUTION REHAB AND REPLACEMENTS	20		0	0	0	0	0	0	0	0	0	0	0	0
112	40761648720	WELL REHABILITATION & REPLACEMENTS	20		0	0	0	0	0	0	0	0	0	0	0	0
113	40731748720	WWTP REHABILITATION & REPLACEMENTS	20		1,735,984	1,251,000	1,731,000	2,074,000	1,621,000	1,644,000	871,000	931,000	986,000	881,000	786,000	14,511,984
114	40760348720	WATER TREATMENT PLANTS REHAB/REPL	20		0	0	0	0	0	0	0	0	0	0	0	0
115	40711548720	PLANT DEMOLITIONS (MM)	20		600,000	750,000	650,000	0	0	0	0	0	0	0	0	2,000,000
116	40400748730	ENVIRONMENTAL MITIGATION	30		119,677	58,333	83,333	83,333	83,333	0	0	0	0	0	0	428,009
117	20065248730	Wells D25/S25 Relocation / Replacement (Wild Blue)	30		0	0	0	0	0	0	0	0	0	0	0	0
	WASTEWATER TREATMENT PLANTS															
118	20061648730	FIESTA WWTP REUSE MAIN UPGRADE (also see 9251 and 0617)	30		1,109,335	1,777,500	3,000,000	1,000,000	0	0	0	0	0	0	0	6,886,835
119	20067648730	FMB Belt Press	30		0	370,000	0	2,150,000	0	0	0	0	0	0	0	2,520,000
120	20061748730	FMB DEEP INJECTION WELL #2 (also see 9251 and 0616)	30		1,310,099	2,284,000	0	6,000,000	3,400,000	0	0	0	0	0	0	12,994,099
121	20728448730	RECLAIM WATER ASR (FMB/FIESTA)	30		1,456,242	900,000	0	0	0	0	0	0	0	0	0	2,356,242
122	20062048730	GATEWAY WWTP SLUDGE DEWATERING SYSTEM ROOF	30		150,000	100,000	0	0	0	0	0	0	0	0	0	250,000
123	20745048730	FIESTA WWTP SLUDGE HANDLING	30		6,710,943	0	0	0	0	0	0	0	0	0	0	6,710,943
124	20745548730	REUSE SYSTEM AND SITE IMPROVEMENTS	30		2,006,283	0	1,375,000	1,375,000	1,375,000	0	0	0	0	0	0	6,131,283
125	20746048730	GATEWAY WWTP EXPANSION FROM 3 MGD TO 6 MGD	30		0	0	0	0	0	0	0	0	0	2,300,000	2,300,000	4,600,000
126	20746748730	SE WRF (SOUTH EAST WATER RECLAMATION FACILITY)	13		0	0	0	0	0	0	0	0	0	0	0	0
127	20746748730	SE WRF (SOUTH EAST WATER RECLAMATION FACILITY)	30		0	0	0	0	0	0	0	0	0	0	0	0
128	20925048730	FIESTA VILLAGE WWTP CONTROL SYSTEM UPGRADE	30		1,118,000	0	0	0	0	0	0	0	0	0	0	1,118,000
129	20925148730	FIESTA VILLAGE WWTP DEEP INJECTION WELL (See 0616 and 0617 also)	30		1,283,083	2,678,000	7,000,000	3,400,000	0	0	0	0	0	0	0	14,361,083
130	20062648720	FORT MYERS MAIN SWITCHGEAR REPLACEMENT	20		0	400,000	4,400,000	0	0	0	0	0	0	0	0	4,800,000
131	20067348730	SE WRF (SOUTH EAST WATER RECLAMATION FACILITY)	30		0	0	0	0	0	0	0	0	0	0	0	0
132	N/A	Three Oaks Extension II	30	WWTrans	0	5,000,000	12,200,000	8,200,000	3,200,000	12,800,000	0	0	0	0	0	41,400,000
133	N/A	Three Oaks Extension II	13	WWTrans	0	750,000	0	0	0	0	0	0	0	0	0	750,000
	WASTEWATER COLLECTION SYSTEM															
134	20063848730	MASTER PUMP STATION 6600 UPGRADES	30		545,000	0	2,140,000	0	0	0	0	0	0	0	0	2,685,000
135	20065348730	Summerlin Rd 20inch FM Replacement	30		939,000	6,395,000	3,985,033	0	0	0	0	0	0	0	0	11,319,033
136	20067348730	SE County Force Main, Reuse Main, & Diversions	30	WWTrans	0	0	3,513,000	0	8,000,000	12,000,000	7,000,000	0	0	0	0	30,513,000
137	20729348713	FIESTA VILLAGE SEWER COLL SYS IMPROV (Winkler Master Pump Station)	13	WWTrans	365,000	0	1,500,600	0	0	0	0	0	0	0	0	1,865,600
138	20733548713	MASTER LS 7716 IMPROVEMENTS	13	WWTrans	2,019,401	0	0	0	0	0	0	0	0	0	0	2,019,401
139		Total Capital Improvement Projects - Wastewater System			38,142,288	37,292,273	49,509,203	31,476,615	20,968,615	29,643,282	14,170,282	10,740,282	15,305,282	19,760,282	23,425,282	290,433,685
140	**TOTAL CAPITAL IMPROVEMENT PROGRAM**				89,972,537	85,704,724	100,926,875	70,174,048	38,369,333	44,414,000	37,171,000	34,736,000	30,206,000	34,856,000	42,826,000	609,356,517

