

**Lee County Board Of County Commissioners
Agenda Item Summary**

Blue Sheet No. 20020113

1. REQUESTED MOTION:

ACTION REQUESTED: Adopt Water and Wastewater Facilities Plans and authorize their submission to the Florida Department of Environmental Protection (DEP)

WHY ACTION IS NECESSARY: Facilities Plans must be approved by the Board of County Commissioners prior to submission to the DEP

WHAT ACTION ACCOMPLISHES: Submission of the Facilities Plans will allow the County to be considered for funding low interest loans for Water and Wastewater Capital Improvement Projects through the State Revolving Fund (SRF)

**2. DEPARTMENTAL CATEGORY:
COMMISSION DISTRICT #:**

5:00 #5

3. MEETING DATE:

04-23-2002

4. AGENDA:

- CONSENT
- ADMINISTRATIVE
- APPEALS
- PUBLIC
- WALK ON
- TIME REQUIRED:**

**5. REQUIREMENT/PURPOSE:
(Specify)**

- STATUTE
- ORDINANCE
- ADMIN. CODE
- OTHER

6. REQUESTOR OF INFORMATION:

- A. COMMISSIONER
- B. DEPARTMENT County Administration
- C. DIVISION Budget Services
- BY: Antonio Majul

7. BACKGROUND: On April 17, 2001, the Board of County Commissioners approved submission of a loan application to the Florida Department of Environmental Protection (DEP) for \$4,669,379 in pre-construction loans from the State Revolving Fund for Water and Wastewater Capital Projects. To date, \$804,309 has been received. The funds are being used for the preparation of water and wastewater facilities plans and for design/engineering for a series of water and wastewater capital projects. The Facilities Plans are planning documents that set forth projects that are expected to be constructed.

The County intends to apply for construction funds through the SRF program. However, prior to becoming eligible to apply for those funds, Facilities Plans must be completed for both water and wastewater capital projects. Only projects contained in those plans are eligible for consideration. Facilities Plans can be amended as new capital needs are identified or other changes occur. Angie Brewer & Associates was contracted to prepare those plans and process their submission to the DEP.

Those plans were completed in early April 2002 and been available for public review since April 12, 2002. A Notice of Public Hearing appeared in the News-Press on April 12, 2002.

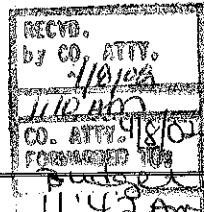
8. MANAGEMENT RECOMMENDATIONS: Approve the Facilities Plans for Water and Wastewater Capital Projects and authorize their submittal to the Florida Department of Environmental Projection (DEP).

9. RECOMMENDED APPROVAL:

A Department Director	B Purchasing or Contracts	C Human Resources	D Other	E County Attorney	F Budget Services				G County Manager
					OA	OM	Risk	GC	
<i>[Signature]</i>				<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>

10. COMMISSION ACTION:

- APPROVED
- DENIED
- DEFERRED
- OTHER



RESOLUTION NO.:

A RESOLUTION OF THE BOARD OF COUNTY COMMISSIONERS OF LEE COUNTY, FLORIDA RELATING TO THE STATE REVOLVING FUND LOAN PROGRAM: APPROVING THE LEE COUNTY UTILITIES WASTEWATER FACILITIES PLAN DATED APRIL 2002, APPROVING THE LEE COUNTY UTILITIES DEDICATED REVENUE AND CAPITAL FINANCING PLAN, AUTHORIZING SUBMISSION OF THE PLAN TO THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (FDEP); DESIGNATING AUTHORIZED REPRESENTATIVES; AND APPROVING AN EFFECTIVE DATE

WHEREAS, Lee County has determined that the Wastewater System Improvements recommended in the Lee County Wastewater Facilities Plan are in the best interest of the citizens; and

WHEREAS, Lee County has examined the Wastewater Facilities Plan prepared by Lee County Utilities and Angie Brewer & Associates, L.C. and has discussed the results and recommendations of the plan at an advertised public hearing; and

WHEREAS, Lee County intends to enter into a loan agreement with the Florida Department of Environmental Protection under the State Revolving Fund for project financing; and

WHEREAS, Lee County has held a duly advertised public hearing in accordance with the State SRF Program requirements.

NOW, THEREFORE, BE IT RESOLVED BY THE COUNTY COMMISSIONERS OF LEE COUNTY, FLORIDA, AS FOLLOWS:

SECTION I. Lee County does hereby adopt the Lee County Wastewater Facilities Plan, attached hereto and incorporated herein by reference.

SECTION II. The Lee County Dedicated Revenue and Capital Financing Plan has been reviewed and discussed in a public hearing of Lee County and is hereby adopted.

SECTION III. The Utilities Director of Lee County is hereby designated as the authorized representative to provide the assurances and commitments required by the SRF program.

SECTION IV. The Utilities Director of Lee County is authorized to represent the County in carrying out the County's responsibilities under the SRF program. The Utilities Director is authorized to delegate responsibility to appropriate County staff to carryout technical, financial and administrative activities associated with the program.

SECTION V. Effective Date. This Resolution shall become effective immediately upon its adoption.

PASSED AND DULY ADOPTED by the Board of County Commissioners of Lee County, Florida, this 23rd day of April, 2002.

**BOARD OF COUNTY COMMISSIONERS
OF LEE COUNTY, FLORIDA**

Attest:

BY: _____
Chairman

APPROVED AS TO FORM:

BY: _____
Clerk

BY: _____
Office of the County Attorney

NOTICE OF PUBLIC HEARING
Lee County, Florida
WATER AND WASTEWATER FACILITIES PLANS

Notice is hereby given that Lee County will hold a public hearing on April 23, 2002 at 5:00 o'clock pm or as soon as possible thereafter, in the Commission Chambers, 2120 Main Street, Fort Myers, FL 33901, Second Floor, to discuss and receive input on the L. C. Water and Wastewater Facilities Plans. This hearing will include, but not be limited to the discussion of the plans to expand and upgrade various water and wastewater facilities throughout Lee County. Additionally, the financial impact on system users will be discussed. The hearing is intended to afford the opportunity to individuals to be heard on economic and practical effects of the location, design and environmental impacts of the water and wastewater facilities recommended in the Water and Wastewater Facilities Plans.

A portion of the funding for this project is anticipated to come from the Florida Department of Environmental Protection State Revolving Fund (SRF) loan program.

The Water and Wastewater Facilities Plans documents can be reviewed beginning April 12, 2002 on the 4th Floor of the Lee County Administration Building located at 2115 Second Street, Fort Myers, Florida 33902.

Interested parties are invited to attend this meeting and be heard. Any person who decides to appeal any decision made with respect to any matter considered at this meeting will need to ensure that a verbatim record of the proceedings is made, which record includes the testimony and evidence upon which the appeal is to be based.

If you have a disability that will require special assistance or accommodations for your attendance at the public hearing, please call the Lee County Division of Public Resources at 335-2269 for information.

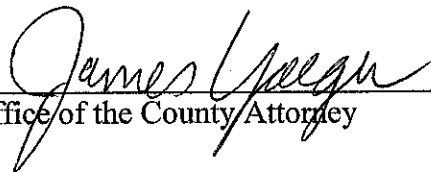
PLEASE GOVERN YOURSELF ACCORDINGLY.

The text of this Notice is pursuant to and in conformance with Section 125.66,
Florida Statutes (2001).

BOARD OF COUNTY COMMISSIONERS
OF LEE COUNTY, FLORIDA

By: _____
Charlie Green, Ex-Officio Clerk
to the Board of County Commissioners
of Lee County, Florida

APPROVED AS TO FORM:

By:  _____
Office of the County Attorney

Ad Size: 2.5

Publishing Date: 04-12-02

LEE COUNTY, FLORIDA

**WATER AND WASTEWATER
RATE AND CHARGE STUDY**



March 2002



Public Resources Management Group, Inc.
Utility, Rate, Financial and Management Consultants



Public Resources Management Group, Inc.

Utility, Rate, Financial and Management Consultants

March 25, 2002

Honorable Members of the County Commission
Lee County
2178 McGregor Blvd.
Fort Myers, FL 33901

Subject: Water and Wastewater Rate and Charge Study

Gentlemen:

We have completed our study of water and wastewater rates for the Public Works – Utilities Division of Lee County (the “County”) and have summarized the results of our analyses, assumptions, and conclusions in this report which is respectively submitted for your consideration. This report summarizes the basis for the proposed rates and charges for water and wastewater services that are necessary to meet the expenditure requirements of the utility. The analysis encompassed the five fiscal year period ending September 30, 2002 through 2006.

During the course of the study, it was determined that the proposed rates should meet a number of goals and objectives. The single most important objective was to produce rates which meet the expenditure requirements of the utility system in order to maintain financial sufficiency as well as to continue to fund the expected capital needs of the system. Other objectives considered in the study included:

- Rates based on cost of service principles
- Continue to promote water conservation
- Compliance with rate covenant requirements of the Bond Resolution
- Development of the funding of the capital program for the renewal, replacement, and betterment of utility assets
- Competitiveness with neighboring utilities of utility rates
- Enhancement of revenues by use of other charges

Following this letter, we have provided an executive summary which summarizes the report and outlines our recommendations and conclusions to the County relative to utility rates. The accompanying report provides additional detail regarding the analysis conducted on behalf of the County. This rate study also presents the projected operating financial status of the utility as well as analyses regarding compliance with the utility’s existing Bond Resolution which authorized the issuance of the outstanding revenue bonds.

Honorable Members of the County Commission

March 25, 2002

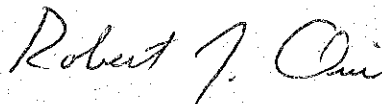
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The proposed user fees, miscellaneous service charges, and system connection fees are based on the total recovery of costs to be incurred by the County water and wastewater facilities with regard to capacity available to serve new growth. As such, these charges are considered by Public Resources Management Group, Inc. to be reasonable and reflect the cost burden of each respective utility. This study did not take into account consolidation of the existing County system with that of Gulf Environmental Services, Inc. Based on discussions with the County, this consolidation would be addressed from a financial and rate application standpoint in the near future.

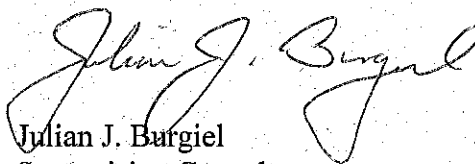
We appreciate the fine cooperation and valuable assistance given to us by the County and its staff in the completion of the study.

Respectfully submitted,

Public Resources Management Group, Inc.



Robert J. Ori
President



Julian J. Burgiel
Supervising Consultant

**LEE COUNTY, FLORIDA
WATER AND WASTEWATER RATE AND CHARGE STUDY**

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**LEE COUNTY, FLORIDA
WATER AND WASTEWATER RATE AND CHARGE STUDY**

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**LEE COUNTY, FLORIDA
WATER AND WASTEWATER RATE AND CHARGE STUDY**

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**LEE COUNTY, FLORIDA
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EXECUTIVE SUMMARY



EXECUTIVE SUMMARY AND RECOMMENDATIONS

General

Lee County is a political subdivision of the State of Florida governed by the State Constitution and general laws of the State of Florida. The County occupies approximately 803 square miles in the southwestern portion of the State and based on information provided by the Bureau of Economic and Business Research for 2001, the County had a population of approximately 440,888 people. When compared to the sixty-seven other counties, the County ranked eleventh in terms of population size according to information contained in the 2001 Florida Statistical Abstract. The Lee County Water and Wastewater System service area generally includes the entire unincorporated area of Lee County with the exception of certain areas serviced by private and other public (municipal) utilities (i.e., the cities of Fort Myers, Cape Coral and Sanibel). The majority of customers served by Lee County Public Works - Utilities Division (LCU) consist primarily of single and multi-family residential customers. Water and wastewater services are also provided to commercial customers of whom only a small percentage is classified as large users for billing purposes.

The County's existing rates for monthly water and wastewater services were adopted pursuant to Resolution No. 94-03-114 and became effective with bills rendered on and after March 30, 1994. Therefore, rates have not been adjusted in seven and one-half years. Subsequent to this last adjustment, it has been projected that the cost of utility operation and system improvements funded from rate revenues would increase, thus placing a financial strain on the utility. As identified in this report, the proposed rate adjustment recommended to be implemented in Fiscal Year 2002 would increase the typical single-family residential water bill by 3.9%, or \$0.75 per month, and would increase the average wastewater bill by 6.9%, or \$2.05 per month (assuming 5,000 gallons monthly usage). In addition, other factors such as: i) reduced water use or sales of the utility (due in part to conservation measures implemented by the utility); ii) an anticipated increase in wastewater treatment costs at the City of Fort Myers facilities which the County is a participant; iii) a reduction in fund balances and interest rates which has had a reducing effect on utility income; iv) the need to fund a significant amount of capital projects; and v) the need to have the individual utility systems fully support the operations from rates have caused the need to review user fees. As a result of these factors and needs, the County authorized this rate study.

Existing Rates

The existing monthly rates for water and wastewater service include: i) a monthly administrative fee applied to each account billed regardless of the number of dwelling units served; ii) a monthly service charge based on the number of dwelling units served; iii) a volumetric or usage charge which increases in cost based on water use (i.e., an inclining block rate) to promote water conservation which is based on metering to each users premise; and iv) for the wastewater system, a monthly maximum billing threshold for the residential single-family and multi-family

classes amounting to 6,000 gallons of metered water consumption (cap). The following is a summary of the existing rates for water and wastewater service:

Summary of Existing Monthly County Water and Wastewater Rates					
Customer Classification	Monthly Service Charge	Usage Charge per Unit (Per 1,000 gallons)			
Water Service:					
Single-Family [*]	\$5.95 per unit	0 - 6,000	\$2.18		
		6,001 - 12,000	2.68		
		12,001 - 18,000	3.18		
		18,001 and above	4.18		
Multi-Family [*]	4.75 per unit	0 - 4,800	\$2.18		
		4,801 - 9,600	2.68		
		9,601 - 14,400	3.18		
		14,401 and above	4.18		
Recreational Vehicle Unit/Lot [*]	2.40 per unit	0 - 2,400	\$2.18		
		2,401 - 4,800	2.68		
		4,801 - 7,200	3.18		
		7,201 and above	4.18		
Commercial and All Non-Residential		For Each ERU			
		1 - 6,000	\$2.18		
		6,001 - 12,000	2.68		
		12,001 - 18,000	3.18		
		18,001 and above	4.18		
		Non-Irrigation Class			
		Per 1,000	\$2.18		
		Irrigation Class			
		1 - 6,000	\$2.68		
		6,001 - 12,000	3.18		
		12,001 and above	4.18		
		5/8"	\$8.10		
		3/4"	11.00		
1"	16.90				
1 1/2"	31.65				
2"	49.30				
3"	96.40				
4"	149.35				
6"	296.50				
8"	473.10				
10"	855.70				

[*] Each residential service account shall be charged monthly an administrative fee of \$2.15

Wastewater Service:

Residential Services		
Single-Family [1] [2]	\$9.20 per unit	\$3.52 per 1,000 gallons metered consumption \$15.84 for unmetered service
Multi-Family [1] [2]	7.35 per unit	\$3.52 per 1,000 gallons metered consumption \$12.67 for unmetered service
Recreational Vehicle Unit/Lot [1]	3.70 per unit	\$3.52 per 1,000 gallons metered consumption \$6.34 for unmetered service

[1] Each residential service account shall be charged monthly an administrative fee of \$2.95.

[2] No wastewater user charge shall be imposed on metered water usage above six thousand (6,000) gallons per month per residential service dwelling unit.

Summary of Existing Monthly County Water and Wastewater Rates (continued)

Customer Classification	Monthly Service Charge	Usage Charge per Unit (Per 1,000 gallons)
Wastewater Service (con't)		
Commercial and All Non-Residential		
<u>Meter Size</u>		
5/8"	\$12.15	\$3.52 per 1,000 gallons metered consumption
3/4"	16.75	
1"	25.95	
1 1/2"	49.00	
2"	76.65	
3"	150.30	
4"	233.20	
6"	463.45	
8"	739.70	
10"	1,338.35	

[1] Each residential service account shall be charged monthly an administrative fee of \$2.95.

[2] No wastewater user charge shall be imposed on metered water usage above six thousand (6,000) gallons per month per residential service dwelling unit.

Net Revenue Requirements From Rates

The various components of costs associated with the operations, maintenance, financing of the system, renewals, replacements and capital improvements are generally considered the revenue requirements of a publicly operated utility system. The development of the net revenue requirements for the County's utility system is a critical component of the study since rates should be designed to represent the full cost of providing service. To the extent that the estimate of the revenue requirements is not accurate, the proposed rates could over or underrecover the expenditure requirements of the System and therefore impact the utility from a financial standpoint. The determination of the revenue requirements for the utility system of the County was made in a manner generally consistent with the methods employed for other publicly-owned utilities utilizing revenue bond financing to meet their capital needs.

In our analysis of the rates for water and wastewater service, a five year forecast or projection period was considered. The forecast period for the study was for the fiscal years ending September 30, 2002 through 2006. This five year forecast period was selected in order to provide the County information regarding additional rate adjustments that may occur or be required in the future, as well as to assist the utility in the development of financial projections associated with the issuance of anticipated utility revenue bond indebtedness. Based upon the projections of utility expenditures, or revenue requirements, and the estimate of sales revenue as discussed in Section 3, the estimated rate adjustments based on existing rates for the Fiscal Year 2002 and the five year forecast period are shown as follows:

Water System: [1]	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>
Net Revenue Requirements from Retail Rates	\$22,030,323	\$22,400,619	\$23,321,592	\$23,661,331	\$24,236,565
Existing Retail Water Rate Revenue [2]	<u>21,545,315</u>	<u>22,400,619</u>	<u>22,686,043</u>	<u>23,611,331</u>	<u>23,936,707</u>
Estimated Revenue Surplus/(Deficiency) [3]	(\$485,008)	\$ 0	(\$635,548)	\$ 0	(\$299,858)
Amount Percent	<u>(2.25%)</u>	<u>0.00%</u>	<u>(2.80%)</u>	<u>0.00</u>	<u>(1.25%)</u>
Percent of Partial Year Rate Revenue [4]	<u>(3.00%)</u>	<u>0.00%</u>	<u>(2.80%)</u>	<u>0.00%</u>	<u>(1.25%)</u>

[1] Derived from Table 3-1.

[2] Amounts shown based on rates currently in effect and include effects of rate adjustments in forecast period (i.e., 2002 adjustment included in 2003 revenue).

[3] Reflects annual deficiency for each year assuming prior period adjustments.

[4] For years in which a rate increase is required, the increase is assumed to be effective on October 1st except for Fiscal Year 2002 where the adjustment is recommended to occur January 1, 2002.

The development of the estimated revenue requirements for the wastewater system summarized as follows:

Wastewater System: [1]	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>
Net Revenue Requirements from Retail Rates	\$21,323,739	\$22,156,600	\$24,947,541	\$25,241,200	\$26,722,631
Existing Retail Wastewater Rate Revenue [2]	<u>19,644,741</u>	<u>22,156,600</u>	<u>22,424,254</u>	<u>25,241,200</u>	<u>25,535,965</u>
Estimated Revenue Surplus/(Deficiency) [3]	(\$1,678,998)	\$ 0	(\$2,523,287)	\$ 0	(\$1,186,665)
Amount Percent	<u>(8.55%)</u>	<u>0.00%</u>	<u>(11.25%)</u>	<u>0.00%</u>	<u>(4.65%)</u>
Percent of Partial Year Rate Revenue [4]	<u>(11.40%)</u>	<u>0.00%</u>	<u>(11.25%)</u>	<u>0.00%</u>	<u>(4.65%)</u>

[1] Derived from Table 3-2.

[2] Amounts shown based on rates currently in effect and include effects of rate adjustments in forecast period (i.e., 2002 adjustment included in 2003 revenue).

[3] Reflects annual deficiency for each year assuming prior period adjustments.

[4] For years in which a rate increase is required, the increase is assumed to be effective on October 1st except for Fiscal Year 2002 where the adjustment is recommended to occur January 1, 2002.

As can be seen above (and as discussed more fully in Section 3) for the water and wastewater systems, respectively, it is currently envisioned that each system will need to experience a rate adjustment in Fiscal Year 2002 to meet its expected revenue requirements. Additionally, based on the capital improvement funding analysis and debt service requirements, we anticipate that the systems will need further rate adjustments to recognize increased revenue requirements of the Systems. The primary reasons for the rate increases for the two systems include the following:

1. The last true rate review and rate adjustment that the water and wastewater system experienced was performed during the Fiscal Year 1994 which is over seven (7) years ago. As a result, the cost of operations of the System due to

inflationary allowances and increased regulatory pressure on the cost of treatment have escalated, thus impacting the financial stability of the System.

2. A projected decline from recently experienced levels in the average water use per equivalent residential connection over the forecast period due primarily to increased water conservation efforts of the County's customer base that affect water use. As a result of these efforts, a reduction in the contribution margin from each water and wastewater customer (based on relative flow) is reduced, thus causing a financial impact on the utility system.

3. A primary reason for the increases is a direct result of the ongoing capital needs of the water and wastewater system due to: i) their age (major replacement and betterments required); ii) the continued need to fund or provide for future water supply; iii) increased regulations and the requirements for System upgrades; iv) the need to meet System growth requirements; and v) meeting environmental concerns and quality issues. In order to fund the capital needs as identified by the County, it is expected that the County will need to increase the amount of indebtedness allocable to the systems. Generally when System indebtedness is incurred, there usually is a short-term rate impact to recognize the payments of the fixed costs of the indebtedness that generally precedes the benefits received by the utility customers (i.e., the construction of facilities and a resulting subsequent increase in customers relative to the facility construction).

4. The need to continually fund the Renewal and Replacement Fund program in a sufficient amount in order to develop a stable revenue source for the betterment, replacement, or upgrades of utility plant in service which is allocable to existing users as opposed to new growth.

Proposed Monthly Rates for Service

Based on the projections of customers and sales, projected utility expenditures requirements, the allocation of costs to the rate structure attributes (cost of service), and discussions with the staff of the County, the proposed monthly rates for water and wastewater service are recommended as follows:

Summary of Proposed Monthly County Water and Wastewater Rates			
Customer Classification	Monthly Service Charge	Usage Charge per Unit (Per 1,000 gallons)	
Water Service:			
Single-Family [*]	\$6.20 per unit	0 - 6,000	\$2.26
		6,001 - 12,000	2.78
		12,001 - 18,000	3.30
		18,001 and above	4.33
Multi-Family [*]	4.95 per unit	0 - 4,800	\$2.26
		4,801 - 9,600	2.78
		9,601 - 14,400	3.30
		14,401 and above	4.33

Summary of Proposed Monthly County Water and Wastewater Rates (continued)

Customer Classification	Monthly Service Charge	Usage Charge per Unit (Per 1,000 gallons)
Water Service (cont)		
Recreational Vehicle Unit/Lot [*]	2.50 per unit	0 - 2,400 \$2.26 3,301 - 4,800 2.78 4,801 - 7,200 3.30 7,201 and above 4.33
Commercial and All Non-Residential		For Each ERU
5/8"	\$8.45	1 - 6,000 \$2.26
3/4"	11.55	6,001 - 12,000 2.78
1"	17.75	12,001 - 18,000 3.30
1 1/2"	33.25	18,001 and above 4.33
2"	51.85	
3"	101.45	
4"	157.25	Non-Irrigation Class
6"	312.25	Per 1,000 \$2.26
8"	498.25	
10"	901.25	Irrigation Class
		1 - 6,000 \$2.78
		6,001 - 12,000 3.30
		12,001 and above 4.33

[*] Each residential service account shall be charged monthly an administrative fee of \$2.25.

Wastewater Service:

Residential Services		
Single-Family [1] [2]	\$10.10 per unit	\$3.69 per 1,000 gallons metered consumption \$16.61 for unmetered service
Multi-Family [1] [2]	8.10 per unit	\$3.69 per 1,000 gallons metered consumption \$13.29 for unmetered service
Recreational Vehicle Unit/Lot [1]	4.10 per unit	\$3.69 per 1,000 gallons metered consumption \$6.65 for unmetered service
Commercial and All Non-Residential		
<u>Meter Size</u>		
5/8"	\$13.35	\$3.69 per 1,000 gallons metered consumption
3/4"	18.45	
1"	28.55	
1 1/2"	54.25	
2"	84.25	
3"	165.00	
4"	255.50	
6"	509.75	
8"	813.50	
10"	1,470.30	

[1] Each residential service account shall be charged monthly an administrative fee of \$3.25.

[2] No wastewater user charge shall be imposed on metered water usage above nine thousand (9,000) gallons per month per residential service dwelling unit.

As can be seen above, the proposed rates for water and wastewater service maintain the same general rate structure as the existing rates. For purposes of this analysis, the wastewater maximum billing threshold for the residential class has been increased to 9,000 gallons. Based on discussions with staff and in order to enhance the revenue stability of the wastewater system, the County may wish to consider increasing this threshold to 9,000 gallons. As discussed in Section 4, typical residential wastewater thresholds in the State of Florida are normally established at the 8,000 - 10,000 gallon range. This range allows for essential indoor water use being recognized as returned to the wastewater system plus an acceptable discretionary allowance that can reasonably be expected to also be returned to the System. As outlined in Section 2 – Customer Statistics, approximately 25% of the single-family residential customer base uses in excess of the 6,000 gallon per month cap. Increasing the threshold to 9,000 gallons per month would ensure recovering the costs associated with treating and disposing of the excess wastewater not currently being billed.

In order to illustrate the effects of the proposed rates, a comparison has been prepared for customers that utilize approximately 5,000 gallons of water and wastewater service per month. The usage level represents approximately the median usage level for the single-family residential class.

	Residential Service @ 5,000 gallons [1]		
	Water	Wastewater	Combined
Lee County			
Existing Rates	\$19.00	\$29.75	\$48.75
Proposed Rates	19.75	31.80	51.55
Other Florida Utilities:			
City of Bradenton	\$16.63	\$18.32	\$34.95
Brevard County	11.44	27.68	39.12
Charlotte County	35.13	36.42	71.55
City of Clearwater	13.65	17.30	30.95
Collier County	19.20	26.70	45.90
Englewood Water District	19.00	31.63	50.63
Florida Water Services – Lehigh – Lee County	28.21	44.57	72.78
City of Fort Myers	14.96	29.81	44.77
Hillsborough County	21.45	35.70	57.15
Manatee County	10.56	25.90	36.46
City of Naples	12.48	32.51	44.99
City of North Port	23.41	42.24	65.65
Orange County	10.52	29.81	40.33
Pinellas County	13.50	23.50	37.00
City of Punta Gorda	25.25	26.75	52.00
City of Sarasota	19.49	41.17	60.66
Sarasota County	23.62	46.39	70.01
City of Tampa	6.95	21.36	28.31
Other of Florida Utilities' Average	<u>\$18.08</u>	<u>\$30.99</u>	<u>\$49.07</u>

[1] Differences in rate levels can be attributable to varying levels in treatment processes (i.e., reverse osmosis versus lime softening) which can exhibit significantly higher costs of operation and, therefore, result in proportionately higher rates for service.

Included at the end of this executive summary section are comparisons illustrating the competitiveness of the County's proposed water and wastewater rates with a number of neighboring utilities.

System Connection Fee Analysis

The County currently charges a one-time charge to new customers in the utility service area; the purpose of which is to assign growth-related capital expenditures to those customers generally responsible for such costs. Presently, a connection fee for capacity utilization of the System is charged for both potable water services and wastewater service. It is proposed that the application of the connection fees for these types of services be maintained.

The proposed connection fees (Section 5) for potable water and wastewater service were determined to be \$1,140 per equivalent residential unit (ERU), or \$4.56 per gallon of reserved capacity, and \$1,735 per ERU, or \$6.94 per gallon of reserved capacity, for the water and wastewater systems, respectively. The proposed change for the water system reflects an increase of \$120, or 11.8%, in comparison to the previously existing water connection fee while the proposed fee for the wastewater system reflects an increase of \$275, or 18.8%. Based on an analysis of water and wastewater connection fees, the increases were primarily attributable to the higher estimated capital costs of providing service due to facility expansion and upgrades anticipated during the planning horizon. LCU's capital program identifies approximately \$263 million in plant capacity expansion/upgrades and utility system renewals and replacements to take place over the next ten (10) years.

With respect to customer application, it is recommended the County maintain the current methodology with respect to the residential class of customer (i.e., single-family, multi-family, mobile homes, etc.) whereby each applicant is charged based on their designated ERU factor (single-family residence = 1.0 ERU, multi-family unit = 0.8 ERU, etc.). With respect to the commercial class, it is recommended the County alter its current methodology whereby connection fees are charged based on the size of the applicant's meter, to that of a per gallon of reserved capacity approach. Under this approach, the County can assign a specific level of capacity to each individual commercial account based on the attributes of the establishment (i.e., a hotel is assigned 150 gallons per day capacity per room as defined in Chapter 10D-6 of the Florida Administrative Code). The resultant ERUs to be assigned to the applicant can then be determined by applying the County's current level of service factor of 250 gallons per day to the total additive gallons of reserve capacity arrived at by the County (reference Section 5 of this report). It is also recommended that in no instance the County assign an ERU determination of less than 1.0 ERU to any individual applicant (connection) for water and wastewater service.

The determination of the proposed connection fees was based on the plant account function (e.g., treatment), existing and incremental plant facilities and available capacity of such facilities to serve new growth, ERU service requirements, and other current data available to PRMG regarding the water and wastewater systems. By designing the connection fee to recover costs on a prospective basis, an attempt is made to design a fee which will provide for the future expansion of the utility system in an equitable manner.

Other Rates and Charges

In addition to the analysis of monthly user charges and connection fees, PRMG also evaluated other miscellaneous charges as well as compliance with the Bond Resolution requirements (covenants) for the outstanding system utility bond indebtedness. A brief summary of these additional issues are presented below for the County's consideration:

Rate Covenants of Bond Resolution

The governing Bond Resolution which authorized the issuance of the outstanding Water and Wastewater Revenue Refunding and Improvement Bonds, Series 1993 (the "Series 1993 Bonds") mandates certain covenants which must be achieved. Based on the provisions of the Bond Resolution, rates for service must produce Net Revenues (Revenues less Operating Expenses as defined in the Bond Resolution) which, after the recognition of any required deposit, must be at least 100% of the annual debt service payment in each fiscal year. The proposed rate adjustments for the water and wastewater system for the study period reflected in the report are anticipated to meet the rate covenants of the Bond Resolution.

In addition to the Senior Lien Parity Bonds, the County has also secured funds from the State Revolving Loan Fund (SRF loan) for the purpose of implementing wastewater system improvements. The issue is considered to be junior and subordinate to the Series 1993 Bonds. Based on the provisions of the Loan Agreement which authorized the issuance of the SRF Loan to the County, rates and charges for services must produce Net Revenues sufficient to provide, after the deduction of the Senior Lien Indebtedness (obligations) requirements, to be at least 115 percent of the annual debt service payment in the fiscal year. The proposed rates and subsequent adjustments for the study period reflected in the report are anticipated to meet the rate covenants of the Loan Agreement.

Based on information provided by the County, it is also anticipated that the County will be procuring additional SRF loan funding for the purpose of implementing water and wastewater system improvements during the course of the projection period. For purposes of this study, it was assumed that the rate covenant requirements would be similar to that of the existing SRF Loan whereby the pledge for repayment would be solely from water and wastewater system revenues. The proposed system rates and subsequent adjustments as outlined in this report are anticipated to meet the rate covenants of the anticipated SRF Loan Agreement during the course of the projection period.

Miscellaneous Charges

The County has several charges or fees which are billed to a customer for specific services. These charges provide additional revenue to the utility and serve to reduce the amount of revenues needed to be derived from user fees.

The fees are designed to recover the costs of providing specific services which may be required periodically by a customer (e.g., a request for a turn-on) or as a direct result of customer actions (e.g., returned and check charge). A summary of the existing charges and the recommended fees for these services is summarized below:

Meter Installation (Drop-in) Fees

<u>Meter Size</u>	<u>Existing Fees</u>	<u>Proposed Fees</u>
5/8"	\$110.00	\$125.00
3/4"	135.00	145.00
1"	190.00	195.00
1 1/2"	355.00	410.00
2"	510.00	560.00
3" and above	Actual Cost	Actual Cost

Tap-in Charge

<u>Meter Size</u>	<u>Existing Fees</u>	<u>Proposed Fees</u>
5/8"	\$395.00	\$470.00
3/4"	425.00	490.00
1"	455.00	560.00
1 1/2"	825.00	825.00
2"	920.00	990.00
3" and above	Actual Cost	Actual Cost

Wastewater Main Tap Charge

Actual Cost Actual Cost

Returned Check Charge

\$25.00 fee for check less than \$50.00	\$25.00 fee for check less than \$50.00
\$30.00 fee for check between \$50.00 and \$300.00	\$30.00 fee for check between \$50.00 and \$300.00
\$40.00 fee for check exceeding \$300.00 or 5% of check value, whichever is greater	\$40.00 fee for check exceeding \$300.00 or 5% of check value, whichever is greater

Premise Visit (trip charge) [*]

\$20.00 \$25.00

Turn-On/Turn-Off Charge

<u>Initiation of Service</u>		
Normal Hours	\$35.00	\$35.00
After Hours	45.00	45.00
<u>For Non-Payment</u>		
Normal Hours	\$40.00	\$45.00
After Hours	55.00	55.00

Plan Review Fees

\$45.00 plus \$15.00 per additional unit
 1.0% of Construction Cost or \$540 minimum charge, whichever is greater

[*] Includes charges for meter re-reads and special reads, and any specific activities where a trip to the customer's premises is requested by the customer and required of LCU.

<u>Monthly Fire Line Charges</u>	<u>Existing Fees</u>	<u>Proposed Fees</u>
5/8"	N/A	\$1.90
3/4"	N/A	2.85
1"	N/A	4.75
1 1/2"	N/A	9.55
2"	\$4.17	15.25
3"	8.33	30.50
4"	12.50	47.65
6"	25.00	95.30
8"	40.83	152.50
10"	40.83	219.20
 <u>Wastewater Service Line Tampering Penalty</u>		
Cleanout Charge	N/A	\$75.00
Connection Restoration/Tampering Fee	N/A	350.00
 <u>Water Line/Hydrant Tampering Charge</u>	 N/A	 \$500.00

Wholesale Water and Wastewater Rates

In addition to the County's retail customers, the County has entered into agreements and anticipates entering future agreements for the sale of potable water and bulk wastewater treatment services. Based on discussions with staff, it has been determined that standard wholesale rates should be established which are designed to recover the County's costs with providing these services and can be applied to future customers of the system who qualify for the provision of such service.

Based on the revenue requirements allocable to wholesale water and wastewater services, a rate of \$2.46 per 1,000 gallons for bulk water purchases and \$3.36 per 1,000 gallons for bulk wastewater treatment services is proposed.

Reclaimed Water Rates for Effluent Reuse

The County's primary methods of effluent disposal from the wastewater treatment facilities operated by the County is the use of spray irrigation at several sites (i.e., golf courses, residential developments, etc.). This is beneficial since this method of disposal conserves raw water resources, allows the County to recover revenues from this by-product of the wastewater treatment process (now being considered as an additional water resource) and provides the user a low-cost method of irrigating, thus improving the community. The County currently charges two (2) distinct and separate rates for reclaimed water service: i) a low demand period rate of \$0.04 per 1,000 gallons which is in effect during the rainy season (June 1 through September 30); and ii) a normal demand period rate of \$0.21 per 1,000 gallons for the remaining months of the year (dry season). Based on information provided by the County, the low demand period rate was placed into effect several years ago when at that time only a handful of reclaimed customers existed and served as a mechanism to entice these users to continue applying the reclaimed water and assist the County in discarding the treated effluent. Since this point in time,

the reclaimed customer base has increased significantly (nearing thirty large users) and the resulting need to sell the reuse water at a level below the cost of treating the product is no longer essential to the County. It is therefore recommended to eliminate the wet/dry season rate application structure currently in effect and adopt a year round rate which is designed to recover the costs to operate and maintain the reuse system. Based on an analysis of the costs associated with operating and maintaining these facilities which are allocable to the reuse system, a rate for reclaimed water service was developed. The rate is \$0.25 per 1,000 gallons.

Customer Deposits

In order to defray the risk of nonpayment for utility services rendered until the negligent customer is disconnected, water and wastewater utilities generally require each new residential and nonresidential customer to pay a customer deposit. The minimum deposit recommended to the County should continue to be based on the size of the service and this class on type of customer served. Based on a review of the existing customer deposits, no adjustment to water system deposits are recommended due to the proposed level of increases to the existing water rates for monthly service, an adjustment to the existing level of wastewater system deposits are proposed. The following is a summary of the existing and recommended proposed wastewater deposit requirements:

	Wastewater System	
	Existing Customer Deposit Rate	Proposed Customer Deposit
Residential Service		
Single-Family	\$65.00	\$70.00
Multi-Family (per dwelling unit)	52.00	56.00
Recreational Vehicle (per unit/lot)	35.00	40.00
Commercial and Non-Residential Service		
<u>Meter Size</u>		
5/8 inch	\$65.00	\$70.00
¾ inch	97.00	105.00
1 inch	165.00	175.00
1½ inch	325.00	350.00
2 inch	520.00	560.00
3 inch	1,040.00	1,120.00
4 inch	1,625.00	1,750.00
6 inch	3,250.00	3,500.00
8 inch	5,200.00	5,600.00
10 inch	9,425.00	10,150.00

Conclusions and Recommendations

Based on our studies, assumptions, considerations, and analyses as summarized herein, we are of the opinion that:

1. The County's existing rates for service for the water and wastewater systems are not anticipated to recover the utility system projected revenue requirements for the fiscal years ending September 30, 2002 through 2006.

2. The County should consider adopting the water and wastewater rates proposed for the Fiscal Year 2002, which will meet the projected revenue requirements of such fiscal year. The revenue requirements include operation and maintenance expenses, the funding of capital improvements, and the payment of debt service associated with the performance of system improvements and the funding of the near term expansion of the utility system.
3. The County should consider revising the current monthly residential billing threshold (cap) for the provision of wastewater service from the existing cap of 6,000 gallons per month to 9,000 gallons per month. This threshold will enable the County to recover costs associated with treating flows that are not being recovered above the current 6,000 gallon threshold level.
4. The proposed water and wastewater rates for both utility systems, should be made effective as soon as possible during the Fiscal Year 2002. Furthermore, the County should closely monitor the rates for service since initial projections indicate that subsequent future adjustments may be necessary during the next four fiscal years.
5. It is recommended the County consider adopting the proposed water and wastewater connection fees established at \$1,140 and \$1,735, respectively, per equivalent residential unit. It is also recommended the County alter the current application methodology for the determination of ERUs for the commercial class of customer from the current meter based approach to that of a gallonage based determination which is derived from the direct attributes of each individual commercial applicant for service. This would equate to a fee of \$4.56 per gallon of water and \$6.94 per gallon of wastewater system reserved capacity, for the commercial class.
6. Based on a review of the type of costs incurred by the County of the specific customer service charges (e.g., labor), the County should consider: i) conducting periodic reviews of such charges to ensure cost recovery; and ii) the possible application of the price index factor to such fees during the Fiscal Year 2003.
7. The County should increase the cost of the water meter installation (drop-in) fees and tap-in fees to the following amounts in order to provide consistency in the recovery of costs to the system:

Meter Size	Proposed Drop-in Fee	Proposed Tap-in Fee
5/8 inch	\$125.00	\$470.00
¾ inch	145.00	490.00
1 inch	195.00	560.00
1½ inch	410.00	825.00
2 inch	560.00	990.00
Above 2 inch	Actual Cost	Actual Cost

8. The County should charge \$45.00 for a meter test for a 5/8" to 1" service customers as part of the premises visit or trip charge policy. For all other meter sizes, the test should be charged to the customer based on actual cost utilizing standard rates.

9. The County should charge a fee for customers which request meter re-reads or special readings. The fee for this type of customer service is recommended to be \$25.00 and should continue to be considered as part of the premises visit or trip charge policy. With respect to meter re-reads, it is further recommended that no charge be assessed for the first re-read in a twelve (12) month period which is fairly common in the utility industry. Additionally, if there is an error in the reading of the meter or of the meter accuracy, the fee should not be charged.
10. In order to defray the risk of nonpayment, the County should adopt the proposed wastewater customer deposits consistent with the proposed increase in user fees or rates. Water deposits are recommended to be maintained at current levels. The deposits should continue to be based on the type of customer (e.g., residential), meter or service size and level of service request (e.g., water and wastewater service). The recommended residential deposit is summarized below (reference Section 6):

	Water	Wastewater	Total
Residential (5/8" meter)	\$45.00	\$75.00	\$120.00

11. It is recommended that the cost for the initiation of service to a new customer at their request should be maintained at \$35.00. The County should raise the standard disconnect/reconnect for cause (e.g., for nonpayment) from the current fee of \$40.00 per occurrence to \$45.00 in order to recover the cost of providing this service. To the extent of the customer requests services to be performed after normal working hours, the rates should be maintained at \$45.00 for normal requests and \$55.00 for the turn-on and turn-off for the non-payment of services.
12. The County should adjust the proposed reuse rates for the rate of treated effluent from the County's wastewater treatment facilities to a rate of \$0.25 per 1,000 gallons of metered effluent on a year-round basis.
13. It is recommended the County continue the returned check charge to recover those costs incurred as a result of the check being refused by the bank and returned to the customer for insufficient funds. The County should maintain the minimum of \$25.00, or 5% of the face amount of the check, whichever is greater. It is also recommended the County maintain the not-to-exceed fee of approximately \$40.00, concurrent with current parameters as outlined in Florida Statute 832.07.

14. The private fire protection charges for recovering costs relative to maintaining the water facilities for private fire protection services are recommended to be increased to the following monthly rates:

Meter Size	Monthly Charge
5/8"	\$1.90
3/4"	2.85
1"	4.75
1-1/2"	9.55
2"	15.25
3"	30.50
4"	47.65
6"	95.30
8"	152.50
10"	219.20

15. It is recommended the County adopt a wastewater service line tampering fee to deter individuals from opening clean-out portions of wastewater service lines to drain standing water (usually during storm events). It is proposed that a cleanout fee of \$75.00 be charged to recover County costs of cleaning and restoring the line with an additional penalty of \$350.00 to be charged per occurrence to deter future occurrences.
16. The plan review fees should be adjusted to a minimum fee of \$540.00 per request or 1.0% of the construction cost of the plan under review, whichever is greater, to be consistent with the costs of providing such service, as well as the relationship or comparability of similar fees charged by other neighboring utilities.
17. The County should consider adopting a water line/hydrant tampering charge to deter individual tapping into the water distribution system either through physical taps into an existing line or tampering with County hydrants. It is recommended a fine of \$500 be adopted to deter such activities.
18. The County should consider adopting a late payment fee charge of 1.0% of the outstanding bill (minimum of \$5.00) in order to encourage timely payment of monthly service.
19. The County should consider adopting a deposit schedule for rental of fire hydrant meters and associated backflow prevention devices to be held by the County until such items are returned to the County in good condition.
20. The County should consider adopting a fee to recover those costs incurred by the County to perform subsequent inspections to commercial accounts who were discovered to have plumbing leaks during the course of normal utility inspections. The fee, proposed to be \$45.00 per occurrence, is intended to recover costs incurred by the County in addition to providing incentive to the customer to implement repairs recommended by the County on a timely basis.
21. It is recommended the County adopt wholesale water and wastewater rates to be charged all new customers who are deemed by the County to qualify for such level of service. The

rates, which are to be applied to the amount of metered water consumption utilized by the wholesale customer, are determined to be \$2.46 and \$3.36 per 1,000 gallons for wholesale water and wastewater service, respectively.

22. It is recommended the County consider implementing a \$0.50 per month wellfield development surcharge to those customers of the water system who exceed their respective first water conservation block threshold in any given month. The surcharge, which is recommended to be applied based on the number of equivalent residential unit (ERUs) served by each physical connection to the County water system will establish a funding source for the development of future reliable sources of water supply to serve the County's customer base in addition to adding further financial incentive to conserve water resources.
23. The proposed rates as reflected in the study should be adequate to meet all the rate covenant requirements (e.g., debt service coverage) as defined in the Bond Resolution which authorized the issuance of the outstanding bond indebtedness allocated to the utility system.
24. The proposed rates are competitive with neighboring utilities, especially at the average usage level for a residential customer of 5,000 gallons. The proposed rates do produce bills which are competitive when compared to the average of 19 utilities surveyed, primarily in the southwestern portion of Florida.

Figure ES-1
Comparison of Typical Monthly Residential Bills for Water Service -
5/8" or 3/4" Meter With Usage of 5,000 Gallons

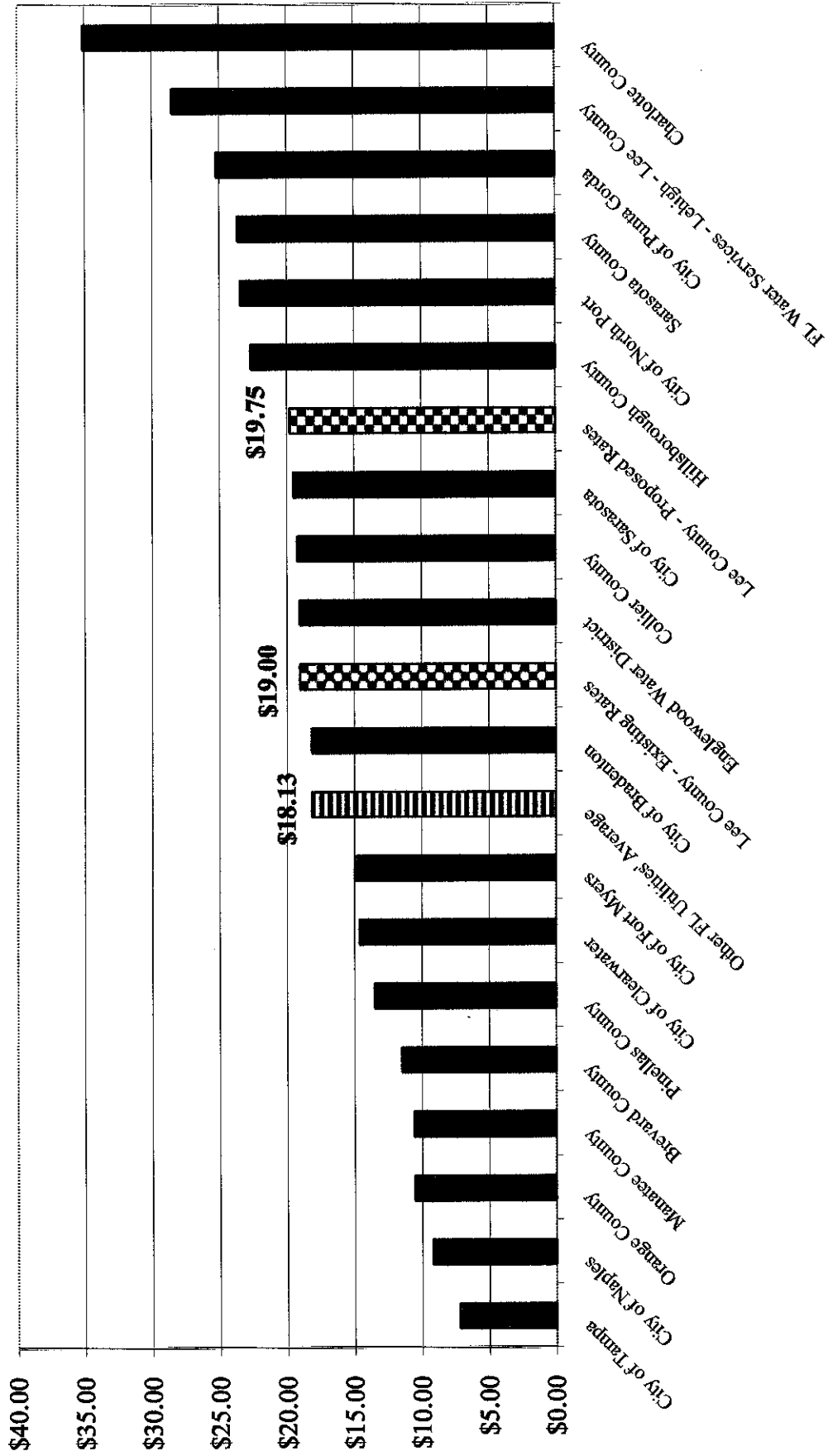


Figure ES-2
Comparison of Typical Monthly Residential Bills for Wastewater Service -
5/8" or 3/4" Meter With Usage of 5,000 Gallons

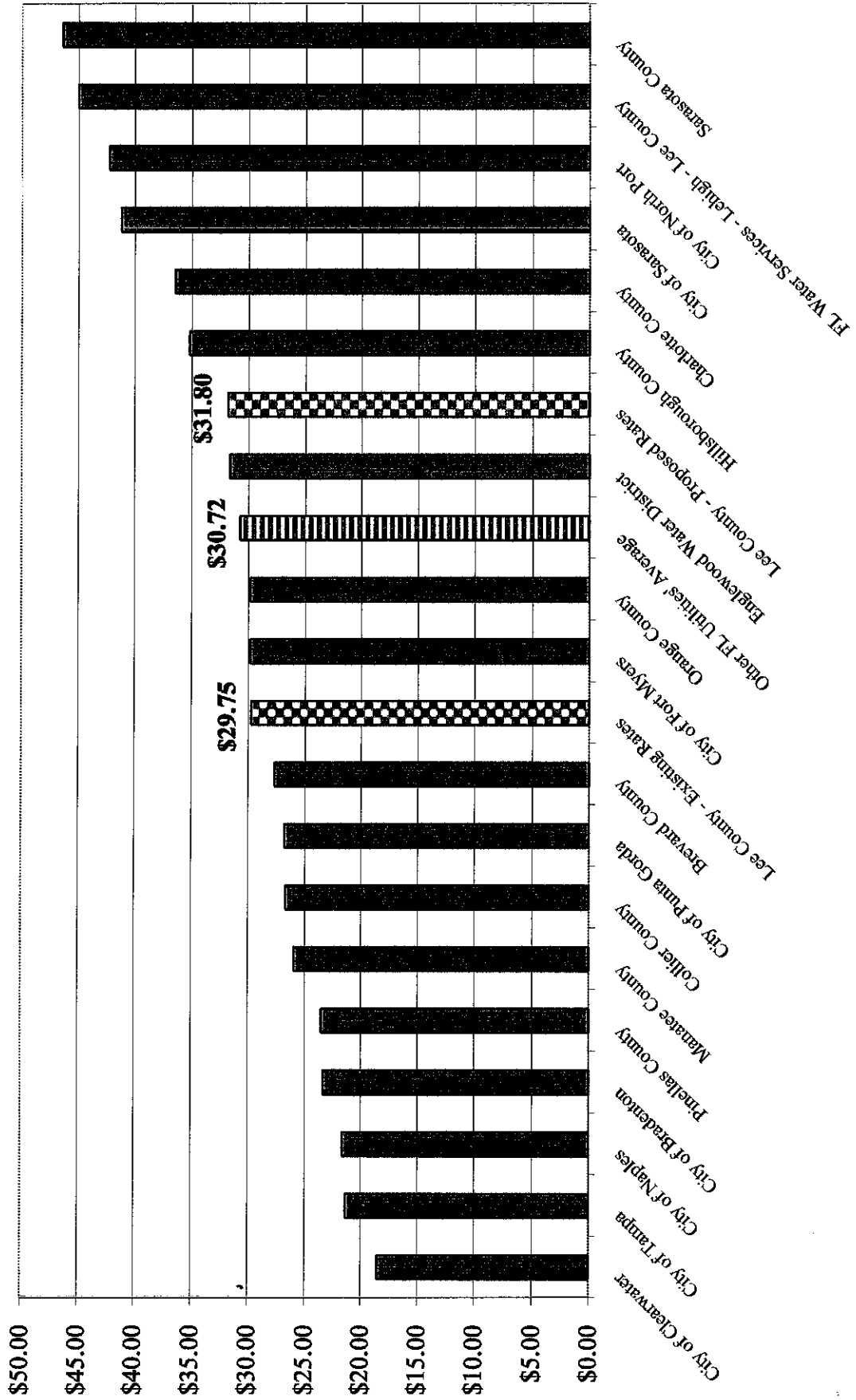
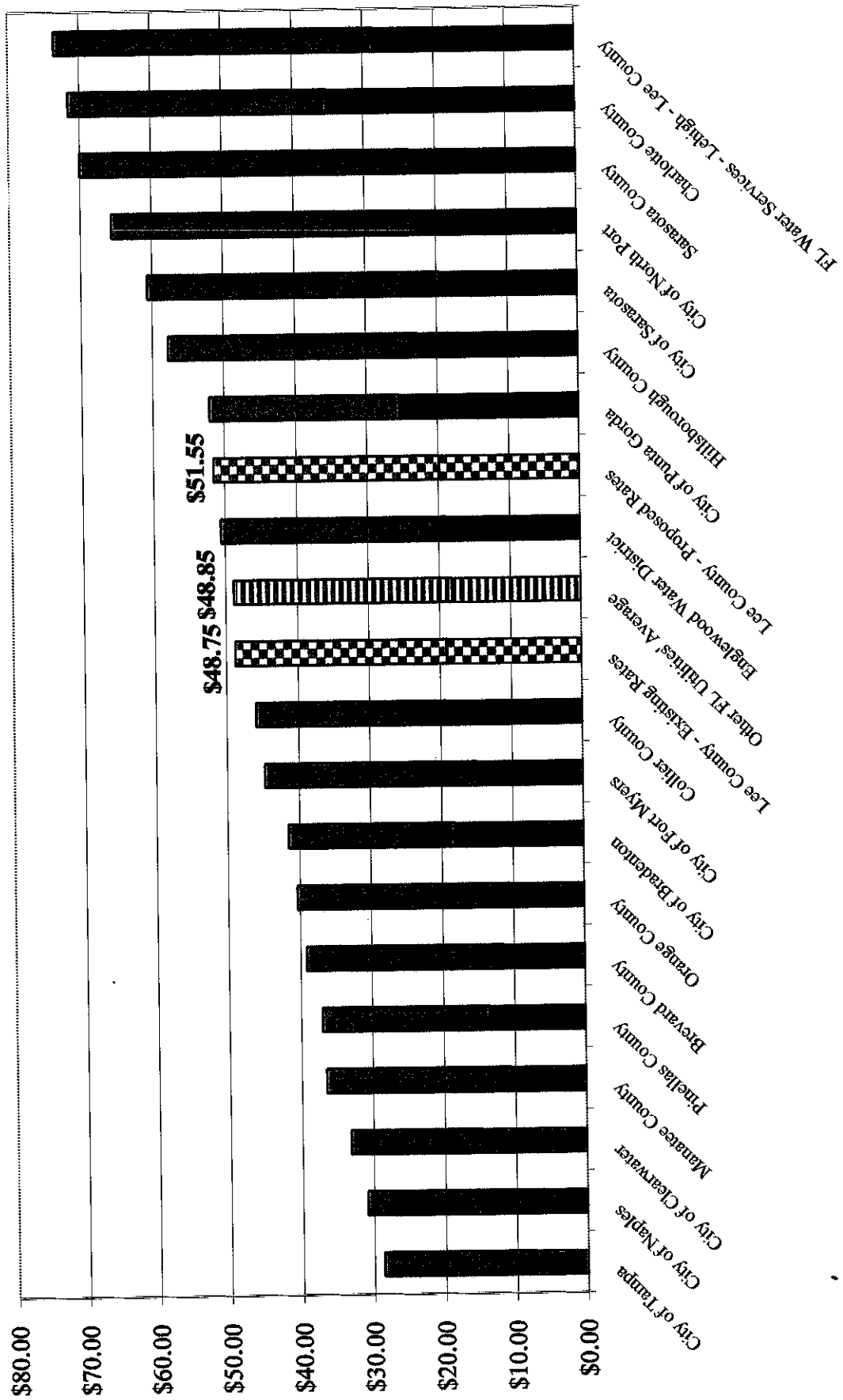


Figure ES-3
Comparison of Typical Monthly Residential Bills for Combined Water and Wastewater Service -
5/8" or 3/4" Meter With Usage of 5,000 Gallons



■ Water ■ Sewer

SECTION 1
INTRODUCTION



SECTION 1

INTRODUCTION

1.1 Introduction

Lee County (the "County") last performed a comprehensive water and wastewater rate study in January 1994. Since the performance of this last rate evaluation over seven (7) years ago, the costs allocable to the water and wastewater (the "System") utility operations have changed and the County has identified a significant amount of capital expenditures for the renewal, betterment, upgrade and expansion of the utility system which plans to be financed, in part, by the issuance of additional utility system indebtedness. As a result of these changes in the expenditure requirements of the utility and under the authority given by the County to ensure the proper recovery of costs among its utility customers through System rates, Public Resources Management Group, Inc. (PRMG) has been retained to perform a utility rate study and prepare a five (5) year financial projection of the County's water and wastewater utility system for rate evaluation purposes. Specifically, PRMG was tasked with analyzing the revenue requirements of each utility system, balancing the funding requirements, the conservation goals and the financial objectives of the County while meeting the incremental service requirements due to growth, and to recommend proposed water and wastewater usage fees and other charges which will meet the System's needs over the next several years.

1.2 Scope of Services

In an effort to continually fund the cost of operations and capital improvements necessary to meet the requirements of water and wastewater system growth, regulatory needs, and to provide allowances for utility system replacement and upgrade of system assets, the County has decided that it would be prudent to review the current System rates. The County has not had a formal review of the rates and charges of the System since January 1994 or over seven (7) years ago. As a result, the County decided that it would be prudent to review the current water and wastewater user fees to ensure adequate cost recovery among the customers of the various utility systems and to update the rates for service as required to promote the cost recovery principles. In addition to the study of user fees for water and wastewater service, the County also authorized PRMG to review their other fees and charges in order to provide increased revenues to the system. Specifically, a review of system connection or impact fee charges was conducted to ensure that new development continues to pay their fair share of the cost of prevailing capacity to provide the same level of service as being enjoyed by existing customers. Also, a review of several charges imposed for specific services which are generally requested by individual customers (turn-on fees, water meter installation, meter test, etc.) was performed to determine that the costs of such services were being adequately recovered.

The analyses and associated recommendations reflected in this report are anticipated to serve as the basis for the development and adoption of any proposed rate resolution which will be addressed by the County Commission at a public hearing.

1.3 Authorization

PRMG was authorized by the County to perform the above analysis as a result of the need to evaluate water and wastewater rate structures designed to provide a reliable and predictable revenue source for the funding of System operations, capital improvements, and debt service. This authorization was granted to PRMG by the Board of County Commissioners (BOCC) pursuant to a contract which was originally approved by the BOCC on January 6, 1998.

1.4 Existing Rates

The rates and charges for the water and wastewater utility system are established by the County Commission and approved by resolution. The rates were last adjusted on March 30, 1994 consistent with the findings of a comprehensive rate study which concluded the need for rates to be structured according to cost of service principals and customer demand requirements. The following table below provides a summary of the present monthly user fees for water and wastewater service.

**Table 1-1
Summary of Existing Monthly County Water and Wastewater Rates**

Customer Classification	Monthly Service Charge	Usage Charge per Unit (Per 1,000 gallons)	
Water Service:			
Single-Family [*]	\$5.95 per unit	0 - 6,000	\$2.18
		6,001 - 12,000	2.68
		12,001 - 18,000	3.18
		18,001 and above	4.18
Multi-Family [*]	4.75 per unit	0 - 4,800	\$2.18
		4,801 - 9,600	2.68
		9,601 - 14,400	3.18
		14,401 and above	4.18
Recreational Vehicle Unit/Lot [*]	2.40 per unit	0 - 2,400	\$2.18
		2,401 - 4,800	2.68
		4,801 - 7,200	3.18
		7,201 and above	4.18
Commercial and All Non-Residential	5/8" \$8.10 3/4" 11.00 1" 16.90 1 1/2" 31.65 2" 49.30 3" 96.40 4" 149.35 6" 296.50 8" 473.10 10" 855.70	For Each ERU	
		1 - 6,000	\$2.18
		6,001 - 12,000	2.68
		12,001 - 18,000	3.18
		18,001 and above	4.18
		Non-Irrigation Class	
		Per 1,000	\$2.18
		Irrigation Class	
		1 - 6,000	\$2.68
		6,001 - 12,000	3.18
12,001 and above	4.18		

[*] Each residential service account shall be charged monthly an administrative fee of \$2.15

**Table 1-1
Summary of Existing Monthly County Water and Wastewater Rates (continued)**

Customer Classification	Monthly Service Charge	Usage Charge per Unit (Per 1,000 gallons)
Wastewater Service:		
Residential Services		
Single-Family [1] [2]	\$9.20 per unit	\$3.52 per 1,000 gallons metered consumption \$15.84 for unmetered service
Multi-Family [1] [2]	7.35 per unit	\$3.52 per 1,000 gallons metered consumption \$12.67 for unmetered service
Recreational Vehicle Unit/Lot [1]	3.70 per unit	\$3.52 per 1,000 gallons metered consumption \$6.34 for unmetered service
Commercial and All Non-Residential		
<u>Meter Size</u>		
5/8"	\$12.15	\$3.52 per 1,000 gallons metered consumption
3/4"	16.75	
1"	25.95	
1 1/2"	49.00	
2"	76.65	
3"	150.30	
4"	233.20	
6"	463.45	
8"	739.70	
10"	1,338.35	

[1] Each residential service account shall be charged monthly an administrative fee of \$2.95.

[2] No wastewater user charge shall be imposed on metered water usage above six thousand (6,000) gallons per month per residential service dwelling unit.

1.5 Summary of Report

In addition to Section 1 which describes the services to be performed by PRMG as well as the existing rates currently in effect for water and wastewater utility service, this report has been subdivided into six (6) other sections. The following is a brief discussion of the main sections contained in this report.

Section 2 - Customer Statistics - This section summarizes the recent trends in customer growth, sales and usage relationships, and production/treatment requirements based on available information of the County's water and wastewater system. Also included in this section is a forecast of customers and sales based on recent trends, detailed customer billing information provided by the County, known development, and potential system interconnections occurring within the County's utility service area, and other factors.

Section 3 - Net Revenue Requirements - This section provides the basis for the determination of the revenue requirements and the user fees or rates (i.e., expenditures paid from rates). Included in this section is a discussion of the assumptions utilized in the forecast of utility expenditures,

rates, revenues, and capital improvement needs. A summary of the projected operating results for each utility system was prepared for the five (5) fiscal year period ended September 30, 2003.

Section 4 - Rate Design and Comparisons - This section provides the basis for the design of the proposed water and wastewater rates or user fees. Included in this section is a discussion of rate setting principles, rate structure objectives, and how the proposed rates for each specific service were designed. This section also summarizes the effects of the proposed rates on the existing utility users of the System as well as the comparability of the proposed rates with rates of the County's neighboring utility systems and other jurisdictions within the state of Florida.

Section 5 - Development of System Connection Fee Charges - This section provides a discussion of the design of the proposed Connection Fee Charges assigned to new customer growth or capacity requests. Included in this section is a discussion of the basis for such fees, assumptions utilized in the design of the fees, comparisons of the existing and proposed fees, and other factors associated with the application and accounting for such fees.

Section 6 - Miscellaneous Service Charges - Including in this section is a discussion of the evaluation of certain miscellaneous service charges associated with specific customer service requests. This section summarizes the costs incurred for the services, the design of the fees, and a comparison of the existing and proposed fees with other neighboring utilities.

Section 7 - Debt Service Compliance - This section provides detailed discussion regarding the ability to meet the rate and other bond covenant requirements as delineated in the Bond Resolution which authorized the issuance of the outstanding senior lien utility system revenue bonds. This section includes discussion of the ability to meet the debt service coverage requirements and the ability to issue additional senior lien bonds as anticipated by the County to meet the capital program needs for the future period.

1.6 Acknowledgments

This report was prepared with the fine cooperation and assistance of the staff of Lee County. PRMG would like to thank the following individuals in particular for their help and hard work during this project: Mr. James Lavender, Director of Public Works; Mr. Rick Diaz, P.E., Director of Utilities; Mr. David M. Owen, Assistant County Attorney; Ms. Carolyn Andrews, Utility Manager; Ivan Velez, Engineering Administrator; Orlando Figueroa, Fiscal Manager; and the entire utility and finance staff of the County.

SECTION 2
CUSTOMER STATISTICS



SECTION 2

CUSTOMER STATISTICS

2.1 General

A major component in the determination of rates for water and wastewater service is the development of a forecast of customers, associated equivalent residential units and sales (or usage characteristics). This is necessary in order to have a proper matching of the development of rate revenues and the design of rates based on the usage requirements or service demographics of the customers of each respective utility system. This section provides a discussion of the recent historical statistical trends and the forecast of customers, equivalent residential units, sales (usage), water production, and wastewater treatment requirements for the System.

2.2 Water and Wastewater Customer Statistics

During the Fiscal Year 2001, it is estimated that the County will provide retail water service to an average of 49,930 customers and wastewater service to an average of 32,284 customers (exclusive of Gulf Environmental Services (GES) customer base that was not reflected in this rate study analysis). For the purposes of analyzing the customer base and recognizing the mix of customers in the County's current water and wastewater service areas, it is beneficial to recognize the number of dwelling units or equivalent residential units (ERU) served. An ERU represents the equivalent usage requirements of a single-family customer. Since commercial or multi-family customers are generally served by a larger sized meter than the standard residential customers, it is useful to equate such customers on an equivalent basis to the single-family residential class to present a more consistent amount of the total customer base served. A summary of the total average number of customers and associated ERUs estimated to be served by the water and wastewater system for the Fiscal Year 2001 is summarized below:

	Fiscal Year 2001 (est.)	
	Water System	Wastewater System
Accounts	49,930	32,284
ERUs [*]	80,414	59,478

[*] Based on number of equivalent dwelling units served (multi-family) and meter equivalents (commercial).

As can be seen above, the County reports that there are more water customers than wastewater customers when compared. This is due to the fact that the County provides water service to a larger territory than that of the wastewater system.

The County currently differentiates its customer base into six major classifications. These customer classifications include single-family residential, multi-family residential, recreational vehicle/mobile homes, commercial, irrigation, and wholesale. Based on customer data provided by the County, the reported average number of customers and respective ERUs estimated to be served during the Fiscal Year 2001 for the water and wastewater systems are as follows:

	Fiscal Year 2001 (estimated)							
	Water				Wastewater			
	Accounts	Percent	ERUs	Percent	Accounts	Percent	ERUs	Percent
Residential Service								
Single-Family	44,103	88.3	44,103	54.8	28,583	88.5	28,583	48.1
Multi-Family	1,748	3.5	23,782	29.6	1,317	4.1	23,082	38.8
RV/Mobile Home	<u>18</u>	<u>0.0</u>	<u>2,957</u>	<u>3.7</u>	<u>17</u>	<u>0.1</u>	<u>2,190</u>	<u>3.7</u>
Total Residential Service	45,869	91.8	70,842	88.1	29,917	92.7	53,855	90.6
Commercial	3,846	7.8	9,042	11.2	2,367	7.3	5,623	9.4
Potable Irrigation	215	0.4	530	0.7	N/A	0.0	N/A	0.0
Wholesale	<u>2</u>	<u>0.0</u>	<u>N/A</u>	<u>0.0</u>	<u>N/A</u>	<u>0.0</u>	<u>N/A</u>	<u>0.0</u>
Total	<u>49,932</u>	<u>100.0</u>	<u>80,414</u>	<u>100.0</u>	<u>32,284</u>	<u>100.0</u>	<u>59,478</u>	<u>100.0</u>

As can be seen above, the residential class represents the predominant class in terms of the number of ERUs served. Specifically, approximately 85% of the customer base is classified as residential with over 29% of this total considered as multi-family (master metered accounts serving large residential developments such as a condominium complex).

Tables 2-1 and 2-2 provide a summary of the recent historical customers and sales for the water and wastewater systems, respectively. The historical customer and sales information was based on an analysis of detailed monthly customer statistical reports as provided by the County. As shown on Tables 2-1 and 2-2, the water customers have increased at an average annual rate of growth of 9.6% over the past several years. A large part of this growth in customer accounts and respective ERUs can be attributed to the acquisition of Florida Cities Water Company (FCWC) in April 1999. This acquisition effectively increased the water system customer base by approximately 19,080 accounts from levels prior to purchase of the FCWC system. Excluding the customer base associated with the FCWC acquisition, water system customer growth would have increased at a more modest rate of approximately 1.3% annually. Historical growth levels are summarized below:

Fiscal Year	Water Accounts (average annual)	Water ERUs (average annual)	Water Sales (000s of gallons)	Average Monthly Use per ERU (gallons)
1995	28,768	44,119	2,728,512	5,154
1996	29,144	44,451	2,688,417	5,040
1997	29,395	44,916	2,793,395	5,183
1998	29,600	45,305	2,811,147	5,171
1999	36,520	55,081	3,437,072	5,201
2000	49,167	79,382	5,221,790	5,482
2001 (est.)	49,930	80,414	5,287,416	5,479
Average Annual Compound Growth Rate	<u>9.6%</u>	<u>5.1%</u>	<u>11.7%</u>	

[*] Amounts shown do not include statistics associated with County's wholesale water customers.

With respect to water sales (thousands of gallons sold), a slight increase in both the amount of sales and a corresponding increase in average monthly water use per ERC has resulted over the most recent historical period. This can be primarily attributable to the absorption of the FCWC customer base which has considerably larger non-residential user characteristics when compared to the County's customer base prior to the acquisition. Typically, this non-residential base of customers exhibit higher water usage on a per ERC basis when compared to residential

customers. The recognition of this revised base of accounts has resulted in a comparably higher rate of water usage per ERC than historically experienced by the County's customers.

For the wastewater system, the historical trend in customer growth for the County's customers (i.e., inclusive of FCWC customer base) has increased at a level generally consistent with that of the water system. As shown on Table 2-2 and as summarized below, the wastewater customers have increased at a rate of growth of approximately 5.6% over the past seven (7) years (1995 through 2001).

Fiscal Year	Wastewater Accounts (average annual) [*]	Wastewater ERUs (average annual) [*]	Revenue Gallons (000s of gallons)
1995	23,272	36,377	2,303,336
1996	23,583	36,831	2,276,389
1997	23,973	38,181	2,398,432
1998	24,597	38,502	2,433,589
1999	28,448	50,289	2,639,722
2000	31,695	58,685	3,221,195
2001 (est.)	32,284	59,478	3,268,984
Average Annual Compound Growth Rate	<u>5.6%</u>	<u>8.5%</u>	<u>6.0%</u>

For the wastewater system, as illustrated above, the customer base of the County has experienced a significant increase in accounts and respective ERCs over the recent historical period. As was the case with the water system, this can be attributable to the acquisition of the FCWC by the County in April of 1999. The acquisition of the FCWC wastewater system effectively increased the County's customer base by approximately 8,985 accounts at the time of the acquisition. With respect to the amount of wastewater billed the flow charge (revenue gallons), the rate of growth in sewer revenue gallons has been less when compared to the trend in water sales. This can be attributable to the increase in water use primarily resulting from higher irrigation demands (due to drought conditions experienced throughout the State of Florida over the recent historical period). As discussed in this report, the existing wastewater flow charge is based on metered water use and the residential class of customer presently has a maximum monthly billing threshold (cap) of 6,000 gallons. For customers that had high irrigation demands, the effects on sewer revenue gallons has not been effected since it appears that the water use was generally outside the wastewater billing threshold usage level. For the commercial class, all metered water use (except separately metered irrigation use) is billed the wastewater flow charge. Thus, the amount of revenue gallons could fluctuate due to changes in use due to outside factors such as weather. However, if irrigation use were a high priority of the commercial customer, it would generally be assumed that a separate irrigation service would be installed by the commercial customer; the use which would not be billed a wastewater usage charge.

In order to provide additional information regarding the mix and service levels of the County's utility customers, a summary of the customers by meter size was prepared. For the multi-family class, customers are generally served by larger "master" meters since one service serves several dwelling units. That explains why the number of meters in service (accounts) are less than the number of dwelling units being served by the utility system. The number of average annual retail water customer accounts and residential units served by meter size are summarized below:

Total Estimated Average Annual Water System Accounts – FY2001

Meter Size	Single-Family	Multi-Family [1]		Commercial	Irrigation	Total Accounts	
		Accounts	Units			Amount	Percent
Residential							
Units	44,103	1,766	38,182	0	0	45,869	91.9%
5/8-inch	0	0	0	2,725	92	2,817	5.6%
3/4-inch	0	0	0	22	1	23	0.1%
1-inch	0	0	0	541	92	633	1.3%
1½-inch	0	0	0	233	18	251	0.5%
2-inch	0	0	0	255	12	267	0.5%
3-inch	0	0	0	39	0	39	0.1%
4-inch	0	0	0	19	0	19	0.0%
6-inch	0	0	0	11	0	11	0.0%
8-inch	0	0	0	1	0	1	0.0%
Totals	44,103	1,766	38,182	3,846	215	49,930	100.0%

[1] Amounts shown include recreational vehicle (RV) and mobile home and respective units served.

The corresponding customer mix by meter size for the wastewater system for the Fiscal Year 2001 is summarized below:

Total Estimated Wastewater System Accounts – FY2001

Meter Size	Single-Family	Multi-Family [1]		Commercial	Total Account	
		Accounts	Units		Amounts	Percent
Residential						
Units	28,583	1,334	35,405	0	29,917	92.7%
5/8-inch	0	0	0	1,640	1,640	5.1%
3/4-inch	0	0	0	9	9	0.0%
1-inch	0	0	0	326	326	1.0%
1½-inch	0	0	0	177	177	0.5%
2-inch	0	0	0	150	150	0.5%
3-inch	0	0	0	35	35	0.1%
4-inch	0	0	0	17	17	0.1%
6-inch	0	0	0	11	11	0.0%
8-inch	0	0	0	2	2	0.0%
Totals	28,583	1,334	35,405	2,367	32,284	100.0%

[1] Amounts shown include recreational vehicle (RV) and mobile home and respective units served.

2.3 Current Customer Usage Profile

As shown earlier in Section 1, the County's current water rate structure includes several consumption blocks which are priced at different levels to encourage water consumption. As a result, it is necessary to identify usage relationships of the various customer classes relative to the usage blocks in order to properly develop usage rate revenues as well as in the design of proposed rates. Besides the development of the consumption levels, it is also helpful to identify the billing relationships of the customer classes relative to usage levels. This will assist the

County in the evaluation of the rates relative to financial impacts of the customers at various billing or usage levels (e.g., rate impact for residential customers using 6,000 gallons or less).

With respect to the water system, approximately 55 percent of the customers are classified by the County as residential single-family. As shown below, over 75 percent of the customer's use is billed for 6,000 gallons or less per month of water service.

Cumulative Number of Residential Single-Family Bills Rendered (*)		
Consumption Levels	Number of Bills	Cumulative Percent
0 - 6	391,715	75.1%
6 - 12	487,077	93.4%
12 - 18	506,976	97.2%
Above 18	<u>521,610</u>	<u>100.0%</u>

[*] Based on Bill Frequency information provided by the County for the twelve (12) month period ended September 2000.

As discussed in Section 1 regarding the County's existing rates, the County has adopted an inclining or increasing block water rate structure to promote water conservation. Therefore, in addition to the dispersion of bills between usage blocks, it is helpful to review the total water billed per consumption block. This is needed in order to accurately estimate rate revenues as well as in the design of proposed rates. Based on the bill frequency information provided by the County, PRMG has developed an estimate of the amount of water used for each consumption rate block for all of the rate classes. Based on this information and with respect particularly to the residential single-family class, the majority of the County's consumption occurs within the first 2 blocks as expected. This is summarized below:

Residential Single-Family Water System Usage per Block - Fiscal Year 2000 [*]		
Consumption Blocks	Amount (000s)	Percent
0 - 6,000 gallons	1,861,997	71.35%
6,000 - 12,000 gallons	437,858	16.78%
12,000 - 18,000 gallons	141,510	5.42%
Above 18,000 gallons	168,328	6.45%
Totals	<u>2,609,693</u>	<u>100.0%</u>

[*] Based on Bill Frequency information provided by the County for the twelve (12) month period ended September 2000.

As can be seen above, approximately 71% of the total water consumption billed is recognized at the 0 to 6,000 gallons usage level. This level would generally be considered as indoor or essential use for a standard residential account which would also be considered as one (1) ERU. It should also be noted that approximately 6.5% of the water consumption is for monthly use in excess of 18,000 gallons which most likely is for ongoing outdoor irrigation thus indicating that a small number of the single-family residential customers may be using water excessively on a continuous basis.

2.4 Customer and Sales Forecast

The development of a forecast of future water production and wastewater treatment requirements, sales or usage and customers is necessary in the evaluation of the adequacy of water and wastewater rate levels and rate structures. The forecast is essential for the determination of revenues from rates, for the escalation of certain water production and wastewater treatment-related expenses, and for the design of rates. For the purpose of this study and in order to assist the County in financial analyses, a five (5) fiscal year forecast (Fiscal Years 2002 through 2006) was prepared.

Based on information provided by the staff of the County, the County has planned or has under consideration several residential or planned unit developments which will provide increased customer growth during the projection period reflected in the report. A summary of a few of the identified developments is summarized below:

<u>Development</u>	<u>Type of Development</u>	<u>Estimated No. of Units</u>	<u>Type of Service</u>
Veranda	Single- & Multi-Family	1,450	Water & Sewer
Black Hawk	Single- & Multi-Family	1,500	Water & Sewer
Heritage Creek	Single-Family	1,472	Water & Sewer

As can be seen above, the County has several large projects which could expand the customer base currently served within the existing service area. It should be noted that the customers noted above would be in addition to normal growth which is anticipated to occur in the service area (i.e., in-fill development of existing vacant parcels or utilization of vacated structures not currently receiving active service).

Based on the information provided by the County as it relates to growth trends, usage relationships, incremental customer additions and other factors, the forecast in customer accounts and ERUs for the water and wastewater system are projected. As can be seen in the table below, growth was anticipated to be approximately 1.3% and 1.6% for the County water and wastewater systems, respectively.

<u>Fiscal Year</u>	<u>Water</u>		<u>Wastewater</u>	
	<u>Accounts</u>	<u>ERUs</u>	<u>Accounts</u>	<u>ERUs</u>
2002	50,655	80,943	32,848	60,267
2003	51,354	81,867	33,396	61,040
2004	52,043	82,796	33,928	61,797
2005	52,722	83,715	34,452	62,546
2006	53,401	84,634	34,976	63,295
Average Annual Compound Growth Rate	<u>1.3%</u>	<u>1.1%</u>	<u>1.6%</u>	<u>1.2%</u>

[*] Amounts shown derived from Tables 2-1 and 2-2.

The following is a summary of the water and sales forecast and corresponding wastewater revenue gallons for the projection period ending September 30, 2006.

Fiscal Year	Water Sales (000s) [1]	Wastewater Revenue Gallons (000s)[1]
2002	5,187,582	3,309,419
2003	5,203,380	3,350,596
2004	5,263,507	3,391,023
2005	5,322,717	3,340,838
2006	5,395,679	3,470,907
Average Annual Compound Growth Rate	<u>1.0%</u>	<u>1.0%</u>

[1] Amounts shown do not include bulk water and wastewater sales.

Water sales were projected based on usage trends experienced by each class of customers during the past six (6) years. This was done since drought conditions have existed over recent years and the intent to anticipate a normalized level of water use prior to these conditions (pre-FY 1999) and the sales would therefore be consistent with the type of customer growth being incurred by the system under normal weather conditions.

The forecast of wastewater sales or "revenue gallons" (i.e., metered water consumption which is charged the wastewater flow charge) was projected in the same manner as the water system. For the residential class, there currently exists a residential billing threshold equal to 6,000 gallons per month per unit of metered water service. Based on the average use per account statistics for the multi-family and single-family classes and a review of billing information, it was estimated that approximately 80% of the water sales for those customer classifications which also have sewer service were applied the wastewater flow charge. Finally, for the general service customer classes (non-irrigation and commercial customers), the wastewater flow charge is based on all metered water use. The County does provide wastewater-only service to a select number of customers within the utility service areas. The wastewater sales were based on billing information provided by the County (as received from the utility providing water service) and was incrementally added to the wastewater sales for those customers which receive both water and wastewater service.

It should be noted that the projection of water sales and associated wastewater revenue gallons do not reflect any adjustments for the effects of price on use (i.e. - price elasticity). As will be discussed in Section 4, Rate Design, rates will be designed to continue to promote water conservation. The estimated effects on water use associated with the increase in price, as well as the continued application of a conservation rate structure, will be accounted for in the design of the rates. Thus, the forecast of sales or flow as shown in Tables 2-1 and 2-2 does not reflect any anticipated impact due to a reduction in water usage as a result of price elasticity adjustments.

In order to estimate water production requirements for the water system, an allowance for losses and unaccounted-for-water was added to the total sales forecast to determine the estimated production needs. The allowance for losses or unaccounted-for-water, sometimes called unbilled water, is due to a variety of factors including water used in hydrant line flushing, water used for fire fighting, slow registering meters which understate water use, and losses due to leaks. The

forecast of the unaccounted-for or unbilled water was based on an assumed loss factor of 15.7% that was based on recent historical trends. This level of unbilled water was used in the determination of variable related costs associated with water operations (chemicals, purchased power).

Wastewater treatment requirements were also based on historical trends regarding the amount of customers served and historical wastewater flows. For the forecast period, the amount of wastewater treated was based on the customer projections, average per customer treatment requirements, and water sales/usage relationships. By the end of the Fiscal Year 2006, it is anticipated that wastewater flows for the wastewater system will average almost 12.15 million gallons daily.

2.4.1 Wholesale Water and Wastewater Customers

The County has entered into, or anticipates potentially entering into, wholesale service agreements with various entities for the purpose of providing wholesale water and wastewater service. These customers differ from the County's retail customers in that they require only treatment and transmission services from the County and supply their own distribution and/or collection facilities in addition to individual billing service to their retail customers. With respect to water system wholesale service projections, the following bulk customers have been recognized:

Customer	Wholesale Service Status
Gateway Services District	Existing
Town of Fort Myers Beach	Existing
FPSC Regulated Systems	Anticipated Effective FY 2002
Gulf Coast Center	Anticipated Effective FY 2002

Based on information provided by the County, it is the intention of the County to allow several Florida Public Service Commission (FPSC) regulated water utility systems located within the County's service territory who are currently provided retail water service to be reclassified as wholesale customers of the County. These systems (Mobil Manor, Inc., Tamiami Village Water Company, Inc. MHC-DeAnza Financing Limited Partnership and NFMU, Inc.) for the most recently completed twelve (12) month period on a cumulative basis, purchased approximately 110 million gallons of water from the County. For purposes of this analysis, these accounts have been reclassified as wholesale customers for the projection period in this report. Based on a review of recent billing histories of the intended wholesale water customers and assuming either levelized or moderate growth within each wholesaler customer service territory, the following annual water sales were projected:

Fiscal Year	TFMB	Gateway	FPSC Systems	Gulf Coast Center	Total (000s)
2002	478,333	114,903	109,898	33,580	736,714
2003	489,095	128,806	109,898	33,580	761,379
2004	500,100	144,391	109,898	33,580	787,969
2005	511,352	161,863	109,898	33,580	673,215
2006	522,857	181,448	109,898	33,580	704,305

With respect to bulk wastewater purchases, it has been assumed that the County will commence serving during the course of Fiscal Year 2002, two (2) wholesale wastewater customers. Based on information provided by the County, negotiations are currently underway with i) Gateway Services District; and ii) Cherry Estates Mobile Home Development (Pine Island) in order for the County to serve these two entities on a wholesale basis. Based on an analysis of historical usage relationships of the two entities, the following annual revenue gallon projections were estimated:

Fiscal Year	Wholesale Revenue Gallons (000s)		
	Gateway	Cherry Estates	Total
2002	101,953 [1]	12,730	114,683
2003	133,447	12,730	146,177
2004	145,557	12,730	158,287
2005	158,766	12,730	171,496
2006	173,174	12,730	185,904

[1] Amount shown reflects ten (10) months of wastewater sales (assumes service commences December 1, 2001).

Table 2-1

Lee County, Florida
Water and Wastewater System Rate Study
Water System

Summary of Historical and Projected Accounts, Sales and Production

Line No.	Description	Fiscal Year Ending September 30,											
		1995	1996	1997	1998	1999 (1)	2000 (1)	2001 (2)	2002	2003	2004	2005	2006
Historical													
Single Family Residential													
1	Average Annual Accounts	26,045	26,386	26,586	26,707	33,146	43,468	44,103	44,703	45,283	45,843	46,393	46,943
2	Average Monthly Use per Account	4,841	4,807	4,842	4,790	4,939	5,003	5,075	5,000	4,900	4,875	4,850	4,850
3	Total Annual Water Sales (000's)	1,513,084	1,522,165	1,544,646	1,535,052	1,964,538	2,609,693	2,685,844	2,682,151	2,662,612	2,681,788	2,700,045	2,732,055
Multi-Unit Residential													
4	Average Annual Accounts	788	788	790	800	1,179	1,739	1,748	1,753	1,762	1,771	1,780	1,789
5	Average Annual Units	16,868	16,868	17,113	17,042	24,355	32,720	32,900	30,093	30,273	30,453	30,633	30,813
6	Average Monthly Use per Unit	3,087	3,015	3,212	3,302	2,909	3,073	3,047	3,048	3,049	3,049	3,049	3,049
7	Total Annual Water Sales (000's)	625,907	610,275	659,584	675,363	850,256	1,206,563	1,203,048	1,100,843	1,107,465	1,114,088	1,120,710	1,127,333
Recreational Vehicles													
8	Average Annual Accounts	0	0	0	0	0	10	10	10	10	10	10	10
9	Average Annual Units	0	0	0	0	0	3,172	3,172	3,172	3,172	3,172	3,172	3,172
10	Average Monthly Use per Unit	N/A	N/A	N/A	N/A	N/A	1,372	1,372	1,372	1,372	1,372	1,372	1,372
11	Total Annual Water Sales (000's)	0	0	0	0	0	52,204	52,204	52,204	52,204	52,204	52,204	52,204
Mobile Homes													
12	Average Annual Accounts	0	0	0	0	0	8	8	8	8	8	8	8
13	Average Annual Units	0	0	0	0	0	2,110	2,110	2,110	2,110	2,110	2,110	2,110
14	Average Monthly Use per Unit	N/A	N/A	N/A	N/A	N/A	2,015	2,015	2,015	2,015	2,015	2,015	2,015
15	Total Annual Water Sales (000's)	0	0	0	0	0	51,016	51,016	51,016	51,016	51,016	51,016	51,016
Commercial													
16	Average Annual Accounts	1,864	1,895	1,941	2,008	2,104	3,774	3,846	3,921	3,996	4,071	4,146	4,221
17	Average Monthly Use per Account	24,743	23,162	23,674	23,117	22,730	26,501	25,525	24,855	24,800	24,747	24,695	24,646
18	Total Annual Water Sales (000's)	553,453	526,708	551,405	557,033	573,880	1,200,180	1,178,049	1,169,504	1,189,226	1,208,947	1,228,669	1,248,390
Irrigation Only													
19	Average Annual Accounts	71	75	78	85	91	168	215	260	295	340	385	430
20	Average Monthly Use per Account	42,333	32,521	40,342	42,842	44,321	50,805	45,548	42,341	39,854	38,157	36,858	35,830
21	Total Annual Water Sales (000's)	36,068	29,269	37,760	43,699	48,398	102,134	117,256	131,864	140,857	155,465	170,073	184,681
22	Total Water Accounts	28,768	29,144	29,395	29,600	36,520	49,167	49,930	50,655	51,354	52,043	52,722	53,401
23	Total Water Units	44,876	45,224	45,718	45,842	59,696	85,411	86,345	84,258	85,128	85,988	86,838	87,688
24	Total Annual Water Sales (000's)	2,728,512	2,688,417	2,793,395	2,811,147	3,437,072	5,221,790	5,287,416	5,187,582	5,203,380	5,263,507	5,322,717	5,395,679
Wholesale Water													
25	Gateway/TFMB/PSC Systems (5)	1	1	1	1	2	2	2	7	7	7	7	7
26	Water Sales	52,186	59,533	67,980	79,545	344,689	624,922	570,307	736,713	761,379	787,969	816,692	847,783
Water Unbilled and Unaccounted for:													
27	Percent	9.33%	18.57%	15.42%	15.38%	16.92%	14.26%	16.69%	15.73%	15.73%	15.73%	15.73%	15.73%
28	Amount (000's)	259,551	510,167	441,199	444,486	639,720	833,495	977,741	931,995	938,361	942,003	965,837	982,206
Finished Water Production (000's)													
29	Total Water Production (000's)	3,040,249	3,258,117	3,302,574	3,335,178	4,421,481	6,680,207	6,835,464	6,856,291	6,903,120	7,003,479	7,105,245	7,225,668
30	Average Daily Flow (MGD)	8.33	8.93	9.05	9.14	12.11	18.30	18.73	18.78	18.91	19.19	19.47	19.80

(1) Amounts shown include incorporation of FCWC customer base which was acquired by the County in April 1999 (midway through FY 1999).

(2) Amounts shown do not include Town of Ft. Myers Beach customer base which has been considered for rate study purposes to be a wholesale customer of the system although they were charged on a retail basis during the FY 2001.

(3) Incremental customers recognized in FY 2002 reflect reclassification of four (4) FPSC regulated utility systems within County service territory which are anticipated to become wholesale customers of the System.

Table 2-2
Lee County, Florida
Water and Wastewater System Rate Study
Wastewater System

Summary of Historical and Projected Accounts, Sales and Production

Line No.	Description	Fiscal Year Ending September 30,											
		1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Historical													
Projected													
1	Single Family Residential												
2	Average Annual Accounts	20,736	20,989	21,341	21,869	25,470	28,075	28,583	29,063	29,527	29,975	30,415	30,855
3	Average Monthly Use per Account	4,290	4,205	4,273	4,253	4,085	4,077	4,075	4,075	4,075	4,075	4,075	4,075
4	Total Revenue Gallons (000's)	1,067,473	1,059,150	1,094,185	1,116,159	1,248,387	1,373,369	1,397,644	1,421,279	1,443,935	1,465,842	1,487,136	1,508,685
Multi-Unit Residential													
5	Average Annual Accounts	1,068	1,090	1,114	1,178	1,422	1,308	1,317	1,326	1,335	1,344	1,353	1,362
6	Average Monthly Use per Unit	15,339	15,545	15,781	15,808	19,730	28,673	28,853	29,033	29,213	29,393	29,573	29,753
7	Total Revenue Gallons (000's)	3,097	3,044	3,046	3,128	2,762	2,283	2,300	2,300	2,300	2,300	2,300	2,300
8	Total Revenue Gallons (000's)	570,086	567,879	576,831	593,458	653,832	785,659	796,484	801,453	806,422	811,391	816,360	821,329
Recreation Vehicles													
9	Average Annual Accounts	11	11	11	11	11	11	11	11	11	11	11	11
10	Average Monthly Use per Unit	4,429	4,429	4,429	3,088	3,114	5,475	5,475	5,475	5,475	5,475	5,475	5,475
11	Total Revenue Gallons (000's) (1)	993	993	993	1,514	2,133	1,052	1,052	1,052	1,052	1,052	1,052	1,052
12	Total Revenue Gallons (000's) (1)	52,776	52,776	52,776	56,103	79,716	69,102	69,102	69,102	69,102	69,102	69,102	69,102
Mobile Homes													
13	Average Annual Accounts	6	6	6	13	6	6	6	6	6	6	6	6
14	Average Monthly Use per Unit	1,892	1,892	1,892	2,837	1,911	1,077	1,077	1,077	1,077	1,077	1,077	1,077
15	Total Revenue Gallons (000's) (1)	2,090	2,090	2,090	2,604	3,142	2,838	2,838	2,838	2,838	2,838	2,838	2,838
16	Total Revenue Gallons (000's) (1)	47,451	47,451	47,451	88,634	72,051	36,667	36,667	36,667	36,667	36,667	36,667	36,667
Commercial													
17	Average Annual Accounts	1,451	1,487	1,501	1,526	1,539	2,295	2,367	2,442	2,517	2,592	2,667	2,742
18	Average Monthly Use per Account	32,480	30,774	34,821	31,631	31,716	34,728	34,119	33,475	32,926	32,409	31,921	31,460
19	Total Revenue Gallons (000's)	565,550	549,133	627,189	579,235	583,736	956,399	969,087	980,918	994,470	1,008,022	1,021,573	1,035,125
20	Total Wastewater Accounts	23,272	23,583	23,973	24,597	28,448	31,695	32,284	32,848	33,396	33,928	34,452	34,976
21	Total Wastewater Units	43,847	44,342	44,944	45,128	51,764	65,595	66,355	67,090	67,809	68,512	69,207	69,902
22	Total Revenue Gallons (000's)	2,303,336	2,276,389	2,398,432	2,433,589	2,639,722	3,221,195	3,268,984	3,309,419	3,350,596	3,391,023	3,430,838	3,470,907
Wholesale Wastewater													
23	Customers (Gateway/Cherry Estates) (3)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	2	2	2	2
24	Revenue Gallons	N/A	N/A	N/A	N/A	N/A	N/A	N/A	114,683	146,177	158,287	171,496	183,904
Wastewater Flow (000's)													
25	City of Fort Myers	1,801,159	1,813,430	1,864,597	1,854,649	1,827,645	1,874,649	1,891,710	1,959,003	1,987,478	2,037,165	2,088,094	2,140,296
26	County Operated Facilities	1,023,412	1,102,343	1,014,384	1,086,531	1,864,592	2,287,779	2,118,652	2,150,411	2,182,668	2,215,408	2,248,639	2,282,368
27	Total Wastewater Flow	2,824,571	2,915,773	2,878,981	2,941,180	3,692,237	4,162,428	4,010,342	4,089,414	4,170,145	4,252,572	4,336,733	4,422,665
28	Average Daily Flow (MGD)	7.74	7.99	7.89	8.06	10.12	11.40	10.99	11.20	11.43	11.65	11.88	12.12

(1) Historical amounts shown reflect two year historical average usage for this customer class. Previous to Fiscal Year 1997 this class was considered as commercial and data was not readily available.

(2) Amounts shown include incorporation of FCWC customer base which was acquired by the County in April 1999 (midway through FY 1999).

(3) Reflects addition of Gateway Services District as wholesale customer anticipated to become effective approximately January 2002. Also reflects addition of Cherry Estates development effective 10/1/01.

SECTION 3
NET REVENUE REQUIREMENTS



SECTION 3

NET REVENUE REQUIREMENTS

3.1 General

The various components of costs associated with the operations, maintenance, financing of the system, renewals, replacements and capital improvements are generally considered as the revenue requirements of a publicly operated utility system. The totaling of these cost components, after adjusting for other income, operating revenues, and the use of reserves and fund balances available to the utility, results in the total annual net revenue requirements (generally "a cash flow statement") and represents the amount of revenues required to be collected through user fees or rates. The development of the net revenue requirements for the County system is a critical component of the study since rates should be designed to recover the full cost of providing service. To the extent that the estimate of the full cost is not accurate, the proposed rates could under-recover the expenditure requirements, which could impact the utility system of the County from a financial standpoint. The determination of the revenue requirements for the utility system of the County was made in a manner generally consistent with the methods employed by publicly owned utilities utilizing bond financing to meet their capital needs. This section provides a discussion of the development of the utility system revenues, expenditure requirements including assumptions utilized in the estimate of such expenditures, and the estimated rate adjustments, if any, necessary to meet such revenue requirements for both the water and wastewater systems on an individual basis.

3.2 Revenue Requirements - General

User fees or rates should be set at a level such that the revenues produced will be sufficient to meet the near future revenue requirements. Thus, it is necessary to estimate or project the various cost components over a reasonable period of time in order to determine the required rate levels. Projections must consider changes in operating practices, new facilities, expected cost increases and other factors that may affect the overall cost of operating, maintaining, and expanding the utility system.

For the purpose of this water and wastewater rate study, a forward-looking study period has been utilized for the determination of the water and wastewater systems projected revenue requirements. An important objective of a projected study period is to establish rates and rate levels that will reflect current costs of providing the service to ensure continuing and adequate service to meet future period requirements. By designing rates and charges in order to provide revenues to match future operating needs and other such requirements, an attempt to maintain the financial integrity of the utility system is accomplished, while continuing to provide the best possible service ultimately to the customer. It was determined that the revenue requirements for this rate study would be predicated on the projected utility costs for the five fiscal year period

ending September 30, 2006. A five year forecast of utility operations was prepared in order: i) to recognize potential rate phasing or multiple rate adjustment considerations which may be required to meet projected revenue requirements and capital expenditure needs; and ii) to provide a surety to the County that the utility rates will be adequate in the future to satisfy the projected debt service and bond covenant requirements associated with revenue bonds and State of Florida loans anticipated to be outstanding during the five year forecast period by the County. —

3.3 Assumptions for Revenue Requirement Development

The development of the estimated revenue requirements for the County's water and wastewater systems required several assumptions and considerations and the development of certain analyses relative to the County's utility operations. The Fiscal Year 2002 served as the base or test year for revenue requirement projection purposes. The County provided PRMG with a copy of the adopted budget for the Fiscal Year 2001 and the proposed budget for the Fiscal Year 2002, which served as the basis of the projection of the revenue requirements for this forecast period. The projected net revenue requirements for the individual water and wastewater systems for the forecast period reflected in this report is summarized on Tables 3-1 and 3-2, respectively.

The projected net revenue requirements for the County's water system which are estimated to be needed to be recovered from user rates or charges are summarized below:

<u>Water System</u>	<u>Fiscal Year Revenue Requirements - Water System [1]</u>				
	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>
Total Operating Expenses	\$11,398,833	\$11,963,217	\$12,563,112	\$13,196,081	\$13,861,940
Other Revenue Requirements:					
Debt Service	6,265,169	6,264,707	6,312,798	8,909,865	8,916,894
Capital Outlay and Other Operating Transfers [2]	7,439,911	7,046,592	7,354,200	4,506,316	4,518,834
Working Capital Transfers to/(from) [3]	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total Utility Expenditures	25,103,913	25,274,516	26,230,110	26,612,261	27,297,669
Less Revenues from Other Sources:					
Interest Income [4]	956,415	735,360	715,512	749,736	747,621
Other Operating Revenues	<u>2,117,174</u>	<u>2,138,537</u>	<u>2,193,007</u>	<u>2,251,194</u>	<u>2,313,484</u>
Net Revenue Required from Rates [5]	<u>\$22,030,323</u>	<u>\$22,400,619</u>	<u>\$23,321,592</u>	<u>\$23,611,331</u>	<u>\$24,236,565</u>

[1] Derived from Table 3-1.

[2] Reflects transfers (specifically, the Capital Improvements Fund and Renewal and Replacement Fund) and capital requirements funded solely from rate revenues.

[3] Amounts shown reflect the transfer of cash reserves to/(from) the operating reserves (if any) to assist in the phasing of rates of the two systems.

[4] Reflects interest income on unrestricted funds; does not include estimated earnings on the Construction Fund or the Connection Fee Fund, which are assumed to remain in such accounts.

[5] Represents the amount of expenditures estimated to be funded from County water rates (user fees).

As can be seen on the above summary, the estimated net revenue requirements for the Water Utility System for the next five years beginning with the Fiscal Year 2002 are anticipated to increase by approximately 10.0% or approximately 2.4% per year on average. The primary reasons for this increase are due to: i) continuing inflationary pressures on operating expenses;

ii) changes in debt service funded from rates over the forecast period; and iii) the need to accrue funds for near- and mid-term capital requirements through transfers to the Utility Capital Improvements Fund (primarily for capital deficiencies associated with system renewals, replacements, upgrades) from rate revenues.

The corresponding net revenue requirements estimated for the five year forecast period for the Wastewater System is summarized as follows:

<u>Wastewater System</u>	<u>Fiscal Year Revenue Requirements - Wastewater System [1]</u>				
	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>
Total Operating Expenses	\$16,858,526	\$17,865,081	\$18,938,294	\$20,083,783	\$21,310,057
Other Revenue Requirements:					
Debt Service	6,566,295	6,525,764	5,959,050	6,491,000	5,866,417
Capital Outlay and Other Operating Transfers [2]	1,350,501	1,322,842	1,358,894	1,499,738	1,518,241
Working Capital Transfers to/(from) [3]	<u>(1,487,000)</u>	<u>(1,704,325)</u>	<u>570,000</u>	<u>(878,215)</u>	<u>30,000</u>
Total Utility Expenditures	23,288,322	24,009,362	26,826,239	27,196,305	28,724,715
Less Revenues from Other Sources:					
Interest Income [4]	878,754	688,190	687,265	734,748	750,557
Other Operating Revenues	<u>1,085,829</u>	<u>1,164,572</u>	<u>1,191,433</u>	<u>1,220,358</u>	<u>1,251,527</u>
Net Revenue Required from Rates [5]	<u>\$21,323,739</u>	<u>\$22,156,600</u>	<u>\$24,947,541</u>	<u>\$25,241,200</u>	<u>\$26,722,631</u>

[1] Derived from Table 3-2.

[2] Reflects transfers (Capital Improvements Funds and Renewal and Replacement Funds) and capital requirements funded solely from rate revenues.

[3] Amounts shown reflect the transfer of cash reserves to/(from) the operating reserves (working capital) to assist in the phasing of rates.

[4] Reflects interest income on unrestricted funds; does not include estimated earnings on the Construction Fund or the Impact Fee Fund, which are assumed to remain in such accounts.

[5] Represents the amount of expenditures estimated to be funded from wastewater rates (user fees).

As can be seen above, the estimated utility expenditures for the wastewater system are anticipated to increase by approximately 25.3% over the next five years beginning with Fiscal Year 2002 or annually about 5.8%. The reasons for the increase in net revenue requirements are: i) a result of anticipated increases in fees charged by the City of Ft. Myers to perform bulk wastewater treatment services for customers of the County; ii) an anticipated increase in indebtedness during the forecast period allocable to the wastewater system in order to fund capital improvements for system expansion and replacement; and iii) the need to recognize system rates on a stand-alone basis (i.e., lessen subsidizations between the water and wastewater systems). These factors, coupled with continued inflationary pressures on the operating expenses, have resulted in the anticipated rise in system cost requirements.