Lee County Utilities
Water and Wastewater Connection Fee Evaluation

Capital Improvement Program (CIP) - Identification of Expansion Projects

Line No.	Project No.	Description	Budgeted Funding Source	Expansion Asset Recognized for Fee Design	Projected Fiscal Year Ending September 30, Adjusted 2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Total
		FUNCTIONALIZED EXPANSION RELATED CIP PROJECTS:														
		WATER EXPANSION PROJECTS														
141		WATER TREATMENT PLANT EXPANSION		WTP	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
142		NLC WTP EXPANSION		NLC WTP	8,447,680	12,200,000	24,000,000	14,000,000	4,000,000	0	0	0	0	0	0	62,647,680
143		TRANSMISSION LINE EXTENSIONS		WTrans	1,986,388	2,528,885	7,500,000	11,001,715	450,000	0	3,000,000	3,000,000	0	0	0	29,466,988
144		TOTAL			$10,434,068	$14,728,885	$31,500,000	$25,001,715	$4,450,000	$0	$3,000,000	$3,000,000	$0	$0	$0	$92,114,668
145		TOTAL			$10,434,068	$14,728,885	$31,500,000	$25,001,715	$4,450,000	$0	$3,000,000	$3,000,000	$0	$0	$0	$92,114,668
		WASTEWATER EXPANSION PROJECTS														
146		WASTEWATER WATER TREATMENT PLANT EXPANSION		WWTP	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
147		GATEWAY WWTP EXPANSION		Gateway	0	0	0	0	0	0	0	0	0	0	0	0
148		TRANSMISSION LINE EXTENSIONS		WWTrans	2,384,401	5,750,000	17,213,600	8,200,000	11,200,000	24,800,000	7,000,000	0	0	0	0	76,548,001
149		TOTAL			$2,384,401	$5,750,000	$17,213,600	$8,200,000	$11,200,000	$24,800,000	$7,000,000	$0	$0	$0	$0	$76,548,001

Table 2-3

Lee County Utilities
Water & Wastewater Connection Fee Evaluation

Capital Cost Summary for Connection Fee Calculation

Line No.	Description	Fixed Asset Records as of 9/30/19	Expansion Related CIP Projects	Adjustments / Exclusions	Assets for Connection Fee Determination
	Water System:				
1	Water Treatment	$320,970,720	$62,647,680	$0	$383,618,400
2	Transmission	59,768,888	29,466,988	0	89,235,876
3	Distribution	147,562,853	n/a	(147,562,853)	0
4	Hydrants	21,101,728	n/a	(21,101,728)	0
5	Vehicles, Meters & Equip.	6,480,006	n/a	(6,480,006)	0
6	Total Water System	$555,884,195	$92,114,668	($175,144,587)	$472,854,276
	Wastewater System:				
7	Wastewater Treatment	$256,531,852	$0	$0	$256,531,852
8	Transmission	175,006,885	76,548,001	0	251,554,886
9	Reclaimed Transmission	3,040,309	n/a	0	3,040,309
10	Reclaimed Distribution	4,667,811	n/a	(4,667,811)	0
11	Collection	215,628,355	n/a	(215,628,355)	0
12	Vehicles & Equip.	4,415,280	n/a	(4,415,280)	0
13	Total Wastewater System	$659,290,492	$76,548,001	($224,711,446)	$511,127,047
14	Other Assets	$23,576,041	n/a	($23,576,041)	$0
15	TOTAL CAPITAL COSTS	$1,238,750,728	$168,662,669	($423,432,073)	$983,981,323