The development of the projected revenue requirements as shown on Tables 3-1 and 3-2 for the water and wastewater systems, respectively, required certain assumptions and analyses. The major assumptions and analyses included in the development of the projected revenue requirements for the study period are:

1. The Fiscal Year 2002 Adopted Operating and Capital Budget as provided by the County served as a base line for the expenditure projections and the underlying assumptions therein are reasonable and reflect anticipated operations. Such amounts were incorporated into the projected revenue requirement component of the study, except for adjustments and assumptions as noted hereunder.

2. Projected revenues from current rates and charges for the County water and wastewater systems have been based on the schedule of rates and charges adopted by the County on March 30, 1994 pursuant to Rate Resolution No. 94-03-114. Such rates were applicable to the customer and sales or usage forecast discussion in Section 2 of this report.

3. The expenditure projections for the Fiscal Year 2002 were allocated between the water and wastewater systems in order to identify the cost of providing service for each individual service area. By allocating costs to each system, rates could then be evaluated and subsequently designed which allow the individual utility systems to be reported on a self-sufficient basis. The allocation of utility expenditures for the Fiscal Year 2002 between the two (2) utility systems was based on the nature of the cost incurrence of such expenditures and is shown in detail on Table 3-4 at the end of this section. The following is a summary of the methodology utilized in the allocation of the operating expenses between the water and wastewater systems.

Expenditure Requirement	Primary Allocation Method	Allocation Percentage	
		Water	Wastewater
County Operations:			
Administration	Salaries and Wages	49.40%	50.60%
Water Meter Services	Customer	60.66%	39.34%
Billings and Collections	Customer	60.66%	39.34%
Utility Engineering	Capital Improvement Program	57.87%	42.13%
Construction/Utility Inspections	Capital Improvement Program	57.87%	42.13%
Maintenance Department	Fixed Assets	35.99%	64.01%
Electronics Department	Fixed Assets	35.99%	64.01%
Support Services	Customer	60.66%	39.34%
Water Operations	Direct Water	100.00%	0.00%
Water Distribution	Direct-Water	100.00%	0.00%
Water Production-Corkscrew	Direct-Water	100.00%	0.00%
Water Production-Olga	Direct-Water	100.00%	0.00%
Water Production-Waterway	Direct-Water	100.00%	0.00%
Water Production-College Parkway	Direct-Water	100.00%	0.00%
Water Production-Green Meadows	Direct-Water	100.00%	0.00%
Sewer Operations	Direct-Sewer	0.00%	100.00%
Wastewater Treatment Contracts	Direct-Sewer	0.00%	100.00%
Wastewater Treatment-Beach WWTP	Direct-Sewer	0.00%	100.00%
Wastewater Treatment-Waterway	Direct-Sewer	0.00%	100.00%
Wastewater Treatment-Fiesta Village	Direct-Sewer	0.00%	100.00%
Wastewater Treatment-Gateway	Direct-Sewer	0.00%	100.00%
Matlacha and Pine Island Plants	Direct-Sewer	0.00%	100.00%
Wastewater Treatment-Package Plants	Direct-Sewer	0.00%	100.00%
Wastewater Collection	Direct-Sewer	0.00%	100.00%
Non-Departmental	Fixed Assets	35.99%	64.01%
Property Appraiser	Customer	60.66%	39.34%
Contingency	Operating Expenses	40.34%	59.66%

As shown on Table 3-4 at the end of this section, the Fiscal Year 2002 utility operational and maintenance expenditures (exclusive of debt service and other non-operating requirements) were allocated between the water and wastewater systems as follows:

	Fiscal Year 2002	
	Water	Wastewater
Amount	\$11,398,833	\$16,858,526
Percent	<u>40.34%</u>	<u>59.66%</u>

4. Projected County operations operating and maintenance expenses allocated to the individual utility systems for the Fiscal Year 2002 were escalated for the remaining four years of the forecast period (through Fiscal Year 2006). The projections are illustrated on Table 3-3 for both the water and wastewater systems. These projected expenses as illustrated on Table 3-3 were escalated for the forecast period as follows:
 - (a) Projected operational and maintenance expenses for the initial fiscal years were based upon the County's Proposed Fiscal Year 2002 Utility Budget which reflects the most recent anticipated annual financial projections of the utility at the time of this study. Such amounts were incorporated into the Fiscal Year 2002 component of the study period.
 - (b) Materials and supplies expenses, other contractual services expenses, repair and maintenance expenses, and certain other operating expenses have been projected to increase in general from historical and current budgetary levels at a rate equal to inflation ranging from 1.0% to 5.0% based on the nature of the expenditure. These escalation factors were based on the Implicit Price Deflator forecast prepared by the Congressional Budget Office as contained in The Economic and Budget Outlook dated June 2001. Additionally, these escalators were compared to historical price indices used by many utilities for financial forecasting and rate review purposes. These indices included: i) the gross national product implicit price deflator index which is used by the Florida Public Service Commission in the establishment of price indices for operating costs as required pursuant to Section 367.081(4)(a), Florida Statutes, in the regulation of private or investor-owned utilities; ii) the consumer price index; and iii) indices derived from the *Handy-Whitman Index*, a publication which tracks trends in construction and materials costs.
 - (c) Based on discussions with the County, the escalation of wages and salaries above Fiscal Year 2002 budgeted amounts was increased by approximately 7.0% annually to reflect increases due to inflation and allowances for salary adjustments such as merit increases and cost of living adjustments. Personnel benefits (i.e., contributions toward retirement, health insurance, FICA, etc.) were projected to remain at the same percentage relationship to total salaries as was reflected in the Fiscal Year 2002 budget based on discussions with the County.

(d) With respect to the projection of variable costs, the cost for purchased power and chemicals for the County water and wastewater treatment facilities were determined utilizing the cost of the expense for water production and wastewater treatment to the County's customers as outlined in the County's Fiscal Year 2002 Budget and was escalated for the forecast period based on an allowance for inflation, which is consistent with recent historical trends, and the projection of flow requirements as discussed earlier in this report. The projections of such costs for the County wastewater system were performed in a similar manner.

(e) A contingency allowance of two and one-half percent (2.5%) of total County-related operating expenses was recognized in each fiscal year. The allowance has been included in order to have sufficient funds to meet unknown or unplanned expenditures throughout each fiscal year and to recognize potential changes in revenues due to weather, conservation, and other factors. This allowance increases the revenue requirements of the utility by approximately \$770,000 annually and is included as an operating expense of the Utilities Division.

5. The County has entered into a large user agreement with the City of Ft. Myers to provide bulk wastewater treatment services for those customers located in the County's South Ft. Myers and East Lee County sewer systems (the "Wastewater Agreement"). For the projection period, the estimated annual expense was determined taking into account: i) projections of rates for service regarding future wastewater treatment costs based on discussions with City staff; ii) the forecast of wastewater customers and their respective wastewater treatment requirements for the County wastewater system; and iii) inflationary allowances based on historical trends. Based on the assumptions as stated above, the costs for wholesale wastewater service were estimated as follows:

Fiscal Year	Total Anticipated Cost
2002	\$4,707,967
2003	5,108,144
2004	5,542,336
2005	6,013,435
2006	6,524,577

6. The County currently provides wholesale potable water service to Gateway Services District (the "District") and, in turn, receives sales revenues for these services. Anticipated revenues expected to be received associated with wholesale water services were based on: i) historical consumption levels of the District; ii) anticipated growth levels within the District's service territory; and iii) the current wholesale water rate charged by the County to the District. Based on these assumptions, estimated bulk sales revenues were projected as follows:

	Monthly Base Charge	Anticipated Flow (000s)	Volumetric Rate	Annual Revenue
FY2002	\$855.70	114,903	\$1.62	\$186,142
FY2003	855.70	128,806	1.62	208,665
FY2004	855.70	144,391	1.62	233,914
FY2005	855.70	161,863	1.62	262,217
FY2006	855.70	181,448	1.62	243,946

7. The County is in the process of acquiring the Gateway Services District wastewater treatment and effluent disposal facilities (GSD System) for the purpose of providing wholesale wastewater service to the District in addition to acquiring facilities which will enable the County to serve anticipated growth in that portion of the County. Based on information provided by the County, the GSD System purchase is currently being negotiated and the eventual acquisition of the utility's treatment facilities is anticipated to occur in Fiscal Year 2002. As a result, it is anticipated that additional personnel, treatment, and associated plant maintenance costs will be incurred associated with the operation of these incremental facilities. For purposes of this analysis and based on discussions with County staff, the following annualized costs have been recognized to be incurred during Fiscal Year 2002.

Division	FY 2002 Annualized Operating Expenses
Salaries and Benefits	\$261,318
All Other Operating Expenses	<u>376,000</u>
Total	\$637,318

8. As a result of the anticipated acquisition of the GSD System, the County will then commence providing wholesale wastewater service to the District. The County currently provides wholesale water services to residents of the District. Based on the provisions of the proposed draft of the Acquisition and Utility Service Provision Agreement (the "Service Provision Agreement"), the District agrees to pay the County in fixed monthly installments an amount exultant to the annual debt service requirement incurred by the County for the purchase of the wastewater treatment and effluent disposal facilities which is allocable to the District. In addition, the District per an agreement anticipated to be entered into by the two parties will pay a rate of approximately \$1.77 per thousand gallons of wastewater received by the County from the District. Based on the provisions of the Service Provision Agreement which maintains the fixed monthly debt component and the volumetric rate during the course of the forecast period and the anticipated deliveries of wastewater produced by the District over the five (5) year projection timeframe, the following revenues were determined:

	2002 [1]	2003	2004	2005	2006
Estimated Wastewater Sales (000s)	101,953	133,447	145,557	158,766	173,174
Rate per 1,000 Gallons	<u>\$1.77</u>	<u>\$1.77</u>	<u>\$1.77</u>	<u>\$1.77</u>	<u>\$1.77</u>
Estimated Volumetric Revenues	196,158	236,201	257,636	281,016	306,519
Annual Debt Component Payment	166,432	199,718	199,718	199,718	199,718
Total Estimated Revenues	<u>\$362,590</u>	<u>\$435,919</u>	<u>\$457,354</u>	<u>\$480,734</u>	<u>\$506,237</u>

[1] Assumed wholesale wastewater services to commence December 1, 2001.

9. In addition to the recognition of the Gateway Services District as a wholesale customer of the water and wastewater system, the County has recently entered into an agreement to provide wholesale water service to the Town of Fort Myers Beach (the "Town"). Based on information provided by the County, the Town recently purchased the water transmission/distribution system within the Town's limits and agreed to purchase wholesale water from the County. Based on i) the current volumetric rate for wholesale water service

currently charged by the County to the Town; ii) the recognition of the revised County-wide wholesale water rate discussed in Section 4 of this report (assumed County will adopt this revised rate and begin applying to Town water purchases by no later than January 1, 2002); and iii) anticipated purchases of wholesale water by the Town during the forecast period, the estimated annual revenues for wholesale water service were estimated as follows:

	2002	2003	2004	2005	2006
Estimated Annual Water Sales (000s)	478,333	489,095	500,100	511,352	522,857
Rate per 1,000 Gallons [1]	<u>\$2.52</u>	<u>\$2.46</u>	<u>\$2.46</u>	<u>\$2.46</u>	<u>\$2.46</u>
Estimated Annual Revenues	<u>\$1,206,594</u>	<u>\$1,203,174</u>	<u>\$1,230,245</u>	<u>\$1,257,926</u>	<u>\$1,286,229</u>

[1] Amount shown reflects current wholesale water rate of \$2.71/1,000 gallons effective through December 31, 2001 and implementation of proposed \$2.46/1,000 gallon rate as described in Section 4 of this report.

10. Based on discussions with County staff, it is anticipated that several privately-owned and operated water systems which are regulated by the Florida Public Service Commission and current served by the County on a retail basis will, in the near future, be recognized as wholesale water customers of the System. For purposes of this analysis, these four (4) utilities have been eliminated from the derivation of retail rate revenues and recognized as wholesale customers of the County who will be charged the System-wide wholesale water rate recommended to be adopted by the County and as discussed in Section 4 of this report. Based on an analysis of historical water consumption requirements recently incurred by these utility systems and the application of the proposed wholesale water rate contained in this report, it is anticipated that annual wholesale water revenues of approximately \$270,350 will be generated.

11. The County currently has outstanding as of September 15, 2001 in the principal amount of \$153,861,483 of revenue, special assessment and State Revolving Loan indebtedness that is allocable to the County utility system (exclusive of GES System which was not tasked as part of this analysis). This consists of five separate issues which include: i) Fort Myers Beach General Obligation Bonds, Series 1977, in the principal amount of \$8,930,000 (the "Series 1977 Bonds"); ii) South Fort Myers Sewer General Obligation Bonds, Series 1983, in principal amount of \$7,360,000 (the "Series 1983 Bonds"); iii) Water and Sewer Refunding Revenue Bonds, Series 1993, in the principal amount of \$40,000,000 (the "Series 1993 Bonds"); iv) Water and Sewer Refunding Revenue Bonds, Series 1999A, in the principal amount of \$134,615,000 (the "Series 1999A Bonds"); and v) a State Revolving Fund Loan issued by the FDEP in the principal amount of \$10,144,085 issued during the Fiscal Year 1991 (the 1991 DEP Loan) (collectively, the "Outstanding Bonds"). The debt service requirements shown for the Outstanding Bonds were based on the actual debt service schedules for each issue and are presented on a "gross" basis (i.e., not net of interest earnings on any debt service related funds or accounts) for the purposes of this study. Furthermore, the amounts shown are based on the monthly funding requirements of the various sinking funds as required by the resolution that authorized the bonds (essentially an accrual basis) as opposed to when the debt service requirements are actually paid.

The indebtedness for the Outstanding Bonds is allocable entirely to the County system and only the revenues and assessment proceeds generated from County operations is pledged towards the payment of this debt. Based on the projects funded from the debt and information provided by the County relative to the source of funding dedicated towards the repayment of each series of bonds, the allocation of the annual debt service requirements between the water and wastewater system and anticipated funding source towards each series of bond is summarized as follows:

	System Allocation		Funding Source Allocation	
	Water	Wastewater	Rate Revenue	Special Assessments
Series 1977 Bonds	0.00%	100.00%	100.00%	0.00%
Series 1983 Bonds	0.00%	100.00%	100.00%	0.00%
Series 1993 Bonds	30.57%	69.43%	100.00%	0.00%
Series 1999A Bonds	64.26%	35.74%	100.00%	0.00%
1991 DEP Loan	0.00%	100.00%	38.65%	61.35%

12. In order to ensure adequacy in the annual receipts of special assessments proceeds dedicated by the County towards the repayment of the utility system indebtedness, a review of the sufficiency of annual special assessment revenues during the forecast period was performed. The County originally issued several series of assessment bonds which were subsequently refunded by the Series 1993 Bonds for several assessment projects located in the County's wastewater service area. The projection of special assessment revenues for the forecast period was based on: i) a review of annual assessment revenues collected, balances on hand, and the application of such funds towards the payment of debt service; ii) the assumption that the principal and interest components of the assessment payments would decrease during the forecast period as repayment programs reach maturity; and iii) the County would not be issuing additional Special Assessment Bonds to fund system improvements. Based on these assumptions and the projection of annual utility system indebtedness to be funded from the special assessment proceeds, the following special assessment revenues which would be utilized toward the repayment of utility system indebtedness were estimated.

Fiscal Year	Anticipated Special Assessment Revenues
2002	\$561,453
2003	541,632
2004	542,184
2005	537,619
2006	510,324

13. The County has filed an application with the Florida Department of Environmental Protection (FDEP) to procure low interest loan funding through the State Revolving Loan Program (SRF) to fund the construction of several capital projects as identified in the Five Year Capital Improvement Program on Table 3-5 at the end of this section. Based on discussions with staff of the Environmental Services Department and a review of the projects intended to be funded with SRF Loan proceeds (the "SRF Loan"), approximately \$43,396,670 in capital projects are anticipated to be funded through this program. Based on

current SRF preconstruction loan documentation as provided by FDEP to the County, approximately \$4,956,267 has currently been received by FDEP to be disbursed to the County for design and other preconstruction activities. For purposes of this analysis, it has been assumed that the County will proceed in a timely manner with the application process to be approved for the remainder of the requested loan proceeds. With respect to the determination of anticipated loan repayments associated with the funding of the specific projects identified in the Five Year Capital Improvement Program, the following assumptions were utilized: i) total principal amount of construction loan (exclusive of preconstruction funding currently approved by FDEP) amounts to \$43,615,000; ii) an assumed average interest rate of 3.15%; iii) a term of 20 years with level debt payments; iv) capitalized interest through the entire estimated construction period (amounts to approximately \$2.23 million capitalizing interest through the end of Fiscal Year 2004; v) loan reserve fee of 3.0% and load service fee of 2.0% of anticipated construction proceeds to be subsequently borrowed; and vi) concurrent application for both water and wastewater system requested projects assuming FDEP requires separate application for each respective system.

Based on the projects anticipated to be funded from proposed the SRF Loan, the anticipated concurrent debt service loan was allocated between the water and wastewater systems as follows:

Proposed SRF Loan	Level Debt Payment	Allocation	
		Water	Wastewater
Amount	\$3,262,241	\$2,652,841	\$609,400
Percent	100.00%	81.32%	18.68%

14. The County budgets capital outlay expenditures for furniture, fixtures, equipment, vehicles, and other related items on a "per department" basis. Since such expenses represent a capital expenditure as opposed to an operating expense, such expenditures were reclassified as a payment after the payment of operating expenses. Although this adjustment does not affect the total revenue requirements of the System, it does improve the amount of funds available for debt service coverage.

15. As reflected in the Bond Resolution which authorized the issuance of the Series 1993 Bonds, the utility is required to establish and deposit into the Renewal and Replacement Fund (the "R&R Fund") an amount equal to five percent (5%) of the Operating Revenues of the System from the previous fiscal year. The R&R Fund has been established to develop a dedicated funding plan to provide funds to perform capital improvements related to the renewal, replacement, upgrade, and betterment of existing System assets on an as needed basis and in accordance with the funding plan of the County's Five Year Capital Improvement Program. Based on discussions with County staff and in keeping with historical funding policy, we have recognized the funding allowance equal to approximately 5% of the System's previous year gross revenues per year to be deposited into the Renewal and Replacement Fund. Based on the funding provisions as described above, the following annual transfers recognized to the R&R Fund were estimated:

Fiscal Year	Estimated Transfer Amount Recognized
2002	\$2,351,512
2003	2,419,612
2004	2,464,194
2005	2,652,817
2006	2,690,428

16. Interest income has been recognized as an available revenue source to fund the expenditure needs of the utility. For the forecast period, interest income was based on estimated balances in unrestricted funds as defined in the Bond Resolution (e.g., Debt Service Reserve Fund) and other available fund balances (i.e., Water/Wastewater Operating Account, Capital Improvements Fund). Thus, for the determination of the net revenue requirements from rates, no earnings have been reflected on balances in the Water and Wastewater Connection Fees Fund or the Construction Fund, which is defined in the Bond Resolution. Since amounts earned on these balances are restricted to such accounts, the earnings are not being considered as being available to fund utility operating expenses or debt service requirements.

In the development of estimated interest earnings, average interest rates of 3.75% to 4.0% during the forecast period were assumed based on recent earning performance results of the utility and discussions with County staff. To the extent interest rates and associated earnings are higher than projected, then the amount of funds available for capital needs may be higher than what is being presented. For the forecast period, the earnings by specific fund or account for the County water and wastewater system is summarized below:

	2002	2003	2004	2005	2006
Operating Account	\$1,138,662	\$774,835	\$752,149	\$745,984	\$729,020
Renewal and Replacement Fund	135,716	150,085	193,761	242,101	294,966
Debt Service Sinking Funds	133,929	133,321	128,140	159,385	152,936
Debt Service Reserve Funds	5,095	5,095	5,095	5,095	5,095
Capital Improvements Fund	<u>421,768</u>	<u>360,214</u>	<u>323,632</u>	<u>331,919</u>	<u>316,161</u>
Subtotal	\$1,835,169	\$1,423,550	\$1,402,777	\$1,484,484	\$1,498,178
Connection Fee Funds					
Water System	478,124	321,303	358,019	395,591	434,461
Wastewater System	<u>661,616</u>	<u>486,531</u>	<u>344,259</u>	<u>300,497</u>	<u>304,984</u>
Total Earnings	<u>\$2,974,909</u>	<u>\$2,231,384</u>	<u>\$2,105,055</u>	<u>\$2,180,572</u>	<u>\$2,237,623</u>

17. The capital improvement program for the water and wastewater utilities was based on data derived from: i) the Fiscal Year 2002 Proposed Capital Budget; ii) information provided by the County regarding the status of current and anticipated projects; and iii) the County's most recent Five-Year Capital Improvement Plan. Table 3-5 at the end of this section provides a detailed listing of the capital projects for the water and wastewater system, respectively, for the forecast period.

Included in the capital improvement program analysis was a review of the sources of funds for the program to ensure that moneys would be available to fund such projects during the

forecast period and to determine additional amounts which needed to be funded from rate revenues, if any. The funding requirements reflected in the analysis for rate determination purposes is as follows:

	2002	2003	2004	2005	2006
<u>Water System</u>					
Total Capital Projects (*)	\$45,248,500	\$7,725,000	\$2,225,000	\$2,925,000	\$2,125,000
Total Funding Sources:					
Operating Account	0	0	0	0	0
Renewal and Replacement Fund	0	0	0	0	0
Connection Fees	5,175,000	300,000	300,000	300,000	300,000
Capital Improvements Fund	4,960,000	5,855,000	1,775,000	2,475,000	1,675,000
Series 1999A Bonds	300,000	1,000,000	0	0	0
Anticipated SRF Loan	34,620,000	420,000	0	0	0
Rate Revenue	<u>193,500</u>	<u>150,000</u>	<u>150,000</u>	<u>150,000</u>	<u>150,000</u>
Total Water CIP	<u>\$45,248,500</u>	<u>\$7,725,000</u>	<u>\$2,225,000</u>	<u>\$2,925,000</u>	<u>\$2,125,000</u>
<u>Wastewater System</u>					
Total Capital Projects (*)	\$18,139,481	\$13,180,000	\$7,210,000	\$3,010,000	\$3,110,000
Total Funding Sources:					
Operating Account	0	0	0	0	0
Renewal and Replacement Fund	2,702,665	1,350,000	1,350,000	1,350,000	1,350,000
Connection Fees	4,690,830	5,410,000	2,700,000	200,000	200,000
Capital Improvements Fund	7,348,818	2,770,000	3,010,000	1,310,000	1,410,000
Anticipated SRF Loan	3,203,668	3,500,000	0	0	0
Rate Revenue	<u>193,500</u>	<u>150,000</u>	<u>150,000</u>	<u>150,000</u>	<u>150,000</u>
Total Wastewater CIP	<u>\$18,139,481</u>	<u>\$13,180,000</u>	<u>\$7,210,000</u>	<u>\$3,010,000</u>	<u>\$3,110,000</u>

(*) Derived from Table 4-5.

18. Revenues from retail rates for the County systems were based on rates currently in effect and the customer and sales forecast presented on Tables 2-1 and 2-2, which was predicted on historical revenue trends and relationships derived from detailed customer records provided by the County and financial data regarding the collectibility of such revenues from the various rate components (i.e., monthly service charge).
19. The County enjoys the receipt of other operating revenues from miscellaneous charges for specific customer service requests or needs which serve to reduce rate revenue requirements. Examples of the revenues include turn-on and turn-off charges, effluent reuse sales, meter drop-in (installation) and tap-on charges and return check charges. Such amounts were allocated between each County utility system based on the specific service for which the revenue was derived and were subsequently escalated for the projection period based on recent historical trends and projected growth of the utility.
20. Based on an analysis of projected revenues and expenses for the water and wastewater system and the need to have adequate funding for the County's on-going capital improvement program, it is anticipated that a transfer to the Capital Improvements Fund of approximately \$15,000,000 will be recognized in Fiscal Year 2002. Since these surplus account transfers represent funds above estimated revenue requirements of the system, such monies are deemed to be available to meet the capital improvement program of the County. It is

anticipated that such deposits over the projection from water system revenues will decline as capital needs are funded over time and other system expenditure needs are being met.

21. The County currently provides sludge hauling services on behalf of the City of Fort Myers. Since the total cost of sludge hauling is recognized as an expense pursuant to County budgetary practices, a revenue for the City's share of the expenses must be recognized. The following amounts with respect to this issue were recognized for the forecast period:

Fiscal Year	Estimated Transfer Amount Recognized
2002	\$200,000
2003	203,948
2004	207,980
2005	212,096
2006	216,298

22. Based on an analysis of the water and wastewater system revenue requirements and the direction of the City staff relative to minimizing the level and number of phased rate adjustments adequate to meet the needs of the utility system for several years, it was necessary to recognize the use of available cash reserves in the Operating Account as well as deposits to such account by the use of excess revenues from system operations (e.g., deposit of revenues from the water system to the Operating Account to assist in the funding of anticipated wastewater system revenue needs). Based on the financing requirements for the capital program, and the need to minimize future rate adjustments, we have recognized the following transfers and use of funds in the Operating Account:

Fiscal Year	Operating Account Beginning Balance	Deposits to Fund	Interest Earnings	Uses of Fund	Operating Account Ending Balance
2002	\$36,710,040	\$0	\$1,138,662	\$16,487,000 [1]	\$20,223,040
2003	20,223,040	0	774,835	1,704,325	18,518,715
2004	18,518,715	570,000	752,149	0	19,088,715
2005	19,088,715	0	745,984	878,215	18,210,500
2006	18,210,500	30,000	729,020	0	18,240,500

[1] Amount shown reflects \$15.0 million transfer to Capital Improvements Fund referenced in Assumption No. 20 above.

The System, as seen above, is anticipated to maintain a nominal reserve balance over the projection period. Based on an estimation of the flow of funds as presented above, it is anticipated operating reserves will be approximately \$18,240,500 by the end of Fiscal Year 2006.

23. For the purpose of this analysis, no funds from available connection fees have been included in the development of the financial analysis as it relates to potential rate impacts since such amounts are available only for capital projects for new customer growth and expansion and do not serve to effectively reduce rate revenue requirements. It should be noted that the use

of such funds are available to fund growth related capital projects thus capable of reducing utility expenditures which could be funded from rates for the water and wastewater systems.

3.4 Adequacy of Existing Utility Retail Rate Revenue

Based on the forecast of sales of the water system and the assumptions and considerations set forth with respect to the determination of the system expenditures, the existing rate revenue deficiency, if any, of the water system in the forecast period is anticipated to be as follows:

	2002	2003	2004	2005	2006
Water System: [1]					
Net Revenue Requirements from Retail Rates	\$22,030,323	\$22,400,619	\$23,321,592	\$23,661,331	\$24,236,565
Existing Retail Water Rate Revenue [2]	<u>21,545,315</u>	<u>22,400,619</u>	<u>22,686,043</u>	<u>23,611,331</u>	<u>23,936,707</u>
Estimated Revenue Surplus/(Deficiency) [3]	(\$485,008)	\$ 0	(\$635,548)	\$ 0	(\$299,858)
Amount Percent	<u>(2.25%)</u>	<u>0.00%</u>	<u>(2.80%)</u>	<u>0.00%</u>	<u>(1.25%)</u>
Percent of Partial Year Rate Revenue [4]	<u>(3.00%)</u>	<u>0.00%</u>	<u>(2.80%)</u>	<u>0.00%</u>	<u>(1.25%)</u>

[1] Derived from Table 3-1.

[2] Amounts shown based on rates currently in effect and include effects of rate adjustments in forecast period (i.e., 2002 adjustment included in 2003 revenue).

[3] Reflects annual deficiency for each year assuming prior period adjustments.

[4] For years in which a rate increase is required, the increase is assumed to be effective on October 1st except for Fiscal Year 2002 where the adjustment is anticipated to occur January 1, 2002.

The development of the estimated revenue requirements for the wastewater system is shown in detail on Table 3-2 for each fiscal year summarized as follows:

	2002	2003	2004	2005	2006
Wastewater System: [1]					
Net Revenue Requirements from Retail Rates	\$21,323,739	\$22,156,600	\$24,947,541	\$25,241,200	\$26,722,631
Existing Retail Wastewater Rate Revenue [2]	<u>19,644,741</u>	<u>22,156,600</u>	<u>22,424,254</u>	<u>25,241,200</u>	<u>25,535,965</u>
Estimated Revenue Surplus/(Deficiency) [3]	(\$1,678,998)	\$ 0	(\$2,523,287)	\$ 0	(\$1,186,665)
Amount Percent	<u>(8.55%)</u>	<u>0.00%</u>	<u>(11.25%)</u>	<u>0.00%</u>	<u>(4.65%)</u>
Percent of Partial Year Rate Revenue [4]	<u>(11.40%)</u>	<u>0.00%</u>	<u>(11.25%)</u>	<u>0.00%</u>	<u>(4.65%)</u>

[1] Derived from Table 3-2.

[2] Amounts shown based on rates currently in effect and include effects of rate adjustments in forecast period (i.e., 2002 adjustment included in 2003 revenue).

[3] Reflects annual deficiency for each year assuming prior period adjustments.

[4] For years in which a rate increase is required, the increase is assumed to be effective on October 1st except for Fiscal Year 2002 where the adjustment is anticipated to occur January 1, 2002.

Table 3-1

Lee County, Florida
Water and Wastewater System Rate Study

Development of Net Revenue Requirements for the Water System

Line No.	Description	Fiscal Year Ending September 30,				
		2002	2003	2004	2005	2006
Water System Operating Expenses						
1	Administration	\$372,502	\$391,895	\$412,479	\$434,333	\$457,543
2	Water Meter Services	422,967	450,750	480,447	512,140	545,941
3	Billings and Collections	1,070,666	1,123,287	1,179,027	1,237,942	1,300,247
4	Utilities Engineering	528,869	559,650	592,428	627,341	664,534
5	Construction/ Utility Inspections	258,952	274,307	290,662	308,085	326,650
6	Maintenance Department	337,314	355,381	374,552	394,900	416,501
7	Electronics Department	146,123	154,595	163,609	173,202	183,414
8	Support Services	429,225	454,137	480,636	508,826	538,821
9	Water Operations	1,237,475	1,278,636	1,321,579	1,366,213	1,412,531
10	Water Distribution	1,438,277	1,514,048	1,594,573	1,679,825	1,769,940
11	Water Production - Olga	1,147,860	1,205,759	1,267,546	1,332,571	1,400,578
12	Water Production - Corkscrew	1,360,011	1,424,462	1,493,184	1,565,284	1,640,377
13	Water Production - Waterway	619,490	652,573	687,852	725,109	764,287
14	Water Production - College Parkway	138,050	144,016	150,340	156,925	163,724
15	Water Production - Green Meadows	1,538,017	1,609,356	1,685,449	1,765,166	1,848,000
16	Property Appraiser	3,033	3,109	3,187	3,266	3,348
17	Non-Departmental	350,000	367,256	385,562	404,951	425,505
18	Total Water System Operating Expenses	11,398,833	11,963,217	12,563,112	13,196,081	13,861,940
Other Revenue Requirements						
Debt Service						
19	Existing and Proposed Debt Service	6,265,169	6,264,707	6,312,798	8,909,865	8,916,894
20	Total Debt Service	6,265,169	6,264,707	6,312,798	8,909,865	8,916,894
Other Miscellaneous Revenue Requirements						
21	Renewal and Replacement Transfer	1,202,937	1,255,196	1,263,726	1,311,505	1,330,613
22	Additional Debt Service-Related Costs	474	474	474	474	474
23	Capital from Rate Revenues	193,500	150,000	150,000	150,000	150,000
24	Transfer to Capital Improvement Fund	6,043,000	5,640,922	5,940,000	3,044,336	3,037,747
25	Working Capital - Deposits to/(use of)	0	0	0	0	0
26	Total Other Revenue Requirements	7,439,911	7,046,592	7,354,200	4,506,316	4,518,834
27	Gross Revenue Requirements	25,103,913	25,274,516	26,230,110	26,612,261	27,297,669
Less Income and Funds from Other Sources						
28	Other Operating Revenues	2,117,174	2,138,537	2,193,007	2,251,194	2,313,484
29	Interest Income	956,415	735,360	715,512	749,736	747,621
30	Additional Item	0	0	0	0	0
31	Total Net Revenue Requirements	22,030,323	22,400,619	23,321,592	23,611,331	24,236,565
Revenue from Retail Rates						
32	Water System Revenue from Existing Rates	21,545,315	21,747,862	22,024,969	22,298,600	22,605,886
33	Prior Year Rate Adjustments	0	652,757	661,074	1,312,731	1,330,821
34	Total Applicable Rate Revenue	21,545,315	22,400,618	22,686,043	23,611,331	23,936,707
Revenue Surplus/ (Deficiency)						
35	Amount	(485,008)	0	(635,548)	0	(299,858)
36	Percent of Retail Rate Revenue	-2.25%	0.00%	-2.80%	0.00%	-1.25%
37	Percent of Partial Year Rate Revenue	-3.00%	0.00%	-2.80%	0.00%	-1.25%

Table 3-2

Lee County, Florida
Water and Wastewater System Rate Study

Development of Net Revenue Requirements for the Wastewater System

Line No.	Description	Fiscal Year Ending September 30,				
		2002	2003	2004	2005	2006
Wastewater System Operating Expenses						
1	Administration	\$381,485	\$401,345	\$422,425	\$444,807	\$468,576
2	Water Meter Services	274,279	292,296	311,554	332,106	354,024
3	Billings and Collections	694,291	728,414	764,559	802,763	843,166
4	Utilities Engineering	384,974	407,379	431,239	456,653	483,726
5	Construction/ Utility Inspections	188,496	199,673	211,578	224,261	237,775
6	Maintenance Department	599,930	632,063	666,160	702,349	740,768
7	Electronics Department	259,888	274,955	290,987	308,049	326,210
8	Support Services	278,338	294,493	311,676	329,956	349,407
9	Sewer Operations	1,294,960	1,335,049	1,376,532	1,419,518	1,464,235
10	Wastewater Collection	3,210,685	3,370,491	3,538,318	3,714,951	3,902,046
11	Wastewater Treatment - Beach	1,373,395	1,445,946	1,522,323	1,602,947	1,688,726
12	Wastewater Treatment - Waterway	671,615	706,884	744,009	783,187	824,849
13	Wastewater Treatment - Fiesta Village	938,927	988,369	1,040,399	1,095,298	1,153,680
14	Wastewater Treatment - Matlacha/Pine	320,309	336,884	354,315	372,694	392,224
15	Wastewater Treatment Plant - Gateway	637,318	671,114	706,694	744,251	784,199
16	Wastewater Treatment - Package Plants	100,500	104,305	108,234	112,307	116,586
17	Wastewater Treatment - Contract	4,707,967	5,108,144	5,542,336	6,013,435	6,524,577
18	Property Appraiser	1,967	2,016	2,066	2,118	2,171
19	Non-Departmental	539,204	565,263	592,890	622,131	653,111
20	Total Wastewater System Operating Expenses	16,858,526	17,865,081	18,938,294	20,083,783	21,310,057
Other Revenue Requirements						
Debt Service						
21	Existing and Proposed Debt Service	6,566,295	6,525,764	5,959,050	6,491,000	5,866,417
23	Total Debt Service	6,566,295	6,525,764	5,959,050	6,491,000	5,866,417
Other Miscellaneous Revenue Requirements						
24	Renewal and Replacement Transfer	1,148,575	1,164,416	1,200,468	1,341,312	1,359,815
25	Additional Debt Service-Related Costs	8,426	8,426	8,426	8,426	8,426
26	Capital from Rate Revenues	193,500	150,000	150,000	150,000	150,000
27	Transfer to Capital Improvement Fund	0	0	0	0	0
28	Working Capital - Deposits to/(use of)	(1,487,000)	(1,704,325)	570,000	(878,215)	30,000
29	Total Other Revenue Requirements	(136,499)	(381,483)	1,928,894	621,523	1,548,241
30	Gross Revenue Requirements	23,288,322	24,009,362	26,826,239	27,196,305	28,724,715
Less Income and Funds from Other Sources						
31	Other Operating Revenues	1,085,829	1,164,572	1,191,433	1,220,358	1,251,527
32	Interest Income	878,754	688,190	687,265	734,748	750,557
33	Additional Item	0	0	0	0	0
34	Total Net Revenue Requirements	21,323,739	22,156,600	24,947,541	25,241,200	26,722,631
Revenue from Retail Rates						
35	Wastewater System Revenue from Existing Rates	19,644,741	19,889,989	20,130,262	20,367,216	20,605,063
36	Prior Year Rate Adjustments	0	2,266,612	2,293,993	4,873,984	4,930,902
37	Total Applicable Rate Revenue	19,644,741	22,156,600	22,424,254	25,241,200	25,535,965
Revenue Surplus/ (Deficiency)						
38	Amount	(1,678,998)	0	(2,523,287)	0	(1,186,665)
39	Percent of Retail Rate Revenue	-8.55%	0.00%	-11.25%	0.00%	-4.65%
40	Percent of Partial Year Rate Revenue	-11.40%	0.00%	-11.25%	0.00%	-4.65%

Lee County, Florida
Water and Wastewater System Rate Study

Allocation of Utility Operating Expenses to Individual Systems

Line No.	Description	Reference	Allocation to Water System					Allocation to Wastewater System				
			Water System	Wastewater System	2002	2003	2004	2005	2006	2002	2003	2004
OPERATING EXPENSES												
Administration (# 53663)												
1	Salaries and Wages	49.40%	\$168,988	\$180,817	\$193,474	\$207,017	\$221,508	\$173,062	\$185,177	\$198,139	\$212,009	\$226,850
2	Benefits	49.40%	51,528	55,135	58,995	63,124	67,543	52,771	56,465	60,417	64,646	69,172
3	Additional Personnel	50.60%	0	0	0	0	0	0	0	0	0	0
4	Legal Services	49.40%	3,705	3,798	3,893	3,990	4,090	3,795	3,890	3,987	4,086	4,189
5	Professional Services	49.40%	62,249	63,806	65,401	67,036	68,712	63,751	65,344	66,978	68,652	70,369
6	Other Contracted Services	49.40%	29,643	30,384	31,143	31,922	32,720	30,357	31,116	31,894	32,692	33,509
7	Travel and Per Diem	49.40%	10,078	10,330	10,589	10,853	11,125	10,322	10,580	10,844	11,115	11,393
8	Communication	49.40%	5,210	5,340	5,474	5,611	5,751	5,336	5,469	5,606	5,746	5,890
9	Advertising	49.40%	2,470	2,532	2,595	2,660	2,727	2,530	2,593	2,658	2,724	2,792
10	Freight and Postage	49.40%	1,235	1,266	1,298	1,330	1,363	1,265	1,297	1,329	1,362	1,396
11	Land, Building, Parking Rental	49.40%	1,112	1,112	1,112	1,112	1,112	1,138	1,138	1,138	1,138	1,138
12	Equipment Rental	49.40%	4,940	5,064	5,191	5,320	5,453	5,060	5,186	5,316	5,449	5,585
13	Self-Insurance Assessment	49.40%	5,188	5,318	5,451	5,587	5,727	5,313	5,446	5,582	5,722	5,865
14	Repair and Maintenance	49.40%	10,414	10,935	11,482	12,056	12,659	10,666	11,199	11,759	12,347	12,964
15	Printing	49.40%	741	760	779	798	818	759	778	797	817	838
16	Other Administrative Fees	49.40%	8,399	8,609	8,824	9,045	9,271	8,601	8,816	9,037	9,263	9,494
17	General Office Supplies	49.40%	1,532	1,570	1,609	1,649	1,691	1,588	1,608	1,648	1,689	1,731
18	Operating Supplies	49.40%	2,253	2,276	2,299	2,322	2,345	2,308	2,331	2,354	2,378	2,401
19	Subscriptions & Memberships	49.40%	2,816	2,844	2,873	2,901	2,930	2,884	2,913	2,942	2,971	3,001
20	Capital Outlay - Furniture and Equipment	49.40%	0	0	0	0	0	0	0	0	0	0
21	Total		\$372,502	\$391,895	\$412,479	\$434,333	\$457,543	\$381,485	\$401,345	\$422,425	\$444,807	\$468,576
Water Meter Services (# 53609)												
22	Salaries and Wages	60.66%	\$252,882	\$270,583	\$289,524	\$309,791	\$331,476	\$163,985	\$175,464	\$187,747	\$200,889	\$214,951
23	Benefits	60.66%	106,629	114,093	122,079	130,625	139,769	69,145	73,985	79,164	84,706	90,635
24	Additional Personnel	39.34%	0	0	0	0	0	0	0	0	0	0
25	Other Contracted Services	39.34%	5,460	5,596	5,736	5,879	6,026	3,540	3,629	3,720	3,813	3,908
26	Travel and Per Diem	39.34%	1,031	1,057	1,083	1,111	1,138	669	685	703	720	738
27	Repair and Maintenance	39.34%	20,856	21,899	22,993	24,143	25,350	13,524	14,200	14,910	15,656	16,439
28	Printing	39.34%	1,213	1,244	1,275	1,307	1,339	787	806	827	847	868
29	General Office Supplies	39.34%	910	933	956	980	1,004	590	605	620	635	651
30	Operating Supplies	39.34%	33,986	35,346	36,800	38,305	39,837	22,039	22,920	23,864	24,839	25,853
31	Total		422,967	450,750	480,447	512,140	545,941	274,279	292,296	311,554	332,106	354,024
Billings & Collections (# 53610)												
32	Salaries and Wages	60.66%	\$363,263	\$388,691	\$415,899	\$445,012	\$476,163	\$235,563	\$252,053	\$269,697	\$288,575	\$308,776
33	Benefits	60.66%	139,131	148,870	159,291	170,442	182,373	90,222	96,537	103,295	110,526	118,262
34	Additional Personnel	39.34%	0	0	0	0	0	0	0	0	0	0
35	Professional Services	39.34%	153,112	156,940	160,863	164,885	169,007	99,288	101,770	104,314	106,922	109,595
36	Other Contracted Services	39.34%	115,186	118,066	121,017	124,043	127,144	74,694	76,561	78,476	80,437	82,448
37	Travel and Per Diem	39.34%	4,500	4,663	4,780	4,900	5,022	2,950	3,002	3,100	3,177	3,257
38	Communication	39.34%	14,559	14,923	15,296	15,678	16,070	9,441	9,677	9,919	10,167	10,421
39	Freight and Postage	39.34%	202,006	202,086	202,166	202,246	202,326	130,994	136,234	141,741	147,455	153,333
40	Electric	60.66%	16,015	16,415	16,826	17,246	17,677	10,385	10,645	10,911	11,184	11,463
41	Water and Sewer	39.34%	1,213	1,244	1,275	1,307	1,339	787	806	827	847	868
42	Trash, Garbage & Sludge Removal	39.34%	320	328	337	345	354	208	213	218	224	229
43	Equipment Rental	60.66%	4,853	4,974	5,099	5,226	5,357	3,147	3,226	3,306	3,389	3,474
44	Repair and Maintenance	39.34%	8,748	9,185	9,644	10,126	10,633	5,672	5,956	6,254	6,567	6,895
45	Printing	39.34%	4,833	4,974	5,099	5,226	5,357	3,147	3,226	3,306	3,389	3,474
46	Other Administrative Fees	60.66%	607	622	637	653	670	393	403	413	424	434
47	General Office Supplies	39.34%	36,519	37,432	38,368	39,327	40,310	23,681	24,273	24,880	25,502	26,140
48	Operating Supplies	60.66%	5,581	5,720	5,863	6,010	6,160	3,619	3,710	3,802	3,897	3,995
49	Subscriptions & Memberships	39.34%	152	153	155	156	158	98	99	100	101	102
50	Capital Outlay - Furniture and Equipment	39.34%	0	0	0	0	0	0	0	0	0	0
51	Total		1,070,666	1,123,287	1,179,027	1,237,942	1,300,247	694,291	728,414	764,559	802,763	843,166

Table 3-3
Lee County, Florida
Water and Wastewater System Rate Study
Allocation of Utility Operating Expenses to Individual Systems

Line No.	Description	Reference	Percent Allocation		Allocation to Water System						Allocation to Wastewater System					
			Water System	Wastewater System	2002	2003	2004	2005	2006	2002	2003	2004	2005	2006		
Utilities Engineering (# 53607)																
52	Salaries and Wages	CIP	57.87%	\$300,047	\$321,050	\$343,524	\$367,571	\$393,301	\$218,410	\$233,699	\$250,057	\$267,561	\$286,291			
53	Benefits	CIP	57.87%	87,322	93,435	99,975	106,974	114,462	63,564	68,013	72,774	77,868	83,319			
54	Additional Personnel	CIP	57.87%	0	0	0	0	0	0	0	0	0	0			
55	Professional Services	CIP	57.87%	86,810	88,980	91,204	93,485	95,822	63,190	64,770	66,339	68,049	69,750			
56	Other Contracted Services	CIP	57.87%	17,362	17,796	18,241	18,597	19,164	12,638	12,954	13,278	13,610	13,950			
57	Travel and Per Diem	CIP	57.87%	8,681	8,898	9,120	9,348	9,582	6,319	6,477	6,659	6,805	6,975			
58	Communication	CIP	57.87%	1,447	1,483	1,520	1,558	1,597	1,053	1,080	1,106	1,134	1,163			
59	Freight and Postage	CIP	57.87%	289	297	304	312	319	211	216	221	227	233			
60	Land, Building, Parking Rental	CIP	57.87%	1,013	1,013	1,013	1,013	1,013	737	737	737	737	737			
61	Repair and Maintenance	CIP	57.87%	7,234	7,596	7,976	8,374	8,793	5,266	5,529	5,806	6,096	6,401			
62	Printing	CIP	57.87%	6,366	6,525	6,688	6,856	7,027	4,634	4,750	4,869	4,990	5,115			
63	Other Administrative Fees	CIP	57.87%	6,077	6,229	6,384	6,544	6,708	4,423	4,534	4,647	4,763	4,883			
64	General Office Supplies	CIP	57.87%	2,026	2,076	2,128	2,181	2,236	1,474	1,511	1,549	1,588	1,628			
65	Operating Supplies	CIP	57.87%	2,286	2,343	2,402	2,462	2,523	1,664	1,706	1,748	1,792	1,837			
66	Subscriptions & Memberships	CIP	57.87%	1,910	1,929	1,948	1,968	1,987	1,390	1,404	1,418	1,432	1,447			
67	Capital Outlay - Furniture and Equipment	CIP	57.87%	0	0	0	0	0	0	0	0	0	0			
68	Total			528,869	559,650	592,428	627,341	664,534	384,974	407,379	431,239	456,653	483,726			
Construction / Utility Inspections (# 54119)																
69	Salaries and Wages	CIP	57.87%	\$143,385	\$153,422	\$164,161	\$175,652	\$187,948	\$104,372	\$111,678	\$119,496	\$127,861	\$136,811			
70	Benefits	CIP	57.87%	47,855	51,183	54,766	58,600	62,702	34,820	37,257	39,865	42,656	45,642			
71	Additional Personnel	CIP	57.87%	0	0	0	0	0	0	0	0	0	0			
72	Professional Services	CIP	57.87%	12,105	12,407	12,718	13,035	13,361	8,811	9,032	9,257	9,489	9,726			
73	Other Contracted Services	CIP	57.87%	289	297	304	312	319	211	216	221	227	233			
74	Travel and Per Diem	CIP	57.87%	6,103	6,256	6,412	6,573	6,737	4,443	4,554	4,668	4,784	4,904			
75	Communication	CIP	57.87%	535	572	612	655	701	389	417	446	477	510			
76	Self-Insurance Assessment	CIP	57.87%	10,076	10,580	11,109	11,665	12,248	7,335	7,701	8,087	8,491	8,915			
77	Repair and Maintenance	CIP	57.87%	27,339	28,022	28,723	29,441	30,177	19,900	20,398	20,908	21,430	21,966			
78	Other Administrative Fees	CIP	57.87%	116	119	122	125	128	84	86	89	91	93			
79	General Office Supplies	CIP	57.87%	10,533	10,796	11,066	11,343	11,626	7,667	7,859	8,055	8,257	8,463			
80	Operating Supplies	CIP	57.87%	258,952	274,307	290,662	308,085	326,650	188,496	199,673	211,578	224,261	237,775			
81	Total			\$137,304	\$146,915	\$157,199	\$168,203	\$179,977	\$244,201	\$261,295	\$279,586	\$299,157	\$320,098			
Maintenance Department (# 53614)																
82	Salaries and Wages	Assets	35.99%	52,264	55,923	59,837	64,026	68,508	92,955	99,462	106,424	113,873	121,845			
83	Benefits	Assets	35.99%	0	0	0	0	0	0	0	0	0	0			
84	Additional Personnel	Assets	35.99%	10,797	11,067	11,344	11,627	11,918	19,203	19,683	20,175	20,680	21,197			
85	Professional Services	Assets	35.99%	73,869	75,716	77,609	79,549	81,538	131,381	134,665	138,032	141,482	145,020			
86	Other Contracted Services	Assets	35.99%	1,245	1,276	1,308	1,341	1,375	2,215	2,270	2,327	2,385	2,445			
87	Travel and Per Diem	Assets	35.99%	1,260	1,291	1,323	1,357	1,390	2,240	2,296	2,354	2,413	2,473			
88	Communication	Assets	35.99%	180	184	189	194	199	320	328	336	345	353			
89	Freight and Postage	Assets	35.99%	1,080	1,107	1,134	1,163	1,192	1,920	1,968	2,018	2,068	2,120			
90	Electric	Assets	35.99%	432	443	454	465	477	768	787	807	827	848			
91	Water and Sewer	Assets	35.99%	432	443	454	465	477	768	787	807	827	848			
92	Trash, Garbage & Sludge Removal	Assets	35.99%	180	184	189	194	199	320	328	336	345	353			
93	Equipment Rental	Assets	35.99%	44,361	46,579	48,908	51,354	53,921	78,899	82,844	86,986	91,335	95,902			
94	Repair and Maintenance	Assets	35.99%	369	378	388	397	407	656	673	689	707	727			
95	Printing	Assets	35.99%	450	461	473	484	497	800	820	841	862	883			
96	Other Administrative Fees	Assets	35.99%	72	74	76	78	79	128	131	135	138	141			
97	General Office Supplies	Assets	35.99%	12,668	12,985	13,310	13,643	13,984	22,532	23,095	23,672	24,262	24,871			
98	Operating Supplies	Assets	35.99%	360	363	367	371	375	640	647	653	659	666			
99	Subscriptions & Memberships	Assets	35.99%	0	0	0	0	0	0	0	0	0	0			
100	Capital Outlay - Furniture and Equipment	Assets	35.99%	337,314	355,381	374,552	394,900	416,501	599,930	632,063	666,160	702,349	740,768			
101	Total			\$137,304	\$146,915	\$157,199	\$168,203	\$179,977	\$244,201	\$261,295	\$279,586	\$299,157	\$320,098			