Table 2-4

Lee County Utilities
Water & Wastewater Connection Fee Evaluation

Connection Fee Calculation

Line No.	Description	Water System	Wastewater System	Combined Fee
	Permitted Plant Capacity of System (MGD) [1]:			
	Water System			
1	Corckscrew WTP (MDF-MGD)	15.000	N/A	
2	Green Meadows WTP (MDF-MGD)	9.000	N/A	
3	Green Meadows WTP (MDF-MGD) - complete FY18	5.000	N/A	
4	North Lee County WTP (MDF-MGD)	11.600	N/A	
5	North Lee County WTP (MDF-MGD) - planned expansion / construction FY21	3.400	N/A	
6	Olga WTP (MDF-MGD)	5.000	N/A	
7	Pinewoods WTP (MDF-MGD)	5.300	N/A	
	Wastewater System			
8	Fiesta Village AWWTP (AADF-MGD)	N/A	5.000	
9	Ft. Myers Beach WWTP (AADF-MGD)	N/A	6.000	
10	Gateway WWTP (AADF-MGD)		3.000	
11	Gateway WWTP (AADF-MGD) - Capacity Reservation by Gateway Services District		(0.743)	
12	High Point WWTP (AADF-MGD)		0.025	
13	Pine Island WWTP (Monthly Average Daily Flow / MADF-MGD)		0.492	
14	Three Oaks WWTP (AADF-MGD)		6.000	
15	Capacity Rights to the City of Fort Myers Central and South WWTP (AADF-MGD)		11.500	
16	Capacity Rights to the FGUA Del Prado WWTP (AADF-MGD)		1.266	
17	Total Capacity (MGD)	54.300	32.540	
18	Peaking Factor [2]	1.330	n/a	
19	Dependable Average Day Capacity (ADF-MGD)	40.827	32.540	
	Capital Costs of Production/Treatment Facilities:			
20	Existing County Owned Facility Costs	$320,970,720	$186,895,612	
21	Capacity Rights - City of Fort Myers	N/A	$56,166,000	
22	Capacity Rights - FGUA	N/A	$13,470,240	
23	Capital Improvement Plan - Treatment Plant Expansions	$62,647,680	$0	
24	Total Capital Costs of Existing Facilities	$ 383,618,400	$ 256,531,852	
25	Cost per Gallon of Treatment Capacity	$ 9.40	$ 7.88	
	Primary Transmission/Collection System			
26	Cost of Existing Facilities	$59,768,888	$178,047,194	
27	Capital Improvement Plan - Transmission/Collection Expansions	29,466,988	76,548,001	
28	Total Capital Costs of Existing Facilities	$ 89,235,876	$ 254,595,195	
29	Cost per Gallon of Treatment Capacity	$ 2.19	$ 7.82	
30	Total Cost per Gallon of Treatment Capacity	$ 11.58	$ 15.71	
31	Level of Service per ERC (GPD)	250	200	
32	Calculated Capital Facility Charge	$ 2,895.47	$ 3,141.53	$ 6,037.00
33	Rounded Capital Facility Charge	$ 2,895.00	$ 3,140.00	$ 6,035.00
34	Existing Capital Facility Charge	$ 2,440.00	$ 2,660.00	$ 5,100.00
35	Change in Capital Facility Charge	$ 455.00	$ 480.00	$ 935.00

GPD = Gallons Per Day
MGD = Million Gallons Per Day
ADF = Average Daily Flow
Footnotes:

[1] For the water system, reflects current maximum day permitted capacity of water treatment facility as provided by the County. With respect to the wastewater treatment capacity, reflects ADF capacity of wastewater treatment facilities.

[2] The peaking factor utilized for the water treatment plant was based on a 2 year average of the peak-to-average day relationships as reported in the most recent EOR reports.