Lee County, Florida
Water and Wastewater System Rate Study

Allocation of Utility Operating Expenses to Individual Systems

Line No.	Description	Reference	Allocation to Water System						Allocation to Wastewater System															
			Percent Allocation Water System	2002	2003	2004	2005	2006	2002	2003	2004	2005	2006											
Electronics Department (# 53615)																								
102	Salaries and Wages	Assets	35.99%	\$74,163	\$79,355	\$84,909	\$90,853	\$97,213	\$131,903	\$141,136	\$151,016	\$161,587	\$172,898											
103	Benefits	Assets	35.99%	25,659	27,455	29,377	31,433	33,634	45,636	48,830	52,249	55,906	59,819											
104	Additional Personnel	Assets	35.99%	0	0	0	0	0	0	0	0	0	0											
105	Professional Services	Assets	35.99%	12,597	12,911	13,234	13,565	13,904	22,404	22,964	23,538	24,126	24,729											
106	Other Contracted Services	Assets	35.99%	9,177	9,407	9,642	9,883	10,130	16,323	16,731	17,149	17,578	18,017											
107	Travel and Per Diem	Assets	35.99%	900	922	945	969	993	1,600	1,640	1,681	1,723	1,766											
108	Communication	Assets	35.99%	1,134	1,162	1,191	1,221	1,251	2,016	2,067	2,118	2,171	2,226											
109	Freight and Postage	Assets	35.99%	180	184	189	194	199	320	328	336	345	353											
110	Electric	Assets	35.99%	1,080	1,107	1,134	1,163	1,192	1,920	1,968	2,018	2,068	2,120											
111	Water and Sewer	Assets	35.99%	432	443	454	465	477	768	787	807	827	848											
112	Trash, Garbage & Sludge Removal	Assets	35.99%	432	443	454	465	477	768	787	807	827	848											
113	Equipment Rental	Assets	35.99%	180	184	189	194	199	320	328	336	345	353											
114	Repair and Maintenance	Assets	35.99%	13,208	13,869	14,562	15,290	16,055	23,492	24,066	25,000	27,195	28,534											
115	Printing	Assets	35.99%	144	148	151	155	159	256	262	269	276	283											
116	Other Administrative Fees	Assets	35.99%	108	111	113	116	119	192	197	202	207	212											
117	General Office Supplies	Assets	35.99%	72	74	76	78	79	128	131	135	138	141											
118	Operating Supplies	Assets	35.99%	6,406	6,566	6,731	6,899	7,071	11,394	11,679	11,971	12,270	12,577											
119	Subscriptions & Memberships	Assets	35.99%	252	254	257	260	262	448	453	457	462	466											
120	Capital Outlay - Furniture and Equipment	Assets	35.99%	0	0	0	0	0	0	0	0	0	0											
121	Total			146,123	154,595	163,609	173,202	183,414	259,888	274,955	290,987	308,049	326,210											
Support Services (# 53616)																								
122	Salaries and Wages	Customer	60.66%	\$204,881	\$219,223	\$234,569	\$250,989	\$268,558	\$32,859	\$42,159	\$52,110	\$62,758	\$74,151											
123	Benefits	Customer	60.66%	77,389	82,806	88,603	94,805	101,441	50,184	53,697	57,456	61,478	65,781											
124	Additional Personnel	Customer	60.66%	0	0	0	0	0	0	0	0	0	0											
125	Professional Services	Customer	60.66%	9,099	9,327	9,560	9,799	10,044	5,901	6,048	6,199	6,354	6,513											
126	Other Contracted Services	Customer	60.66%	19,412	19,897	20,395	20,905	21,427	12,588	12,903	13,225	13,556	13,895											
127	Travel and Per Diem	Customer	60.66%	1,972	2,021	2,071	2,123	2,176	1,278	1,310	1,343	1,377	1,411											
128	Communication	Customer	60.66%	7,583	7,772	7,967	8,166	8,370	4,917	5,040	5,166	5,295	5,428											
129	Freight and Postage	Customer	60.66%	1,820	1,865	1,912	1,960	2,009	1,180	1,210	1,240	1,271	1,303											
130	Electric	Customer	60.66%	10,919	11,192	11,472	11,759	12,053	7,081	7,258	7,439	7,625	7,816											
131	Water and Sewer	Customer	60.66%	1,213	1,244	1,275	1,307	1,339	787	806	827	847	868											
132	Trash, Garbage & Sludge Removal	Customer	60.66%	1,820	1,865	1,912	1,960	2,009	1,180	1,210	1,240	1,271	1,303											
133	Equipment Rental	Customer	60.66%	6,066	6,218	6,373	6,534	6,696	3,934	4,032	4,133	4,236	4,342											
134	Repair and Maintenance	Customer	60.66%	59,449	62,422	65,543	68,820	72,261	38,551	40,478	42,502	44,627	46,859											
135	Printing	Customer	60.66%	2,123	2,176	2,231	2,286	2,344	1,377	1,411	1,447	1,483	1,520											
136	Other Administrative Fees	Customer	60.66%	1,668	1,710	1,753	1,796	1,841	1,082	1,109	1,137	1,165	1,194											
137	General Office Supplies	Customer	60.66%	1,972	2,021	2,071	2,123	2,176	1,278	1,310	1,343	1,377	1,411											
138	Operating Supplies	Customer	60.66%	21,384	21,918	22,466	23,028	23,603	13,866	14,213	14,568	14,933	15,306											
139	Subscriptions & Memberships	Customer	60.66%	455	460	464	469	473	295	298	301	304	307											
140	Capital Outlay - Furniture and Equipment	Customer	60.66%	0	0	0	0	0	0	0	0	0	0											
141	Total			429,225	454,137	480,636	508,826	538,821	278,338	294,493	311,676	329,936	349,407											
Water Operations (# 53662)																								
142	Salaries and Wages	DirWater	100.00%	\$39,588	\$42,359	\$45,324	\$48,497	\$51,892	\$0	\$0	\$0	\$0	\$0											
143	Benefits	DirWater	100.00%	20,260	21,678	23,196	24,819	26,557	0	0	0	0	0											
144	Additional Personnel	DirWater	100.00%	0	0	0	0	0	0	0	0	0	0											
145	Legal Services	DirWater	100.00%	5,000	5,125	5,253	5,384	5,519	0	0	0	0	0											
146	Professional Services	DirWater	100.00%	204,900	210,023	215,273	220,655	226,171	0	0	0	0	0											
147	Other Contracted Services	DirWater	100.00%	76,500	78,413	80,373	82,382	84,442	0	0	0	0	0											
148	Travel and Per Diem	DirWater	100.00%	4,000	4,100	4,203	4,308	4,415	0	0	0	0	0											
149	Communication	DirWater	100.00%	30,683	31,450	32,236	33,042	33,868	0	0	0	0	0											
150	Advertising	DirWater	100.00%	1,500	1,515	1,530	1,545	1,561	0	0	0	0	0											
151	Freight and Postage	DirWater	100.00%	1,500	1,538	1,576	1,615	1,656	0	0	0	0	0											
152	Electric	DirWater	100.00%	35,000	36,400	37,898	39,447	41,025	0	0	0	0	0											
153	Trash, Garbage & Sludge Removal	DirWater	100.00%	50,000	52,000	54,140	56,353	58,608	0	0	0	0	0											
154	Land, Building, Parking Rental	DirWater	100.00%	250	250	250	250	250	0	0	0	0	0											
155	Equipment Rental	DirWater	100.00%	1,500	1,538	1,576	1,615	1,656	0	0	0	0	0											

Table 3-3

Lee County, Florida
Water and Wastewater System Rate Study

Allocation of Utility Operating Expenses to Individual Systems

Line No.	Description	Reference	Allocation to Water System						Allocation to Wastewater System						
			Percent Allocation	2002	2003	2004	2005	2006	2002	2003	2004	2005	2006		
156	Self-Insurance Assessment	Dir-Water	100.00%	34,337	36,741	39,312	42,064	45,009	0	0	0	0	0	0	0
157	Insurance and Bonds	Dir-Water	100.00%	32,100	32,100	34,347	36,751	39,324	0	0	0	0	0	0	0
158	Repair and Maintenance	Dir-Water	100.00%	113,548	119,225	125,187	131,446	138,018	0	0	0	0	0	0	0
159	Printing	Dir-Water	100.00%	2,000	2,050	2,101	2,154	2,208	0	0	0	0	0	0	0
160	Other Administrative Fees	Dir-Water	100.00%	333,493	341,830	350,376	359,135	368,114	0	0	0	0	0	0	0
161	Indirect Cost	Dir-Water	100.00%	212,000	217,300	222,733	228,301	234,008	0	0	0	0	0	0	0
162	General Office Supplies	Dir-Water	100.00%	2,500	2,563	2,627	2,692	2,760	0	0	0	0	0	0	0
163	Operating Supplies	Dir-Water	100.00%	37,816	39,329	40,947	42,621	44,326	0	0	0	0	0	0	0
164	Subscriptions & Memberships	Dir-Water	100.00%	1,100	1,111	1,122	1,133	1,145	0	0	0	0	0	0	0
165	Capital Outlay - Furniture and Equipm	Dir-Water	100.00%	0	0	0	0	0	0	0	0	0	0	0	0
166	Total			1,237,475	1,278,636	1,321,579	1,366,213	1,412,531	0	0	0	0	0	0	0
Water Distribution (# 53602)															
167	Salaries and Wages	Dir-Water	100.00%	\$523,562	\$560,211	\$599,426	\$641,386	\$686,283	\$0	\$0	\$0	\$0	\$0	\$0	\$0
168	Benefits	Dir-Water	100.00%	178,365	190,851	204,210	218,505	233,800	0	0	0	0	0	0	0
169	Additional Personnel	Dir-Water	100.00%	0	0	0	0	0	0	0	0	0	0	0	0
170	Professional Services	Dir-Water	100.00%	42,000	43,050	44,126	45,229	46,360	0	0	0	0	0	0	0
171	Other Contracted Services	Dir-Water	100.00%	253,000	259,325	265,808	272,453	279,265	0	0	0	0	0	0	0
172	Travel and Per Diem	Dir-Water	100.00%	4,000	4,100	4,203	4,308	4,415	0	0	0	0	0	0	0
173	Communication	Dir-Water	100.00%	5,000	5,125	5,253	5,384	5,519	0	0	0	0	0	0	0
174	Freight and Postage	Dir-Water	100.00%	2,000	2,050	2,101	2,154	2,208	0	0	0	0	0	0	0
175	Electric	Dir-Water	100.00%	160,000	166,400	173,247	180,331	187,544	0	0	0	0	0	0	0
176	Trash, Garbage & Sludge Removal	Dir-Water	100.00%	3,600	3,744	3,898	4,057	4,220	0	0	0	0	0	0	0
177	Equipment Rental	Dir-Water	100.00%	2,000	2,050	2,101	2,154	2,208	0	0	0	0	0	0	0
178	Repair and Maintenance	Dir-Water	100.00%	194,500	204,225	214,436	225,158	236,416	0	0	0	0	0	0	0
179	Printing	Dir-Water	100.00%	3,000	3,075	3,152	3,231	3,311	0	0	0	0	0	0	0
180	Other Administrative Fees	Dir-Water	100.00%	3,000	3,075	3,152	3,231	3,311	0	0	0	0	0	0	0
181	General Office Supplies	Dir-Water	100.00%	500	513	525	538	552	0	0	0	0	0	0	0
182	Operating Supplies	Dir-Water	100.00%	62,250	64,740	67,404	70,160	72,967	0	0	0	0	0	0	0
183	Subscriptions & Memberships	Dir-Water	100.00%	1,500	1,515	1,530	1,545	1,561	0	0	0	0	0	0	0
184	Capital Outlay - Furniture and Equipm	Dir-Water	100.00%	0	0	0	0	0	0	0	0	0	0	0	0
185	Total			1,438,277	1,514,048	1,594,373	1,679,825	1,769,940	0	0	0	0	0	0	0
Water Production - Olga (# 53601)															
186	Salaries and Wages	Dir-Water	100.00%	\$279,916	\$299,510	\$320,476	\$342,909	\$366,913	\$0	\$0	\$0	\$0	\$0	\$0	\$0
187	Benefits	Dir-Water	100.00%	103,694	110,953	118,719	127,050	135,922	0	0	0	0	0	0	0
188	Additional Personnel	Dir-Water	100.00%	0	0	0	0	0	0	0	0	0	0	0	0
189	Other Contracted Services	Dir-Water	100.00%	11,950	12,249	12,555	12,869	13,191	0	0	0	0	0	0	0
190	Travel and Per Diem	Dir-Water	100.00%	4,000	4,100	4,203	4,308	4,415	0	0	0	0	0	0	0
191	Communication	Dir-Water	100.00%	1,750	1,794	1,839	1,885	1,932	0	0	0	0	0	0	0
192	Advertising	Dir-Water	100.00%	200	205	210	215	221	0	0	0	0	0	0	0
193	Freight and Postage	Dir-Water	100.00%	2,000	2,050	2,101	2,154	2,208	0	0	0	0	0	0	0
194	Electric	Dir-Water	100.00%	165,000	171,600	178,661	185,967	193,405	0	0	0	0	0	0	0
195	Trash, Garbage & Sludge Removal	Dir-Water	100.00%	77,500	80,600	83,916	87,348	90,842	0	0	0	0	0	0	0
196	Repair and Maintenance	Dir-Water	100.00%	113,500	119,175	125,134	131,390	137,960	0	0	0	0	0	0	0
197	Printing	Dir-Water	100.00%	16,000	16,400	16,810	17,230	17,661	0	0	0	0	0	0	0
198	Other Administrative Fees	Dir-Water	100.00%	3,500	3,588	3,677	3,769	3,863	0	0	0	0	0	0	0
199	General Office Supplies	Dir-Water	100.00%	2,500	2,563	2,627	2,692	2,760	0	0	0	0	0	0	0
200	Operating Supplies	Dir-Water	100.00%	365,350	379,964	395,599	411,775	428,246	0	0	0	0	0	0	0
201	Subscriptions & Memberships	Dir-Water	100.00%	1,000	1,010	1,020	1,030	1,041	0	0	0	0	0	0	0
202	Capital Outlay - Furniture and Equipm	Dir-Water	100.00%	0	0	0	0	0	0	0	0	0	0	0	0
203	Total			1,147,860	1,205,759	1,267,546	1,332,571	1,400,578	0	0	0	0	0	0	0

Table 3-3

Lee County, Florida
Water and Wastewater System Rate Study

Allocation of Utility Operating Expenses to Individual Systems

Line No.	Description	Reference	Allocation to Water System				Allocation to Wastewater System								
			2002	2003	2004	2005	2006	2002	2003	2004	2005	2006			
204	Water Production - Corkscrew (# 53618)														
205	Salaries and Wages	DirWater	\$262,279	\$280,659	\$300,283	\$321,303	\$343,794	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
206	Benefits	DirWater	89,732	96,013	102,734	109,926	117,620	0	0	0	0	0	0	0	0
207	Additional Personnel	DirWater	0	0	0	0	0	0	0	0	0	0	0	0	0
208	Professional Services	DirWater	56,000	57,400	58,835	60,306	61,814	0	0	0	0	0	0	0	0
209	Other Contracted Services	DirWater	11,700	11,993	12,292	12,600	12,915	0	0	0	0	0	0	0	0
210	Travel and Per Diem	DirWater	4,000	4,100	4,203	4,308	4,415	0	0	0	0	0	0	0	0
211	Communication	DirWater	200	205	210	215	221	0	0	0	0	0	0	0	0
212	Advertising	DirWater	2,000	2,050	2,101	2,154	2,208	0	0	0	0	0	0	0	0
213	Freight and Postage	DirWater	390,500	406,120	422,831	440,121	457,726	0	0	0	0	0	0	0	0
214	Electric	DirWater	113,500	119,175	124,134	131,390	137,960	0	0	0	0	0	0	0	0
215	Repair and Maintenance	DirWater	26,000	26,650	27,316	27,999	28,699	0	0	0	0	0	0	0	0
216	Printing	DirWater	3,500	3,588	3,677	3,769	3,863	0	0	0	0	0	0	0	0
217	Other Administrative Fees	DirWater	2,500	2,563	2,627	2,692	2,760	0	0	0	0	0	0	0	0
218	General Office Supplies	DirWater	395,350	411,164	428,082	445,587	463,411	0	0	0	0	0	0	0	0
219	Operating Supplies	DirWater	1,000	1,010	1,020	1,030	1,041	0	0	0	0	0	0	0	0
220	Subscriptions & Memberships	DirWater	0	0	0	0	0	0	0	0	0	0	0	0	0
221	Capital Outlay - Furniture and Equipment	DirWater	1,360,011	1,424,462	1,493,184	1,565,284	1,640,377	0	0	0	0	0	0	0	0
222	Water Production - Waterway (# 53625)														
223	Salaries and Wages	DirWater	\$191,547	\$204,955	\$219,302	\$234,653	\$251,079	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
224	Benefits	DirWater	69,443	74,304	79,505	85,071	91,026	0	0	0	0	0	0	0	0
225	Additional Personnel	DirWater	0	0	0	0	0	0	0	0	0	0	0	0	0
226	Other Contracted Services	DirWater	6,500	6,663	6,829	7,000	7,175	0	0	0	0	0	0	0	0
227	Travel and Per Diem	DirWater	4,000	4,100	4,203	4,308	4,415	0	0	0	0	0	0	0	0
228	Communication	DirWater	1,750	1,794	1,839	1,885	1,932	0	0	0	0	0	0	0	0
229	Advertising	DirWater	200	205	210	215	221	0	0	0	0	0	0	0	0
230	Freight and Postage	DirWater	2,000	2,050	2,101	2,154	2,208	0	0	0	0	0	0	0	0
231	Electric	DirWater	95,700	99,528	103,623	107,861	112,175	0	0	0	0	0	0	0	0
232	Trash, Garbage & Sludge Removal	DirWater	52,500	54,600	56,847	59,171	61,538	0	0	0	0	0	0	0	0
233	Repair and Maintenance	DirWater	88,500	92,925	97,571	102,450	107,572	0	0	0	0	0	0	0	0
234	Printing	DirWater	6,000	6,150	6,304	6,461	6,623	0	0	0	0	0	0	0	0
235	Other Administrative Fees	DirWater	2,500	2,563	2,627	2,692	2,760	0	0	0	0	0	0	0	0
236	General Office Supplies	DirWater	2,500	2,563	2,627	2,692	2,760	0	0	0	0	0	0	0	0
237	Operating Supplies	DirWater	95,350	99,164	103,244	107,466	111,765	0	0	0	0	0	0	0	0
238	Subscriptions & Memberships	DirWater	1,000	1,010	1,020	1,030	1,041	0	0	0	0	0	0	0	0
239	Capital Outlay - Furniture and Equipment	DirWater	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total		619,490	652,573	687,852	725,109	764,287	0	0	0	0	0	0	0	0
240	Water Production - College Parkway (# 53626)														
241	Electric	DirWater	\$44,000	\$45,760	\$47,643	\$49,591	\$51,575	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
242	Trash, Garbage & Sludge Removal	DirWater	12,500	13,000	13,555	14,088	14,652	0	0	0	0	0	0	0	0
243	Repair and Maintenance	DirWater	53,500	56,175	58,984	61,933	65,030	0	0	0	0	0	0	0	0
244	Printing	DirWater	5,050	5,176	5,306	5,438	5,574	0	0	0	0	0	0	0	0
245	Operating Supplies	DirWater	22,500	23,400	24,363	25,359	26,373	0	0	0	0	0	0	0	0
246	Subscriptions & Memberships	DirWater	500	505	510	515	520	0	0	0	0	0	0	0	0
	Total		138,050	144,016	150,340	156,925	163,724	0	0	0	0	0	0	0	0
247	Water Production - Green Meadows (# 53627)														
248	Salaries and Wages	DirWater	\$260,833	\$279,091	\$298,628	\$319,532	\$341,899	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
249	Benefits	DirWater	92,634	99,118	106,057	113,481	121,424	0	0	0	0	0	0	0	0
250	Additional Personnel	DirWater	0	0	0	0	0	0	0	0	0	0	0	0	0
251	Professional Services	DirWater	66,000	67,650	69,341	71,075	72,852	0	0	0	0	0	0	0	0
252	Other Contracted Services	DirWater	11,750	12,044	12,345	12,653	12,970	0	0	0	0	0	0	0	0
253	Travel and Per Diem	DirWater	4,000	4,100	4,203	4,308	4,415	0	0	0	0	0	0	0	0
254	Communication	DirWater	1,750	1,794	1,839	1,885	1,932	0	0	0	0	0	0	0	0
255	Advertising	DirWater	200	205	210	215	221	0	0	0	0	0	0	0	0
256	Freight and Postage	DirWater	2,000	2,050	2,101	2,154	2,208	0	0	0	0	0	0	0	0
257	Electric	DirWater	418,000	434,720	452,608	471,115	489,960	0	0	0	0	0	0	0	0
258	Trash, Garbage & Sludge Removal	DirWater	181,500	188,760	196,527	204,563	212,746	0	0	0	0	0	0	0	0
	Repair and Maintenance	DirWater	101,000	106,050	111,353	116,920	122,766	0	0	0	0	0	0	0	0

Table 3-3
Lee County, Florida
Water and Wastewater System Rate Study

Allocation of Utility Operating Expenses to Individual Systems

Line No.	Description	Reference	Percent Allocation					Allocation to Water System					Allocation to Wastewater System				
			Water System	Wastewater System	2002	2003	2004	2005	2006	2002	2003	2004	2005	2006			
259	Printing	DirWater	100.00%	0.00%	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
260	Other Administrative Fees	DirWater	100.00%	0.00%	26,000	26,650	27,316	27,999	28,699	0	0	0	0	0	0		
261	General Office Supplies	DirWater	100.00%	0.00%	3,500	3,588	3,677	3,769	3,863	0	0	0	0	0	0		
262	Operating Supplies	DirWater	100.00%	0.00%	2,500	2,563	2,627	2,692	2,760	0	0	0	0	0	0		
263	Subscriptions & Memberships	DirWater	100.00%	0.00%	365,350	379,964	395,599	411,775	428,246	0	0	0	0	0	0		
264	Capital Outlay - Furniture and Equipments	DirWater	100.00%	0.00%	1,000	1,010	1,020	1,030	1,041	0	0	0	0	0	0		
265	Total				1,538,017	1,609,356	1,685,449	1,765,166	1,848,000	0	0	0	0	0	0		
Sewer Operations (# 53606)																	
266	Salaries and Wages	DirSewer	0.00%	100.00%	\$0	\$0	\$0	\$0	\$0	\$38,438	\$41,129	\$44,008	\$47,088	\$50,384			
267	Benefits	DirSewer	0.00%	100.00%	0	0	0	0	0	18,987	20,316	21,738	23,260	24,888			
268	Additional Personnel	DirSewer	0.00%	100.00%	0	0	0	0	0	0	0	0	0	0			
269	Legal Services	DirSewer	0.00%	100.00%	0	0	0	0	0	5,000	5,125	5,253	5,384	5,519			
270	Professional Services	DirSewer	0.00%	100.00%	0	0	0	0	0	229,900	235,648	241,539	247,577	253,767			
271	Other Contracted Services	DirSewer	0.00%	100.00%	0	0	0	0	0	101,500	104,038	106,638	109,304	112,037			
272	Travel and Per Diem	DirSewer	0.00%	100.00%	0	0	0	0	0	4,000	4,100	4,203	4,308	4,415			
273	Communication	DirSewer	0.00%	100.00%	0	0	0	0	0	129,683	132,925	136,248	139,654	143,146			
274	Advertising	DirSewer	0.00%	100.00%	0	0	0	0	0	1,500	1,538	1,576	1,615	1,656			
275	Freight and Postage	DirSewer	0.00%	100.00%	0	0	0	0	0	1,500	1,538	1,576	1,615	1,656			
276	Electric	DirSewer	0.00%	100.00%	0	0	0	0	0	60,000	62,400	64,861	67,404	70,100			
277	Trash, Garbage & Sludge Removal	DirSewer	0.00%	100.00%	0	0	0	0	0	50,000	52,000	54,051	56,170	58,417			
278	Land, Building, Parking Rental	DirSewer	0.00%	100.00%	0	0	0	0	0	250	250	250	250	250			
279	Equipment Rental	DirSewer	0.00%	100.00%	0	0	0	0	0	1,500	1,538	1,576	1,615	1,656			
280	Self-Insurance Assessment	DirSewer	0.00%	100.00%	0	0	0	0	0	33,585	35,936	38,451	41,143	44,023			
281	Insurance and Bonds	DirSewer	0.00%	100.00%	0	0	0	0	0	30,000	32,100	34,347	36,751	39,324			
282	Repair and Maintenance	DirSewer	0.00%	100.00%	0	0	0	0	0	7,200	7,560	7,938	8,335	8,752			
283	Printing	DirSewer	0.00%	100.00%	0	0	0	0	0	2,000	2,050	2,101	2,154	2,208			
284	Other Administrative Fees	DirSewer	0.00%	100.00%	0	0	0	0	0	333,492	341,829	350,375	359,134	368,113			
285	Indirect Cost	DirSewer	0.00%	100.00%	0	0	0	0	0	212,000	217,300	222,733	228,301	234,008			
286	General Office Supplies	DirSewer	0.00%	100.00%	0	0	0	0	0	2,500	2,563	2,627	2,692	2,760			
287	Operating Supplies	DirSewer	0.00%	100.00%	0	0	0	0	0	30,825	32,058	33,322	34,614	36,014			
288	Subscriptions & Memberships	DirSewer	0.00%	100.00%	0	0	0	0	0	1,100	1,111	1,122	1,133	1,145			
289	Capital Outlay - Furniture and Equipment	DirSewer	0.00%	100.00%	0	0	0	0	0	0	0	0	0	0			
290	Total				0	0	0	0	0	1,294,960	1,335,049	1,376,532	1,419,518	1,464,235			
Wastewater Collection (# 53604)																	
291	Salaries and Wages	DirSewer	0.00%	100.00%	\$0	\$0	\$0	\$0	\$0	\$641,481	\$686,385	\$734,432	\$785,842	\$840,851			
292	Benefits	DirSewer	0.00%	100.00%	0	0	0	0	0	233,387	249,724	267,205	285,909	305,923			
293	Additional Personnel	DirSewer	0.00%	100.00%	0	0	0	0	0	0	0	0	0	0			
294	Legal Services	DirSewer	0.00%	100.00%	0	0	0	0	0	1,000	1,025	1,051	1,077	1,104			
295	Professional Services	DirSewer	0.00%	100.00%	0	0	0	0	0	40,000	41,000	42,025	43,076	44,153			
296	Other Contracted Services	DirSewer	0.00%	100.00%	0	0	0	0	0	253,600	259,940	266,439	273,099	279,927			
297	Travel and Per Diem	DirSewer	0.00%	100.00%	0	0	0	0	0	6,000	6,150	6,304	6,461	6,623			
298	Communication	DirSewer	0.00%	100.00%	0	0	0	0	0	1,000	1,025	1,051	1,077	1,104			
299	Advertising	DirSewer	0.00%	100.00%	0	0	0	0	0	9,250	9,481	9,718	9,961	10,210			
300	Electric	DirSewer	0.00%	100.00%	0	0	0	0	0	1,000	1,025	1,051	1,077	1,104			
301	Water and Sewer	DirSewer	0.00%	100.00%	0	0	0	0	0	250,000	260,000	270,254	280,849	292,083			
302	Trash, Garbage & Sludge Removal	DirSewer	0.00%	100.00%	0	0	0	0	0	40,000	41,600	43,241	44,936	46,733			
303	Equipment Rental	DirSewer	0.00%	100.00%	0	0	0	0	0	30,000	31,280	32,630	33,702	35,050			
304	Repair and Maintenance	DirSewer	0.00%	100.00%	0	0	0	0	0	5,000	5,125	5,253	5,384	5,519			
305	Printing	DirSewer	0.00%	100.00%	0	0	0	0	0	1,005,317	1,055,583	1,108,362	1,163,780	1,221,969			
306	Other Administrative Fees	DirSewer	0.00%	100.00%	0	0	0	0	0	1,000	1,025	1,051	1,077	1,104			
307	General Office Supplies	DirSewer	0.00%	100.00%	0	0	0	0	0	3,000	3,075	3,152	3,231	3,311			
308	Operating Supplies	DirSewer	0.00%	100.00%	0	0	0	0	0	1,000	1,025	1,051	1,077	1,104			
309	Subscriptions & Memberships	DirSewer	0.00%	100.00%	0	0	0	0	0	686,050	713,492	741,630	770,705	801,533			
310	Capital Outlay - Furniture and Equipment	DirSewer	0.00%	100.00%	0	0	0	0	0	3,600	3,636	3,672	3,709	3,746			
311	Total				0	0	0	0	0	3,210,685	3,370,491	3,538,318	3,714,951	3,902,046			

Table 3-3
Lee County, Florida
Water and Wastewater System Rate Study
Allocation of Utility Operating Expenses to Individual Systems

Line No.	Description	Reference	Percent Allocation					Allocation to Water System					Allocation to Wastewater System				
			Water System	Wastewater System	2002	2003	2004	2005	2006	2002	2003	2004	2005	2006			
Wastewater Treatment - Beach (# 53605)																	
312	Salaries and Wages	DirSewer	0.00%	100.00%	\$0	\$0	\$0	\$440,518	\$471,354	\$504,349	\$539,653	\$577,429					
313	Benefits	DirSewer	0.00%	100.00%	0	0	138,527	148,224	158,600	169,702	181,581						
314	Additional Personnel	DirSewer	0.00%	100.00%	0	0	0	0	0	0	0						
315	Professional Services	DirSewer	0.00%	100.00%	0	0	40,000	41,000	42,025	43,076	44,153						
316	Other Contracted Services	DirSewer	0.00%	100.00%	0	0	18,000	18,450	18,911	19,384	19,869						
317	Travel and Per Diem	DirSewer	0.00%	100.00%	0	0	4,500	4,613	4,728	4,846	4,967						
318	Communication	DirSewer	0.00%	100.00%	0	0	2,000	2,050	2,101	2,154	2,208						
319	Advertising	DirSewer	0.00%	100.00%	0	0	200	205	210	215	221						
320	Freight and Postage	DirSewer	0.00%	100.00%	0	0	350,000	364,000	378,355	393,188	408,916						
321	Electric	DirSewer	0.00%	100.00%	0	0	1,200	1,230	1,261	1,292	1,325						
322	Water and Sewer	DirSewer	0.00%	100.00%	0	0	62,500	63,000	63,563	64,127	64,701						
323	Trash, Garbage & Sludge Removal	DirSewer	0.00%	100.00%	0	0	5,000	5,125	5,253	5,384	5,519						
324	Equipment Rental	DirSewer	0.00%	100.00%	0	0	145,250	152,513	160,138	168,145	176,552						
325	Repair and Maintenance	DirSewer	0.00%	100.00%	0	0	2,000	2,050	2,101	2,154	2,208						
326	Printing	DirSewer	0.00%	100.00%	0	0	3,000	3,075	3,152	3,231	3,311						
327	Other Administrative Fees	DirSewer	0.00%	100.00%	0	0	2,500	2,563	2,627	2,692	2,760						
328	General Office Supplies	DirSewer	0.00%	100.00%	0	0	157,000	163,280	169,719	176,373	183,428						
329	Operating Supplies	DirSewer	0.00%	100.00%	0	0	1,000	1,010	1,020	1,030	1,041						
330	Subscriptions & Memberships	DirSewer	0.00%	100.00%	0	0	0	0	0	0	0						
331	Capital Outlay - Furniture and Equipm	DirSewer	0.00%	100.00%	0	0	1,373,395	1,445,946	1,522,323	1,602,947	1,688,726						
332	Total				0	0											
Wastewater Treatment - Waterway (# 53623)																	
333	Salaries and Wages	DirSewer	0.00%	100.00%	\$0	\$0	\$188,255	\$201,411	\$215,510	\$230,596	\$246,738						
334	Benefits	DirSewer	0.00%	100.00%	0	0	83,980	89,859	96,149	102,879	110,081						
335	Additional Personnel	DirSewer	0.00%	100.00%	0	0	0	0	0	0	0						
336	Professional Services	DirSewer	0.00%	100.00%	0	0	20,000	20,500	21,013	21,538	22,076						
337	Other Contracted Services	DirSewer	0.00%	100.00%	0	0	8,250	8,456	8,668	8,884	9,106						
338	Travel and Per Diem	DirSewer	0.00%	100.00%	0	0	4,500	4,613	4,728	4,846	4,967						
339	Communication	DirSewer	0.00%	100.00%	0	0	1,500	1,538	1,576	1,615	1,656						
340	Advertising	DirSewer	0.00%	100.00%	0	0	100	103	105	108	110						
341	Freight and Postage	DirSewer	0.00%	100.00%	0	0	200	205	210	215	221						
342	Electric	DirSewer	0.00%	100.00%	0	0	126,500	131,560	136,748	142,109	147,794						
343	Water and Sewer	DirSewer	0.00%	100.00%	0	0	1,200	1,230	1,261	1,292	1,325						
344	Trash, Garbage & Sludge Removal	DirSewer	0.00%	100.00%	0	0	72,500	75,400	78,374	81,416	84,704						
345	Equipment Rental	DirSewer	0.00%	100.00%	0	0	500	513	525	538	552						
346	Repair and Maintenance	DirSewer	0.00%	100.00%	0	0	89,750	94,238	98,949	103,897	109,092						
347	Printing	DirSewer	0.00%	100.00%	0	0	2,000	2,050	2,101	2,154	2,208						
348	Other Administrative Fees	DirSewer	0.00%	100.00%	0	0	3,000	3,075	3,152	3,231	3,311						
349	General Office Supplies	DirSewer	0.00%	100.00%	0	0	1,500	1,538	1,576	1,615	1,656						
350	Operating Supplies	DirSewer	0.00%	100.00%	0	0	67,300	69,992	72,752	75,604	78,629						
351	Subscriptions & Memberships	DirSewer	0.00%	100.00%	0	0	600	606	612	618	624						
352	Capital Outlay - Furniture and Equipm	DirSewer	0.00%	100.00%	0	0	671,615	706,884	744,009	783,187	824,849						
353	Total				0	0											
Wastewater Treatment - Fiesta Village (# 53624)																	
354	Salaries and Wages	DirSewer	0.00%	100.00%	\$0	\$0	\$287,158	\$307,259	\$328,767	\$351,781	\$376,406						
355	Benefits	DirSewer	0.00%	100.00%	0	0	86,619	92,682	99,170	106,112	113,540						
356	Additional Personnel	DirSewer	0.00%	100.00%	0	0	0	0	0	0	0						
357	Professional Services	DirSewer	0.00%	100.00%	0	0	10,000	10,250	10,500	10,769	11,038						
358	Other Contracted Services	DirSewer	0.00%	100.00%	0	0	12,800	13,120	13,448	13,784	14,129						
359	Travel and Per Diem	DirSewer	0.00%	100.00%	0	0	4,500	4,613	4,728	4,846	4,967						
360	Communication	DirSewer	0.00%	100.00%	0	0	2,000	2,050	2,101	2,154	2,208						
361	Advertising	DirSewer	0.00%	100.00%	0	0	200	205	210	215	221						
362	Freight and Postage	DirSewer	0.00%	100.00%	0	0	200	205	210	215	221						
363	Electric	DirSewer	0.00%	100.00%	0	0	172,500	179,400	186,475	193,786	201,337						
364	Water and Sewer	DirSewer	0.00%	100.00%	0	0	1,200	1,230	1,261	1,292	1,325						
365	Trash, Garbage & Sludge Removal	DirSewer	0.00%	100.00%	0	0	83,000	86,320	89,724	93,242	96,971						
366	Equipment Rental	DirSewer	0.00%	100.00%	0	0	5,000	5,125	5,253	5,384	5,519						
367	Repair and Maintenance	DirSewer	0.00%	100.00%	0	0	135,250	142,013	149,113	156,569	164,397						
368	Printing	DirSewer	0.00%	100.00%	0	0	2,000	2,050	2,101	2,154	2,208						

Table 3-3

Lee County, Florida
Water and Wastewater System Rate Study

Allocation of Utility Operating Expenses to Individual Systems

Line No.	Description	Percent Allocation		Allocation to Water System						Allocation to Wastewater System					
		Water System	Wastewater System	2002	2003	2004	2005	2006	2002	2003	2004	2005	2006		
Wastewater Treatment - Pack Plants (# 53652)															
416	Professional Services	0.00%	100.00%	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
417	Other Contracted Services	0.00%	100.00%	0	0	0	0	0	0	0	0	0	0	0	
418	Travel and Per Diem	0.00%	100.00%	0	0	0	0	0	0	0	0	0	0	0	
419	Electric	0.00%	100.00%	0	0	0	0	0	0	0	0	0	0	0	
420	Water and Sewer	0.00%	100.00%	0	0	0	0	0	0	0	0	0	0	0	
421	Trash, Garbage & Sludge Removal	0.00%	100.00%	0	0	0	0	0	0	0	0	0	0	0	
422	Repair and Maintenance	0.00%	100.00%	0	0	0	0	0	0	0	0	0	0	0	
423	Operating Supplies	0.00%	100.00%	0	0	0	0	0	0	0	0	0	0	0	
424	Total			0	0	0	0	0	0	0	0	0	0	0	
Wastewater Treatment Contract (# 53603)															
425	Professional Services	0.00%	100.00%	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
426	Other Contracted Services			0	0	0	0	0	0	0	0	0	0	0	
Property Appraiser (# 51314)															
427	Professional Services	60.66%	39.34%	\$3,033	\$3,109	\$3,187	\$3,266	\$3,348	\$3,430	\$3,516	\$3,603	\$3,690	\$3,777	\$3,864	
428	Total			3,033	3,109	3,187	3,266	3,348	3,430	3,516	3,603	3,690	3,777	3,864	
Non-Departmental (# 51903)															
429	Professional Services	35.99%	64.01%	\$35,990	\$36,890	\$37,812	\$38,757	\$39,726	\$40,716	\$41,726	\$42,756	\$43,806	\$44,876	\$45,966	
430	Other Contracted Services	35.99%	64.01%	35,990	36,890	37,812	38,757	39,726	40,716	41,726	42,756	43,806	44,876	45,966	
431	Contingency	40.34%	59.66%	278,020	293,477	309,938	327,436	346,052	365,766	385,526	405,286	425,046	444,806	464,566	
432	Total			350,000	367,256	385,562	404,951	425,505	446,062	466,712	487,368	508,024	528,680	549,336	
Total County Operations and Maintenance															
433	Total			\$11,398,833	\$11,963,217	\$12,563,112	\$13,196,081	\$13,861,940	\$14,527,800	\$15,193,660	\$15,859,520	\$16,525,380	\$17,191,240	\$17,857,100	

Table 3-4
Lee County, Florida
Water and Wastewater System Rate Study

Five Year Projection of Utility Operating Expenses and Other Revenue

Line No.	Description	2002		Escalation Reference	Fiscal Year Ending September 30,				
		Budget	Adjustments		Adjusted	2003	2004	2005	2006
OPERATING EXPENSES									
Administration (# 53663)									
1	Salaries and Wages	\$342,050	\$0	\$342,050	Labor	\$365,994	\$391,613	\$419,026	\$448,358
2	Benefits	104,299	0	104,299	Labor	111,600	119,412	127,771	136,715
3	Legal Services	7,500	0	7,500	Inflation	7,688	7,880	8,077	8,279
4	Professional Services	126,000	0	126,000	Inflation	129,150	132,379	135,688	139,080
5	Other Contracted Services	60,000	0	60,000	Inflation	61,500	63,038	64,613	66,229
6	Travel and Per Diem	20,400	0	20,400	Inflation	20,910	21,433	21,969	22,518
7	Communication	10,546	0	10,546	Inflation	10,810	11,080	11,357	11,641
8	Advertising	5,000	0	5,000	Inflation	5,125	5,253	5,384	5,519
9	Freight and Postage	2,500	0	2,500	Inflation	2,563	2,627	2,692	2,760
10	Land, Building, Parking Rental	2,250	0	2,250	Constant	2,250	2,250	2,250	2,250
11	Equipment Rental	10,000	0	10,000	Inflation	10,250	10,506	10,769	11,038
12	Self-Insurance Assessment	10,501	0	10,501	Inflation	10,764	11,033	11,308	11,591
13	Repair and Maintenance	21,080	0	21,080	Repair	22,134	23,241	24,403	25,623
14	Printing	1,500	0	1,500	Inflation	1,538	1,576	1,615	1,656
15	Other Administrative Fees	17,000	0	17,000	Inflation	17,425	17,861	18,307	18,765
16	General Office Supplies	3,100	0	3,100	Inflation	3,178	3,257	3,338	3,422
17	Operating Supplies	4,561	0	4,561	Margin	4,607	4,653	4,699	4,746
18	Subscriptions & Memberships	5,700	0	5,700	Margin	5,757	5,815	5,873	5,931
19	Capital Outlay - Furniture and Equipment	10,000	(10,000)	0	Inflation	0	0	0	0
20	Total	\$763,987	(\$10,000)	\$753,987		\$793,239	\$834,904	\$879,140	\$926,120
Water Meter Services (# 53609)									
21	Salaries and Wages	\$416,867	\$0	\$416,867	Labor	\$446,048	\$477,271	\$510,680	\$546,428
22	Benefits	175,774	0	175,774	Labor	188,078	201,244	215,331	230,404
23	Other Contracted Services	9,000	0	9,000	Inflation	9,225	9,456	9,692	9,934
24	Travel and Per Diem	1,700	0	1,700	Inflation	1,743	1,786	1,831	1,876
25	Repair and Maintenance	34,380	0	34,380	Repair	36,099	37,904	39,799	41,789
26	Printing	2,000	0	2,000	Inflation	2,050	2,101	2,154	2,208
27	General Office Supplies	1,500	0	1,500	Inflation	1,538	1,576	1,615	1,656
28	Operating Supplies	56,025	0	56,025	WaterCust	58,266	60,664	63,144	65,670
29	Total	\$697,246	\$0	\$697,246		\$743,046	\$792,001	\$844,246	\$899,965
Billings & Collections (# 53610)									
30	Salaries and Wages	\$598,826	\$0	\$598,826	Labor	\$640,744	\$685,596	\$733,588	\$784,939
31	Benefits	229,353	0	229,353	Labor	245,408	262,586	280,967	300,635
32	Professional Services	252,400	0	252,400	Inflation	258,710	265,178	271,807	278,602
33	Other Contracted Services	189,880	0	189,880	Inflation	194,627	199,493	204,480	209,592
34	Travel and Per Diem	7,500	0	7,500	Inflation	7,688	7,880	8,077	8,279
35	Communication	24,000	0	24,000	Inflation	24,600	25,215	25,845	26,492
36	Freight and Postage	333,000	0	333,000	TotalCust	346,320	360,319	374,795	389,787
37	Electric	26,400	0	26,400	Inflation	27,060	27,737	28,430	29,141
38	Water and Sewer	2,000	0	2,000	Inflation	2,050	2,101	2,154	2,208
39	Trash, Garbage & Sludge Removal	528	0	528	Inflation	541	555	569	583
40	Equipment Rental	8,000	0	8,000	Inflation	8,200	8,405	8,615	8,831
41	Repair and Maintenance	14,420	0	14,420	Repair	15,141	15,898	16,693	17,528
42	Printing	8,000	0	8,000	Inflation	8,200	8,405	8,615	8,831
43	Other Administrative Fees	1,000	0	1,000	Inflation	1,025	1,051	1,077	1,104
44	General Office Supplies	60,200	0	60,200	Inflation	61,705	63,248	64,829	66,450
45	Operating Supplies	9,200	0	9,200	Inflation	9,430	9,666	9,907	10,155
46	Subscriptions & Memberships	250	0	250	Margin	253	255	258	260
47	Capital Outlay - Furniture and Equipment	205,000	(205,000)	0	Inflation	0	0	0	0
48	Total	\$1,969,957	(\$205,000)	\$1,764,957		\$1,851,701	\$1,943,586	\$2,040,705	\$2,143,413
Utilities Engineering (# 53607)									
49	Salaries and Wages	\$518,457	\$0	\$518,457	Labor	\$554,749	\$593,581	\$635,132	\$679,591
50	Benefits	150,886	0	150,886	Labor	161,448	172,749	184,842	197,781
51	Professional Services	150,000	0	150,000	Inflation	153,750	157,594	161,534	165,572
52	Other Contracted Services	30,000	0	30,000	Inflation	30,750	31,519	32,307	33,114
53	Travel and Per Diem	15,000	0	15,000	Inflation	15,375	15,759	16,153	16,557
54	Communication	2,500	0	2,500	Inflation	2,563	2,627	2,692	2,760
55	Freight and Postage	500	0	500	Inflation	513	525	538	552
56	Land, Building, Parking Rental	1,750	0	1,750	Constant	1,750	1,750	1,750	1,750
57	Repair and Maintenance	12,500	0	12,500	Repair	13,125	13,781	14,470	15,194
58	Printing	11,000	0	11,000	Inflation	11,275	11,557	11,846	12,142
59	Other Administrative Fees	10,500	0	10,500	Inflation	10,763	11,032	11,307	11,590
60	General Office Supplies	3,500	0	3,500	Inflation	3,588	3,677	3,769	3,863
61	Operating Supplies	3,950	0	3,950	Inflation	4,049	4,150	4,254	4,360
62	Subscriptions & Memberships	3,300	0	3,300	Margin	3,333	3,366	3,400	3,434
63	Capital Outlay - Furniture and Equipment	20,000	(20,000)	0	Inflation	0	0	0	0
64	Total	\$933,843	(\$20,000)	\$913,843		\$967,029	\$1,023,668	\$1,083,995	\$1,148,260

Table 3-4
Lee County, Florida
Water and Wastewater System Rate Study

Five Year Projection of Utility Operating Expenses and Other Revenue

Line No.	Description	2002		Escalation Reference	Fiscal Year Ending September 30,				
		Budget	Adjustments		Adjusted	2003	2004	2005	2006
Construction / Utility Inspections (# 54119)									
65	Salaries and Wages	\$247,757	\$0	\$247,757	Labor	\$265,100	\$283,657	\$303,513	\$324,759
66	Benefits	82,655	0	82,655	Labor	88,441	94,632	101,256	108,344
67	Professional Services	20,916	0	20,916	Inflation	21,439	21,975	22,524	23,087
68	Other Contracted Services	500	0	500	Inflation	513	525	538	552
69	Travel and Per Diem	1,100	0	1,100	Inflation	1,128	1,156	1,185	1,214
70	Communication	10,546	0	10,546	Inflation	10,810	11,080	11,357	11,641
71	Self-Insurance Assessment	924	0	924	Insurance	989	1,058	1,132	1,211
72	Repair and Maintenance	17,411	0	17,411	Repair	18,282	19,196	20,155	21,163
73	Other Administrative Fees	47,239	0	47,239	Inflation	48,420	49,630	50,871	52,143
74	General Office Supplies	200	0	200	Inflation	205	210	215	221
75	Operating Supplies	18,200	0	18,200	Inflation	18,655	19,121	19,599	20,089
76	Total	\$447,448	\$0	\$447,448		\$473,980	\$502,240	\$532,346	\$564,425
Maintenance Department (# 53614)									
77	Salaries and Wages	\$381,505	\$0	\$381,505	Labor	\$408,210	\$436,785	\$467,360	\$500,075
78	Benefits	145,219	0	145,219	Labor	155,384	166,261	177,900	190,352
79	Professional Services	30,000	0	30,000	Inflation	30,750	31,519	32,307	33,114
80	Other Contracted Services	205,250	0	205,250	Inflation	210,381	215,641	221,032	226,558
81	Travel and Per Diem	3,460	0	3,460	Inflation	3,547	3,635	3,726	3,819
82	Communication	3,500	0	3,500	Inflation	3,588	3,677	3,769	3,863
83	Freight and Postage	500	0	500	Inflation	513	525	538	552
84	Electric	3,000	0	3,000	Inflation	3,075	3,152	3,231	3,311
85	Water and Sewer	1,200	0	1,200	Inflation	1,230	1,261	1,292	1,325
86	Trash, Garbage & Sludge Removal	1,200	0	1,200	Inflation	1,230	1,261	1,292	1,325
87	Equipment Rental	500	0	500	Inflation	513	525	538	552
88	Repair and Maintenance	123,260	0	123,260	Repair	129,423	135,894	142,689	149,823
89	Printing	1,000	0	1,000	Inflation	1,025	1,051	1,077	1,104
90	Other Administrative Fees	1,250	0	1,250	Inflation	1,281	1,313	1,346	1,380
91	General Office Supplies	200	0	200	Inflation	205	210	215	221
92	Operating Supplies	35,200	0	35,200	Inflation	36,080	36,982	37,907	38,854
93	Subscriptions & Memberships	1,000	0	1,000	Margin	1,010	1,020	1,030	1,041
94	Capital Outlay - Furniture and Equipment	3,000	(3,000)	0	Inflation	0	0	0	0
95	Total	\$940,244	(\$3,000)	\$937,244		\$987,444	\$1,040,712	\$1,097,249	\$1,157,269
Electronics Department (# 53615)									
96	Salaries and Wages	\$206,066	\$0	\$206,066	Labor	\$220,491	\$235,925	\$252,440	\$270,110
97	Benefits	71,295	0	71,295	Labor	76,286	81,626	87,339	93,453
98	Professional Services	35,000	0	35,000	Inflation	35,875	36,772	37,691	38,633
99	Other Contracted Services	25,500	0	25,500	Inflation	26,138	26,791	27,461	28,147
100	Travel and Per Diem	2,500	0	2,500	Inflation	2,563	2,627	2,692	2,760
101	Communication	3,150	0	3,150	Inflation	3,229	3,309	3,392	3,477
102	Freight and Postage	500	0	500	Inflation	513	525	538	552
103	Electric	3,000	0	3,000	Inflation	3,075	3,152	3,231	3,311
104	Water and Sewer	1,200	0	1,200	Inflation	1,230	1,261	1,292	1,325
105	Trash, Garbage & Sludge Removal	1,200	0	1,200	Inflation	1,230	1,261	1,292	1,325
106	Equipment Rental	500	0	500	Inflation	513	525	538	552
107	Repair and Maintenance	36,700	0	36,700	Repair	38,535	40,462	42,485	44,609
108	Printing	400	0	400	Inflation	410	420	431	442
109	Other Administrative Fees	300	0	300	Inflation	308	315	323	331
110	General Office Supplies	200	0	200	Inflation	205	210	215	221
111	Operating Supplies	17,800	0	17,800	Inflation	18,245	18,701	19,169	19,648
112	Subscriptions & Memberships	700	0	700	Margin	707	714	721	728
113	Capital Outlay - Furniture and Equipment	3,000	(3,000)	0	Inflation	0	0	0	0
114	Total	\$409,011	(\$3,000)	\$406,011		\$429,550	\$454,596	\$481,251	\$509,624
Support Services (# 53616)									
115	Salaries and Wages	\$337,740	\$0	\$337,740	Labor	\$361,382	\$386,679	\$413,746	\$442,708
116	Benefits	127,573	0	127,573	Labor	136,503	146,058	156,282	167,222
117	Professional Services	15,000	0	15,000	Inflation	15,375	15,759	16,153	16,557
118	Other Contracted Services	32,000	0	32,000	Inflation	32,800	33,620	34,461	35,322
119	Travel and Per Diem	3,250	0	3,250	Inflation	3,331	3,415	3,500	3,587
120	Communication	12,500	0	12,500	Inflation	12,813	13,133	13,461	13,798
121	Freight and Postage	3,000	0	3,000	Inflation	3,075	3,152	3,231	3,311
122	Electric	18,000	0	18,000	Inflation	18,450	18,911	19,384	19,869
123	Water and Sewer	2,000	0	2,000	Inflation	2,050	2,101	2,154	2,208
124	Trash, Garbage & Sludge Removal	3,000	0	3,000	Inflation	3,075	3,152	3,231	3,311
125	Equipment Rental	10,000	0	10,000	Inflation	10,250	10,506	10,769	11,038
126	Repair and Maintenance	98,000	0	98,000	Repair	102,900	108,045	113,447	119,120
127	Printing	3,500	0	3,500	Inflation	3,588	3,677	3,769	3,863
128	Other Administrative Fees	2,750	0	2,750	Inflation	2,819	2,889	2,961	3,035
129	General Office Supplies	3,250	0	3,250	Inflation	3,331	3,415	3,500	3,587
130	Operating Supplies	35,250	0	35,250	Inflation	36,131	37,035	37,960	38,909
131	Subscriptions & Memberships	750	0	750	Margin	758	765	773	780
132	Capital Outlay - Furniture and Equipment	5,000	(5,000)	0	Inflation	0	0	0	0
133	Total	\$712,563	(\$5,000)	\$707,563		\$748,630	\$792,312	\$838,782	\$888,228

Table 3-4
Lee County, Florida
Water and Wastewater System Rate Study

Five Year Projection of Utility Operating Expenses and Other Revenue

Line No.	Description	2002		Escalation Reference	Fiscal Year Ending September 30,				
		Budget	Adjustments		Adjusted	2003	2004	2005	2006
Water Operations (# 53662)									
134	Salaries and Wages	\$39,588	\$0	\$39,588	Labor	\$42,359	\$45,324	\$48,497	\$51,892
135	Benefits	20,260	0	20,260	Labor	21,678	23,196	24,819	26,557
136	Legal Services	5,000	0	5,000	Inflation	5,125	5,253	5,384	5,519
137	Professional Services	204,900	0	204,900	Inflation	210,023	215,273	220,655	226,171
138	Other Contracted Services	76,500	0	76,500	Inflation	78,413	80,373	82,382	84,442
139	Travel and Per Diem	4,000	0	4,000	Inflation	4,100	4,203	4,308	4,415
140	Communication	30,683	0	30,683	Inflation	31,450	32,236	33,042	33,868
141	Advertising	1,500	0	1,500	Margin	1,515	1,530	1,545	1,561
142	Freight and Postage	1,500	0	1,500	Inflation	1,538	1,576	1,615	1,656
143	Electric	35,000	0	35,000	WaterCust	36,400	37,898	39,447	41,025
144	Trash, Garbage & Sludge Removal	50,000	0	50,000	WaterCust	52,000	54,140	56,353	58,608
145	Land, Building, Parking Rental	250	0	250	Constant	250	250	250	250
146	Equipment Rental	1,500	0	1,500	Inflation	1,538	1,576	1,615	1,656
147	Self-Insurance Assessment	34,337	0	34,337	Insurance	36,741	39,312	42,064	45,009
148	Insurance and Bonds	30,000	0	30,000	Insurance	32,100	34,347	36,751	39,324
149	Repair and Maintenance	113,548	0	113,548	Repair	119,225	125,187	131,446	138,018
150	Printing	2,000	0	2,000	Inflation	2,050	2,101	2,154	2,208
151	Other Administrative Fees	333,493	0	333,493	Inflation	341,830	350,376	359,135	368,114
152	Indirect Cost	212,000	0	212,000	Inflation	217,300	222,733	228,301	234,008
153	General Office Supplies	2,500	0	2,500	Inflation	2,563	2,627	2,692	2,760
154	Operating Supplies	37,816	0	37,816	WaterCust	39,329	40,947	42,621	44,326
155	Subscriptions & Memberships	1,100	0	1,100	Margin	1,111	1,122	1,133	1,145
156	Capital Outlay - Furniture and Equipment	50,000	(50,000)	0	Inflation	0	0	0	0
157	Total	\$1,287,475	(\$50,000)	\$1,237,475		\$1,278,636	\$1,321,579	\$1,366,213	\$1,412,531
Water Distribution (# 53602)									
158	Salaries and Wages	\$523,562	\$0	\$523,562	Labor	\$560,211	\$599,426	\$641,386	\$686,283
159	Benefits	178,365	0	178,365	Labor	190,851	204,210	218,505	233,800
160	Professional Services	42,000	0	42,000	Inflation	43,050	44,126	45,229	46,360
161	Other Contracted Services	253,000	0	253,000	Inflation	259,325	265,808	272,453	279,265
162	Travel and Per Diem	4,000	0	4,000	Inflation	4,100	4,203	4,308	4,415
163	Communication	5,000	0	5,000	Inflation	5,125	5,253	5,384	5,519
164	Freight and Postage	2,000	0	2,000	Inflation	2,050	2,101	2,154	2,208
165	Electric	160,000	0	160,000	WaterCust	166,400	173,247	180,331	187,544
166	Trash, Garbage & Sludge Removal	3,600	0	3,600	WaterCust	3,744	3,898	4,057	4,220
167	Equipment Rental	2,000	0	2,000	Inflation	2,050	2,101	2,154	2,208
168	Repair and Maintenance	194,500	0	194,500	Repair	204,225	214,436	225,158	236,416
169	Printing	3,000	0	3,000	Inflation	3,075	3,152	3,231	3,311
170	Other Administrative Fees	3,000	0	3,000	Inflation	3,075	3,152	3,231	3,311
171	General Office Supplies	500	0	500	Inflation	513	525	538	552
172	Operating Supplies	62,250	0	62,250	WaterCust	64,740	67,404	70,160	72,967
173	Subscriptions & Memberships	1,500	0	1,500	Margin	1,515	1,530	1,545	1,561
174	Capital Outlay - Furniture and Equipment	2,500	(2,500)	0	Inflation	0	0	0	0
175	Total	\$1,440,777	(\$2,500)	\$1,438,277		\$1,514,048	\$1,594,573	\$1,679,825	\$1,769,940
Water Production - Olga (# 53601)									
176	Salaries and Wages	\$279,916	\$0	\$279,916	Labor	\$299,510	\$320,476	\$342,909	\$366,913
177	Benefits	103,694	0	103,694	Labor	110,953	118,719	127,030	135,922
178	Other Contracted Services	11,950	0	11,950	Inflation	12,249	12,555	12,869	13,191
179	Travel and Per Diem	4,000	0	4,000	Inflation	4,100	4,203	4,308	4,415
180	Communication	1,750	0	1,750	Inflation	1,794	1,839	1,885	1,932
181	Advertising	200	0	200	Inflation	205	210	215	221
182	Freight and Postage	2,000	0	2,000	Inflation	2,050	2,101	2,154	2,208
183	Electric	165,000	0	165,000	WaterCust	171,600	178,661	185,967	193,405
184	Trash, Garbage & Sludge Removal	77,500	0	77,500	WaterCust	80,600	83,916	87,348	90,842
185	Repair and Maintenance	113,500	0	113,500	Repair	119,175	125,134	131,390	137,960
186	Printing	16,000	0	16,000	Inflation	16,400	16,810	17,230	17,661
187	Other Administrative Fees	3,500	0	3,500	Inflation	3,588	3,677	3,769	3,863
188	General Office Supplies	2,500	0	2,500	Inflation	2,563	2,627	2,692	2,760
189	Operating Supplies	365,350	0	365,350	WaterCust	379,964	395,599	411,775	428,246
190	Subscriptions & Memberships	1,000	0	1,000	Margin	1,010	1,020	1,030	1,041
191	Capital Outlay - Furniture and Equipment	5,000	(5,000)	0	Inflation	0	0	0	0
192	Total	\$1,152,860	(\$5,000)	\$1,147,860		\$1,205,759	\$1,267,546	\$1,332,571	\$1,400,578

Table 3-4
Lee County, Florida
Water and Wastewater System Rate Study

Five Year Projection of Utility Operating Expenses and Other Revenue

Line No.	Description	2002		Escalation Reference	Fiscal Year Ending September 30,				
		Budget	Adjustments		Adjusted	2003	2004	2005	2006
Water Production - Corkscrew (# 53618)									
193	Salaries and Wages	\$262,279	\$0	\$262,279	Labor	\$280,639	\$300,283	\$321,303	\$343,794
194	Benefits	89,732	0	89,732	Labor	96,013	102,734	109,926	117,620
195	Professional Services	56,000	0	56,000	Inflation	57,400	58,835	60,306	61,814
196	Other Contracted Services	11,700	0	11,700	Inflation	11,993	12,292	12,600	12,915
197	Travel and Per Diem	4,000	0	4,000	Inflation	4,100	4,203	4,308	4,415
198	Communication	1,750	0	1,750	Inflation	1,794	1,839	1,885	1,932
199	Advertising	200	0	200	Inflation	205	210	215	221
200	Freight and Postage	2,000	0	2,000	Inflation	2,050	2,101	2,154	2,208
201	Electric	390,500	0	390,500	WaterCust	406,120	422,831	440,121	457,726
202	Repair and Maintenance	113,500	0	113,500	Repair	119,175	125,134	131,390	137,960
203	Printing	26,000	0	26,000	Inflation	26,650	27,316	27,999	28,699
204	Other Administrative Fees	3,500	0	3,500	Inflation	3,588	3,677	3,769	3,863
205	General Office Supplies	2,500	0	2,500	Inflation	2,563	2,627	2,692	2,760
206	Operating Supplies	395,350	0	395,350	WaterCust	411,164	428,082	445,587	463,411
207	Subscriptions & Memberships	1,000	0	1,000	Margin	1,010	1,020	1,030	1,041
208	Capital Outlay - Furniture and Equipment	5,000	(5,000)	0	Inflation	0	0	0	0
209	Total	\$1,365,011	(\$5,000)	\$1,360,011		\$1,424,462	\$1,493,184	\$1,565,284	\$1,640,377
Water Production - Waterway (# 53625)									
210	Salaries and Wages	\$191,547	\$0	\$191,547	Labor	\$204,955	\$219,302	\$234,653	\$251,079
211	Benefits	69,443	0	69,443	Labor	74,304	79,505	85,071	91,026
212	Other Contracted Services	6,500	0	6,500	Inflation	6,663	6,829	7,000	7,175
213	Travel and Per Diem	4,000	0	4,000	Inflation	4,100	4,203	4,308	4,415
214	Communication	1,750	0	1,750	Inflation	1,794	1,839	1,885	1,932
215	Advertising	200	0	200	Inflation	205	210	215	221
216	Freight and Postage	2,000	0	2,000	Inflation	2,050	2,101	2,154	2,208
217	Electric	95,700	0	95,700	WaterCust	99,528	103,623	107,861	112,175
218	Trash, Garbage & Sludge Removal	52,500	0	52,500	WaterCust	54,600	56,847	59,171	61,538
219	Repair and Maintenance	88,500	0	88,500	Repair	92,925	97,571	102,450	107,572
220	Printing	6,000	0	6,000	Inflation	6,150	6,304	6,461	6,623
221	Other Administrative Fees	2,500	0	2,500	Inflation	2,563	2,627	2,692	2,760
222	General Office Supplies	2,500	0	2,500	Inflation	2,563	2,627	2,692	2,760
223	Operating Supplies	95,350	0	95,350	WaterCust	99,164	103,244	107,466	111,765
224	Subscriptions & Memberships	1,000	0	1,000	Margin	1,010	1,020	1,030	1,041
225	Capital Outlay - Furniture and Equipment	5,000	(5,000)	0	Inflation	0	0	0	0
226	Total	\$624,490	(\$5,000)	\$619,490		\$652,373	\$687,852	\$725,109	\$764,287
Water Production - College Parkway (# 53626)									
227	Electric	\$44,000	0	44,000	WaterCust	45,760	47,643	49,591	51,575
228	Trash, Garbage & Sludge Removal	12,500	0	12,500	WaterCust	13,000	13,535	14,088	14,652
229	Repair and Maintenance	53,500	0	53,500	Repair	56,175	58,984	61,933	65,030
230	Printing	5,050	0	5,050	Inflation	5,176	5,306	5,438	5,574
231	Operating Supplies	22,500	0	22,500	WaterCust	23,400	24,363	25,359	26,373
232	Subscriptions & Memberships	500	0	500	Margin	505	510	515	520
233	Total	\$138,050	\$0	\$138,050		\$144,016	\$150,340	\$156,925	\$163,724
Water Production - Green Meadows (# 53627)									
234	Salaries and Wages	\$260,833	\$0	\$260,833	Labor	\$279,091	\$298,628	\$319,532	\$341,899
235	Benefits	92,634	0	92,634	Labor	99,118	106,057	113,481	121,424
236	Professional Services	66,000	0	66,000	Inflation	67,650	69,341	71,075	72,852
237	Other Contracted Services	11,750	0	11,750	Inflation	12,044	12,345	12,653	12,970
238	Travel and Per Diem	4,000	0	4,000	Inflation	4,100	4,203	4,308	4,415
239	Communication	1,750	0	1,750	Inflation	1,794	1,839	1,885	1,932
240	Advertising	200	0	200	Inflation	205	210	215	221
241	Freight and Postage	2,000	0	2,000	Inflation	2,050	2,101	2,154	2,208
242	Electric	418,000	0	418,000	WaterCust	434,720	452,608	471,115	489,960
243	Trash, Garbage & Sludge Removal	181,500	0	181,500	WaterCust	188,760	196,527	204,563	212,746
244	Repair and Maintenance	101,000	0	101,000	Repair	106,050	111,353	116,920	122,766
245	Printing	26,000	0	26,000	Inflation	26,650	27,316	27,999	28,699
246	Other Administrative Fees	3,500	0	3,500	Inflation	3,588	3,677	3,769	3,863
247	General Office Supplies	2,500	0	2,500	Inflation	2,563	2,627	2,692	2,760
248	Operating Supplies	365,350	0	365,350	WaterCust	379,964	395,599	411,775	428,246
249	Subscriptions & Memberships	1,000	0	1,000	Margin	1,010	1,020	1,030	1,041
250	Capital Outlay - Furniture and Equipment	5,000	(5,000)	0	Inflation	0	0	0	0
251	Total	\$1,543,017	(\$5,000)	\$1,538,017		\$1,609,356	\$1,685,449	\$1,765,166	\$1,848,000

Table 3-4
Lee County, Florida
Water and Wastewater System Rate Study

Five Year Projection of Utility Operating Expenses and Other Revenue

Line No.	Description	2002		Escalation Reference	Fiscal Year Ending September 30,				
		Budget	Adjustments		Adjusted	2003	2004	2005	2006
Sewer Operations (# 53606)									
252	Salaries and Wages	\$38,438	\$0	\$38,438	Labor	\$41,129	\$44,008	\$47,088	\$50,384
253	Benefits	18,987	0	18,987	Labor	20,316	21,738	23,260	24,888
254	Legal Services	5,000	0	5,000	Inflation	5,125	5,253	5,384	5,519
255	Professional Services	229,900	0	229,900	Inflation	235,648	241,539	247,577	253,767
256	Other Contracted Services	101,500	0	101,500	Inflation	104,038	106,638	109,304	112,037
257	Travel and Per Diem	4,000	0	4,000	Inflation	4,100	4,203	4,308	4,415
258	Communication	129,683	0	129,683	Inflation	132,925	136,248	139,654	143,146
259	Advertising	1,500	0	1,500	Inflation	1,538	1,576	1,615	1,656
260	Freight and Postage	1,500	0	1,500	Inflation	1,538	1,576	1,615	1,656
261	Electric	60,000	0	60,000	SewerCust	62,400	64,861	67,404	70,100
262	Trash, Garbage & Sludge Removal	50,000	0	50,000	SewerCust	52,000	54,051	56,170	58,417
263	Land, Building, Parking Rental	250	0	250	Constant	250	250	250	250
264	Equipment Rental	1,500	0	1,500	Inflation	1,538	1,576	1,615	1,656
265	Self-Insurance Assessment	33,585	0	33,585	Insurance	35,936	38,451	41,143	44,023
266	Insurance and Bonds	30,000	0	30,000	Insurance	32,100	34,347	36,751	39,324
267	Repair and Maintenance	7,200	0	7,200	Repair	7,560	7,938	8,335	8,752
268	Printing	2,000	0	2,000	Inflation	2,050	2,101	2,154	2,208
269	Other Administrative Fees	333,492	0	333,492	Inflation	341,829	350,375	359,134	368,113
270	Indirect Cost	212,000	0	212,000	Inflation	217,300	222,733	228,301	234,008
271	General Office Supplies	2,500	0	2,500	Inflation	2,563	2,627	2,692	2,760
272	Operating Supplies	30,825	0	30,825	SewerCust	32,058	33,322	34,629	36,014
273	Subscriptions & Memberships	1,100	0	1,100	Margin	1,111	1,122	1,133	1,145
274	Capital Outlay - Furniture and Equipment	50,000	(50,000)	0	Inflation	0	0	0	0
275	Total	\$1,344,960	(\$50,000)	\$1,294,960		\$1,335,049	\$1,376,532	\$1,419,518	\$1,464,235
Wastewater Collection (# 53604)									
276	Salaries and Wages	\$641,481	\$0	\$641,481	Labor	\$686,385	\$734,432	\$785,842	\$840,851
277	Benefits	233,387	0	233,387	Labor	249,724	267,205	285,909	305,923
278	Legal Services	1,000	0	1,000	Inflation	1,025	1,051	1,077	1,104
279	Professional Services	40,000	0	40,000	Inflation	41,000	42,025	43,076	44,153
280	Other Contracted Services	253,600	0	253,600	Inflation	259,940	266,439	273,099	279,927
281	Travel and Per Diem	6,000	0	6,000	Inflation	6,150	6,304	6,461	6,623
282	Communication	9,250	0	9,250	Inflation	9,481	9,718	9,961	10,210
283	Advertising	1,000	0	1,000	Inflation	1,025	1,051	1,077	1,104
284	Electric	250,000	0	250,000	SewerCust	260,000	270,254	280,849	292,083
285	Water and Sewer	40,000	0	40,000	SewerCust	41,600	43,241	44,936	46,733
286	Trash, Garbage & Sludge Removal	30,000	0	30,000	SewerCust	31,200	32,430	33,702	35,050
287	Equipment Rental	5,000	0	5,000	Inflation	5,125	5,253	5,384	5,519
288	Repair and Maintenance	1,005,317	0	1,005,317	Repair	1,055,583	1,108,362	1,163,780	1,221,969
289	Printing	1,000	0	1,000	Inflation	1,025	1,051	1,077	1,104
290	Other Administrative Fees	3,000	0	3,000	Inflation	3,075	3,152	3,231	3,311
291	General Office Supplies	1,000	0	1,000	Inflation	1,025	1,051	1,077	1,104
292	Operating Supplies	686,050	0	686,050	SewerCust	713,492	741,630	770,705	801,533
293	Subscriptions & Memberships	3,600	0	3,600	Margin	3,636	3,672	3,709	3,746
294	Capital Outlay - Furniture and Equipment	2,500	(2,500)	0	Inflation	0	0	0	0
295	Total	\$3,213,185	(\$2,500)	\$3,210,685		\$3,370,491	\$3,538,318	\$3,714,951	\$3,902,046
Wastewater Treatment - Beach (# 53605)									
296	Salaries and Wages	\$440,518	\$0	\$440,518	Labor	\$471,354	\$504,349	\$539,653	\$577,429
297	Benefits	138,527	0	138,527	Labor	148,224	158,600	169,702	181,581
298	Professional Services	40,000	0	40,000	Inflation	41,000	42,025	43,076	44,153
299	Other Contracted Services	18,000	0	18,000	Inflation	18,450	18,911	19,384	19,869
300	Travel and Per Diem	4,500	0	4,500	Inflation	4,613	4,728	4,846	4,967
301	Communication	2,000	0	2,000	Inflation	2,050	2,101	2,154	2,208
302	Advertising	200	0	200	Inflation	205	210	215	221
303	Freight and Postage	200	0	200	Inflation	205	210	215	221
304	Electric	350,000	0	350,000	SewerCust	364,000	378,355	393,188	408,916
305	Water and Sewer	1,200	0	1,200	Inflation	1,230	1,261	1,292	1,325
306	Trash, Garbage & Sludge Removal	62,500	0	62,500	SewerCust	65,000	67,563	70,212	73,021
307	Equipment Rental	5,000	0	5,000	Inflation	5,125	5,253	5,384	5,519
308	Repair and Maintenance	145,250	0	145,250	Repair	152,513	160,138	168,145	176,552
309	Printing	2,000	0	2,000	Inflation	2,050	2,101	2,154	2,208
310	Other Administrative Fees	3,000	0	3,000	Inflation	3,075	3,152	3,231	3,311
311	General Office Supplies	2,500	0	2,500	Inflation	2,563	2,627	2,692	2,760
312	Operating Supplies	157,000	0	157,000	SewerCust	163,280	169,719	176,373	183,428
313	Subscriptions & Memberships	1,000	0	1,000	Margin	1,010	1,020	1,030	1,041
314	Capital Outlay - Furniture and Equipment	4,000	(4,000)	0	Inflation	0	0	0	0
315	Total	\$1,377,395	(\$4,000)	\$1,373,395		\$1,445,946	\$1,522,323	\$1,602,947	\$1,688,726

Table 3-4
Lee County, Florida
Water and Wastewater System Rate Study

Five Year Projection of Utility Operating Expenses and Other Revenue

Line No.	Description	2002		Escalation Reference	Fiscal Year Ending September 30,				
		Budget	Adjustments		Adjusted	2003	2004	2005	2006
Wastewater Treatment - Waterway (# 53623)									
316	Salaries and Wages	\$188,235	\$0	\$188,235	Labor	\$201,411	\$215,510	\$230,596	\$246,738
317	Benefits	83,980	0	83,980	Labor	89,859	96,149	102,879	110,081
318	Professional Services	20,000	0	20,000	Inflation	20,500	21,013	21,538	22,076
319	Other Contracted Services	8,250	0	8,250	Inflation	8,456	8,668	8,884	9,106
320	Travel and Per Diem	4,500	0	4,500	Inflation	4,613	4,728	4,846	4,967
321	Communication	1,500	0	1,500	Inflation	1,538	1,576	1,615	1,656
322	Advertising	100	0	100	Inflation	103	105	108	110
323	Freight and Postage	200	0	200	Inflation	205	210	215	221
324	Electric	126,500	0	126,500	SewerCust	131,560	136,748	142,109	147,794
325	Water and Sewer	1,200	0	1,200	Inflation	1,230	1,261	1,292	1,325
326	Trash , Garbage & Sludge Removal	72,500	0	72,500	SewerCust	75,400	78,374	81,446	84,704
327	Equipment Rental	500	0	500	Inflation	513	525	538	552
328	Repair and Maintenance	89,750	0	89,750	Repair	94,238	98,949	103,897	109,092
329	Printing	2,000	0	2,000	Inflation	2,050	2,101	2,154	2,208
330	Other Administrative Fees	3,000	0	3,000	Inflation	3,075	3,152	3,231	3,311
331	General Office Supplies	1,500	0	1,500	Inflation	1,538	1,576	1,615	1,656
332	Operating Supplies	67,300	0	67,300	SewerCust	69,992	72,752	75,604	78,629
333	Subscriptions & Memberships	600	0	600	Margin	606	612	618	624
334	Capital Outlay - Furniture and Equipment	2,000	(2,000)	0	Inflation	0	0	0	0
335	Total	\$673,615	(\$2,000)	\$671,615		\$706,884	\$744,009	\$783,187	\$824,849
Wastewater Treatment - Fiesta Village (# 53624)									
336	Salaries and Wages	\$287,158	\$0	\$287,158	Labor	\$307,259	\$328,767	\$351,781	\$376,406
337	Benefits	86,619	0	86,619	Labor	92,682	99,170	106,112	113,540
338	Professional Services	10,000	0	10,000	Inflation	10,250	10,506	10,769	11,038
339	Other Contracted Services	12,800	0	12,800	Inflation	13,120	13,448	13,784	14,129
340	Travel and Per Diem	4,500	0	4,500	Inflation	4,613	4,728	4,846	4,967
341	Communication	2,000	0	2,000	Inflation	2,050	2,101	2,154	2,208
342	Advertising	200	0	200	Inflation	205	210	215	221
343	Freight and Postage	200	0	200	Inflation	205	210	215	221
344	Electric	172,500	0	172,500	SewerCust	179,400	186,475	193,786	201,537
345	Water and Sewer	1,200	0	1,200	Inflation	1,230	1,261	1,292	1,325
346	Trash , Garbage & Sludge Removal	83,000	0	83,000	SewerCust	86,320	89,724	93,242	96,971
347	Equipment Rental	5,000	0	5,000	Inflation	5,125	5,253	5,384	5,519
348	Repair and Maintenance	135,250	0	135,250	Repair	142,013	149,113	156,569	164,397
349	Printing	2,000	0	2,000	Inflation	2,050	2,101	2,154	2,208
350	Other Administrative Fees	3,000	0	3,000	Inflation	3,075	3,152	3,231	3,311
351	General Office Supplies	2,500	0	2,500	Inflation	2,563	2,627	2,692	2,760
352	Operating Supplies	130,000	0	130,000	SewerCust	135,200	140,532	146,041	151,883
353	Subscriptions & Memberships	1,000	0	1,000	Margin	1,010	1,020	1,030	1,041
354	Capital Outlay - Furniture and Equipment	7,000	(7,000)	0	Inflation	0	0	0	0
355	Total	\$945,927	(\$7,000)	\$938,927		\$988,369	\$1,040,399	\$1,095,298	\$1,153,680
Wastewater Treatment - Matlacha / Pine (# 53651)									
356	Salaries and Wages	\$90,310	\$0	\$90,310	Labor	\$96,632	\$103,396	\$110,634	\$118,378
357	Benefits	27,949	0	27,949	Labor	29,905	31,999	34,239	36,635
358	Other Contracted Services	5,500	0	5,500	Inflation	5,638	5,778	5,923	6,071
359	Travel and Per Diem	4,500	0	4,500	Inflation	4,613	4,728	4,846	4,967
360	Communication	1,500	0	1,500	Inflation	1,538	1,576	1,615	1,656
361	Advertising	100	0	100	Inflation	103	105	108	110
362	Freight and Postage	200	0	200	Inflation	205	210	215	221
363	Electric	50,000	0	50,000	SewerCust	52,000	54,051	56,170	58,417
364	Water and Sewer	1,200	0	1,200	Inflation	1,230	1,261	1,292	1,325
365	Trash , Garbage & Sludge Removal	19,500	0	19,500	SewerCust	20,280	21,080	21,906	22,782
366	Equipment Rental	500	0	500	Inflation	513	525	538	552
367	Repair and Maintenance	53,750	0	53,750	Repair	56,438	59,259	62,222	65,333
368	Printing	2,000	0	2,000	Inflation	2,050	2,101	2,154	2,208
369	Other Administrative Fees	3,000	0	3,000	Inflation	3,075	3,152	3,231	3,311
370	General Office Supplies	1,000	0	1,000	Inflation	1,025	1,051	1,077	1,104
371	Operating Supplies	58,300	0	58,300	SewerCust	60,632	63,023	65,494	68,114
372	Subscriptions & Memberships	1,000	0	1,000	Margin	1,010	1,020	1,030	1,041
373	Capital Outlay - Furniture and Equipment	2,000	(2,000)	0	Inflation	0	0	0	0
374	Aids to Private Organizations (LCRWSA)	0	0	0	Inflation	0	0	0	0
375	Total	\$322,309	(\$2,000)	\$320,309		\$336,884	\$354,315	\$372,694	\$392,224

Table 3-4
Lee County, Florida
Water and Wastewater System Rate Study

Five Year Projection of Utility Operating Expenses and Other Revenue

Line No.	Description	2002		Escalation Reference	Fiscal Year Ending September 30,				
		Budget	Adjustments		Adjusted	2003	2004	2005	2006
Wastewater Treatment - Gateway									
376	Salaries and Wages	\$189,367	\$0	\$189,367	Labor	\$202,623	\$216,806	\$231,983	\$248,222
377	Benefits	71,951	0	71,951	Labor	76,988	82,377	88,143	94,313
378	Other Contracted Services	8,250	0	8,250	Inflation	8,456	8,668	8,884	9,106
379	Travel and Per Diem	4,500	0	4,500	Inflation	4,613	4,728	4,846	4,967
380	Communication	1,500	0	1,500	Inflation	1,538	1,576	1,615	1,656
381	Advertising	100	0	100	Inflation	103	105	108	110
382	Freight and Postage	200	0	200	Inflation	205	210	215	221
383	Electric	126,500	0	126,500	SewerCust	131,560	136,748	142,109	147,794
384	Water and Sewer	1,200	0	1,200	Inflation	1,230	1,261	1,292	1,325
385	Trash, Garbage & Sludge Removal	72,500	0	72,500	SewerCust	75,400	78,374	81,446	84,704
386	Equipment Rental	5,000	0	5,000	Inflation	5,125	5,253	5,384	5,519
387	Repair and Maintenance	90,250	0	90,250	Repair	94,763	99,501	104,476	109,699
388	Printing	2,000	0	2,000	Inflation	2,050	2,101	2,154	2,208
389	Other Administrative Fees	3,000	0	3,000	Inflation	3,075	3,152	3,231	3,311
390	General Office Supplies	1,500	0	1,500	Inflation	1,538	1,576	1,615	1,656
391	Operating Supplies	58,500	0	58,500	SewerCust	60,840	63,239	65,719	68,347
392	Subscriptions & Memberships	1,000	0	1,000	Margin	1,010	1,020	1,030	1,041
393	Capital Outlay - Furniture and Equipment	1,000	(1,000)	0	Inflation	0	0	0	0
394	Total	\$638,318	(\$1,000)	\$637,318		\$671,114	\$706,694	\$744,251	\$784,199
Wastewater Treatment - Pack Plants (# 53652)									
395	Professional Services	\$20,000	0	20,000	Inflation	20,500	21,013	21,538	22,076
396	Other Contracted Services	7,000	0	7,000	Inflation	7,175	7,354	7,538	7,727
397	Travel and Per Diem	1,500	0	1,500	Inflation	1,538	1,576	1,615	1,656
398	Electric	20,000	0	20,000	SewerCust	20,800	21,620	22,468	23,367
399	Water and Sewer	1,200	0	1,200	Inflation	1,230	1,261	1,292	1,325
400	Trash, Garbage & Sludge Removal	20,000	0	20,000	SewerCust	20,800	21,620	22,468	23,367
401	Repair and Maintenance	23,000	0	23,000	Repair	24,150	25,358	26,625	27,957
402	Operating Supplies	7,800	0	7,800	SewerCust	8,112	8,432	8,762	9,113
403	Total	\$100,500	\$0	\$100,500		\$104,305	\$108,234	\$112,307	\$116,586
Wastewater Treatment Contract (# 53603)									
404	Other Contracted Services	\$4,300,000	407,967	4,707,967	Treat	5,108,144	5,542,336	6,013,435	6,524,577
405	Total	\$4,300,000	\$407,967	\$4,707,967		\$5,108,144	\$5,542,336	\$6,013,435	\$6,524,577
Property Appraiser (# 51314)									
406	Professional Services	\$5,000	\$0	\$5,000	Inflation	5,125	\$5,253	\$5,384	\$5,519
407	Total	\$5,000	\$0	\$5,000		\$5,125	\$5,253	\$5,384	\$5,519
Non-Departmental (# 51903)									
408	Professional Services	\$100,000	\$0	\$100,000	Inflation	\$102,500	\$105,063	\$107,689	\$110,381
409	Other Contracted Services	100,000	0	100,000	Inflation	102,500	105,063	107,689	110,381
410	Contingency	0	689,204	689,204	Input (2.5%)	727,519	768,327	811,704	857,854
411	Total	\$200,000	\$689,204	\$889,204		\$932,519	\$978,452	\$1,027,082	\$1,078,616
412	Total Operations and Maintenance	\$27,547,188	\$710,171	\$28,257,359		\$29,828,298	\$31,501,406	\$33,279,864	\$35,171,997

Table 3-5
Lee County, Florida
Water and Wastewater System Rate Study
Five Year Estimated Capital Improvement Program

Line No.	Description	Fiscal Year Ending September 30.										Five-Year Total	
		2001	Budgeted 2002	Adjustments	Adjusted 2002	2003	2004	2005	2006				
CAPITAL PROJECTS - WATER SYSTEM													
Departmental Capital Outlay - Water System													
1	Furniture and Equipment	\$0	\$193,500	\$0	\$193,500	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$793,500
2	Miscellaneous Renewal and Replacements	0	0	0	0	0	0	0	0	0	0	0	0
3	Total Departmental Capital Outlay - Water System	0	193,500	0	193,500	150,000	150,000	150,000	150,000	150,000	150,000	150,000	793,500
CIP - Water System													
4	Alico Road Water Relocation (Property Metro Pkwy Extension)	0	0	0	0	1,400,000	0	0	0	0	0	0	1,400,000
5	7085 Aquifer Storage and Recovery Wells	170,613	0	0	0	0	0	0	0	0	0	0	0
6	Business 41 Line Upgrade - Littleton to Shell Factory	0	0	0	0	200,000	0	0	0	0	0	0	200,000
7	Business 41 Waterline Relocation - MNianna to Littleton	0	0	0	0	400,000	0	0	0	0	0	0	400,000
8	7114 Corkscrew Plant WTP Expansion to 15 MGD	4,223,140	0	0	2,150,000	0	0	0	0	0	0	0	2,150,000
9	7114 Corkscrew Plant WTP Expansion to 15 MGD	0	5,850,000	0	5,850,000	0	0	0	0	0	0	0	5,850,000
10	7097 Corkscrew WTP Wellfield - Alico Road	2,500,000	0	0	0	0	0	0	0	0	0	0	0
11	7119 Cypress Lake Drive Water & Sewer Line Relocation	800,000	0	0	0	0	0	0	0	0	0	0	0
12	7120 Del Vera Watermain Extension	175,000	0	0	625,000	0	0	0	0	0	0	0	625,000
13	7121 Dunbn Fire Protection Improvements	380,000	0	0	0	0	0	0	0	0	0	0	0
14	7092 Fire Hydrant Valve Installation	500,000	0	0	350,000	350,000	350,000	350,000	350,000	350,000	350,000	350,000	1,750,000
15	7122 Fluoridation System - (Former FCWC WTP)	650,000	0	0	0	0	0	0	0	0	0	0	0
16	7098 Fluoridation System - Water Treatment Plants	110,780	0	0	0	0	0	0	0	0	0	0	0
17	7126 Lime Slaker Replacements	120,000	0	0	0	0	0	0	0	0	0	0	0
18	New Fire Hydrant Installations	400,000	0	0	0	200,000	0	0	0	0	0	0	200,000
19	Olga Water Transmission Main	0	0	0	0	0	0	0	0	0	0	0	0
20	Olga WTP Reservoir and Plant Improvements	0	2,500,000	0	2,500,000	0	0	0	0	0	0	0	2,500,000
21	Olga WTP Reservoir and Plant Improvements	0	5,000,000	0	5,000,000	0	0	0	0	0	0	0	5,000,000
22	7127 Page Pk Waterline Improvements	50,000	0	0	0	150,000	0	0	0	0	0	0	150,000
23	7100 State Route 739 Waterline Relocation	0	20,000	0	20,000	420,000	0	0	0	0	0	0	440,000
24	7100 State Route 739 Waterline Relocation	100,000	0	0	0	0	0	0	0	0	0	0	0
25	State Route 78 Waterline Relocation - Slater to I-75	0	30,000	0	30,000	1,500,000	0	0	0	0	0	0	1,530,000
26	7094 Water System Improvements	275,186	200,000	0	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	1,000,000
27	7062 Water - Small Projects	103,849	100,000	0	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	500,000
28	7086 Water Transmission System Improvements (No C/O)	333,860	300,000	0	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	1,500,000
29	7128 Water Transmission Line for NLCWTP	250,000	1,250,000	0	1,250,000	0	0	0	0	0	0	0	1,250,000
30	7082 Waterline Extensions	147,426	150,000	0	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	750,000
31	7419 Waterline Relocation for Pondella Road Widening	0	200,000	0	200,000	0	0	0	0	0	0	0	200,000
32	7257 Waterline Relocation US 41 South of Alico Road	226,000	0	0	0	0	0	0	0	0	0	0	0
33	7111 Automated Flushing Devices	35,000	0	0	0	0	0	0	0	0	0	0	0
34	7110 ASR Wells at North Reservoir	233,555	0	0	0	0	0	0	0	0	0	0	0
35	7112 Backflow Prevention Devices	125,000	35,000	0	35,000	0	0	0	0	0	0	0	35,000
36	7113 Corkscrew WTR - Wellfield Check Valves	25,000	0	0	0	0	0	0	0	0	0	0	0
37	7116 Sampling Stations	50,000	75,000	0	75,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000	375,000
38	7117 Water Easement Acquisition	0	0	0	0	0	0	0	0	0	0	0	0
39	Water & Sewer Line Relocation (Summerlin Road)	0	0	0	0	250,000	0	0	0	0	0	0	250,000
40	Water & Sewer Line Relocation (Three Oaks Pkwy)	350,000	0	0	0	0	0	0	0	0	0	0	0
41	Water & Sewer Line Relocation (Treeline Avenue)	200,000	0	0	0	0	0	0	0	0	0	0	0
42	Water Line Relocate (Pondella Road Widening)	1,999,500	0	0	0	0	0	0	0	0	0	0	0
43	7118 Wellfield Monitors	20,000	0	0	0	0	0	0	0	0	0	0	0
44	7103 Alico Road Water Main Relocation	1,159,624	0	0	0	0	0	0	0	0	0	0	0
45	7103 Alico Road Water Main Relocation	170,000	0	0	0	0	0	0	0	0	0	0	0
46	7103 Alico Road Water Main Relocation	170,000	0	0	0	0	0	0	0	0	0	0	0
47	7105 Green Meadows/Corkscrew Interconnect	150,000	0	0	0	0	0	0	0	0	0	0	0
48	7105 Green Meadows/Corkscrew Interconnect	170,000	0	0	0	0	0	0	0	0	0	0	0
49	7124 Green Meadows Water Storage Improvements	0	2,500,000	0	2,500,000	0	0	0	0	0	0	0	2,500,000
50	7124 Green Meadows Water Storage Improvements	0	480,000	0	480,000	0	0	0	0	0	0	0	480,000
51	Green Meadows Transmission System Improvements	0	2,100,000	0	2,100,000	0	0	0	0	0	0	0	2,100,000

Table 3-5
Lee County, Florida
Water and Wastewater System Rate Study

Five Year Estimated Capital Improvement Program

Line No.	Description	Fiscal Year Ending September 30					Five-Year Total		
		2001	Budgeted 2002	Adjusted 2002	2003	2004		2005	2006
52	7106 Green Meadows Wellfield Emergency Generators	497,901	0	0	0	0	0	0	
53	Green Meadows Wellfield Roadway	300,000	0	0	0	0	0	0	
54	7104 Green Meadows WTP Improvements	150,000	300,000	300,000	1,000,000	0	0	1,300,000	
55	7109 Miners Corner Reservoir Replacement	100,000	0	0	0	0	0	0	
56	7109 Miners Corner Reservoir Replacement	90,000	0	0	0	0	0	0	
57	7109 Miners Corner Reservoir Replacement	349,886	0	0	0	0	0	0	
58	7107 Waterway Estates Interconnect	50,000	0	0	0	0	0	0	
59	7107 Waterway Estates Interconnect	5,128	0	0	0	0	0	0	
60	LNge Water Meter Replacement	0	350,000	350,000	350,000	350,000	350,000	1,750,000	
61	Water Quality Monitoring	0	40,000	40,000	80,000	0	0	120,000	
62	Water Treatment Plant Improvements	0	200,000	200,000	200,000	200,000	200,000	1,000,000	
63	7084 North Lee County Water Treatment Plant	7,157,351	0	0	0	0	0	0	
64	7085 North Lee County Water Treatment Plant	445,338	0	0	0	0	0	0	
65	7084 North Lee County Water Treatment Plant	0	20,000,000	20,000,000	0	0	0	20,000,000	
66	7411 Chlorine Storage Facilities Improvements - 50%	0	0	0	0	0	0	0	
67	7416 DOT Project Utility Relocations - 50%	3,677	0	0	0	0	0	0	
68	7123 GIS System Info Update - 50%	87,500	250,000	250,000	250,000	250,000	250,000	1,250,000	
69	4040 GIS System Upgrade - 50%	205,000	0	0	0	0	0	0	
70	0726 MNIn Luthr King Jr. Utilities Relocation - 50%	25,965	0	0	0	0	0	0	
71	7414 Day Tank Modifications (3 Lift Stations and 2 Reservoirs) - 50%	1,358	0	0	0	0	0	0	
72	7417 Plant Pumping Improvements - 50%	5,000	0	0	0	0	0	0	
73	7413 Chlorine System Improvements - 50%	200,000	0	0	0	0	0	0	
74	Total CIP - Water System	742,500	0	0	0	0	0	0	
75	TOTAL CAPITAL PROJECTS - WATER SYSTEM	27,274,116	45,055,000	45,055,000	7,575,000	2,075,000	2,775,000	1,975,000	59,455,000
76	Dep'nmental Capital Outlay - Wastewater System	0	0	0	0	0	0	0	0
77	Furniture and Equipment	\$0	\$193,500	\$0	\$150,000	\$150,000	\$150,000	\$150,000	\$793,500
78	Miscellaneous Renewal and Replacements	0	0	0	0	0	0	0	0
79	Total Dep'nmental Outlay - Wastewater System	0	193,500	0	150,000	150,000	150,000	150,000	793,500
80	CIP - Wastewater System	1,600,000	2,500,000	2,500,000	0	0	0	0	2,500,000
81	7251 Coastal Estates Gravity Line	150,000	0	0	0	0	0	0	0
82	7252 Daniels Pkwy Master Pump Station	489,177	0	0	0	0	0	0	0
83	Fiesta Village Effluent Storage Tank	0	0	0	500,000	1,000,000	0	0	1,500,000
84	7243 Fiesta Village Reuse Interconnect	2,226,408	0	0	0	0	0	0	0
85	7244 Fiesta Village WWTP Expansion	1,055,669	0	0	0	0	0	0	0
86	7244 Fiesta Village WWTP Expansion	338,003	4,440,830	4,440,830	0	0	0	0	4,440,830
87	7213 FMB Reuse/Disposal	66,808	0	0	0	0	0	0	0
88	7245 FMB Reuse Supplement Study	335,000	0	0	0	0	0	0	0
89	7224 FMB Splitter Box Rehab and Flow Controls	116,341	0	0	0	0	0	0	0
90	7234 FMB WWTP Expansion	2,262,815	0	0	0	0	0	0	0
91	7261 FMB WWTP Filtration System Replacement	77,123	0	0	0	0	0	0	0
92	7261 FMB WWTP Filtration System Replacement	0	1,352,665	1,352,665	0	0	0	0	1,352,665
93	FMB WWTP Transfer Pumps Upgrade	0	147,335	147,335	0	0	0	0	147,335
94	7247 Inflow and Infiltration Improvements	472,855	400,000	400,000	0	0	0	0	400,000
95	7248 Inflow and Infiltration Rehabilitation	810,000	250,000	250,000	250,000	250,000	250,000	250,000	1,250,000
96	7249 Jetport Master Pump Station and Force Main	135,626	0	0	0	0	0	0	0
97	7231 Main Street Master Pump Station Rehabilitation	300,811	0	0	0	0	0	0	0
98	7231 Main Street Master Pump Station Rehabilitation	65,000	0	0	0	0	0	0	0
99	7206 Manhole Rehabilitation and Reconstruction	300,000	300,000	300,000	300,000	300,000	300,000	300,000	1,500,000
100	7252 Mantanzas Pass Force Main	20,000	85,667	85,667	860,000	0	0	0	943,667

Table 3-5
Lee County, Florida
Water and Wastewater System Rate Study
Five Year Estimated Capital Improvement Program

Line No.	Description	Fiscal Year Ending September 30,					Five-Year Total		
		2001	Budgeted 2002	Adjusted 2002	2003	2004		2005	2006
101	7252 Manantzas Pass Force Main	0	56,333	0	0	0	0	0	56,333
102	7253 Manalacha Subaqueous Foremain Replacement	200,000	0	0	0	0	0	0	0
103	7226 Metro Pkwy Force Main Relocation/Upgrade	0	50,000	0	700,000	0	0	0	750,000
104	7226 Metro Pkwy Force Main Relocation/Upgrade	0	50,000	0	0	0	0	0	50,000
105	7227 Odor Control Devices at Pump Stations	204,529	200,000	0	100,000	100,000	100,000	100,000	600,000
106	7254 Odor Control System - FMBWWTP	125,000	0	0	0	0	0	0	0
107	7223 Package Plant Rehabilitation and Reconstruction (No C/O)	51,280	50,000	50,000	50,000	50,000	50,000	50,000	250,000
108	Pine Island WWTP Deep Injection Wells	0	0	0	2,500,000	2,500,000	0	0	5,000,000
109	7238 Pine Island Sewer Transmission System	150,000	0	0	1,500,000	0	0	0	1,500,000
110	7220 Pine Island Wastewater Treatment Plant	2,402,409	0	0	0	0	0	0	0
111	7240 Pine Island WWTP Reuse System	400,000	0	0	0	0	0	0	0
112	7239 Pine Island WWTP Expansion	499,300	0	0	0	500,000	0	0	500,000
113	7207 Pump Station Rehabilitation and Reconstruction (no C/O)	1,095,294	0	0	750,000	750,000	750,000	750,000	3,750,000
114	7217 Reuse System Improvements (No C/O)	530,283	100,000	100,000	100,000	100,000	100,000	100,000	500,000
115	7211 Sewer Package Plant Purchases (No C/O)	200,000	0	0	0	0	0	0	0
116	7208 Sewer Transmission System Improve (No C/O)	200,000	200,000	200,000	200,000	200,000	200,000	200,000	1,000,000
117	7200 Sewer - Small Projects	75,000	75,000	75,000	100,000	100,000	100,000	100,000	475,000
118	7219 Stormwater Inflow Protection	112,000	10,000	10,000	10,000	10,000	10,000	10,000	50,000
119	7229 Wastewater System Improvements	264,627	200,000	200,000	200,000	200,000	200,000	200,000	1,000,000
120	Waterway Estates Reuse Connection CTY C.C.	100,000	200,000	200,000	0	0	0	0	200,000
121	7256 Waterway Estates Reuse Storage	650,000	0	0	0	0	0	0	0
122	7255 Sewer Easement Acquisitions	100,000	100,000	100,000	100,000	100,000	100,000	100,000	500,000
123	Beach Plant Improvements/Training Room	0	35,000	0	0	0	0	0	35,000
124	East Lee County Force Main Replacement	0	0	0	200,000	0	0	0	200,000
125	Force Main Valve Installation and Replacements	0	50,000	50,000	50,000	50,000	50,000	50,000	250,000
126	Fort Myers to Pump Station 393 Replacement	0	0	0	310,000	0	0	0	310,000
127	Portable Generators	0	100,000	100,000	200,000	300,000	100,000	200,000	900,000
128	Reuse System Storage Feasibility Study	0	200,000	200,000	0	0	0	0	200,000
129	Wastewater Collection System Pump Replacement	0	100,000	100,000	100,000	100,000	100,000	100,000	500,000
130	Wastewater Treatment Plant Improvements	0	200,000	200,000	200,000	200,000	200,000	200,000	1,000,000
131	7000 Airport Sewer District - (Gateway)	0	500,000	500,000	3,500,000	0	0	0	4,000,000
132	7000 Airport Sewer District - (Gateway)	0	4,995,151	4,995,151	0	0	0	0	4,995,151
133	7411 Chlorine Storage Facilities Improvements - 50%	3,677	0	0	0	0	0	0	0
134	7416 DOT Project Utility Relocations - 50%	87,500	250,000	250,000	250,000	250,000	250,000	250,000	1,250,000
135	4040 GIS System Upgrade - 50%	25,965	0	0	0	0	0	0	0
136	726 MNHn Luther King Jr. Utilities Relocation - 50%	1,358	0	0	0	0	0	0	0
137	7414 Day Tank Modifications (3 Lift Stations and 2 Reservoirs) - 50%	5,000	0	0	0	0	0	0	0
138	7417 Plant Pumping Improvements - 50%	200,000	0	0	0	0	0	0	0
139	7413 Chlorine System Improvements - 50%	742,500	0	0	0	0	0	0	0
140	Total CIP - Wastewater System	18,852,357	17,945,981	17,945,981	13,030,000	7,060,000	2,860,000	2,960,000	43,855,981
	TOTAL CAPITAL PROJECTS - WASTEWATER SYSTEM	18,852,357	18,139,481	18,139,481	13,180,000	7,210,000	3,010,000	3,110,000	44,649,481
	TOTAL CAPITAL PROJECTS - WATER AND WASTEWATER SYSTEM	\$46,126,473	\$63,387,981	\$63,387,981	\$20,905,000	\$9,435,000	\$5,935,000	\$5,235,000	\$104,897,981
	FUNDING SOURCES - WATER SYSTEM								
141	Operating Reserves	0	0	0	0	0	0	0	0
142	Renewal and Replacement Fund	100,000	0	0	0	0	0	0	0
143	Water Connection Fees Fund	7,347,451	5,175,000	5,175,000	300,000	300,000	300,000	300,000	6,375,000
144	Operating Revenues	0	193,500	193,500	150,000	150,000	150,000	150,000	793,500
145	Capital Improvement Fund	16,521,626	4,960,000	4,960,000	5,855,000	1,775,000	2,475,000	1,675,000	16,740,000
146	Proposed SRP Loan	250,000	34,620,000	34,620,000	420,000	0	0	0	35,040,000
147	Additional Indebtedness	0	0	0	0	0	0	0	0
148	Series 1999 Bonds	3,055,039	300,000	300,000	1,000,000	0	0	0	1,300,000
149	Total Funding Sources - Water System	27,274,116	45,248,500	45,248,500	7,725,000	2,225,000	2,925,000	2,125,000	60,248,500

Table 3-5
Lee County, Florida
Water and Wastewater System Rate Study
Five Year Estimated Capital Improvement Program

Line No.	Description	Fiscal Year Ending September 30,					Five-Year Total		
		2001	Budgeted 2002	Adjustments	Adjusted 2002	2003		2004	2005
FUNDING SOURCES - WASTEWATER SYSTEM									
150	Operating Reserves	0	0	0	0	0	0	0	0
151	Renewal and Replacement Fund	3,490,866	2,702,665	0	2,702,665	1,350,000	1,350,000	1,350,000	8,102,665
152	Wastewater Connection Fees Fund	4,357,661	4,690,830	0	4,690,830	5,410,000	2,700,000	200,000	13,200,830
153	Operating Revenues	0	193,500	0	193,500	150,000	150,000	150,000	793,500
154	Capital Improvement Fund	8,858,327	7,348,818	0	7,348,818	2,770,000	3,010,000	1,410,000	15,848,818
155	Proposed SRF Loan	1,403,003	3,203,668	0	3,203,668	3,500,000	0	0	6,703,668
156	Additional Indebtedness	0	0	0	0	0	0	0	0
157	Series 1999 Bonds	742,500	0	0	0	0	0	0	0
158	Total Funding Sources - Wastewater System	18,852,357	18,139,481	0	18,139,481	13,180,000	7,210,000	3,010,000	44,649,481
TOTAL FUNDING SOURCES - WATER AND WASTEWATER SYSTEM									
		46,126,473	63,387,981	0	63,387,981	20,905,000	9,435,000	5,935,000	104,897,981

SECTION 4
RATE DESIGN AND COMPARISONS



SECTION 4

RATE DESIGN AND COMPARISONS

4.1 General

This section sets forth the proposed rates for water and wastewater service including a discussion of general rate design criteria, issues related to the maintenance of water conservation pricing and the methods used to classify and allocate costs in order to properly design rate structures. The proposed rates are predicated on the rate revenue requirements presented in Section 3 and the customer and sales forecast summarized in Section 2. This section also summarizes typical monthly bill comparisons for the proposed rates versus the existing rates as well as a comparison of the proposed rates with rates of neighboring utility systems. While we believe the proposed rates and subsequent adjustments should be adequate during the study period based on the assumptions and considerations as outlined in this report, as discussed in Section 3, the County may need to update this study as more up-to-date financial data and System consolidation (GES) information is available.

4.2 Proposed Retail Rate Design – General Criteria

Rate design involves the calculation of monthly rates and charges for each customer classification. The goal of this task is to establish a pricing structure to recover the total revenue requirements of the utility system in an equitable manner, consistent with the cost of providing service, regulatory compliance, overall revenue stability, and the fiscal and pricing policies of the County. The proposed utility rates, to the extent practical, should meet the following criteria for service provided by publicly owned utilities:

- Utility rates should be based on a policy, which calls for the lowest possible prices consistent with the requirements of providing quality service on an ongoing basis.
- Utility rates should be simple and understandable.
- Utility rates should be equitable among customers, taking into consideration the cost of providing service to the various users of the System.
- Utility rate and cost recovery strategies should recognize the current financial needs of the System and when rates were last adjusted and where possible help develop approaches to avoid “rate shock” presently as well as in the future.
- Utility rates should be designed to encourage the most efficient use of the County's utility plant investment and discourage unnecessary or wasteful use of resources.
- Utility rates should comply with applicable orders and requirements of local, state, and federal regulatory authorities, if any, which may have jurisdiction.

Other considerations, which have an effect on the design of the user fees, include revenue stability, historical rate form, and competitiveness with neighboring utility systems.

In order to make a reasonable determination of the projected revenues from each customer classification; it is beneficial to have a customer bill frequency analysis. The bill frequency analysis summarizes the number of bills rendered at various consumption levels for each customer classification or meter size, and provides a way to analyze the effect of any change in rates.

The County provided PRMG with customer and sales information by customer classification and service type on a monthly basis for the twelve (12) months ended September 2000. The billing information for the single-family residential, multi-family residential, irrigation and non-residential classes was used to develop a bill frequency analysis for the System. The bill frequency analysis was then used to develop a projection of detailed billing determinants for each customer class (e.g., number of bills by meter size and water usage statistics) which along with the customer and sales forecast provides the basis for estimating utility rate revenues and the effects of proposed rate changes.

4.3 Classification of Water and Wastewater Costs

In order to properly design water and wastewater rates it is necessary to allocate costs to the various rate structure components (e.g., monthly service charge and the volumetric or usage charge). The System costs are generally classified into three groups for ratemaking purposes: i) fixed costs including certain production, transmission, distribution and collection operating, maintenance and capital-related costs; ii) variable or flow-related costs such as chemicals for treatment, disposal and pumping costs; and iii) billing and customer service related costs. The utility system revenue requirements are assigned to these three specific cost classifications on the following basis:

1. Fixed Costs - Those costs that are incurred to maintain in a state of readiness-to-serve a water or wastewater system capable of meeting the total combined demands of all customers is classified as fixed or capacity-related costs. Capacity costs include that portion of operating and maintenance expense, capital expenditures, and other costs which are generally fixed and do not vary materially with the quantity of flow or which cannot be designated specifically as a customer or variable cost. Fixed costs are further classified into Base Capacity costs and Extra Capacity costs based on system peak to average demand relationships.
2. Variable Costs - Those costs that vary substantially or directly with flow, including such items as chemicals, utilities, and a portion of operation and maintenance expenses are classified as variable or flow-related costs.
3. Customer or Service Costs - Those costs directly related to the number and type of customers, such as customer accounting and billing and meter-related expenses are classified as customer-related costs.

The above three cost components cover the majority of all utility costs. However, there are certain costs that do not fall directly within any of the three categories or are not readily identifiable as associated with a specific customer or customer class. Thus, certain costs must be assigned or allocated by some formula or assignment basis. Other cost categories used in this study were:

Revenue Related - Those costs related to revenue or total projected revenue requirements are allocated to the various costs classifications on the basis of revenues collected or anticipated to be collected. An example of a cost allocated on the basis of revenues is Bad Debt Expense.

Weighted Customer - The costs allocated to the weighted customer category include expenditures which are directly assignable to the customer function but vary according to the capacity or cost of the services. Specific costs allocable to this function include the cost of water meter replacement installations and labor and associated expenditures associated with any other type of physical connections to the water and wastewater systems.

Tables 4-1 and 4-2 set forth the classification of the projected net revenue requirements for the water and wastewater systems, respectively. The fiscal year ending September 30, 2002 served as the basis (test year) for the classification of costs for rate design purposes. As shown on Tables 4-1 and 4-2, the classified costs are summarized as follows:

	Fiscal Year 2002	
	Water [1]	Wastewater [2]
Fixed Costs:		
Base Capacity	\$11,555,238	\$10,595,770
Extra/Peak Capacity	<u>4,858,452</u>	<u>6,349,328</u>
Total Fixed Costs	16,413,691	16,945,098
Customer Costs	1,367,061	1,177,438
Variable Costs	2,974,649	2,339,174
Weighted Customer Costs	<u>1,274,923</u>	<u>862,029</u>
Total Net Revenue Requirements	<u>\$22,030,323</u>	<u>\$21,323,739</u>

[1] Derived from Table 4-1.

[2] Derived from Table 4-2.

A detailed summary of the classified revenue requirements for the water and wastewater systems is shown on Tables 4-1 and 4-2, respectively. The following is a synopsis of the classification of the major cost categories.

Administration Expenses, Water and Wastewater Operations: The administrative expenses and water/wastewater operations contain a wide variety of costs incurred in the supervision and management relative to the operation and maintenance of the system. These costs have been functionalized as labor-related and have been classified based upon all classified labor-related operation and maintenance expenses.

Utility Engineering, Utility Inspections, Maintenance and Electronics Departments: It was assumed that most of these expenses are incurred in direct proportion to the investment in the County's utility system plant account balances.

Water Distribution and Wastewater Collection: It was assumed that most of these expenses, with the exception of distribution and collection related electrical, chemical, and waste disposal expenses which were considered as variable-related, are incurred in direct proportion to the investment in specific plant account balances relative to the water distribution and wastewater collection system since this function deals with general engineering functions of the County, or is specifically allocated to such services.

Meter Services, Billing and Collection, Support Services: Billing and collection of revenues and the field and support services component deal with the reading of meters and providing field visits to customers (at a customer request). Such expenses have been apportioned directly to the customer-related and the weighted customer service function as associated with the classification. The customer-related and weighted customer costs include items of expense that relate directly to the number and service types of customers.

Water Treatment, Wastewater Treatment: These expenses are incurred in the making of water and wastewater treatment available on demand to all customers through the operation and maintenance of various well pumps, water storage and wastewater treatment facilities. This classification does not perform any direct customer-related work and, as such, no expenses are classified as being so. Expenses are allocated between capacity and readiness to serve-related based on the capacity utilization requirements of the Systems (peak to average daily demand flow factors). The projected costs of electric, sludge removal, repair equipment and chemicals are classified as variable-related.

Contingency: This cost has been recognized as being available for any operating expense function and was therefore allocated among the various rate structure classifications based upon all previously classified labor-related and operation and maintenance expenses.

Other Revenue Requirements: Capital funded from revenues, renewal and replacement fund transfers, debt service, and other non-operating transfers were allocated based on plant investment balances as outlined previously in the water distribution/wastewater collection allocated with the addition of all plant-related facilities.

Investment Income: Comprises of water and wastewater system's pro rata share of investment income earned from the Operating Account, Sinking Funds, the Capital Improvement Fund, and other utility fund balances, and was classified based on the nature of the fund source, and thereby reduced the net revenue requirements required from rates.

Other Operating Revenue: This component of revenue is comprised of various miscellaneous fees and charges that include delinquent fees, initiation of existing and new services, and returned check charges. As illustrated at the end of this Section in Table 4-1 and 4-2 for the

County water and wastewater system respectively, various items were determined to be predominantly customer- and capacity-related and were classified as such.

4.4 Retail Water System Rate Design

The County's water rates include three separate rate structure attributes. The three rate structure attributes are: i) a monthly administrative fee applied to each account billed (to recover the costs of meter reading, billing, and other related expense) regardless of the number of dwelling units served; ii) a monthly service charge based on the number of dwelling units served; and iii) a volumetric or flow charge which varies for specific classes of customers. The monthly service charge for the residential class is currently based on the number of dwelling units served whereas the monthly service charge for commercial customers generally varies by meter size (i.e., up to 10 inches) to recognize differences in capacity relationships (or meter equivalence) of the various commercial customers. With the exception of rates developed for individual customers by system usage, this type of structure for the commercial class is common in Florida and is calculated based, in part, on the water demand or capacity of the size of the service. Based on discussions with the County and the recommendations of PRMG, the existing rate structure is adequate and should not be materially adjusted for purposes of this specific study. It is recommended that upon consolidation of the County system with the GES system from a governance and financial reporting standpoint, the County may wish to revisit the schedule of individual rates by class and type of service (i.e., water and wastewater) to eliminate/consolidate specific rate codes that may be obsolete or duplications from a rate application standpoint.

The monthly service charge generally consists of two cost components that include a readiness to serve (service availability) charge and a customer service (administrative) charge. These costs generally do not vary with consumption, but are either fixed in relation to capacity needs or represents a cost of meter reading, billing and collection.

The usage or flow charge generally consists all of the variable related expenses of the utility in addition to a portion of the fixed costs. For the residential class (i.e., single-family and multi-unit customers), it is recommended that the rate structure be maintained which consists of a four block or tiered use structure. The rate blocks for the single-family residential class are structured as follows:

1. The first rate block for the single-family residential class ranges from 0 to 6,000 gallons of metered water use. Based on research information developed by the U.S. Department of Housing and Urban Development, the residential potable indoor water use was assumed to be approximately 65 gallons per day (gpd) per capita. Assuming an average of 2.50 persons per household that approximates the average number of persons per household for the single-family residence, the average demand for indoor water service would be 162 gpd, or approximately 5,000 gallons per month. The 6,000 gallon threshold was assumed for this block since it provides for the essential use of a residence (i.e., indoor use), and also allows for some usage diversity within the class due to recognized differences in family size and other demographic factors. Based on detailed bill frequency data, the first block includes approximately 71% of total single-family water use in Lee County.

2. The second rate block for the residential single-family class was determined to range from 6,000 gallons to 12,000 gallons of metered water usage. Based on discussions with the County, this usage block was incorporated to allow for continued discretionary use by a household (e.g., an allowance for some irrigation use), yet provide a price signal to conserve water use. It is estimated that approximately 17% of LCU's single-family water use is included in this usage block.
3. The third usage block for the single-family residential class is ranged in consumption from 12,000 to 18,000 gallons per month. This block allows for additional discretionary use and irrigation yet recognizes the need to present a stronger price signal to conserve water resources. This usage block accounts for approximately 5% of LCU's total water single family use needs.
4. The final usage block for the single-family residential class is targeted for all consumption in excess of 18,000 gallons per month. This accounts for approximately 7% of LCU's total water use needs and is attributable, primarily to outdoor irrigation (excessive use target).

With respect to the multi-unit customers, it is recommended that the monthly base charge be based on an equivalent residential unit factor to recognize the capacity or demand relationships between the respective residential customer classifications. Specifically, based on an analysis of capacity utilization requirements of the residential classifications, the following equivalent unit factors are being recommended.

Residential Classification	ERU Factor
Single-Family	1.00
Multi-Family / Mobile Home Unit	0.80
Recreational Unit/Lot	0.40

In order to i) promote conservation of water use consistent with the capacity relationships of the class and ii) to apply the application of the water conservation rates on a basis consistent with the general service class, the four tier rate blocks recommended for the single family class as discussed above should be maintained. The consumption blocks for the residential classifications is summarized below:

	Residential Classification		
	Single-Family	Multi-Family / Mobile Home	Recreational Unit/Lot
First Block Usage Threshold (gallons)	6,000	4,800	2,400
Second Block Usage Threshold (gallons)	12,000	9,600	4,800
Third Block Usage Threshold (gallons)	18,000	14,400	7,200
Fourth Block Usage Threshold (gallons)	Above 18,000	Above 14,400	Above 7,200

For the general service class, the usage requirements can significantly vary by meter size and customer type. Additionally, the contribution to the peak demand of the system generally is not

as significant for this class as compared to the residential class. Based on the direction of the County and in order to recognize the various usage needs of the non-residential customers in relation to their service needs, it is proposed that the usage blocks continue to vary by meter size. Therefore, the four usage block charges as discussed above for the residential class be adjusted to reflect the application of equivalent meter factors based on service capacity for the larger meter sizes. Thus, the rates are consistent in terms of residential equivalents and capacity needs. The residential equivalents utilized in the derivation of the various threshold levels for the various commercial meter sizes were based on the meter equivalent factors developed from meter capacity information provided by the AWWA.

Based on the customer forecast discussed in Section 3, the net revenue requirements of the water system as presented in Section 4, and the rate structure changes discussed above, the proposed rates for the water system were determined as follows:

	Water System		
	Volumetric Charge	Monthly Service Charge	
		Customer	Readiness to Service
Net Revenue Requirements ^[1]	\$14,529,887	\$1,367,061	\$6,133,375
Number of Annual Billing Units ^[2]			
1,000 Gallons Bills/Units	5,523,582	607,856	607,856
Equivalent Number of Billing Units ^[3]	6,436,210	607,956	990,309
Unit Charge Per Equivalent Unit	<u>\$2.25752</u>	<u>\$2.24899</u>	<u>\$6.19340</u>

[1] Based on an analysis of revenue requirements shown on Table 3-1.

[2] Derived from Table 2-1.

[3] Billing units adjusted to reflect rate differentials and cost allocations.

Based on the rate parameters and the per equivalent unit charges shown above and recognizing allowances for rate rounding, the proposed rates for monthly water services are summarized as follows:

Residential Service:	Monthly Service Charge (Per Dwelling Unit)	Consumption Charge (per ERU) (Per 1,000 Gallons) [2]	
		Range	Amount
Single-family Dwelling Unit [1]	\$6.20	1 to 6,000	\$2.26
		6,001 to 12,000	2.78
		12,001 to 18,000	3.30
Multiple-family/Mobile Home Dwelling Unit [1]	4.95	18,001 and over	4.33
Recreational Vehicles [1]	2.50		

[1] A monthly administrative fee of \$2.25 for each account (meter) shall be charged in addition to the unit based rates identified above.

[2] Reflects consumption charges for 1 ERU; multi-family/mobile home equivalence to 0.80 ERU and recreational vehicle units/lots are considered as 0.40 ERU.

General Service

Commercial Service:

Meter Size (inches)	Monthly Service Charge	Equivalent Unit Rates	Consumption Charge Per ERU (Per 1,000 Gallons)	
			Range	Amount
5/8	\$8.45	1.00	1 to 6,000	\$2.26
3/4	11.55	1.50	6,001 to 12,000	2.78
1	17.75	2.50	12,001 to 18,000	3.30
1½	33.25	5.00	18,001 and over	4.33
2	51.85	8.00		
3	101.45	16.00		
4	157.25	25.00		
6	312.25	50.00		
8	498.25	80.00		
10	901.25	145.00		

Irrigation and Non-Irrigation Service (*):

Meter Size (inches)	Monthly Service Charge	Equivalent Unit Rates	Consumption Charge Per ERU (Per 1,000 Gallons)	
			Range	Amount
5/8	\$8.45	1.00	1 to 6,000	\$2.78
3/4	11.55	1.50	6,001 to 12,000	3.30
1	17.75	2.50	12,001 and over	4.33
1½	33.25	5.00		
2	51.85	8.00		
3	101.45	16.00		
4	157.25	25.00		
6	312.25	50.00		
8	498.25	80.00		
10	901.25	145.00		
			Non-Irrigation Customers (Per 1,000 Gallons)	
			\$2.26	
			All Metered Flows	

(*) For customers with potable water meters which also have separate irrigation meters located at the same account.

4.5 Retail Wastewater System Rate Design

The existing rates for the retail customers of the wastewater system have the same type of structure as previously discussed for the water system which promotes consistency among the two systems. The existing wastewater rates include: i) a monthly administrative fee applied to each account billed regardless of the number of dwelling units served; ii) a monthly service availability charge applied to the number of dwelling units served per account; iii) a constant usage or flow charge; and iv) for the residential class, a maximum billing threshold (maximum consumption charge). The application of a maximum billing threshold for the residential class is a policy implemented by several utilities in the state to recognize that not all of the water used by a residential customer is returned to the wastewater system. The non-residential class generally does not have a billing threshold since: i) major irrigation needs, if any, are generally serviced through a separate irrigation meter; and ii) the amount of impervious surface or non-irrigatable

area is generally high so the primary use of metered water is for indoor usage needs and assumed to be returned to the wastewater system.

The design of the proposed wastewater rates was performed in a manner similar to the water system. The proposed rate structure for the wastewater system should be designed on a consistent basis as the proposed water rates. Therefore, the rate structure includes i) a base monthly charge per dwelling unit (residential class) or meter size (general service class); ii) a monthly administrative fee applied to each account billed; and iii) a volume charge based on metered water use. The monthly residential maximum billing threshold for the single-family residential classification is for purposes of this analysis to be increased to 9,000 gallons from the current 6,000 gallon cap. Based on information provided by the LCU staff and a review of historical customer bill frequency data as provided by the County, approximately 192.86 million gallons which are not currently subject to charge under the current cap would now be subject to charge. This would ensure adequate cost recovery to fund the costs associated with treating and disposal of these flows. Typical residential thresholds in the State of Florida are recognized in the 8,000-10,000 gallon range and serve to enhance revenue stability of the wastewater system. Raising the current threshold to 9,000 gallons would place the County within the norm of Florida utilities. As was previously discussed for the water system, the service availability charge should be fixed based on the size of the water meter. This is consistent with the ratemaking practices of a several of Florida utilities, including the Florida Public Service Commission.

Based on the customer forecast discussed in Section 3, the net revenue requirements of the combined wastewater system as presented in Section 4, and the allocation of costs to the retail class as discussed previously in this section, the proposed retail rates for the wastewater system were determined as follows:

	Wastewater System		
	Volumetric Charge	Monthly Service Charge	
		Customer	Readiness to Service
Net Revenue Requirements ^[1]	\$12,934,944	\$1,177,438	\$7,211,357
Number of Annual Billing Units ^[2]			
1,000 Gallons	3,509,279		
Bills/Units		365,374	365,374
Equivalent Number of Billing Units ^[3]			
Unit Charge Per Equivalent Unit	<u>\$3.69000</u>	<u>\$3.22256</u>	<u>\$10.08977</u>

[1] Based on an analysis of revenue requirements shown on Table 3-2.

[2] Derived from Table 2-2.

[3] Billing units adjusted to reflect rate differentials and cost allocations.

Based on the rate parameters and the equivalent unit charges shown above, the proposed rates for wastewater services are summarized as follows:

<u>Residential Service:</u>	Monthly Service Charge (Per Dwelling Unit)	Per 1,000 Gallon Consumption Charge (metered water)(*)	Monthly Consumption Charge Unmetered Service
Single family Dwelling	\$10.10	\$3.69	\$16.61
Multiple-family/Mobile Homes (*)	8.10	3.69	13.29
Recreational Vehicles (*)	4.10	3.69	6.65

(*) The Residential service accounts are charged a monthly administrative fee of \$3.25 for each account. No sewer disposal charge shall be imposed on metered water usage above nine thousand (9,000) gallons per month per dwelling unit.

Commercial Service:

Meter Size (inches)	Monthly Service Charge	Per 1,000 Gallon Consumption Charge (metered water)
5/8	\$13.35	\$3.69
3/4	18.45	
1	28.55	
1½	54.25	
2	84.25	
3	165.00	
4	255.50	
6	509.75	
8	813.50	
10	1,470.30	

Note: Unmetered commercial charges are calculated individually based on estimates of wastewater discharges and the above schedule of rates. Wastewater disposal charges for commercial customers shall be imposed on one hundred (100) percent of total water consumption per water meter per month.

4.6 Retail Water and Wastewater Rate Comparisons - Neighboring Utilities

In order to provide the County with additional information regarding the proposed rate levels, a comparison of the County's existing and proposed rates for customers served by a 5/8 inch or 3/4 inch meter (representative of the single-family residential class) has been made with charges for similar service of other neighboring utilities. It should be noted that when making comparison for water and wastewater service, several factors have an effect on levels of rates charged. These factors may include:

- 1) Level of treatment required before the distribution of water to the ultimate customer;
- 2) Level of treatment and effluent disposal methods of wastewater service;
- 3) Plant capacity utilization, age, and assistance in construction by federal grants, connection fees, etc.;

- 4) General Fund and administrative fee transfers made by municipal and County systems which may account for differences in the level of rates charged; and
- 5) Bond Covenants and funding requirements of the rates.

For the utilities included in the rate comparison on Tables 4-3 through 4-5 at the end of this section, no analysis has been made of the above mentioned factors, as they related to the reported water and wastewater rates currently being charged. In order to illustrate the effects of the proposed rates, a comparison has been prepared for customers which use approximately 5,000 gallons of water and wastewater service. This usage level represents approximately the medium usage level for the single family residential class. As can be seen in Tables 4-3 through 4-5, the recommended rates at 5,000 gallons of usage for a 3/4-inch meter size (standard residential rate) are comparable with the rates charge by other neighboring utilities in the area.

4.7 Mandatory Water Restriction Rate Adjustment

The SFWMD from time to time may implement water usage restrictions on water consumption. The effect of the restriction is to reduce water consumption (sales) which ultimately impacts the recovery rate revenues for the utility. Since the utility has certain rate covenant requirements associated with the issuance of the currently outstanding Bonds, which must be satisfied in terms of the amount of revenues generated and debt service coverage needs, the County needs a methodology to react to such a situation.

The SFWMD has adopted a Water Shortage Plan pursuant to Chapter 40E-21 of the FAC. The rule establishes four phases of water shortage which is a function of the estimated percent reduction in overall demand required to reduce estimated available water supply. The four phases of the water shortage plan are summarized below:

Water Shortage Phase	Percent Reduction in Overall Demand
Moderate	Less than 15%
Severe	Less than 30%
Extreme	Less than 45%
Critical	Less than 60%

In order to give the County flexibility to meet its revenue requirements if this uncontrollable event should occur in the future, it is recommended that a water shortage surcharge be added to the monthly water rates. This surcharge adjustment would be applicable only to the water flow charge at the direction of the County. Based on the reduction requirements associated with each water shortage phase as outlined above, the adjustment to the flow charge (all customers, all usage blocks) would be as follows:

Water Shortage Phase	Flow Charge Rate Adjustment	
	Percent	Cumulative
Moderate	18%	18%
Severe	25%	43%
Extreme	39%	82%
Critical	68%	150%

Although the percentages appear high, one must realize that at the critical phase of the shortage plan, up to 60% of the water use is curtailed or restricted. However, to give the Board and the County some flexibility and recognizing that the District has only instituted moderate water shortage restrictions in the past, any surcharge associated with a shortage phase above the moderate level should be determined individually by the County.

4.8 Wholesale Rate Design Analysis – General

In the design of bulk water and wastewater rates, it is necessary to determine the amount of revenue requirements for each individual system which are allocable to providing the wholesale service. Therefore, it is necessary to allocate costs attributable to the wholesale service function. This allocation of costs is necessary in order to establish both rates that are reasonable and equitable to the customers, maintain consistency in rate design between the bulk and retail customers of the County as well as allow the County to adequately recover its fair share of cost associated with providing bulk service.

4.9 Wholesale Water System Rate Design

As discussed earlier in Section 2 of this report, the County has expressed interest in adopting a uniform wholesale water rate which can be applied to those customers located within the County's service area who qualify for such level of service. The rate structure for wholesale water customers consists of a volumetric or flow-only charge. Based on discussions with the County, this method of rate structure is appropriate and will be utilized in the determination of the proposed bulk water rate.

As shown on Table 4-6 at the end of this section, the rate for wholesale water service was determined to be \$2.46 per thousand gallons of metered water service. The development of this rate required several assumptions to the analysis. A detailed summary of the assumptions in the allocation of cost and the ultimate design of the rate are as follows:

1. The development of the bulk rate for service should be predicated on the same costs utilized in the determination of the retail rates. Therefore, the estimated Fiscal Year 2002 revenue requirements as shown on Tables 3-3 and 3-4 were utilized in the analysis of the bulk rates to provide consistency in rate determination. Reference is made to Section 3 relative to the determination of the projected revenue requirements for the Fiscal year 2002.
2. Administration and Water Operations which include such expenditures as the utility management and supervision function of the utility division were allocated to each customer

class (wholesale vs. retail) based on the summation and respective allocation of all other departmental salaries of the water system.

3. Weighted customer costs include expenditures directly assignable to the customer function but also take into account the varying capacity or cost of service requirements of each customer. An example of costs allocated to this expenditure allocation category includes Water Meter Services. In this instance, costs were allocated based on the allocation of total equivalent residential connections to each class of customer. This results in approximately 99.57% of weighted customer costs being allocable to the retail customer class with the remainder to bulk.
4. Customer related costs result from the processes, supplies, and man-hours involved in servicing and billing the County's utility system customer base. An example of costs considered as customer-related included billing costs such as postage and meter reading. Under this preface, costs attributable to customer accounting were allocated based on the actual number of customer accounts (bills) served by the utility.
5. Costs associated with Utilities Engineering and Construction/Utility Inspections were allocated to each function based on a review of the County's Five Year Capital Improvement Program. For purposes of this analysis, it was determined that these divisions are responsible for review and oversight of, among other privately implemented projects, improvements proposed by the utilities department to be performed by the County. These costs, therefore, were allocated based on allocations of capital projects to each respective customer class.
6. Maintenance and Electronics Department activities were allocated among the customer classifications based on a review of the utility systems fixed assets and the benefit such facilities serve each type of customer. This resulted in approximately 59.51% of these costs being deemed allocable to the wholesale function.
7. Operating expenses allocable to water supply, production and treatment were deemed to be 100% allocable to the wholesale category since these costs are directly related to the production and treatment of water supply which benefits all customers of the utility system including the wholesale customers.
8. With respect to the operating expenses accounted for in the water transmission cost component, the expenditures were assumed to be incurred in direct relationship to the plant in-service for this functional compound and were allocated based on the fixed asset relationship for the water transmission and water distribution functions. Once the costs were allocated, the expenditures attributable to the transmission related facilities benefit all customer classes and, therefore, should be shared by both the bulk and retail customers.
9. A contingency allowance has been recognized in the development of the revenue requirements, and such amount was allocable to the bulk function based on the allocation of all other operating and maintenance expenses consistent with the assumption for inclusion of the contingency allowance in the retail rates.

10. Debt service and the funding of renewals and replacements were allocated between the customer classifications based on the functionalization of capital projects funded by both the outstanding debt service and rate revenues. Specifically, the capital cost, such as water production, has been allocated entirely to the bulk water function. Water transmission capital costs were allocated based on the determination of plant facilities allocable to that function. The allocation was based on capital cost information associated with projects funded through the outstanding indebtedness.
11. Other operating revenue sources were allocated to each customer class based on the nature of or purpose of the fee application and were predominantly determined to be retail related.

4.10 Wholesale Wastewater System Rate Design

The County also anticipates providing bulk wastewater services to a number of entities. As was the case with water, the bulk wastewater rate consists solely of a volumetric rate or flow charge. Based on discussion with the County staff, it was determined to develop a uniform volumetric rate which would be applied to all customers within the County who qualify as this class of customer.

As a result of these analyses and as shown on Table 4-7 and based on the assumptions utilized in the development of revenue requirements in Section 3 and the cost allocation assumptions previously described, it was determined that a rate of \$3.36 per thousand gallons of bulk wastewater service be put into effect concurrent with adoption of the retail rates.

4.11 Wholesale Rate Comparison of Neighboring Utilities

In order to give the County a perspective on how the designed rates compare to those of nearby utilities, a brief comparison has been prepared. As can be seen below, wholesale rates vary from utility to utility and can be directly related to the types of treatment processes, demographics of the individual systems (i.e., condensed service territory vs. wide-spread service area) along with other factors. As can be seen below, the proposed rates are comparable with neighboring utility systems.

	Rate Per Thousand Gallons	
	Water	Wastewater
Lee County (proposed)	\$2.46	\$3.36
Charlotte County	\$2.41	\$2.36
Hillsborough County	1.89	5.59
Pinellas County	1.19	N/A
Tampa Bay Water	1.45	N/A

4.12 Wellfield Development Surcharge

Based on discussions with Lee County Utilities staff, an issue which requires addressing is the development of future sources of water supply to serve the projected growth within the County's utility service area. The main source of developing new sources of water supply is through the construction of new wellfields to supplement those currently in use that are limited to their withdrawal capacities based on parameters established by the SWFWMD. In order to establish a reliable funding source to begin accruing financial resources for developing future water supply, it is proposed that the County implement a wellfield development surcharge. This surcharge is recommended to be applied to all water customers of the County who surpass the initial water conservation block based on the County's current schedule of rates for monthly service (i.e., single-family @ 6,000 gallons, multi-family @ 4,800 gallons, RVs @2,400 gallons, etc.). This surcharge would provide a further incentive for customers to conserve water in addition to supplying a source of funds to acquire lands or other pertinent use for water supply development. Based on discussions with Lee County Utilities staff, it has been determined that a \$0.50 surcharge on a per equivalent residential unit (ERC) basis allocable to each respective water customer be billed in those monthly billing cycles when water consumption exceeds the first water conservation block threshold. Based on an analysis of recent customer statistical information, it is estimated that approximately \$112,000 per year could be generated through the application of this surcharge. It is recommended that the County establish a separate subfund within the utility's Enterprise Fund in order to track both deposits and subsequent uses of these proposed revenues for the specific purpose of purchasing lands for wellfield development.

Table 4-1
Lee County, Florida
Water and Wastewater System Rate Study
Water System

Classification of Net Revenue Requirements

Line No.	Description	2002 Net Revenue Requirements	Allocation Reference	Fixed			Variable	Administrative/Customer		Revenue Related	Total
				Base Capacity	Extra Capacity	Total		Weighted Customer	Customer		
OPERATING EXPENSES - Water											
Administration (# 53663)											
1	Salaries and Wages	\$168,988	WS/W	\$84,390	\$35,482	\$119,872	\$0	\$28,323	\$20,793	\$0	\$168,988
2	Benefits	51,528	WS/W	25,733	10,819	36,552	0	8,636	6,340	0	51,528
3	Additional Personnel	0	WS/W	0	0	0	0	0	0	0	0
4	Legal Services	3,705	WS/W	1,850	778	2,628	0	621	456	0	3,705
5	Professional Services	62,249	WS/W	31,087	13,070	44,157	0	10,433	7,659	0	62,249
6	Other Contracted Services	29,643	WS/W	14,803	6,224	21,027	0	4,968	3,647	0	29,643
7	Travel and Per Diem	10,078	WS/W	5,033	2,116	7,149	0	1,689	1,240	0	10,078
8	Communication	5,210	WS/W	2,602	1,094	3,696	0	873	641	0	5,210
9	Advertising	2,470	WS/W	1,234	519	1,752	0	414	304	0	2,470
10	Freight and Postage	1,235	WS/W	617	259	876	0	207	152	0	1,235
11	Land, Building, Parking Rental	1,112	WS/W	555	233	789	0	186	137	0	1,112
12	Equipment Rental	4,940	WS/W	2,467	1,037	3,505	0	828	608	0	4,940
13	Self-Insurance Assessment	5,188	WS/W	2,591	1,089	3,680	0	870	638	0	5,188
14	Repair and Maintenance	10,414	WS/W	5,201	2,187	7,388	0	1,745	1,281	0	10,414
15	Printing	741	WS/W	370	156	526	0	124	91	0	741
16	Other Administrative Fees	8,399	WS/W	4,194	1,763	5,958	0	1,408	1,033	0	8,399
17	General Office Supplies	1,532	WS/W	765	322	1,086	0	257	188	0	1,532
18	Operating Supplies	2,253	WS/W	1,125	473	1,598	0	378	277	0	2,253
19	Subscriptions & Memberships	2,816	WS/W	1,406	591	1,998	0	472	346	0	2,816
20	Capital Outlay - Furniture and Equipment	0	WS/W	0	0	0	0	0	0	0	0
21	Total	\$372,502		\$186,023	\$78,214	\$264,237	\$0	\$62,432	\$45,834	\$0	\$372,502
Water Meter Services (# 53609)											
22	Salaries and Wages	\$252,882	WCust	\$0	\$0	\$0	\$0	\$252,882	\$0	\$0	\$252,882
23	Benefits	106,629	WCust	0	0	0	0	106,629	0	0	106,629
24	Additional Personnel	0	WCust	0	0	0	0	0	0	0	0
25	Other Contracted Services	5,460	WCust	0	0	0	0	5,460	0	0	5,460
26	Travel and Per Diem	1,031	WCust	0	0	0	0	1,031	0	0	1,031
27	Repair and Maintenance	20,856	WCust	0	0	0	0	20,856	0	0	20,856
28	Printing	1,213	WCust	0	0	0	0	1,213	0	0	1,213
29	General Office Supplies	910	WCust	0	0	0	0	910	0	0	910
30	Operating Supplies	33,986	WCust	0	0	0	0	33,986	0	0	33,986
31	Total	\$422,967		\$0	\$0	\$0	\$0	\$422,967	\$0	\$0	\$422,967
Billings & Collections (# 53610)											
32	Salaries and Wages	\$363,263	Cust	\$0	\$0	\$0	\$0	\$0	\$363,263	\$0	\$363,263
33	Benefits	139,131	Cust	0	0	0	0	0	139,131	0	139,131
34	Additional Personnel	0	Cust	0	0	0	0	0	0	0	0
35	Professional Services	153,112	Cust	0	0	0	0	0	153,112	0	153,112
36	Other Contracted Services	115,186	Cust	0	0	0	0	0	115,186	0	115,186
37	Travel and Per Diem	4,550	Cust	0	0	0	0	0	4,550	0	4,550
38	Communication	14,559	Cust	0	0	0	0	0	14,559	0	14,559
39	Freight and Postage	202,006	Cust	0	0	0	0	0	202,006	0	202,006
40	Electric	16,015	Cust	0	0	0	0	0	16,015	0	16,015
41	Water and Sewer	1,213	Cust	0	0	0	0	0	1,213	0	1,213
42	Trash, Garbage & Sludge Removal	320	Cust	0	0	0	0	0	320	0	320
43	Equipment Rental	4,853	Cust	0	0	0	0	0	4,853	0	4,853
44	Repair and Maintenance	8,748	Cust	0	0	0	0	0	8,748	0	8,748
45	Printing	4,853	Cust	0	0	0	0	0	4,853	0	4,853
46	Other Administrative Fees	607	Cust	0	0	0	0	0	607	0	607
47	General Office Supplies	36,519	Cust	0	0	0	0	0	36,519	0	36,519
48	Operating Supplies	5,581	Cust	0	0	0	0	0	5,581	0	5,581
49	Subscriptions & Memberships	152	Cust	0	0	0	0	0	152	0	152
50	Capital Outlay - Furniture and Equipment	0	Cust	0	0	0	0	0	0	0	0
51	Total	\$1,070,666		\$0	\$0	\$0	\$0	\$0	\$1,070,666	\$0	\$1,070,666
Utilities Engineering (# 53607)											
52	Salaries and Wages	\$300,047	WPlant	\$203,774	\$85,678	\$289,452	\$0	\$9,489	\$1,106	\$0	\$300,047
53	Benefits	87,322	WPlant	59,304	24,935	84,239	0	2,762	322	0	87,322
54	Additional Personnel	0	WPlant	0	0	0	0	0	0	0	0
55	Professional Services	86,810	WPlant	58,956	24,788	83,744	0	2,745	320	0	86,810
56	Other Contracted Services	17,362	WPlant	11,791	4,958	16,749	0	549	64	0	17,362
57	Travel and Per Diem	8,681	WPlant	5,896	2,479	8,374	0	275	32	0	8,681
58	Communication	1,447	WPlant	983	413	1,396	0	46	5	0	1,447
59	Freight and Postage	289	WPlant	197	83	279	0	9	1	0	289
60	Land, Building, Parking Rental	1,013	WPlant	688	289	977	0	32	4	0	1,013
61	Repair and Maintenance	7,234	WPlant	4,913	2,066	6,979	0	229	27	0	7,234
62	Printing	6,366	WPlant	4,323	1,818	6,141	0	201	23	0	6,366
63	Other Administrative Fees	6,077	WPlant	4,127	1,735	5,862	0	192	22	0	6,077
64	General Office Supplies	2,026	WPlant	1,376	578	1,954	0	64	7	0	2,026
65	Operating Supplies	2,286	WPlant	1,553	653	2,205	0	72	8	0	2,286
66	Subscriptions & Memberships	1,910	WPlant	1,297	545	1,842	0	60	7	0	1,910
67	Capital Outlay - Furniture and Equipment	0	WPlant	0	0	0	0	0	0	0	0
68	Total	\$528,869		\$359,177	\$151,018	\$510,195	\$0	\$16,725	\$1,950	\$0	\$528,869

Table 4-1
Lee County, Florida
Water and Wastewater System Rate Study
Water System

Classification of Net Revenue Requirements

Line No.	Description	2002 Net Revenue Requirements	Allocation Reference	Fixed			Administrative/Customer		Revenue Related	Total	
				Base Capacity	Extra Capacity	Total	Variable	Weighted Customer			Customer
Construction / Utility Inspections (# 54119)											
69	Salaries and Wages	\$143,385	WPlant	\$97,378	\$40,943	\$138,322	\$0	\$4,534	\$529	\$0	\$143,385
70	Benefits	47,835	WPlant	32,487	13,659	46,146	0	1,513	176	0	47,835
71	Additional Personnel	0	WPlant	0	0	0	0	0	0	0	0
72	Professional Services	12,105	WPlant	8,221	3,456	11,677	0	383	45	0	12,105
73	Other Contracted Services	289	WPlant	197	83	279	0	9	1	0	289
74	Travel and Per Diem	637	WPlant	432	182	614	0	20	2	0	637
75	Communication	6,103	WPlant	4,145	1,743	5,888	0	193	22	0	6,103
76	Self-Insurance Assessment	535	WPlant	363	153	516	0	17	2	0	535
77	Repair and Maintenance	10,076	WPlant	6,843	2,877	9,720	0	319	37	0	10,076
78	Other Administrative Fees	27,339	WPlant	18,567	7,807	26,373	0	865	101	0	27,339
79	General Office Supplies	116	WPlant	79	33	112	0	4	0	0	116
80	Operating Supplies	10,533	WPlant	7,153	3,008	10,161	0	333	39	0	10,533
81	Total	\$258,952		\$175,865	\$73,943	\$249,808	\$0	\$8,189	\$955	\$0	\$258,952
Maintenance Department (# 53614)											
82	Salaries and Wages	\$137,304	WPlant	\$93,249	\$39,207	\$132,455	\$0	\$4,342	\$506	\$0	\$137,304
83	Benefits	52,264	WPlant	35,495	14,924	50,419	0	1,653	193	0	52,264
84	Additional Personnel	0	WPlant	0	0	0	0	0	0	0	0
85	Professional Services	10,797	WPlant	7,333	3,083	10,416	0	341	40	0	10,797
86	Other Contracted Services	73,869	WPlant	50,168	21,093	71,261	0	2,336	272	0	73,869
87	Travel and Per Diem	1,245	WPlant	846	356	1,201	0	39	5	0	1,245
88	Communication	1,260	WPlant	855	360	1,215	0	40	5	0	1,260
89	Freight and Postage	180	WPlant	122	51	174	0	6	1	0	180
90	Electric	1,080	WPlant	733	308	1,042	0	34	4	0	1,080
91	Water and Sewer	432	WPlant	293	123	417	0	14	2	0	432
92	Trash , Garbage & Sludge Removal	432	WPlant	293	123	417	0	14	2	0	432
93	Equipment Rental	180	WPlant	122	51	174	0	6	1	0	180
94	Repair and Maintenance	44,361	WPlant	30,128	12,667	42,795	0	1,403	164	0	44,361
95	Printing	360	WPlant	244	103	347	0	11	1	0	360
96	Other Administrative Fees	450	WPlant	306	128	434	0	14	2	0	450
97	General Office Supplies	72	WPlant	49	21	69	0	2	0	0	72
98	Operating Supplies	12,668	WPlant	8,604	3,617	12,221	0	401	47	0	12,668
99	Subscriptions & Memberships	360	WPlant	244	103	347	0	11	1	0	360
100	Capital Outlay - Furniture and Equipment	0	WPlant	0	0	0	0	0	0	0	0
101	Total	\$337,314		\$229,084	\$96,319	\$325,403	\$0	\$10,667	\$1,243	\$0	\$337,314
Electronics Department (# 53615)											
102	Salaries and Wages	\$74,163	WPlant	\$50,367	\$21,177	\$71,544	\$0	\$2,345	\$273	\$0	\$74,163
103	Benefits	25,659	WPlant	17,426	7,327	24,753	0	811	95	0	25,659
104	Additional Personnel	0	WPlant	0	0	0	0	0	0	0	0
105	Professional Services	12,597	WPlant	8,555	3,597	12,152	0	398	46	0	12,597
106	Other Contracted Services	9,177	WPlant	6,233	2,621	8,853	0	290	34	0	9,177
107	Travel and Per Diem	900	WPlant	611	257	868	0	28	3	0	900
108	Communication	1,134	WPlant	770	324	1,094	0	36	4	0	1,134
109	Freight and Postage	180	WPlant	122	51	174	0	6	1	0	180
110	Electric	1,080	WPlant	733	308	1,042	0	34	4	0	1,080
111	Water and Sewer	432	WPlant	293	123	417	0	14	2	0	432
112	Trash , Garbage & Sludge Removal	432	WPlant	293	123	417	0	14	2	0	432
113	Equipment Rental	180	WPlant	122	51	174	0	6	1	0	180
114	Repair and Maintenance	13,208	WPlant	8,970	3,772	12,742	0	418	49	0	13,208
115	Printing	144	WPlant	98	41	139	0	5	1	0	144
116	Other Administrative Fees	108	WPlant	73	31	104	0	3	0	0	108
117	General Office Supplies	72	WPlant	49	21	69	0	2	0	0	72
118	Operating Supplies	6,406	WPlant	4,351	1,829	6,180	0	203	24	0	6,406
119	Subscriptions & Memberships	252	WPlant	171	72	243	0	8	1	0	252
120	Capital Outlay - Furniture and Equipment	0	WPlant	0	0	0	0	0	0	0	0
121	Total	\$146,123		\$99,238	\$41,725	\$140,964	\$0	\$4,621	\$539	\$0	\$146,123
Support Services (# 53616)											
122	Salaries and Wages	\$204,881	WCust	\$0	\$0	\$0	\$0	\$204,881	\$0	\$0	\$204,881
123	Benefits	77,389	WCust	0	0	0	0	77,389	0	0	77,389
124	Additional Personnel	0	WCust	0	0	0	0	0	0	0	0
125	Professional Services	9,099	WCust	0	0	0	0	9,099	0	0	9,099
126	Other Contracted Services	19,412	WCust	0	0	0	0	19,412	0	0	19,412
127	Travel and Per Diem	1,972	WCust	0	0	0	0	1,972	0	0	1,972
128	Communication	7,583	WCust	0	0	0	0	7,583	0	0	7,583
129	Freight and Postage	1,820	WCust	0	0	0	0	1,820	0	0	1,820
130	Electric	10,919	WCust	0	0	0	0	10,919	0	0	10,919
131	Water and Sewer	1,213	WCust	0	0	0	0	1,213	0	0	1,213
132	Trash , Garbage & Sludge Removal	1,820	WCust	0	0	0	0	1,820	0	0	1,820
133	Equipment Rental	6,066	WCust	0	0	0	0	6,066	0	0	6,066
134	Repair and Maintenance	59,449	WCust	0	0	0	0	59,449	0	0	59,449
135	Printing	2,123	WCust	0	0	0	0	2,123	0	0	2,123
136	Other Administrative Fees	1,668	WCust	0	0	0	0	1,668	0	0	1,668
137	General Office Supplies	1,972	WCust	0	0	0	0	1,972	0	0	1,972
138	Operating Supplies	21,384	WCust	0	0	0	0	21,384	0	0	21,384
139	Subscriptions & Memberships	455	WCust	0	0	0	0	455	0	0	455
140	Capital Outlay - Furniture and Equipment	0	WCust	0	0	0	0	0	0	0	0
141	Total	\$429,225		\$0	\$0	\$0	\$0	\$429,225	\$0	\$0	\$429,225

Table 4-1
Lee County, Florida
Water and Wastewater System Rate Study
Water System

Classification of Net Revenue Requirements

Line No.	Description	2002 Net Revenue Requirements	Allocation Reference	Fixed			Administrative/Customer		Revenue Related	Total	
				Base Capacity	Extra Capacity	Total	Variable	Weighted Customer			Customer
Water Operations (# 53662)											
142	Salaries and Wages	\$39,588	WS/W	\$19,770	\$8,312	\$28,082	\$0	\$6,635	\$4,871	\$0	\$39,588
143	Benefits	20,260	WS/W	10,118	4,254	14,372	0	3,396	2,493	0	20,260
144	Additional Personnel	0	WS/W	0	0	0	0	0	0	0	0
145	Legal Services	5,000	WS/W	2,497	1,050	3,547	0	838	615	0	5,000
146	Professional Services	204,900	WS/W	102,324	43,023	145,347	0	34,342	25,211	0	204,900
147	Other Contracted Services	76,500	WS/W	38,203	16,063	54,266	0	12,822	9,413	0	76,500
148	Travel and Per Diem	4,000	WS/W	1,998	840	2,837	0	670	492	0	4,000
149	Communication	30,683	WS/W	15,323	6,442	21,765	0	5,143	3,775	0	30,683
150	Advertising	1,500	WS/W	749	315	1,064	0	251	185	0	1,500
151	Freight and Postage	1,500	WS/W	749	315	1,064	0	251	185	0	1,500
152	Electric	35,000	Variable	0	0	0	35,000	0	0	0	35,000
153	Trash, Garbage & Sludge Removal	50,000	Variable	0	0	0	50,000	0	0	0	50,000
154	Land, Building, Parking Rental	250	WS/W	125	52	177	0	42	31	0	250
155	Equipment Rental	1,500	WS/W	749	315	1,064	0	251	185	0	1,500
156	Self-Insurance Assessment	34,337	WS/W	17,147	7,210	24,357	0	5,755	4,225	0	34,337
157	Insurance and Bonds	30,000	WS/W	14,982	6,299	21,281	0	5,028	3,691	0	30,000
158	Repair and Maintenance	113,548	WS/W	56,704	23,842	80,546	0	19,031	13,971	0	113,548
159	Printing	2,000	WS/W	999	420	1,419	0	335	246	0	2,000
160	Other Administrative Fees	333,493	WS/W	166,542	70,023	236,565	0	55,894	41,034	0	333,493
161	Indirect Cost	212,000	WS/W	105,870	44,514	150,383	0	35,532	26,085	0	212,000
162	General Office Supplies	2,500	WS/W	1,248	525	1,773	0	419	308	0	2,500
163	Operating Supplies	37,816	WS/W	18,885	7,940	26,825	0	6,338	4,653	0	37,816
164	Subscriptions & Memberships	1,100	WS/W	549	231	780	0	184	135	0	1,100
165	Capital Outlay - Furniture and Equipment	0	WS/W	0	0	0	0	0	0	0	0
166	Total	\$1,237,475		\$575,531	\$241,984	\$817,515	\$85,000	\$193,156	\$141,803	\$0	\$1,237,475
Water Distribution (# 53602)											
167	Salaries and Wages	\$523,562	WT/D	\$350,245	\$147,262	\$497,507	\$0	\$23,335	\$2,720	\$0	\$523,562
168	Benefits	178,365	WT/D	119,320	50,169	169,489	0	7,950	927	0	178,365
169	Additional Personnel	0	WT/D	0	0	0	0	0	0	0	0
170	Professional Services	42,000	WT/D	28,097	11,813	39,910	0	1,872	218	0	42,000
171	Other Contracted Services	253,000	WT/D	169,248	71,161	240,409	0	11,276	1,314	0	253,000
172	Travel and Per Diem	4,000	WT/D	2,676	1,125	3,801	0	178	21	0	4,000
173	Communication	5,000	WT/D	3,345	1,406	4,751	0	223	26	0	5,000
174	Freight and Postage	2,000	WT/D	1,338	563	1,900	0	89	10	0	2,000
175	Electric	160,000	Variable	0	0	0	160,000	0	0	0	160,000
176	Trash, Garbage & Sludge Removal	3,600	Variable	0	0	0	3,600	0	0	0	3,600
177	Equipment Rental	2,000	WT/D	1,338	563	1,900	0	89	10	0	2,000
178	Repair and Maintenance	194,500	WT/D	130,114	54,707	184,821	0	8,669	1,010	0	194,500
179	Printing	3,000	WT/D	2,007	844	2,851	0	134	16	0	3,000
180	Other Administrative Fees	3,000	WT/D	2,007	844	2,851	0	134	16	0	3,000
181	General Office Supplies	500	WT/D	334	141	475	0	22	3	0	500
182	Operating Supplies	62,250	Variable	0	0	0	62,250	0	0	0	62,250
183	Subscriptions & Memberships	1,500	WT/D	1,003	422	1,425	0	67	8	0	1,500
184	Capital Outlay - Furniture and Equipment	0	WT/D	0	0	0	0	0	0	0	0
185	Total	\$1,438,277		\$811,072	\$341,019	\$1,152,091	\$225,850	\$54,038	\$6,299	\$0	\$1,438,277
Water Production - Olga (# 53601)											
186	Salaries and Wages	\$279,916	WB/E	\$197,061	\$82,855	\$279,916	\$0	\$0	\$0	\$0	\$279,916
187	Benefits	103,694	WB/E	73,001	30,693	103,694	0	0	0	0	103,694
188	Additional Personnel	0	WB/E	0	0	0	0	0	0	0	0
189	Other Contracted Services	11,950	WB/E	8,413	3,537	11,950	0	0	0	0	11,950
190	Travel and Per Diem	4,000	WB/E	2,816	1,184	4,000	0	0	0	0	4,000
191	Communication	1,750	WB/E	1,232	518	1,750	0	0	0	0	1,750
192	Advertising	200	WB/E	141	59	200	0	0	0	0	200
193	Freight and Postage	2,000	WB/E	1,408	592	2,000	0	0	0	0	2,000
194	Electric	165,000	Variable	0	0	0	165,000	0	0	0	165,000
195	Trash, Garbage & Sludge Removal	77,500	Variable	0	0	0	77,500	0	0	0	77,500
196	Repair and Maintenance	113,500	WB/E	79,904	33,596	113,500	0	0	0	0	113,500
197	Printing	16,000	WB/E	11,264	4,736	16,000	0	0	0	0	16,000
198	Other Administrative Fees	3,500	WB/E	2,464	1,036	3,500	0	0	0	0	3,500
199	General Office Supplies	2,500	WB/E	1,760	740	2,500	0	0	0	0	2,500
200	Operating Supplies	365,350	Variable	0	0	0	365,350	0	0	0	365,350
201	Subscriptions & Memberships	1,000	WB/E	704	296	1,000	0	0	0	0	1,000
202	Capital Outlay - Furniture and Equipment	0	WB/E	0	0	0	0	0	0	0	0
203	Total	\$1,147,860		\$380,167	\$159,843	\$540,010	\$607,850	\$0	\$0	\$0	\$1,147,860
Water Production - Corkscrew (# 53618)											
204	Salaries and Wages	\$262,279	WB/E	\$184,644	\$77,635	\$262,279	\$0	\$0	\$0	\$0	\$262,279
205	Benefits	89,732	WB/E	63,171	26,561	89,732	0	0	0	0	89,732
206	Additional Personnel	0	WB/E	0	0	0	0	0	0	0	0
207	Professional Services	56,000	WB/E	39,424	16,576	56,000	0	0	0	0	56,000
208	Other Contracted Services	11,700	WB/E	8,237	3,463	11,700	0	0	0	0	11,700
209	Travel and Per Diem	4,000	WB/E	2,816	1,184	4,000	0	0	0	0	4,000
210	Communication	1,750	WB/E	1,232	518	1,750	0	0	0	0	1,750
211	Advertising	200	WB/E	141	59	200	0	0	0	0	200
212	Freight and Postage	2,000	WB/E	1,408	592	2,000	0	0	0	0	2,000
213	Electric	390,500	Variable	0	0	0	390,500	0	0	0	390,500
214	Repair and Maintenance	113,500	WB/E	79,904	33,596	113,500	0	0	0	0	113,500
215	Printing	26,000	WB/E	18,304	7,696	26,000	0	0	0	0	26,000
216	Other Administrative Fees	3,500	WB/E	2,464	1,036	3,500	0	0	0	0	3,500
217	General Office Supplies	2,500	WB/E	1,760	740	2,500	0	0	0	0	2,500

Table 4-1
Lee County, Florida
Water and Wastewater System Rate Study
Water System

Classification of Net Revenue Requirements

Line No.	Description	2002 Net Revenue Requirements	Allocation Reference	Fixed			Administrative/Customer		Revenue Related	Total
				Base Capacity	Extra Capacity	Total	Variable	Weighted Customer		
218	Operating Supplies	395,350	Variable	0	0	0	395,350	0	0	395,350
219	Subscriptions & Memberships	1,000	WB/E	704	296	1,000	0	0	0	1,000
220	Capital Outlay - Furniture and Equipment	0	WB/E	0	0	0	0	0	0	0
221	Total	\$1,360,011		\$404,209	\$169,952	\$574,161	\$785,850	\$0	\$0	\$0
Water Production - Waterway (# 53625)										
222	Salaries and Wages	\$191,547	WB/E	\$134,849	\$56,698	\$191,547	\$0	\$0	\$0	\$191,547
223	Benefits	69,443	WB/E	48,888	20,555	69,443	0	0	0	69,443
224	Additional Personnel	0	WB/E	0	0	0	0	0	0	0
225	Other Contracted Services	6,500	WB/E	4,576	1,924	6,500	0	0	0	6,500
226	Travel and Per Diem	4,000	WB/E	2,816	1,184	4,000	0	0	0	4,000
227	Communication	1,750	WB/E	1,232	518	1,750	0	0	0	1,750
228	Advertising	200	WB/E	141	59	200	0	0	0	200
229	Freight and Postage	2,000	WB/E	1,408	592	2,000	0	0	0	2,000
230	Electric	95,700	Variable	0	0	0	95,700	0	0	95,700
231	Trash, Garbage & Sludge Removal	52,500	Variable	0	0	0	52,500	0	0	52,500
232	Repair and Maintenance	88,500	WB/E	62,304	26,196	88,500	0	0	0	88,500
233	Printing	6,000	WB/E	4,224	1,776	6,000	0	0	0	6,000
234	Other Administrative Fees	2,500	WB/E	1,760	740	2,500	0	0	0	2,500
235	General Office Supplies	2,500	WB/E	1,760	740	2,500	0	0	0	2,500
236	Operating Supplies	95,350	Variable	0	0	0	95,350	0	0	95,350
237	Subscriptions & Memberships	1,000	WB/E	704	296	1,000	0	0	0	1,000
238	Capital Outlay - Furniture and Equipment	0	WB/E	0	0	0	0	0	0	0
239	Total	\$619,490		\$264,662	\$111,278	\$375,940	\$243,550	\$0	\$0	\$0
Water Production - College Parkway (# 53626)										
240	Electric	\$44,000	Variable	\$0	\$0	\$0	\$44,000	\$0	\$0	\$44,000
241	Trash, Garbage & Sludge Removal	12,500	Variable	0	0	0	12,500	0	0	12,500
242	Repair and Maintenance	53,500	WB/E	37,664	15,836	53,500	0	0	0	53,500
243	Printing	5,050	WB/E	3,555	1,495	5,050	0	0	0	5,050
244	Operating Supplies	22,500	Variable	0	0	0	22,500	0	0	22,500
245	Subscriptions & Memberships	500	WB/E	352	148	500	0	0	0	500
246	Total	\$138,050		\$41,571	\$17,479	\$59,050	\$79,000	\$0	\$0	\$0
Water Production - Green Meadows (# 53627)										
247	Salaries and Wages	\$260,833	WB/E	\$183,626	\$77,207	\$260,833	\$0	\$0	\$0	\$260,833
248	Benefits	92,634	WB/E	65,214	27,420	92,634	0	0	0	92,634
249	Additional Personnel	0	WB/E	0	0	0	0	0	0	0
250	Professional Services	66,000	WB/E	46,464	19,536	66,000	0	0	0	66,000
251	Other Contracted Services	11,750	WB/E	8,272	3,478	11,750	0	0	0	11,750
252	Travel and Per Diem	4,000	WB/E	2,816	1,184	4,000	0	0	0	4,000
253	Communication	1,750	WB/E	1,232	518	1,750	0	0	0	1,750
254	Advertising	200	WB/E	141	59	200	0	0	0	200
255	Freight and Postage	2,000	WB/E	1,408	592	2,000	0	0	0	2,000
256	Electric	418,000	Variable	0	0	0	418,000	0	0	418,000
257	Trash, Garbage & Sludge Removal	181,500	Variable	0	0	0	181,500	0	0	181,500
258	Repair and Maintenance	101,000	WB/E	71,104	29,896	101,000	0	0	0	101,000
259	Printing	26,000	WB/E	18,304	7,696	26,000	0	0	0	26,000
260	Other Administrative Fees	3,500	WB/E	2,464	1,036	3,500	0	0	0	3,500
261	General Office Supplies	2,500	WB/E	1,760	740	2,500	0	0	0	2,500
262	Operating Supplies	365,350	Variable	0	0	0	365,350	0	0	365,350
263	Subscriptions & Memberships	1,000	WB/E	704	296	1,000	0	0	0	1,000
264	Capital Outlay - Furniture and Equipment	0	WB/E	0	0	0	0	0	0	0
265	Total	\$1,538,017		\$403,510	\$169,657	\$573,167	\$964,850	\$0	\$0	\$0
Property Appraiser (# 51314)										
266	Professional Services	\$3,033	Cust	\$0	\$0	\$0	\$0	\$0	\$3,033	\$0
267	Total	\$3,033		\$0	\$0	\$0	\$0	\$0	\$3,033	\$0
Non-Departmental (# 51903)										
268	Professional Services	35,990	Cust	\$0	\$0	\$0	\$0	\$0	\$35,990	\$0
269	Other Contracted Services	35,990	Cust	0	0	0	0	0	35,990	0
270	Contingency	278,020	WCont	98,253	41,311	139,564	74,799	30,051	33,608	0
271	Total	\$350,000		\$98,253	\$41,311	\$139,564	\$74,799	\$30,051	\$105,588	\$0
272	Total Water System Operations and Maintenance	\$11,398,833		\$4,028,361	\$1,693,743	\$5,722,104	\$3,066,749	\$1,232,071	\$1,377,909	\$0
Other Revenue Requirements										
Debt Service										
273	Ft. Myers Beach G.O. Bonds-Series 1977	\$0	WPlant	\$0	\$0	\$0	\$0	\$0	\$0	\$0
274	South Ft. Myers G.O. Bonds-Series 1983	0	WPlant	0	0	0	0	0	0	0
275	Existing SRF PreConstruction Loan	0	WPlant	0	0	0	0	0	0	0
276	Series 1993 Water/Sewer Revenue Bonds	776,642	WPlant	527,450	221,769	749,218	0	24,561	2,863	0
277	Series 1999A Water/Sewer Revenue Bonds	5,488,527	WPlant	3,727,485	1,567,238	5,294,724	0	173,571	20,232	0
278	Additional Item	0	WPlant	0	0	0	0	0	0	0
279	State Revolving Fund Loan	0	WPlant	0	0	0	0	0	0	0
280	Total Debt Service	\$6,265,169		\$4,254,935	\$1,789,007	\$6,043,942	\$0	\$198,132	\$23,095	\$0

Table 4-1
Lee County, Florida
Water and Wastewater System Rate Study
Water System

Classification of Net Revenue Requirements

Line No.	Description	2002 Net Revenue Requirements	Allocation Reference	Fixed			Administrative/Customer		Revenue Related	Total	
				Base Capacity	Extra Capacity	Total	Variable	Weighted Customer			Customer
Other Miscellaneous Revenue Requirements											
281	Renewal and Replacement Transfer	\$1,202,937	WPlant	\$816,964	\$343,496	\$1,160,461	\$0	\$38,042	\$4,434	\$0	\$1,202,937
282	Additional Debt Service-Related Costs	474	WPlant	322	135	457	0	15	2	0	474
283	Capital from Rate Revenues	193,500	WPlant	131,414	55,254	186,667	0	6,119	713	0	193,500
284	Transfer to Capital Improvement Fund	6,043,000	WPlant	4,104,051	1,725,567	5,829,618	0	191,106	22,276	0	6,043,000
285	Working Capital - Deposits to/(use of)	0	Revenue	0	0	0	0	0	0	0	0
286	Total Other Miscellaneous Revenue Requirements	\$7,439,911		\$5,052,751	\$2,124,452	\$7,177,203	\$0	\$235,283	\$27,425	\$0	\$7,439,911
287	GROSS REVENUE REQUIREMENTS	\$25,103,913		\$13,336,048	\$5,607,202	\$18,943,249	\$3,066,749	\$1,665,486	\$1,428,429	\$0	\$25,103,913
Less Income and Funds from Other Sources											
288	Other Operating Revenues	2,117,174	WOtRev	\$1,225,871	\$515,423	\$1,741,294	\$0	\$270,556	\$18,211	\$87,113	\$2,117,174
289	Interest Income	956,415	WInt	197,169	82,900	280,069	0	80,533	831	594,983	956,415
290	Additional Item	0	Revenue	0	0	0	0	0	0	0	0
291	Total Income and Funds from Other Sources	3,073,589		1,423,040	598,323	2,021,363	0	351,089	19,041	682,096	3,073,589
292	NET REVENUE REQUIREMENTS	22,030,323		11,913,008	5,008,878	16,921,886	3,066,749	1,314,397	1,409,388	(682,096)	22,030,323
293	Allocation of Revenue Related	0		(357,770)	(150,426)	(508,196)	(92,100)	(39,474)	(42,327)	682,096	0
294	REVISED NET REVENUE REQUIREMENTS	\$22,030,323		\$11,555,238	\$4,858,452	\$16,413,691	\$2,974,649	\$1,274,923	\$1,367,061	\$0	\$22,030,323

Table 4-2
Lee County, Florida
Water and Wastewater System Rate Study
Wastewater System

Classification of Net Revenue Requirements

Line No.	Description	2002 Net Revenue Requirements	Allocation Reference	Fixed			Variable	Administrative/Customer		Revenue Related	Total
				Base Capacity	Extra Capacity	Total		Weighted Customer	Customer		
OPERATING EXPENSES - Wastewater											
Administration (# 53663)											
1	Salaries and Wages	\$173,062	SS/W	\$86,812	\$52,021	\$138,833	\$0	\$13,449	\$20,780	\$0	\$173,062
2	Benefits	52,771	SS/W	26,471	15,862	42,333	0	4,101	6,336	0	52,771
3	Additional Personnel	0	SS/W	0	0	0	0	0	0	0	0
4	Legal Services	3,795	SS/W	1,904	1,141	3,044	0	295	456	0	3,795
5	Professional Services	63,751	SS/W	31,979	19,163	51,142	0	4,954	7,655	0	63,751
6	Other Contracted Services	30,357	SS/W	15,228	9,125	24,353	0	2,359	3,645	0	30,357
7	Travel and Per Diem	10,322	SS/W	5,178	3,103	8,280	0	802	1,239	0	10,322
8	Communication	5,336	SS/W	2,677	1,604	4,280	0	415	641	0	5,336
9	Advertising	2,530	SS/W	1,269	760	2,029	0	197	304	0	2,530
10	Freight and Postage	1,265	SS/W	635	380	1,015	0	98	152	0	1,265
11	Land, Building, Parking Rental	1,138	SS/W	571	342	913	0	88	137	0	1,138
12	Equipment Rental	5,060	SS/W	2,538	1,521	4,059	0	393	608	0	5,060
13	Self-Insurance Assessment	5,313	SS/W	2,665	1,597	4,262	0	413	638	0	5,313
14	Repair and Maintenance	10,666	SS/W	5,350	3,206	8,556	0	829	1,281	0	10,666
15	Printing	759	SS/W	381	228	609	0	59	91	0	759
16	Other Administrative Fees	8,601	SS/W	4,315	2,585	6,900	0	668	1,033	0	8,601
17	General Office Supplies	1,568	SS/W	787	471	1,258	0	122	188	0	1,568
18	Operating Supplies	2,308	SS/W	1,158	694	1,851	0	179	277	0	2,308
19	Subscriptions & Memberships	2,884	SS/W	1,447	867	2,314	0	224	346	0	2,884
20	Capital Outlay - Furniture and Equipment	0	SS/W	0	0	0	0	0	0	0	0
	Total	381,485		191,362	114,670	306,033	0	29,647	45,805	0	381,485
Water Meter Services (# 53609)											
21	Salaries and Wages	163,985	WCust	0	0	0	0	163,985	0	0	163,985
22	Benefits	69,145	WCust	0	0	0	0	69,145	0	0	69,145
23	Additional Personnel	0	WCust	0	0	0	0	0	0	0	0
24	Other Contracted Services	3,540	WCust	0	0	0	0	3,540	0	0	3,540
25	Travel and Per Diem	669	WCust	0	0	0	0	669	0	0	669
26	Repair and Maintenance	13,524	WCust	0	0	0	0	13,524	0	0	13,524
27	Printing	787	WCust	0	0	0	0	787	0	0	787
28	General Office Supplies	590	WCust	0	0	0	0	590	0	0	590
29	Operating Supplies	22,039	WCust	0	0	0	0	22,039	0	0	22,039
30	Total	274,279		0	0	0	0	274,279	0	0	274,279
Billings & Collections (# 53610)											
31	Salaries and Wages	235,563	Cust	0	0	0	0	0	235,563	0	235,563
32	Benefits	90,222	Cust	0	0	0	0	0	90,222	0	90,222
33	Additional Personnel	0	Cust	0	0	0	0	0	0	0	0
34	Professional Services	99,288	Cust	0	0	0	0	0	99,288	0	99,288
35	Other Contracted Services	74,694	Cust	0	0	0	0	0	74,694	0	74,694
36	Travel and Per Diem	2,950	Cust	0	0	0	0	0	2,950	0	2,950
37	Communication	9,441	Cust	0	0	0	0	0	9,441	0	9,441
38	Freight and Postage	130,994	Cust	0	0	0	0	0	130,994	0	130,994
39	Electric	10,385	Cust	0	0	0	0	0	10,385	0	10,385
40	Water and Sewer	787	Cust	0	0	0	0	0	787	0	787
41	Trash, Garbage & Sludge Removal	208	Cust	0	0	0	0	0	208	0	208
42	Equipment Rental	3,147	Cust	0	0	0	0	0	3,147	0	3,147
43	Repair and Maintenance	5,672	Cust	0	0	0	0	0	5,672	0	5,672
44	Printing	3,147	Cust	0	0	0	0	0	3,147	0	3,147
45	Other Administrative Fees	393	Cust	0	0	0	0	0	393	0	393
46	General Office Supplies	23,681	Cust	0	0	0	0	0	23,681	0	23,681
47	Operating Supplies	3,619	Cust	0	0	0	0	0	3,619	0	3,619
48	Subscriptions & Memberships	98	Cust	0	0	0	0	0	98	0	98
49	Capital Outlay - Furniture and Equipment	0	Cust	0	0	0	0	0	0	0	0
50	Total	694,291		0	0	0	0	0	694,291	0	694,291
Utilities Engineering (# 53607)											
51	Salaries and Wages	218,410	SPlant	129,579	77,648	207,227	0	11,183	0	0	218,410
52	Benefits	63,564	SPlant	37,711	22,598	60,309	0	3,255	0	0	63,564
53	Additional Personnel	0	SPlant	0	0	0	0	0	0	0	0
54	Professional Services	63,190	SPlant	37,490	22,465	59,955	0	3,235	0	0	63,190
55	Other Contracted Services	12,638	SPlant	7,498	4,493	11,991	0	647	0	0	12,638
56	Travel and Per Diem	6,319	SPlant	3,749	2,247	5,995	0	324	0	0	6,319
57	Communication	1,053	SPlant	625	374	999	0	54	0	0	1,053
58	Freight and Postage	211	SPlant	125	75	200	0	11	0	0	211
59	Land, Building, Parking Rental	737	SPlant	437	262	699	0	38	0	0	737
60	Repair and Maintenance	5,266	SPlant	3,124	1,872	4,996	0	270	0	0	5,266
61	Printing	4,634	SPlant	2,749	1,647	4,397	0	237	0	0	4,634
62	Other Administrative Fees	4,423	SPlant	2,624	1,573	4,197	0	226	0	0	4,423
63	General Office Supplies	1,474	SPlant	875	524	1,399	0	75	0	0	1,474
64	Operating Supplies	1,664	SPlant	987	592	1,579	0	85	0	0	1,664
65	Subscriptions & Memberships	1,390	SPlant	825	494	1,319	0	71	0	0	1,390
66	Capital Outlay - Furniture and Equipment	0	SPlant	0	0	0	0	0	0	0	0
67	Total	384,974		228,399	136,864	365,262	0	19,711	0	0	384,974

Table 4-2
Lee County, Florida
Water and Wastewater System Rate Study
Wastewater System

Classification of Net Revenue Requirements

Line No.	Description	2002 Net Revenue Requirements	Allocation Reference	Fixed			Variable	Administrative/Customer		Revenue Related	Total
				Base Capacity	Extra Capacity	Total		Weighted Customer	Customer		
Construction / Utility Inspections (# 54119)											
68	Salaries and Wages	104,372	SPlant	61,922	37,106	99,028	0	5,344	0	0	104,372
69	Benefits	34,820	SPlant	20,658	12,379	33,037	0	1,783	0	0	34,820
70	Additional Personnel	0	SPlant	0	0	0	0	0	0	0	0
71	Professional Services	8,811	SPlant	5,228	3,133	8,360	0	451	0	0	8,811
72	Other Contracted Services	211	SPlant	125	75	200	0	11	0	0	211
73	Travel and Per Diem	463	SPlant	275	165	440	0	24	0	0	463
74	Communication	4,443	SPlant	2,636	1,579	4,215	0	227	0	0	4,443
75	Self-Insurance Assessment	389	SPlant	231	138	369	0	20	0	0	389
76	Repair and Maintenance	7,335	SPlant	4,352	2,608	6,959	0	376	0	0	7,335
77	Other Administrative Fees	19,900	SPlant	11,807	7,075	18,881	0	1,019	0	0	19,900
78	General Office Supplies	84	SPlant	50	30	80	0	4	0	0	84
79	Operating Supplies	7,667	SPlant	4,549	2,726	7,275	0	393	0	0	7,667
80	Total	188,496		111,832	67,013	178,845	0	9,651	0	0	188,496
Maintenance Department (# 53614)											
81	Salaries and Wages	244,201	SPlant	144,881	86,817	231,698	0	12,504	0	0	244,201
82	Benefits	92,955	SPlant	55,148	33,047	88,195	0	4,759	0	0	92,955
83	Additional Personnel	0	SPlant	0	0	0	0	0	0	0	0
84	Professional Services	19,203	SPlant	11,393	6,827	18,220	0	983	0	0	19,203
85	Other Contracted Services	131,381	SPlant	77,946	46,708	124,654	0	6,727	0	0	131,381
86	Travel and Per Diem	2,215	SPlant	1,314	787	2,101	0	113	0	0	2,215
87	Communication	2,240	SPlant	1,329	796	2,126	0	115	0	0	2,240
88	Freight and Postage	320	SPlant	190	114	304	0	16	0	0	320
89	Electric	1,920	SPlant	1,139	683	1,822	0	98	0	0	1,920
90	Water and Sewer	768	SPlant	456	273	729	0	39	0	0	768
91	Trash , Garbage & Sludge Removal	768	SPlant	456	273	729	0	39	0	0	768
92	Equipment Rental	320	SPlant	190	114	304	0	16	0	0	320
93	Repair and Maintenance	78,899	SPlant	46,809	28,050	74,859	0	4,040	0	0	78,899
94	Printing	640	SPlant	380	228	607	0	33	0	0	640
95	Other Administrative Fees	800	SPlant	475	284	759	0	41	0	0	800
96	General Office Supplies	128	SPlant	76	46	121	0	7	0	0	128
97	Operating Supplies	22,532	SPlant	13,368	8,010	21,378	0	1,154	0	0	22,532
98	Subscriptions & Memberships	640	SPlant	380	228	607	0	33	0	0	640
99	Capital Outlay - Furniture and Equipment	0	SPlant	0	0	0	0	0	0	0	0
100	Total	599,930		355,929	213,284	569,212	0	30,717	0	0	599,930
Electronics Department (# 53615)											
101	Salaries and Wages	131,903	SPlant	78,256	46,893	125,149	0	6,754	0	0	131,903
102	Benefits	45,636	SPlant	27,075	16,224	43,299	0	2,337	0	0	45,636
103	Additional Personnel	0	SPlant	0	0	0	0	0	0	0	0
104	Professional Services	22,404	SPlant	13,292	7,965	21,256	0	1,147	0	0	22,404
105	Other Contracted Services	16,323	SPlant	9,684	5,803	15,487	0	836	0	0	16,323
106	Travel and Per Diem	1,600	SPlant	949	569	1,518	0	82	0	0	1,600
107	Communication	2,016	SPlant	1,196	717	1,913	0	103	0	0	2,016
108	Freight and Postage	320	SPlant	190	114	304	0	16	0	0	320
109	Electric	1,920	SPlant	1,139	683	1,822	0	98	0	0	1,920
110	Water and Sewer	768	SPlant	456	273	729	0	39	0	0	768
111	Trash , Garbage & Sludge Removal	768	SPlant	456	273	729	0	39	0	0	768
112	Equipment Rental	320	SPlant	190	114	304	0	16	0	0	320
113	Repair and Maintenance	23,492	SPlant	13,937	8,352	22,289	0	1,203	0	0	23,492
114	Printing	256	SPlant	152	91	243	0	13	0	0	256
115	Other Administrative Fees	192	SPlant	114	68	182	0	10	0	0	192
116	General Office Supplies	128	SPlant	76	46	121	0	7	0	0	128
117	Operating Supplies	11,394	SPlant	6,760	4,051	10,810	0	583	0	0	11,394
118	Subscriptions & Memberships	448	SPlant	266	159	425	0	23	0	0	448
119	Capital Outlay - Furniture and Equipment	0	SPlant	0	0	0	0	0	0	0	0
120	Total	259,888		154,187	92,394	246,581	0	13,307	0	0	259,888
Support Services (# 53616)											
121	Salaries and Wages	132,859	Cust	0	0	0	0	0	132,859	0	132,859
122	Benefits	50,184	Cust	0	0	0	0	0	50,184	0	50,184
123	Additional Personnel	0	Cust	0	0	0	0	0	0	0	0
124	Professional Services	5,901	Cust	0	0	0	0	0	5,901	0	5,901
125	Other Contracted Services	12,588	Cust	0	0	0	0	0	12,588	0	12,588
126	Travel and Per Diem	1,278	Cust	0	0	0	0	0	1,278	0	1,278
127	Communication	4,917	Cust	0	0	0	0	0	4,917	0	4,917
128	Freight and Postage	1,180	Cust	0	0	0	0	0	1,180	0	1,180
129	Electric	7,081	Cust	0	0	0	0	0	7,081	0	7,081
130	Water and Sewer	787	Cust	0	0	0	0	0	787	0	787
131	Trash , Garbage & Sludge Removal	1,180	Cust	0	0	0	0	0	1,180	0	1,180
132	Equipment Rental	3,934	Cust	0	0	0	0	0	3,934	0	3,934
133	Repair and Maintenance	38,551	Cust	0	0	0	0	0	38,551	0	38,551
134	Printing	1,377	Cust	0	0	0	0	0	1,377	0	1,377
135	Other Administrative Fees	1,082	Cust	0	0	0	0	0	1,082	0	1,082
136	General Office Supplies	1,278	Cust	0	0	0	0	0	1,278	0	1,278
137	Operating Supplies	13,866	Cust	0	0	0	0	0	13,866	0	13,866
138	Subscriptions & Memberships	295	Cust	0	0	0	0	0	295	0	295
139	Capital Outlay - Furniture and Equipment	0	Cust	0	0	0	0	0	0	0	0
140	Total	278,338		0	0	0	0	0	278,338	0	278,338

Table 4-2
Lee County, Florida
Water and Wastewater System Rate Study
Wastewater System

Classification of Net Revenue Requirements

Line No.	Description	2002 Net Revenue Requirements	Allocation Reference	Fixed			Variable	Administrative/Customer		Revenue Related	Total
				Base Capacity	Extra Capacity	Total		Weighted Customer	Customer		
Sewer Operations (# 53606)											
141	Salaries and Wages	38,438	SS/W	19,281	11,554	30,836	0	2,987	4,615	0	38,438
142	Benefits	18,987	SS/W	9,524	5,707	15,232	0	1,476	2,280	0	18,987
143	Additional Personnel	0	SS/W	0	0	0	0	0	0	0	0
144	Legal Services	5,000	SS/W	2,508	1,503	4,011	0	389	600	0	5,000
145	Professional Services	229,900	SS/W	115,324	69,106	184,429	0	17,866	27,604	0	229,900
146	Other Contracted Services	101,500	SS/W	50,915	30,510	81,425	0	7,888	12,187	0	101,500
147	Travel and Per Diem	4,000	SS/W	2,006	1,202	3,209	0	311	480	0	4,000
148	Communication	129,683	SS/W	65,052	38,981	104,034	0	10,078	15,571	0	129,683
149	Advertising	1,500	SS/W	752	451	1,203	0	117	180	0	1,500
150	Freight and Postage	1,500	SS/W	752	451	1,203	0	117	180	0	1,500
151	Electric	60,000	Variable	0	0	0	60,000	0	0	0	60,000
152	Trash, Garbage & Sludge Removal	50,000	Variable	0	0	0	50,000	0	0	0	50,000
153	Land, Building, Parking Rental	250	SS/W	125	75	201	0	19	30	0	250
154	Equipment Rental	1,500	SS/W	752	451	1,203	0	117	180	0	1,500
155	Self-Insurance Assessment	33,585	SS/W	16,847	10,095	26,942	0	2,610	4,033	0	33,585
156	Insurance and Bonds	30,000	SS/W	15,049	9,018	24,066	0	2,331	3,602	0	30,000
157	Repair and Maintenance	7,200	SS/W	3,612	2,164	5,776	0	560	865	0	7,200
158	Printing	2,000	SS/W	1,003	601	1,604	0	155	240	0	2,000
159	Other Administrative Fees	333,492	SS/W	167,288	100,244	267,532	0	25,917	40,043	0	333,492
160	Indirect Cost	212,000	SS/W	106,344	63,725	170,070	0	16,475	25,455	0	212,000
161	General Office Supplies	2,500	SS/W	1,254	751	2,006	0	194	300	0	2,500
162	Operating Supplies	30,825	SS/W	15,463	9,266	24,728	0	2,396	3,701	0	30,825
163	Subscriptions & Memberships	1,100	SS/W	552	331	882	0	85	132	0	1,100
164	Capital Outlay - Furniture and Equipment	0	SS/W	0	0	0	0	0	0	0	0
165	Total	1,294,960		594,406	356,187	950,593	110,000	92,088	142,280	0	1,294,960
Wastewater Collection (# 53604)											
166	Salaries and Wages	641,481	ST/D	376,928	225,868	602,796	0	38,685	0	0	641,481
167	Benefits	233,387	ST/D	137,136	82,176	219,312	0	14,075	0	0	233,387
168	Additional Personnel	0	ST/D	0	0	0	0	0	0	0	0
169	Legal Services	1,000	ST/D	588	352	940	0	60	0	0	1,000
170	Professional Services	40,000	ST/D	23,504	14,084	37,588	0	2,412	0	0	40,000
171	Other Contracted Services	253,600	ST/D	149,013	89,293	238,306	0	15,294	0	0	253,600
172	Travel and Per Diem	6,000	ST/D	3,526	2,113	5,638	0	362	0	0	6,000
173	Communication	9,250	ST/D	5,435	3,257	8,692	0	558	0	0	9,250
174	Advertising	1,000	ST/D	588	352	940	0	60	0	0	1,000
175	Electric	250,000	Variable	0	0	0	250,000	0	0	0	250,000
176	Water and Sewer	40,000	Variable	0	0	0	40,000	0	0	0	40,000
177	Trash, Garbage & Sludge Removal	30,000	Variable	0	0	0	30,000	0	0	0	30,000
178	Equipment Rental	5,000	ST/D	2,938	1,761	4,698	0	302	0	0	5,000
179	Repair and Maintenance	1,005,317	ST/D	590,715	353,976	944,691	0	60,626	0	0	1,005,317
180	Printing	1,000	ST/D	588	352	940	0	60	0	0	1,000
181	Other Administrative Fees	3,000	ST/D	1,763	1,056	2,819	0	181	0	0	3,000
182	General Office Supplies	1,000	ST/D	588	352	940	0	60	0	0	1,000
183	Operating Supplies	686,050	Variable	0	0	0	686,050	0	0	0	686,050
184	Subscriptions & Memberships	3,600	ST/D	2,115	1,268	3,383	0	217	0	0	3,600
185	Capital Outlay - Furniture and Equipment	0	ST/D	0	0	0	0	0	0	0	0
186	Total	3,210,685		1,295,423	776,260	2,071,683	1,006,050	132,952	0	0	3,210,685
Wastewater Treatment - Beach (# 53605)											
187	Salaries and Wages	440,518	SB/E	275,456	165,062	440,518	0	0	0	0	440,518
188	Benefits	138,527	SB/E	86,621	51,906	138,527	0	0	0	0	138,527
189	Additional Personnel	0	SB/E	0	0	0	0	0	0	0	0
190	Professional Services	40,000	SB/E	25,012	14,988	40,000	0	0	0	0	40,000
191	Other Contracted Services	18,000	SB/E	11,255	6,745	18,000	0	0	0	0	18,000
192	Travel and Per Diem	4,500	SB/E	2,814	1,686	4,500	0	0	0	0	4,500
193	Communication	2,000	SB/E	1,251	749	2,000	0	0	0	0	2,000
194	Advertising	200	SB/E	125	75	200	0	0	0	0	200
195	Freight and Postage	200	SB/E	125	75	200	0	0	0	0	200
196	Electric	350,000	Variable	0	0	0	350,000	0	0	0	350,000
197	Water and Sewer	1,200	Variable	0	0	0	1,200	0	0	0	1,200
198	Trash, Garbage & Sludge Removal	62,500	Variable	0	0	0	62,500	0	0	0	62,500
199	Equipment Rental	5,000	SB/E	3,127	1,874	5,000	0	0	0	0	5,000
200	Repair and Maintenance	145,250	SB/E	90,825	54,425	145,250	0	0	0	0	145,250
201	Printing	2,000	SB/E	1,251	749	2,000	0	0	0	0	2,000
202	Other Administrative Fees	3,000	SB/E	1,876	1,124	3,000	0	0	0	0	3,000
203	General Office Supplies	2,500	SB/E	1,563	937	2,500	0	0	0	0	2,500
204	Operating Supplies	157,000	Variable	0	0	0	157,000	0	0	0	157,000
205	Subscriptions & Memberships	1,000	SB/E	625	375	1,000	0	0	0	0	1,000
206	Capital Outlay - Furniture and Equipment	0	SB/E	0	0	0	0	0	0	0	0
207	Total	1,373,395		501,925	300,770	802,695	570,700	0	0	0	1,373,395
Wastewater Treatment - Waterway (# 53623)											
208	Salaries and Wages	188,235	SB/E	117,703	70,532	188,235	0	0	0	0	188,235
209	Benefits	83,980	SB/E	52,513	31,467	83,980	0	0	0	0	83,980
210	Additional Personnel	0	SB/E	0	0	0	0	0	0	0	0

Table 4-2
Lee County, Florida
Water and Wastewater System Rate Study
Wastewater System

Classification of Net Revenue Requirements

Line No.	Description	2002		Fixed			Administrative/Customer		Revenue Related	Total
		Net Revenue Requirements	Allocation Reference	Base Capacity	Extra Capacity	Total	Variable	Weighted Customer		
211	Professional Services	20,000	SB/E	12,506	7,494	20,000	0	0	0	20,000
212	Other Contracted Services	8,250	SB/E	5,159	3,091	8,250	0	0	0	8,250
213	Travel and Per Diem	4,500	SB/E	2,814	1,686	4,500	0	0	0	4,500
214	Communication	1,500	SB/E	938	562	1,500	0	0	0	1,500
215	Advertising	100	SB/E	63	37	100	0	0	0	100
216	Freight and Postage	200	SB/E	125	75	200	0	0	0	200
217	Electric	126,500	Variable	0	0	0	126,500	0	0	126,500
218	Water and Sewer	1,200	Variable	0	0	0	1,200	0	0	1,200
219	Trash, Garbage & Sludge Removal	72,500	Variable	0	0	0	72,500	0	0	72,500
220	Equipment Rental	500	SB/E	313	187	500	0	0	0	500
221	Repair and Maintenance	89,750	SB/E	56,121	33,629	89,750	0	0	0	89,750
222	Printing	2,000	SB/E	1,251	749	2,000	0	0	0	2,000
223	Other Administrative Fees	3,000	SB/E	1,876	1,124	3,000	0	0	0	3,000
224	General Office Supplies	1,500	SB/E	938	562	1,500	0	0	0	1,500
225	Operating Supplies	67,300	Variable	0	0	0	67,300	0	0	67,300
226	Subscriptions & Memberships	600	SB/E	375	225	600	0	0	0	600
227	Capital Outlay - Furniture and Equipment	0	SB/E	0	0	0	0	0	0	0
228	Total	671,615		252,693	151,422	404,115	267,500	0	0	671,615
Wastewater Treatment - Fiesta Village (# 53624)										
229	Salaries and Wages	287,158	SB/E	179,560	107,598	287,158	0	0	0	287,158
230	Benefits	86,619	SB/E	54,163	32,456	86,619	0	0	0	86,619
231	Additional Personnel	0	SB/E	0	0	0	0	0	0	0
232	Professional Services	10,000	SB/E	6,253	3,747	10,000	0	0	0	10,000
233	Other Contracted Services	12,800	SB/E	8,004	4,796	12,800	0	0	0	12,800
234	Travel and Per Diem	4,500	SB/E	2,814	1,686	4,500	0	0	0	4,500
235	Communication	2,000	SB/E	1,251	749	2,000	0	0	0	2,000
236	Advertising	200	SB/E	125	75	200	0	0	0	200
237	Freight and Postage	200	SB/E	125	75	200	0	0	0	200
238	Electric	172,500	Variable	0	0	0	172,500	0	0	172,500
239	Water and Sewer	1,200	Variable	0	0	0	1,200	0	0	1,200
240	Trash, Garbage & Sludge Removal	83,000	Variable	0	0	0	83,000	0	0	83,000
241	Equipment Rental	5,000	SB/E	3,127	1,874	5,000	0	0	0	5,000
242	Repair and Maintenance	135,250	SB/E	84,572	50,678	135,250	0	0	0	135,250
243	Printing	2,000	SB/E	1,251	749	2,000	0	0	0	2,000
244	Other Administrative Fees	3,000	SB/E	1,876	1,124	3,000	0	0	0	3,000
245	General Office Supplies	2,500	SB/E	1,563	937	2,500	0	0	0	2,500
246	Operating Supplies	130,000	Variable	0	0	0	130,000	0	0	130,000
247	Subscriptions & Memberships	1,000	SB/E	625	375	1,000	0	0	0	1,000
248	Capital Outlay - Furniture and Equipment	0	SB/E	0	0	0	0	0	0	0
249	Total	938,927		345,308	206,919	552,227	386,700	0	0	938,927
Wastewater Treatment - Matlacha / Pine (# 53651)										
250	Salaries and Wages	90,310	SB/E	56,471	33,839	90,310	0	0	0	90,310
251	Benefits	27,949	SB/E	17,477	10,472	27,949	0	0	0	27,949
252	Additional Personnel	0	SB/E	0	0	0	0	0	0	0
253	Other Contracted Services	5,500	SB/E	3,439	2,061	5,500	0	0	0	5,500
254	Travel and Per Diem	4,500	SB/E	2,814	1,686	4,500	0	0	0	4,500
255	Communication	1,500	SB/E	938	562	1,500	0	0	0	1,500
256	Advertising	100	SB/E	63	37	100	0	0	0	100
257	Freight and Postage	200	SB/E	125	75	200	0	0	0	200
258	Electric	50,000	Variable	0	0	0	50,000	0	0	50,000
259	Water and Sewer	1,200	Variable	0	0	0	1,200	0	0	1,200
260	Trash, Garbage & Sludge Removal	19,500	Variable	0	0	0	19,500	0	0	19,500
261	Equipment Rental	500	SB/E	313	187	500	0	0	0	500
262	Repair and Maintenance	53,750	SB/E	33,610	20,140	53,750	0	0	0	53,750
263	Printing	2,000	SB/E	1,251	749	2,000	0	0	0	2,000
264	Other Administrative Fees	3,000	SB/E	1,876	1,124	3,000	0	0	0	3,000
265	General Office Supplies	1,000	SB/E	625	375	1,000	0	0	0	1,000
266	Operating Supplies	58,300	Variable	0	0	0	58,300	0	0	58,300
267	Subscriptions & Memberships	1,000	SB/E	625	375	1,000	0	0	0	1,000
268	Capital Outlay - Furniture and Equipment	0	SB/E	0	0	0	0	0	0	0
269	Aids to Private Organizations (LCRWSA)	0	SB/E	0	0	0	0	0	0	0
270	Total	320,309		119,626	71,683	191,309	129,000	0	0	320,309
Wastewater Treatment - Gateway										
271	Salaries and Wages	189,367	SB/E	118,411	70,956	189,367	0	0	0	189,367
272	Benefits	71,951	SB/E	44,991	26,960	71,951	0	0	0	71,951
273	Additional Personnel	0	SB/E	0	0	0	0	0	0	0
274	Other Contracted Services	8,250	SB/E	5,159	3,091	8,250	0	0	0	8,250
275	Travel and Per Diem	4,500	SB/E	2,814	1,686	4,500	0	0	0	4,500
276	Communication	1,500	SB/E	938	562	1,500	0	0	0	1,500
277	Advertising	100	SB/E	63	37	100	0	0	0	100
278	Freight and Postage	200	SB/E	125	75	200	0	0	0	200
279	Electric	126,500	Variable	0	0	0	126,500	0	0	126,500
280	Water and Sewer	1,200	Variable	0	0	0	1,200	0	0	1,200
281	Trash, Garbage & Sludge Removal	72,500	Variable	0	0	0	72,500	0	0	72,500
282	Equipment Rental	5,000	SB/E	3,127	1,874	5,000	0	0	0	5,000
283	Repair and Maintenance	90,250	SB/E	56,433	33,817	90,250	0	0	0	90,250
284	Printing	2,000	SB/E	1,251	749	2,000	0	0	0	2,000
285	Other Administrative Fees	3,000	SB/E	1,876	1,124	3,000	0	0	0	3,000
286	General Office Supplies	1,500	SB/E	938	562	1,500	0	0	0	1,500
287	Operating Supplies	58,500	Variable	0	0	0	58,500	0	0	58,500
288	Subscriptions & Memberships	1,000	SB/E	625	375	1,000	0	0	0	1,000
289	Capital Outlay - Furniture and Equipment	0	SB/E	0	0	0	0	0	0	0
290	Total	637,318		236,750	141,868	378,618	258,700	0	0	637,318

Table 4-2
Lee County, Florida
Water and Wastewater System Rate Study
Wastewater System

Classification of Net Revenue Requirements

Line No.	Description	2002 Net Revenue Requirements	Allocation Reference	Fixed			Variable	Administrative/Customer		Revenue Related	Total
				Base Capacity	Extra Capacity	Total		Weighted Customer	Customer		
Wastewater Treatment - Pack Plants (# 53652)											
291	Professional Services	20,000	SB/E	12,506	7,494	20,000	0	0	0	0	20,000
292	Other Contracted Services	7,000	SB/E	4,377	2,623	7,000	0	0	0	0	7,000
293	Travel and Per Diem	1,500	SB/E	938	562	1,500	0	0	0	0	1,500
294	Electric	20,000	Variable	0	0	0	20,000	0	0	0	20,000
295	Water and Sewer	1,200	Variable	0	0	0	1,200	0	0	0	1,200
296	Trash, Garbage & Sludge Removal	20,000	Variable	0	0	0	20,000	0	0	0	20,000
297	Repair and Maintenance	23,000	SB/E	14,382	8,618	23,000	0	0	0	0	23,000
298	Operating Supplies	7,800	Variable	0	0	0	7,800	0	0	0	7,800
299	Total	100,500		32,203	19,297	51,500	49,000	0	0	0	100,500
Wastewater Treatment Contract (# 53603)											
300	Other Contracted Services	4,707,967	SB/E	2,943,892	1,764,075	4,707,967	0	0	0	0	4,707,967
301	Total	4,707,967		2,943,892	1,764,075	4,707,967	0	0	0	0	4,707,967
Property Appraiser (# 51314)											
302	Professional Services	1,967	SPlant	1,167	699	1,866	0	101	0	0	1,967
303	Total	1,967		1,167	699	1,866	0	101	0	0	1,967
Non-Departmental (# 51903)											
304	Professional Services	64,010	Cust	0	0	0	0	0	64,010	0	64,010
305	Other Contracted Services	64,010	Cust	0	0	0	0	0	64,010	0	64,010
306	Contingency	411,184	SCont	184,127	110,335	294,463	69,441	15,061	32,218	0	411,184
307	Total	539,204		184,127	110,335	294,463	69,441	15,061	160,238	0	539,204
308	Total Wastewater System Operating Expenses	\$16,858,526		\$7,549,227	\$4,523,741	\$12,072,968	\$2,847,091	\$617,515	\$1,320,952	\$0	\$16,858,526
Other Revenue Requirements											
Debt Service											
309	Ft. Myers Beach G.O. Bonds-Series 1977	\$689,848	SPlant	\$409,275	\$245,251	\$654,527	\$0	\$35,321	\$0	\$0	\$689,848
310	South Ft. Myers G.O. Bonds-Series 1983	617,667	SPlant	366,452	219,590	586,041	0	31,626	0	0	617,667
311	Existing SRF PreConstruction Loan	0	SPlant	0	0	0	0	0	0	0	0
312	Series 1993 Water/Sewer Revenue Bonds	1,763,894	SPlant	1,046,489	627,090	1,673,580	0	90,314	0	0	1,763,894
313	Series 1999A Water/Sewer Revenue Bonds	3,052,598	SPlant	1,811,056	1,085,244	2,896,300	0	156,298	0	0	3,052,598
314	Additional Item	0	SPlant	0	0	0	0	0	0	0	0
315	State Revolving Fund Loan	442,288	SPlant	262,402	157,240	419,642	0	22,646	0	0	442,288
316	Total Debt Service	\$6,566,295		\$3,895,675	\$2,334,415	\$6,230,090	\$0	\$336,206	\$0	\$0	\$6,566,295
Other Miscellaneous Revenue Requirements											
317	Renewal and Replacement Transfer	\$1,148,575	SPlant	\$681,431	\$408,335	\$1,089,766	\$0	\$58,809	\$0	\$0	\$1,148,575
318	Additional Debt Service-Related Costs	8,426	SPlant	4,999	2,996	7,994	0	431	0	0	8,426
319	Capital from Rate Revenues	193,500	SPlant	114,800	68,792	183,592	0	9,908	0	0	193,500
320	Transfer to Capital Improvement Fund	0	SPlant	0	0	0	0	0	0	0	0
321	Working Capital - Deposits to/use of	(1,487,000)	Revenue	0	0	0	0	0	0	(1,487,000)	(1,487,000)
322	Total Other Miscellaneous Revenue Requirements	(136,499)		\$801,230	\$480,123	\$1,281,353	\$0	\$69,148	\$0	-\$1,487,000	-\$136,499
323	GROSS REVENUE REQUIREMENTS	\$23,288,322		\$12,246,132	\$7,338,279	\$19,584,411	\$2,847,091	\$1,022,869	\$1,320,952	(\$1,487,000)	\$23,288,322
Less Income and Funds from Other Sources											
324	Other Operating Revenues	1,085,829	SOiRev	\$236,025	\$141,434	\$377,459	\$226,940	\$0	\$2,082	\$479,349	\$1,085,829
325	Interest Income	878,754	SInt	141,592	84,846	226,438	0	57,294	0	595,021	878,754
326	Additional Item	0	Revenue	0	0	0	0	0	0	0	0
327	Total Income and Funds from Other Sources	1,964,583		377,616	226,280	603,896	226,940	57,294	2,082	1,074,371	1,964,583
328	NET REVENUE REQUIREMENTS	21,323,739		11,868,516	7,111,999	18,980,514	2,620,152	965,574	1,318,870	(2,561,371)	21,323,739
329	Allocation of Revenue Related	0		(1,272,746)	(762,670)	(2,035,416)	(280,978)	(103,545)	(141,432)	2,561,371	0
330	REVISED NET REVENUE REQUIREMENTS	\$21,323,739		\$10,595,770	\$6,349,328	\$16,945,098	\$2,339,174	\$862,029	\$1,177,438	\$0	\$21,323,739

Table 4-3
Lee County, Florida
Water and Wastewater Rate Study

Comparison of Typical Monthly Residential Bills for Water Service (1)

Line No.	Description	Residential Service for a 5/8" or 3/4" Meter							
		0 Gallons	2,000 Gallons	4,000 Gallons	5,000 Gallons	7,000 Gallons	10,000 Gallons	15,000 Gallons	20,000 Gallons
Lee County									
1	Existing Rates	\$8.10	\$12.46	\$16.82	\$19.00	\$23.86	\$31.90	\$46.80	\$64.70
2	Proposed Rates	8.45	12.97	17.49	19.75	24.79	33.13	48.59	67.15
Other Florida Utilities:									
3	City of Bradenton	\$7.49	\$10.57	\$14.37	\$16.63	\$21.15	\$27.93	\$39.23	\$50.53
4	Brevard County	8.22	8.22	9.83	11.44	14.66	19.49	28.02	36.87
5	Charlotte County	16.88	24.18	31.48	35.13	42.43	53.38	76.18	102.62
6	City of Clearwater	7.53	7.53	10.59	13.65	19.77	29.53	47.73	65.93
7	Collier County	12.00	14.88	17.76	19.20	22.08	26.40	35.40	44.40
8	Englewood Water District	10.00	13.60	17.20	19.00	23.20	35.20	59.20	83.20
9	FL Water Services - Lehigh - Lee County	9.76	17.14	24.52	28.21	35.59	46.66	65.11	83.56
10	City of Fort Myers	3.61	8.15	12.69	14.96	20.52	28.86	45.36	79.41
11	Hillsborough County	9.70	14.40	19.10	21.45	26.15	33.40	45.65	64.15
12	Manatee County	5.46	7.50	9.54	10.56	12.67	15.94	21.39	29.34
13	City of Naples	7.08	9.24	11.40	12.48	14.64	17.88	23.28	28.68
14	City of North Port	9.16	14.86	20.56	23.41	29.11	39.16	57.16	75.16
15	Orange County	5.47	7.25	9.33	10.52	12.90	16.47	22.42	32.87
16	Pinellas County	11.25	11.25	11.25	13.50	18.00	24.75	36.00	47.25
17	City of Punta Gorda	11.65	17.09	22.53	25.25	30.69	38.85	54.50	70.15
18	City of Sarasota	7.59	12.35	17.11	19.49	24.25	31.39	43.29	56.93
19	Sarasota County	13.92	17.48	21.04	23.62	28.78	40.06	69.76	110.76
20	City of Tampa	1.50	2.78	5.56	6.95	9.73	14.14	25.37	36.60
21	Other Florida Utilities' Average	\$8.79	\$12.14	\$15.88	\$18.08	\$22.57	\$29.97	\$44.17	\$61.02

(1) Unless otherwise noted, amounts shown reflect residential rates in effect August 2001 and are exclusive of taxes or franchise fees, if any, and reflect rates charged for inside the city service. All rates are as reported by the respective utility. This comparison is intended to show comparable charges for similar service for comparison purposes only and is not intended to be a complete listing of all rates and charges offered by each listed utility.

Table 4-4
Lee County, Florida
Water and Wastewater Rate Study

Comparison of Typical Monthly Residential Bills for Wastewater Service (1)

Line No.	Description	Residential Service for a 5/8" or 3/4" Meter							
		0 Gallons	2,000 Gallons	4,000 Gallons	5,000 Gallons	7,000 Gallons	10,000 Gallons	15,000 Gallons	20,000 Gallons
Lee County									
1	Existing Rates	\$12.15	\$19.19	\$26.23	\$29.75	\$33.27	\$33.27	\$33.27	\$33.27
2	Proposed Rates	13.35	20.73	28.11	31.80	35.49	35.49	35.49	35.49
<u>Other Florida Utilities:</u>									
3	City of Bradenton	\$9.09	\$11.75	\$15.70	\$18.32	\$23.56	\$31.42	\$44.52	\$57.62
4	Brevard County	13.43	19.13	24.83	27.68	33.38	41.93	47.63	47.63
5	Charlotte County	21.47	27.45	33.43	36.42	42.40	51.37	51.37	51.37
6	City of Clearwater	10.38	10.38	13.84	17.30	24.22	34.60	51.90	69.20
7	Collier County	17.00	20.88	24.76	26.70	30.58	36.40	36.40	36.40
8	Englewood Water District	17.63	23.23	28.83	31.63	37.23	45.63	45.63	45.63
9	FL Water Services - Lehigh - Lee County	16.62	27.80	38.98	44.57	50.16	50.16	50.16	50.16
10	City of Fort Myers	5.36	15.14	24.92	29.81	40.11	55.56	55.56	55.56
11	Hillsborough County	13.70	22.50	31.30	35.70	44.50	48.90	48.90	48.90
12	Manatee County	12.50	17.86	23.22	25.90	31.26	39.30	44.66	44.66
13	City of Naples	22.86	26.72	30.58	32.51	36.37	42.16	51.81	61.46
14	City of North Port	21.74	29.94	38.14	42.24	50.44	54.54	54.54	54.54
15	Orange County	13.96	20.30	26.64	29.81	36.15	45.66	58.34	58.34
16	Pinellas County	8.00	14.20	20.40	23.50	29.70	39.00	54.50	57.60
17	City of Punta Gorda	20.70	23.12	25.54	26.75	29.17	32.80	32.80	32.80
18	City of Sarasota	15.65	25.86	36.06	41.17	51.37	66.68	92.19	120.47
19	Sarasota County	14.34	27.16	39.98	46.39	59.21	78.44	78.44	78.44
20	City of Tampa	2.78	10.21	17.65	21.36	28.80	39.95	58.53	77.11
21	Other Florida Utilities' Average	\$14.29	\$20.76	\$27.49	\$30.99	\$37.70	\$46.36	\$53.22	\$58.22

(1) Unless otherwise noted, amounts shown reflect residential rates in effect August 2001 and are exclusive of taxes or franchise fees, if any, and reflect rates charged for inside the city service. All rates are as reported by the respective utility. This comparison is intended to show comparable charges for similar service for comparison purposes only and is not intended to be a complete listing of all rates and charges offered by each listed utility.

Table 4-5
Lee County, Florida
Water and Wastewater Rate Study

Comparison of Typical Monthly Residential Bills for Water and Wastewater Service (1)

Line No.	Description	Residential Service for a 5/8" or 3/4" Meter							
		0 Gallons	2,000 Gallons	4,000 Gallons	5,000 Gallons	7,000 Gallons	10,000 Gallons	15,000 Gallons	20,000 Gallons
Lee County									
1	Existing Rates	\$20.25	\$31.65	\$43.05	\$48.75	\$57.13	\$65.17	\$80.07	\$97.97
2	Proposed Rates	21.80	33.70	45.60	51.55	60.28	68.62	84.08	102.64
Other Florida Utilities:									
3	City of Bradenton	\$16.58	\$22.32	\$30.07	\$34.95	\$44.71	\$59.35	\$83.75	\$108.15
4	Brevard County	21.65	27.35	34.66	39.12	48.04	61.42	75.65	84.50
5	Charlotte County	38.35	51.63	64.91	71.55	84.83	104.75	127.55	153.99
6	City of Clearwater	17.91	17.91	24.43	30.95	43.99	64.13	99.63	135.13
7	Collier County	29.00	35.76	42.52	45.90	52.66	62.80	71.80	80.80
8	Englewood Water District	27.63	36.83	46.03	50.63	60.43	80.83	104.83	128.83
9	FL Water Services - Lehigh - Lee County	26.38	44.94	63.50	72.78	85.75	96.82	115.27	133.72
10	City of Fort Myers	8.97	23.29	37.61	44.77	60.63	84.42	100.92	134.97
11	Hillsborough County	23.40	36.90	50.40	57.15	70.65	82.30	94.55	113.05
12	Manatee County	17.96	25.36	32.76	36.46	43.93	55.24	66.05	74.00
13	City of Naples	29.94	35.96	41.98	44.99	51.01	60.04	75.09	90.14
14	City of North Port	30.90	44.80	58.70	65.65	79.55	93.70	111.70	129.70
15	Orange County	19.43	27.55	35.97	40.33	49.05	62.13	80.76	91.21
16	Pinellas County	19.25	25.45	31.65	37.00	47.70	63.75	90.50	104.85
17	City of Punta Gorda	32.35	40.21	48.07	52.00	59.86	71.65	87.30	102.95
18	City of Sarasota	23.24	38.21	53.17	60.66	75.62	98.07	135.48	177.40
19	Sarasota County	28.26	44.64	61.02	70.01	87.99	118.50	148.20	189.20
20	City of Tampa	4.28	12.99	23.21	28.31	38.53	54.09	83.90	113.71
21	Other Florida Utilities' Average	\$23.08	\$32.89	\$43.37	\$49.07	\$60.27	\$76.33	\$97.38	\$119.24

(1) Unless otherwise noted, amounts shown reflect residential rates in effect August 2001 and are exclusive of taxes or franchise fees, if any, and reflect rates charged for inside the city service. All rates are as reported by the respective utility. This comparison is intended to show comparable charges for similar service for comparison purposes only and is not intended to be a complete listing of all rates and charges offered by each listed utility.

Table 4-6

Department of Lee County Utilities
Water System

Development of Wholesale Water Rate

Line No.	Description	2002 Budget (L)	Adjustments	2002 As Adjusted	Water / Wastewater Allocation Methodology			Water Bulk / Retail Allocation Methodology				
					Allocation Basis	Allocation Percent	Allocation Amount	Allocation Basis	Allocation Percent	Allocation Amount		
OPERATING EXPENSES												
Administration (# 53663)												
1	Salaries and Wages	\$342,050	\$0	\$342,050	Salaries	49.40%	\$168,988	DLCU Salaries	59.30%	\$100,213	\$68,775	
2	Benefits	104,299	0	104,299	Salaries	49.40%	51,528	DLCU Salaries	59.30%	30,557	20,971	
3	Additional Personnel	0	0	0	Salaries	49.40%	0	0	59.30%	0	0	
4	Legal Services	7,500	0	7,500	Salaries	49.40%	3,705	3,795	59.30%	2,197	1,508	
5	Professional Services	126,000	0	126,000	Salaries	49.40%	62,249	63,751	59.30%	36,915	25,334	
6	Other Contracted Services	60,000	0	60,000	Salaries	49.40%	29,643	30,357	59.30%	17,579	12,064	
7	Travel and Per Diem	20,400	0	20,400	Salaries	49.40%	10,078	10,322	59.30%	5,977	4,102	
8	Communication	10,546	0	10,546	Salaries	49.40%	5,210	5,336	59.30%	3,090	2,120	
9	Advertising	5,000	0	5,000	Salaries	49.40%	2,470	2,530	59.30%	1,465	1,005	
10	Freight and Postage	2,500	0	2,500	Salaries	49.40%	1,235	1,265	59.30%	732	503	
11	Land, Building, Parking Rental	2,250	0	2,250	Salaries	49.40%	1,112	1,138	59.30%	659	452	
12	Equipment Rental	10,000	0	10,000	Salaries	49.40%	4,940	5,060	59.30%	2,930	2,011	
13	Self-Insurance Assessment	10,501	0	10,501	Salaries	49.40%	5,188	5,313	59.30%	3,077	2,111	
14	Repair and Maintenance	21,080	0	21,080	Salaries	49.40%	10,414	10,666	59.30%	6,176	4,238	
15	Printing	1,500	0	1,500	Salaries	49.40%	741	759	59.30%	439	302	
16	Other Administrative Fees	17,000	0	17,000	Salaries	49.40%	8,399	8,601	59.30%	4,981	3,418	
17	General Office Supplies	3,100	0	3,100	Salaries	49.40%	1,532	1,568	59.30%	908	623	
18	Operating Supplies	4,561	0	4,561	Salaries	49.40%	2,253	2,308	59.30%	1,336	917	
19	Subscriptions & Memberships	5,700	0	5,700	Salaries	49.40%	2,816	2,884	59.30%	1,670	1,146	
20	Capital Outlay - Furniture and Equipment	0	0	0	Salaries	49.40%	0	0	59.30%	0	0	
21	Total	753,987	0	753,987			372,502	381,485		220,901	151,601	
Water Meter Services (# 53609)												
22	Salaries and Wages	416,867	0	416,867	Customer	60.66%	252,882	163,985	ERUs	0.43%	1,079	251,803
23	Benefits	175,774	0	175,774	Customer	60.66%	106,629	69,145	ERUs	0.43%	455	106,174
24	Additional Personnel	0	0	0	Customer	60.66%	0	0	ERUs	0.43%	0	0
25	Other Contracted Services	9,000	0	9,000	Customer	60.66%	5,460	3,540	ERUs	0.43%	23	5,436
26	Travel and Per Diem	1,700	0	1,700	Customer	60.66%	1,031	669	ERUs	0.43%	4	1,027
27	Repair and Maintenance	34,380	0	34,380	Customer	60.66%	20,856	13,524	ERUs	0.43%	89	20,767
28	Printing	2,000	0	2,000	Customer	60.66%	1,213	787	ERUs	0.43%	5	1,208
29	General Office Supplies	1,500	0	1,500	Customer	60.66%	910	590	ERUs	0.43%	4	906
30	Operating Supplies	56,025	0	56,025	Customer	60.66%	33,986	22,039	ERUs	0.43%	145	33,841
31	Total	697,246	0	697,246			422,967	274,279		1,804	421,162	
Billings & Collections (# 53610)												
32	Salaries and Wages	598,826	0	598,826	Customer	60.66%	363,263	233,563	Metered Points	0.01%	43	363,220
33	Benefits	229,353	0	229,353	Customer	60.66%	139,131	90,222	Metered Points	0.01%	16	139,115
34	Additional Personnel	0	0	0	Customer	60.66%	0	0	Metered Points	0.01%	0	0
35	Professional Services	252,400	0	252,400	Customer	60.66%	153,112	99,288	Metered Points	0.01%	18	153,094
36	Other Contracted Services	189,880	0	189,880	Customer	60.66%	115,186	74,694	Metered Points	0.01%	14	115,172
37	Travel and Per Diem	7,500	0	7,500	Customer	60.66%	4,550	2,950	Metered Points	0.01%	1	4,549
38	Communication	24,000	0	24,000	Customer	60.66%	14,559	9,441	Metered Points	0.01%	2	14,557
39	Freight and Postage	333,000	0	333,000	Customer	60.66%	202,006	130,994	Metered Points	0.01%	24	201,982
40	Electric	26,400	0	26,400	Customer	60.66%	16,015	10,385	Metered Points	0.01%	2	16,013
41	Water and Sewer	2,000	0	2,000	Customer	60.66%	1,213	787	Metered Points	0.01%	0	1,213
42	Trash, Garbage & Sludge Removal	528	0	528	Customer	60.66%	320	208	Metered Points	0.01%	0	320
43	Equipment Rental	8,000	0	8,000	Customer	60.66%	4,853	3,147	Metered Points	0.01%	1	4,852
44	Repair and Maintenance	14,420	0	14,420	Customer	60.66%	8,748	5,672	Metered Points	0.01%	1	8,746
45	Printing	8,000	0	8,000	Customer	60.66%	4,853	3,147	Metered Points	0.01%	1	4,852
46	Other Administrative Fees	1,000	0	1,000	Customer	60.66%	607	393	Metered Points	0.01%	0	607
47	General Office Supplies	60,200	0	60,200	Customer	60.66%	36,519	23,681	Metered Points	0.01%	4	36,514
48	Operating Supplies	9,200	0	9,200	Customer	60.66%	5,581	3,619	Metered Points	0.01%	1	5,580
49	Subscriptions & Memberships	250	0	250	Customer	60.66%	152	98	Metered Points	0.01%	0	152
50	Capital Outlay - Furniture and Equipment	0	0	0	Customer	60.66%	0	0	Metered Points	0.01%	0	0
51	Total	1,764,957	0	1,764,957			1,070,666	694,291		127	1,070,539	

Table 4-6

Department of Lee County Utilities
Water System

Development of Wholesale Water Rate

Line No.	Description	2002 Budget (1)	Adjustments	As Adjusted	Water / Wastewater Allocation Methodology			Water Bulk / Retail Allocation Methodology			
					Allocation Basis	Allocation Percent	Allocation Amount	Allocation Basis	Allocation Percent	Allocation Amount	
Utilities Engineering (# 53607)											
52	Salaries and Wages	518,457	0	518,457	CIP	57.87%	300,047	Applicable CIP	81.75%	245,298	54,749
53	Benefits	150,886	0	150,886	CIP	57.87%	87,322	Applicable CIP	81.75%	71,389	15,934
54	Additional Personnel	0	0	0	CIP	57.87%	0	Applicable CIP	81.75%	0	0
55	Professional Services	150,000	0	150,000	CIP	57.87%	86,810	Applicable CIP	81.75%	70,970	15,840
56	Other Contracted Services	30,000	0	30,000	CIP	57.87%	17,362	Applicable CIP	81.75%	14,194	3,168
57	Travel and Per Diem	15,000	0	15,000	CIP	57.87%	8,681	Applicable CIP	81.75%	7,097	1,584
58	Communication	2,500	0	2,500	CIP	57.87%	1,447	Applicable CIP	81.75%	1,183	264
59	Freight and Postage	500	0	500	CIP	57.87%	289	Applicable CIP	81.75%	237	53
60	Land, Building, Parking Rental	1,750	0	1,750	CIP	57.87%	1,013	Applicable CIP	81.75%	828	185
61	Repair and Maintenance	12,500	0	12,500	CIP	57.87%	7,234	Applicable CIP	81.75%	5,914	1,320
62	Printing	11,000	0	11,000	CIP	57.87%	6,366	Applicable CIP	81.75%	5,204	1,162
63	Other Administrative Fees	10,500	0	10,500	CIP	57.87%	6,077	Applicable CIP	81.75%	4,968	1,109
64	General Office Supplies	3,500	0	3,500	CIP	57.87%	2,026	Applicable CIP	81.75%	1,656	370
65	Operating Supplies	3,950	0	3,950	CIP	57.87%	2,286	Applicable CIP	81.75%	1,869	417
66	Subscriptions & Memberships	3,300	0	3,300	CIP	57.87%	1,910	Applicable CIP	81.75%	1,561	348
67	Capital Outlay - Furniture and Equipment	0	0	0	CIP	57.87%	0	Applicable CIP	81.75%	0	0
68	Total	913,843	0	913,843			528,869			432,367	96,502
Construction / Utility Inspections (# 54119)											
69	Salaries and Wages	247,757	0	247,757	CIP	57.87%	143,385	Applicable CIP	81.75%	117,221	26,163
70	Benefits	82,655	0	82,655	CIP	57.87%	47,835	Applicable CIP	81.75%	39,107	8,728
71	Additional Personnel	0	0	0	CIP	57.87%	0	Applicable CIP	81.75%	0	0
72	Professional Services	20,916	0	20,916	CIP	57.87%	12,105	Applicable CIP	81.75%	9,896	2,209
73	Other Contracted Services	500	0	500	CIP	57.87%	289	Applicable CIP	81.75%	237	53
74	Travel and Per Diem	1,100	0	1,100	CIP	57.87%	637	Applicable CIP	81.75%	520	116
75	Communication	10,546	0	10,546	CIP	57.87%	6,103	Applicable CIP	81.75%	4,990	1,114
76	Self-Insurance Assessment	924	0	924	CIP	57.87%	535	Applicable CIP	81.75%	437	98
77	Repair and Maintenance	17,411	0	17,411	CIP	57.87%	10,076	Applicable CIP	81.75%	8,238	1,839
78	Other Administrative Fees	47,239	0	47,239	CIP	57.87%	27,339	Applicable CIP	81.75%	22,350	4,988
79	General Office Supplies	200	0	200	CIP	57.87%	116	Applicable CIP	81.75%	95	21
80	Operating Supplies	18,200	0	18,200	CIP	57.87%	10,533	Applicable CIP	81.75%	8,611	1,922
81	Total	447,448	0	447,448			258,952			211,701	47,251
Maintenance Department (# 55614)											
82	Salaries and Wages	381,505	0	381,505	Assets	35.99%	137,304	Total Assets	59.51%	81,704	55,599
83	Benefits	145,219	0	145,219	Assets	35.99%	52,264	Total Assets	59.51%	31,101	21,164
84	Additional Personnel	0	0	0	Assets	35.99%	0	Total Assets	59.51%	0	0
85	Professional Services	30,000	0	30,000	Assets	35.99%	10,797	Total Assets	59.51%	6,425	4,372
86	Other Contracted Services	205,250	0	205,250	Assets	35.99%	73,869	Total Assets	59.51%	43,957	29,912
87	Travel and Per Diem	3,460	0	3,460	Assets	35.99%	1,245	Total Assets	59.51%	741	504
88	Communication	3,500	0	3,500	Assets	35.99%	1,260	Total Assets	59.51%	750	510
89	Freight and Postage	500	0	500	Assets	35.99%	180	Total Assets	59.51%	107	73
90	Electric	3,000	0	3,000	Assets	35.99%	1,080	Total Assets	59.51%	642	437
91	Water and Sewer	1,200	0	1,200	Assets	35.99%	432	Total Assets	59.51%	257	175
92	Trash, Garbage & Sludge Removal	1,200	0	1,200	Assets	35.99%	180	Total Assets	59.51%	107	73
93	Equipment Rental	1,200	0	1,200	Assets	35.99%	432	Total Assets	59.51%	257	175
94	Repair and Maintenance	123,260	0	123,260	Assets	35.99%	44,361	Total Assets	59.51%	26,398	17,963
95	Printing	1,000	0	1,000	Assets	35.99%	360	Total Assets	59.51%	214	146
96	Other Administrative Fees	1,250	0	1,250	Assets	35.99%	450	Total Assets	59.51%	268	182
97	General Office Supplies	200	0	200	Assets	35.99%	72	Total Assets	59.51%	43	29
98	Operating Supplies	35,200	0	35,200	Assets	35.99%	12,668	Total Assets	59.51%	7,539	5,130
99	Subscriptions & Memberships	1,000	0	1,000	Assets	35.99%	360	Total Assets	59.51%	214	146
100	Capital Outlay - Furniture and Equipment	0	0	0	Assets	35.99%	0	Total Assets	59.51%	0	0
101	Total	937,244	0	937,244			337,314			200,723	136,591

Table 4-6

Department of Lee County Utilities
Water System

Development of Wholesale Water Rate

Line No.	Description	2002 Budget (1)	Adjustments	2002 As Adjusted	Water / Wastewater Allocation Methodology			Water Bulk / Retail Allocation Methodology			
					Allocation Basis	Allocation Percent	Allocation Amount	Allocation Basis	Allocation Percent	Allocation Amount	
Electronics Department (# 53615)											
102	Salaries and Wages	206,066	0	206,066	Assets	64.01%	74,163	Total Assets	59.51%	44,132	30,031
103	Benefits	71,295	0	71,295	Assets	64.01%	25,659	Total Assets	59.51%	15,269	10,390
104	Additional Personnel	0	0	0	Assets	64.01%	0	Total Assets	59.51%	0	0
105	Professional Services	35,000	0	35,000	Assets	64.01%	12,597	Total Assets	59.51%	7,496	5,101
106	Other Contracted Services	25,500	0	25,500	Assets	64.01%	9,177	Total Assets	59.51%	5,461	3,716
107	Travel and Per Diem	2,500	0	2,500	Assets	64.01%	900	Total Assets	59.51%	535	364
108	Communication	3,150	0	3,150	Assets	64.01%	1,134	Total Assets	59.51%	675	459
109	Freight and Postage	500	0	500	Assets	64.01%	180	Total Assets	59.51%	107	73
110	Electric	3,000	0	3,000	Assets	64.01%	1,080	Total Assets	59.51%	642	437
111	Water and Sewer	1,200	0	1,200	Assets	64.01%	432	Total Assets	59.51%	257	175
112	Trash, Garbage & Sludge Removal	1,200	0	1,200	Assets	64.01%	432	Total Assets	59.51%	257	175
113	Equipment Rental	500	0	500	Assets	64.01%	180	Total Assets	59.51%	107	73
114	Repair and Maintenance	36,700	0	36,700	Assets	64.01%	13,208	Total Assets	59.51%	7,860	5,349
115	Printing	400	0	400	Assets	64.01%	144	Total Assets	59.51%	86	58
116	Other Administrative Fees	300	0	300	Assets	64.01%	108	Total Assets	59.51%	64	44
117	General Office Supplies	200	0	200	Assets	64.01%	72	Total Assets	59.51%	43	29
118	Operating Supplies	17,800	0	17,800	Assets	64.01%	6,406	Total Assets	59.51%	3,812	2,594
119	Subscriptions & Memberships	700	0	700	Assets	64.01%	252	Total Assets	59.51%	150	102
120	Capital Outlay - Furniture and Equipment	0	0	0	Assets	64.01%	0	Total Assets	59.51%	0	0
121	Total	406,011	0	406,011			146,123			86,953	59,171
Support Services (# 53616)											
122	Salaries and Wages	337,740	0	337,740	Customer	39.34%	204,881	ERUs	0.43%	874	204,007
123	Benefits	127,573	0	127,573	Customer	39.34%	77,389	ERUs	0.43%	330	77,059
124	Additional Personnel	0	0	0	Customer	39.34%	0	ERUs	0.43%	0	0
125	Professional Services	15,000	0	15,000	Customer	39.34%	9,099	ERUs	0.43%	39	9,061
126	Other Contracted Services	32,000	0	32,000	Customer	39.34%	19,412	ERUs	0.43%	83	19,329
127	Travel and Per Diem	3,250	0	3,250	Customer	39.34%	1,972	ERUs	0.43%	8	1,963
128	Communication	12,500	0	12,500	Customer	39.34%	7,583	ERUs	0.43%	32	7,550
129	Freight and Postage	3,000	0	3,000	Customer	39.34%	1,820	ERUs	0.43%	8	1,812
130	Electric	18,000	0	18,000	Customer	39.34%	10,919	ERUs	0.43%	47	10,873
131	Water and Sewer	2,000	0	2,000	Customer	39.34%	1,213	ERUs	0.43%	5	1,208
132	Trash, Garbage & Sludge Removal	3,000	0	3,000	Customer	39.34%	1,820	ERUs	0.43%	8	1,812
133	Equipment Rental	10,000	0	10,000	Customer	39.34%	6,066	ERUs	0.43%	26	6,040
134	Repair and Maintenance	98,000	0	98,000	Customer	39.34%	59,449	ERUs	0.43%	254	59,196
135	Printing	3,500	0	3,500	Customer	39.34%	2,123	ERUs	0.43%	9	2,114
136	Other Administrative Fees	2,750	0	2,750	Customer	39.34%	1,668	ERUs	0.43%	7	1,661
137	General Office Supplies	3,250	0	3,250	Customer	39.34%	1,972	ERUs	0.43%	8	1,963
138	Operating Supplies	35,250	0	35,250	Customer	39.34%	21,384	ERUs	0.43%	91	21,292
139	Subscriptions & Memberships	750	0	750	Customer	39.34%	455	ERUs	0.43%	2	453
140	Capital Outlay - Furniture and Equipment	0	0	0	Customer	39.34%	0	ERUs	0.43%	0	0
141	Total	707,563	0	707,563			429,225			1,831	427,394

Table 4-6

Department of Lee County Utilities
Water System

Development of Wholesale Water Rate

Line No.	Description	2002			2002			Water / Wastewater Allocation Methodology			Water Bulk / Retail Allocation Methodology		
		Budget (I)	Adjustments	As Adjusted	Allocation Basis	Allocation Percent	Allocation Amount	Allocation Basis	Allocation Percent	Allocation Amount	Allocation Basis	Allocation Percent	Allocation Amount
Water Operations (# 53662)													
142	Salaries and Wages	39,588	0	39,588	DirWater	100.00%	0.00%	39,588	0	DLCU Salaries	59.30%	40.70%	23,476
143	Benefits	20,260	0	20,260	DirWater	100.00%	0.00%	20,260	0	DLCU Salaries	59.30%	40.70%	12,015
144	Additional Personnel	0	0	0	DirWater	100.00%	0.00%	0	0	DLCU Salaries	59.30%	40.70%	0
145	Legal Services	5,000	0	5,000	DirWater	100.00%	0.00%	5,000	0	DLCU Salaries	59.30%	40.70%	2,965
146	Professional Services	204,900	0	204,900	DirWater	100.00%	0.00%	204,900	0	DLCU Salaries	59.30%	40.70%	121,510
147	Other Contracted Services	76,500	0	76,500	DirWater	100.00%	0.00%	76,500	0	DLCU Salaries	59.30%	40.70%	45,366
148	Travel and Per Diem	4,000	0	4,000	DirWater	100.00%	0.00%	4,000	0	DLCU Salaries	59.30%	40.70%	2,372
149	Communication	30,683	0	30,683	DirWater	100.00%	0.00%	30,683	0	DLCU Salaries	59.30%	40.70%	18,196
150	Advertising	1,500	0	1,500	DirWater	100.00%	0.00%	1,500	0	DLCU Salaries	59.30%	40.70%	890
151	Freight and Postage	1,500	0	1,500	DirWater	100.00%	0.00%	1,500	0	DLCU Salaries	59.30%	40.70%	890
152	Electric	35,000	0	35,000	DirWater	100.00%	0.00%	35,000	0	DLCU Salaries	59.30%	40.70%	20,756
153	Trash, Garbage & Sludge Removal	50,000	0	50,000	DirWater	100.00%	0.00%	50,000	0	DLCU Salaries	59.30%	40.70%	29,651
154	Land, Building, Parking Rental	250	0	250	DirWater	100.00%	0.00%	250	0	DLCU Salaries	59.30%	40.70%	148
155	Equipment Rental	1,500	0	1,500	DirWater	100.00%	0.00%	1,500	0	DLCU Salaries	59.30%	40.70%	890
156	Self-Insurance Assessment	34,337	0	34,337	DirWater	100.00%	0.00%	34,337	0	DLCU Salaries	59.30%	40.70%	20,363
157	Insurance and Bonds	30,000	0	30,000	DirWater	100.00%	0.00%	30,000	0	DLCU Salaries	59.30%	40.70%	17,791
158	Repair and Maintenance	113,548	0	113,548	DirWater	100.00%	0.00%	113,548	0	DLCU Salaries	59.30%	40.70%	67,336
159	Printing	2,000	0	2,000	DirWater	100.00%	0.00%	2,000	0	DLCU Salaries	59.30%	40.70%	1,186
160	Other Administrative Fees	333,493	0	333,493	DirWater	100.00%	0.00%	333,493	0	DLCU Salaries	59.30%	40.70%	197,768
161	Indirect Cost	212,000	0	212,000	DirWater	100.00%	0.00%	212,000	0	DLCU Salaries	59.30%	40.70%	125,720
162	General Office Supplies	2,500	0	2,500	DirWater	100.00%	0.00%	2,500	0	DLCU Salaries	59.30%	40.70%	1,483
163	Operating Supplies	37,816	0	37,816	DirWater	100.00%	0.00%	37,816	0	DLCU Salaries	59.30%	40.70%	22,426
164	Subscriptions & Memberships	1,100	0	1,100	DirWater	100.00%	0.00%	1,100	0	DLCU Salaries	59.30%	40.70%	652
165	Capital Outlay - Furniture and Equipment	0	0	0	DirWater	100.00%	0.00%	0	0	DLCU Salaries	59.30%	40.70%	0
166	Total	1,237,475	0	1,237,475				1,237,475	0				733,847
Water Distribution (# 53602)													
167	Salaries and Wages	523,562	0	523,562	DirWater	100.00%	0.00%	523,562	0	Bulk Transmission	58.70%	41.30%	307,331
168	Benefits	178,365	0	178,365	DirWater	100.00%	0.00%	178,365	0	Bulk Transmission	58.70%	41.30%	104,700
169	Additional Personnel	0	0	0	DirWater	100.00%	0.00%	0	0	Bulk Transmission	58.70%	41.30%	0
170	Professional Services	42,000	0	42,000	DirWater	100.00%	0.00%	42,000	0	Bulk Transmission	58.70%	41.30%	24,654
171	Other Contracted Services	253,000	0	253,000	DirWater	100.00%	0.00%	253,000	0	Bulk Transmission	58.70%	41.30%	148,511
172	Travel and Per Diem	4,000	0	4,000	DirWater	100.00%	0.00%	4,000	0	Bulk Transmission	58.70%	41.30%	2,348
173	Communication	5,000	0	5,000	DirWater	100.00%	0.00%	5,000	0	Bulk Transmission	58.70%	41.30%	2,935
174	Freight and Postage	2,000	0	2,000	DirWater	100.00%	0.00%	2,000	0	Bulk Transmission	58.70%	41.30%	1,174
175	Electric	160,000	0	160,000	DirWater	100.00%	0.00%	160,000	0	Bulk Transmission	58.70%	41.30%	93,920
176	Trash, Garbage & Sludge Removal	3,600	0	3,600	DirWater	100.00%	0.00%	3,600	0	Bulk Transmission	58.70%	41.30%	2,113
177	Equipment Rental	2,000	0	2,000	DirWater	100.00%	0.00%	2,000	0	Bulk Transmission	58.70%	41.30%	1,174
178	Repair and Maintenance	194,500	0	194,500	DirWater	100.00%	0.00%	194,500	0	Bulk Transmission	58.70%	41.30%	114,172
179	Printing	3,000	0	3,000	DirWater	100.00%	0.00%	3,000	0	Bulk Transmission	58.70%	41.30%	1,761
180	Other Administrative Fees	3,000	0	3,000	DirWater	100.00%	0.00%	3,000	0	Bulk Transmission	58.70%	41.30%	1,761
181	General Office Supplies	500	0	500	DirWater	100.00%	0.00%	500	0	Bulk Transmission	58.70%	41.30%	294
182	Operating Supplies	62,250	0	62,250	DirWater	100.00%	0.00%	62,250	0	Bulk Transmission	58.70%	41.30%	36,541
183	Subscriptions & Memberships	1,500	0	1,500	DirWater	100.00%	0.00%	1,500	0	Bulk Transmission	58.70%	41.30%	881
184	Capital Outlay - Furniture and Equipment	0	0	0	DirWater	100.00%	0.00%	0	0	Bulk Transmission	58.70%	41.30%	0
185	Total	1,438,277	0	1,438,277				1,438,277	0				844,269
Water Production - Olga (# 53601)													
186	Salaries and Wages	279,916	0	279,916	DirWater	100.00%	0.00%	279,916	0	Direct Bulk	100.00%	0.00%	279,916
187	Benefits	103,694	0	103,694	DirWater	100.00%	0.00%	103,694	0	Direct Bulk	100.00%	0.00%	103,694
188	Additional Personnel	0	0	0	DirWater	100.00%	0.00%	0	0	Direct Bulk	100.00%	0.00%	0
189	Other Contracted Services	11,950	0	11,950	DirWater	100.00%	0.00%	11,950	0	Direct Bulk	100.00%	0.00%	11,950
190	Travel and Per Diem	4,000	0	4,000	DirWater	100.00%	0.00%	4,000	0	Direct Bulk	100.00%	0.00%	4,000
191	Communication	1,750	0	1,750	DirWater	100.00%	0.00%	1,750	0	Direct Bulk	100.00%	0.00%	1,750
192	Advertising	200	0	200	DirWater	100.00%	0.00%	200	0	Direct Bulk	100.00%	0.00%	200
193	Freight and Postage	2,000	0	2,000	DirWater	100.00%	0.00%	2,000	0	Direct Bulk	100.00%	0.00%	2,000
194	Electric	165,000	0	165,000	DirWater	100.00%	0.00%	165,000	0	Direct Bulk	100.00%	0.00%	165,000
195	Trash, Garbage & Sludge Removal	77,500	0	77,500	DirWater	100.00%	0.00%	77,500	0	Direct Bulk	100.00%	0.00%	77,500

Table 4-6
Department of Lee County Utilities
Water System

Development of Wholesale Water Rate

Line No.	Description	2002 Budget (1)	Adjustments	2002 As Adjusted	Water / Wastewater Allocation Methodology			Water Bulk / Retail Allocation Methodology		
					Allocation Basis	Allocation Percent	Allocation Amount	Allocation Basis	Allocation Percent	Allocation Amount
196	Repair and Maintenance	113,500	0	113,500	DirWater	100.00%	0	Direct Bulk	100.00%	0
197	Printing	16,000	0	16,000	DirWater	100.00%	0	Direct Bulk	100.00%	16,000
198	Other Administrative Fees	3,500	0	3,500	DirWater	100.00%	0	Direct Bulk	100.00%	3,500
199	General Office Supplies	2,500	0	2,500	DirWater	100.00%	0	Direct Bulk	100.00%	2,500
200	Operating Supplies	365,350	0	365,350	DirWater	100.00%	0	Direct Bulk	100.00%	365,350
201	Subscriptions & Memberships	1,000	0	1,000	DirWater	100.00%	0	Direct Bulk	100.00%	1,000
202	Capital Outlay - Furniture and Equipment	0	0	0	DirWater	100.00%	0	Direct Bulk	100.00%	0
203	Total	1,147,860	0	1,147,860						1,147,860
Water Production - Corkscrew (# 53618)										
204	Salaries and Wages	262,279	0	262,279	DirWater	100.00%	0	Direct Bulk	100.00%	262,279
205	Benefits	89,732	0	89,732	DirWater	100.00%	0	Direct Bulk	100.00%	89,732
206	Additional Personnel	0	0	0	DirWater	100.00%	0	Direct Bulk	100.00%	0
207	Professional Services	56,000	0	56,000	DirWater	100.00%	0	Direct Bulk	100.00%	56,000
208	Other Contracted Services	11,700	0	11,700	DirWater	100.00%	0	Direct Bulk	100.00%	11,700
209	Travel and Per Diem	4,000	0	4,000	DirWater	100.00%	0	Direct Bulk	100.00%	4,000
210	Communication	1,750	0	1,750	DirWater	100.00%	0	Direct Bulk	100.00%	1,750
211	Advertising	200	0	200	DirWater	100.00%	0	Direct Bulk	100.00%	200
212	Freight and Postage	2,000	0	2,000	DirWater	100.00%	0	Direct Bulk	100.00%	2,000
213	Electric	390,500	0	390,500	DirWater	100.00%	0	Direct Bulk	100.00%	390,500
214	Repair and Maintenance	113,500	0	113,500	DirWater	100.00%	0	Direct Bulk	100.00%	113,500
215	Printing	26,000	0	26,000	DirWater	100.00%	0	Direct Bulk	100.00%	26,000
216	Other Administrative Fees	3,500	0	3,500	DirWater	100.00%	0	Direct Bulk	100.00%	3,500
217	General Office Supplies	2,500	0	2,500	DirWater	100.00%	0	Direct Bulk	100.00%	2,500
218	Operating Supplies	395,350	0	395,350	DirWater	100.00%	0	Direct Bulk	100.00%	395,350
219	Subscriptions & Memberships	1,000	0	1,000	DirWater	100.00%	0	Direct Bulk	100.00%	1,000
220	Capital Outlay - Furniture and Equipment	0	0	0	DirWater	100.00%	0	Direct Bulk	100.00%	0
221	Total	1,360,011	0	1,360,011						1,360,011
Water Production - Waterway (# 53625)										
222	Salaries and Wages	191,547	0	191,547	DirWater	100.00%	0	Direct Bulk	100.00%	191,547
223	Benefits	69,443	0	69,443	DirWater	100.00%	0	Direct Bulk	100.00%	69,443
224	Additional Personnel	0	0	0	DirWater	100.00%	0	Direct Bulk	100.00%	0
225	Other Contracted Services	6,500	0	6,500	DirWater	100.00%	0	Direct Bulk	100.00%	6,500
226	Travel and Per Diem	4,000	0	4,000	DirWater	100.00%	0	Direct Bulk	100.00%	4,000
227	Communication	1,750	0	1,750	DirWater	100.00%	0	Direct Bulk	100.00%	1,750
228	Advertising	200	0	200	DirWater	100.00%	0	Direct Bulk	100.00%	200
229	Freight and Postage	2,000	0	2,000	DirWater	100.00%	0	Direct Bulk	100.00%	2,000
230	Electric	95,700	0	95,700	DirWater	100.00%	0	Direct Bulk	100.00%	95,700
231	Trash, Garbage & Sludge Removal	52,500	0	52,500	DirWater	100.00%	0	Direct Bulk	100.00%	52,500
232	Repair and Maintenance	88,500	0	88,500	DirWater	100.00%	0	Direct Bulk	100.00%	88,500
233	Printing	6,000	0	6,000	DirWater	100.00%	0	Direct Bulk	100.00%	6,000
234	Other Administrative Fees	2,500	0	2,500	DirWater	100.00%	0	Direct Bulk	100.00%	2,500
235	General Office Supplies	95,350	0	95,350	DirWater	100.00%	0	Direct Bulk	100.00%	95,350
236	Operating Supplies	1,000	0	1,000	DirWater	100.00%	0	Direct Bulk	100.00%	1,000
237	Subscriptions & Memberships	0	0	0	DirWater	100.00%	0	Direct Bulk	100.00%	0
238	Capital Outlay - Furniture and Equipment	0	0	0	DirWater	100.00%	0	Direct Bulk	100.00%	0
239	Total	619,490	0	619,490						619,490
Water Production - College Parkway (# 53626)										
240	Electric	44,000	0	44,000	DirWater	100.00%	0	Direct Bulk	100.00%	44,000
241	Trash, Garbage & Sludge Removal	12,500	0	12,500	DirWater	100.00%	0	Direct Bulk	100.00%	12,500
242	Repair and Maintenance	53,500	0	53,500	DirWater	100.00%	0	Direct Bulk	100.00%	53,500
243	Printing	5,050	0	5,050	DirWater	100.00%	0	Direct Bulk	100.00%	5,050
244	Operating Supplies	22,500	0	22,500	DirWater	100.00%	0	Direct Bulk	100.00%	22,500
245	Subscriptions & Memberships	500	0	500	DirWater	100.00%	0	Direct Bulk	100.00%	500
246	Total	138,050	0	138,050						138,050

Table 4-6

Department of Lee County Utilities
Water System

Development of Wholesale Water Rate

Line No.	Description	2002 Budget (1)	Adjustments	2002 As Adjusted	Water / Wastewater Allocation Methodology			Water Bulk / Retail Allocation Methodology							
					Allocation Basis	Allocation Percent	Allocation Amount	Allocation Basis	Allocation Percent	Allocation Amount					
247	Water Production - Green Meadows (# 53627)														
248	Salaries and Wages	260,833	0	260,833	DirWater	100.00%	0.00%	260,833	0	0	0.00%	260,833	0	0	
249	Benefits	92,634	0	92,634	DirWater	100.00%	0.00%	92,634	0	0	0.00%	92,634	0	0	
250	Additional Personnel	0	0	0	DirWater	100.00%	0.00%	0	0	0	0.00%	0	0	0	
251	Professional Services	66,000	0	66,000	DirWater	100.00%	0.00%	66,000	0	0	0.00%	66,000	0	0	
252	Other Contracted Services	11,750	0	11,750	DirWater	100.00%	0.00%	11,750	0	0	0.00%	11,750	0	0	
253	Travel and Per Diem	4,000	0	4,000	DirWater	100.00%	0.00%	4,000	0	0	0.00%	4,000	0	0	
254	Communication	1,750	0	1,750	DirWater	100.00%	0.00%	1,750	0	0	0.00%	1,750	0	0	
255	Advertising	200	0	200	DirWater	100.00%	0.00%	200	0	0	0.00%	200	0	0	
256	Freight and Postage	2,000	0	2,000	DirWater	100.00%	0.00%	2,000	0	0	0.00%	2,000	0	0	
257	Electric	418,000	0	418,000	DirWater	100.00%	0.00%	418,000	0	0	0.00%	418,000	0	0	
258	Trash, Garbage & Sludge Removal	181,500	0	181,500	DirWater	100.00%	0.00%	181,500	0	0	0.00%	181,500	0	0	
259	Repair and Maintenance	101,000	0	101,000	DirWater	100.00%	0.00%	101,000	0	0	0.00%	101,000	0	0	
260	Printing	26,000	0	26,000	DirWater	100.00%	0.00%	26,000	0	0	0.00%	26,000	0	0	
261	Other Administrative Fees	3,500	0	3,500	DirWater	100.00%	0.00%	3,500	0	0	0.00%	3,500	0	0	
262	General Office Supplies	2,500	0	2,500	DirWater	100.00%	0.00%	2,500	0	0	0.00%	2,500	0	0	
263	Operating Supplies	365,350	0	365,350	DirWater	100.00%	0.00%	365,350	0	0	0.00%	365,350	0	0	
264	Subscriptions & Memberships	1,000	0	1,000	DirWater	100.00%	0.00%	1,000	0	0	0.00%	1,000	0	0	
265	Capital Outlay - Furniture and Equipment	0	0	0	DirWater	100.00%	0.00%	0	0	0	0.00%	0	0	0	
	Total	1,538,017	0	1,538,017				1,538,017	0	0		1,538,017	0	0	
266	Sewer Operations (# 53506)														
267	Salaries and Wages	38,438	0	38,438	DirSewer	0.00%	100.00%	0	38,438	0	0.00%	0	0	0	
268	Benefits	18,987	0	18,987	DirSewer	0.00%	100.00%	0	18,987	0	0.00%	0	0	0	
269	Additional Personnel	0	0	0	DirSewer	0.00%	100.00%	0	0	0	0.00%	0	0	0	
270	Legal Services	5,000	0	5,000	DirSewer	0.00%	100.00%	0	5,000	0	0.00%	0	0	0	
271	Professional Services	229,900	0	229,900	DirSewer	0.00%	100.00%	0	229,900	0	0.00%	0	0	0	
272	Other Contracted Services	101,500	0	101,500	DirSewer	0.00%	100.00%	0	101,500	0	0.00%	0	0	0	
273	Travel and Per Diem	4,000	0	4,000	DirSewer	0.00%	100.00%	0	4,000	0	0.00%	0	0	0	
274	Communication	129,683	0	129,683	DirSewer	0.00%	100.00%	0	129,683	0	0.00%	0	0	0	
275	Advertising	1,500	0	1,500	DirSewer	0.00%	100.00%	0	1,500	0	0.00%	0	0	0	
276	Freight and Postage	1,500	0	1,500	DirSewer	0.00%	100.00%	0	1,500	0	0.00%	0	0	0	
277	Electric	60,000	0	60,000	DirSewer	0.00%	100.00%	0	60,000	0	0.00%	0	0	0	
278	Trash, Garbage & Sludge Removal	50,000	0	50,000	DirSewer	0.00%	100.00%	0	50,000	0	0.00%	0	0	0	
279	Land, Building, Parking Rental	250	0	250	DirSewer	0.00%	100.00%	0	250	0	0.00%	0	0	0	
280	Equipment Rental	1,500	0	1,500	DirSewer	0.00%	100.00%	0	1,500	0	0.00%	0	0	0	
281	Self-Insurance Assessment	33,585	0	33,585	DirSewer	0.00%	100.00%	0	33,585	0	0.00%	0	0	0	
282	Insurance and Bonds	30,000	0	30,000	DirSewer	0.00%	100.00%	0	30,000	0	0.00%	0	0	0	
283	Repair and Maintenance	7,200	0	7,200	DirSewer	0.00%	100.00%	0	7,200	0	0.00%	0	0	0	
284	Printing	2,000	0	2,000	DirSewer	0.00%	100.00%	0	2,000	0	0.00%	0	0	0	
285	Indirect Cost	333,492	0	333,492	DirSewer	0.00%	100.00%	0	333,492	0	0.00%	0	0	0	
286	Other Administrative Fees	212,000	0	212,000	DirSewer	0.00%	100.00%	0	212,000	0	0.00%	0	0	0	
287	General Office Supplies	2,500	0	2,500	DirSewer	0.00%	100.00%	0	2,500	0	0.00%	0	0	0	
288	Operating Supplies	30,825	0	30,825	DirSewer	0.00%	100.00%	0	30,825	0	0.00%	0	0	0	
289	Subscriptions & Memberships	1,100	0	1,100	DirSewer	0.00%	100.00%	0	1,100	0	0.00%	0	0	0	
290	Capital Outlay - Furniture and Equipment	0	0	0	DirSewer	0.00%	100.00%	0	0	0	0.00%	0	0	0	
	Total	1,294,960	0	1,294,960				1,294,960	0	0		1,294,960	0	0	
291	Wastewater Collection (# 53604)														
292	Salaries and Wages	641,481	0	641,481	DirSewer	0.00%	100.00%	0	641,481	0	0.00%	0	0	0	
293	Benefits	233,387	0	233,387	DirSewer	0.00%	100.00%	0	233,387	0	0.00%	0	0	0	
294	Additional Personnel	0	0	0	DirSewer	0.00%	100.00%	0	0	0	0.00%	0	0	0	
295	Legal Services	1,000	0	1,000	DirSewer	0.00%	100.00%	0	1,000	0	0.00%	0	0	0	
296	Professional Services	40,000	0	40,000	DirSewer	0.00%	100.00%	0	40,000	0	0.00%	0	0	0	
297	Other Contracted Services	253,600	0	253,600	DirSewer	0.00%	100.00%	0	253,600	0	0.00%	0	0	0	
298	Travel and Per Diem	6,000	0	6,000	DirSewer	0.00%	100.00%	0	6,000	0	0.00%	0	0	0	
299	Communication	9,250	0	9,250	DirSewer	0.00%	100.00%	0	9,250	0	0.00%	0	0	0	
300	Advertising	1,000	0	1,000	DirSewer	0.00%	100.00%	0	1,000	0	0.00%	0	0	0	
	Total	250,000	0	250,000	DirSewer	0.00%	100.00%	0	250,000	0	0.00%	0	0	0	

Table 4-6

Department of Lee County Utilities
Water System

Development of Wholesale Water Rate

Line No.	Description	2002 Budget (1)	Adjustments	2002 As Adjusted	Water / Wastewater Allocation Methodology			Water Bulk / Retail Allocation Methodology						
					Allocation Basis	Water	Sewer	Allocation Percent	Water	Sewer	Allocation Basis	Allocation Percent	Bulk	Retail
301	Water and Sewer	40,000	0	40,000	DirSewer	100.00%	100.00%	0	40,000	Not Applicable	0.00%	0.00%	0	0
302	Trash, Garbage & Sludge Removal	30,000	0	30,000	DirSewer	0.00%	100.00%	0	30,000	Not Applicable	0.00%	0.00%	0	0
303	Equipment Rental	5,000	0	5,000	DirSewer	0.00%	100.00%	0	5,000	Not Applicable	0.00%	0.00%	0	0
304	Repair and Maintenance	1,005,317	0	1,005,317	DirSewer	0.00%	100.00%	0	1,005,317	Not Applicable	0.00%	0.00%	0	0
305	Printing	1,000	0	1,000	DirSewer	0.00%	100.00%	0	1,000	Not Applicable	0.00%	0.00%	0	0
306	Other Administrative Fees	3,000	0	3,000	DirSewer	0.00%	100.00%	0	3,000	Not Applicable	0.00%	0.00%	0	0
307	General Office Supplies	1,000	0	1,000	DirSewer	0.00%	100.00%	0	1,000	Not Applicable	0.00%	0.00%	0	0
308	Operating Supplies	686,050	0	686,050	DirSewer	0.00%	100.00%	0	686,050	Not Applicable	0.00%	0.00%	0	0
309	Subscriptions & Memberships	3,600	0	3,600	DirSewer	0.00%	100.00%	0	3,600	Not Applicable	0.00%	0.00%	0	0
310	Capital Outlay - Furniture and Equipment	0	0	0	DirSewer	0.00%	100.00%	0	0	Not Applicable	0.00%	0.00%	0	0
311	Total	3,210,685	0	3,210,685				0	3,210,685				0	0
Wastewater Treatment - Beach (# 53605)														
312	Salaries and Wages	440,518	0	440,518	DirSewer	0.00%	100.00%	0	440,518	Not Applicable	0.00%	0.00%	0	0
313	Benefits	138,527	0	138,527	DirSewer	0.00%	100.00%	0	138,527	Not Applicable	0.00%	0.00%	0	0
314	Additional Personnel	0	0	0	DirSewer	0.00%	100.00%	0	0	Not Applicable	0.00%	0.00%	0	0
315	Professional Services	40,000	0	40,000	DirSewer	0.00%	100.00%	0	40,000	Not Applicable	0.00%	0.00%	0	0
316	Other Contracted Services	18,000	0	18,000	DirSewer	0.00%	100.00%	0	18,000	Not Applicable	0.00%	0.00%	0	0
317	Travel and Per Diem	4,500	0	4,500	DirSewer	0.00%	100.00%	0	4,500	Not Applicable	0.00%	0.00%	0	0
318	Communication	2,000	0	2,000	DirSewer	0.00%	100.00%	0	2,000	Not Applicable	0.00%	0.00%	0	0
319	Advertising	200	0	200	DirSewer	0.00%	100.00%	0	200	Not Applicable	0.00%	0.00%	0	0
320	Freight and Postage	200	0	200	DirSewer	0.00%	100.00%	0	200	Not Applicable	0.00%	0.00%	0	0
321	Electric	350,000	0	350,000	DirSewer	0.00%	100.00%	0	350,000	Not Applicable	0.00%	0.00%	0	0
322	Water and Sewer	1,200	0	1,200	DirSewer	0.00%	100.00%	0	1,200	Not Applicable	0.00%	0.00%	0	0
323	Trash, Garbage & Sludge Removal	62,500	0	62,500	DirSewer	0.00%	100.00%	0	62,500	Not Applicable	0.00%	0.00%	0	0
324	Equipment Rental	5,000	0	5,000	DirSewer	0.00%	100.00%	0	5,000	Not Applicable	0.00%	0.00%	0	0
325	Repair and Maintenance	145,250	0	145,250	DirSewer	0.00%	100.00%	0	145,250	Not Applicable	0.00%	0.00%	0	0
326	Printing	2,000	0	2,000	DirSewer	0.00%	100.00%	0	2,000	Not Applicable	0.00%	0.00%	0	0
327	Other Administrative Fees	3,000	0	3,000	DirSewer	0.00%	100.00%	0	3,000	Not Applicable	0.00%	0.00%	0	0
328	General Office Supplies	2,500	0	2,500	DirSewer	0.00%	100.00%	0	2,500	Not Applicable	0.00%	0.00%	0	0
329	Operating Supplies	157,000	0	157,000	DirSewer	0.00%	100.00%	0	157,000	Not Applicable	0.00%	0.00%	0	0
330	Subscriptions & Memberships	1,000	0	1,000	DirSewer	0.00%	100.00%	0	1,000	Not Applicable	0.00%	0.00%	0	0
331	Capital Outlay - Furniture and Equipment	0	0	0	DirSewer	0.00%	100.00%	0	0	Not Applicable	0.00%	0.00%	0	0
332	Total	1,373,395	0	1,373,395				0	1,373,395				0	0
Wastewater Treatment - Waterway (# 53623)														
333	Salaries and Wages	188,235	0	188,235	DirSewer	0.00%	100.00%	0	188,235	Not Applicable	0.00%	0.00%	0	0
334	Benefits	83,980	0	83,980	DirSewer	0.00%	100.00%	0	83,980	Not Applicable	0.00%	0.00%	0	0
335	Additional Personnel	0	0	0	DirSewer	0.00%	100.00%	0	0	Not Applicable	0.00%	0.00%	0	0
336	Professional Services	20,000	0	20,000	DirSewer	0.00%	100.00%	0	20,000	Not Applicable	0.00%	0.00%	0	0
337	Other Contracted Services	8,250	0	8,250	DirSewer	0.00%	100.00%	0	8,250	Not Applicable	0.00%	0.00%	0	0
338	Travel and Per Diem	4,500	0	4,500	DirSewer	0.00%	100.00%	0	4,500	Not Applicable	0.00%	0.00%	0	0
339	Communication	1,500	0	1,500	DirSewer	0.00%	100.00%	0	1,500	Not Applicable	0.00%	0.00%	0	0
340	Advertising	100	0	100	DirSewer	0.00%	100.00%	0	100	Not Applicable	0.00%	0.00%	0	0
341	Freight and Postage	200	0	200	DirSewer	0.00%	100.00%	0	200	Not Applicable	0.00%	0.00%	0	0
342	Electric	126,500	0	126,500	DirSewer	0.00%	100.00%	0	126,500	Not Applicable	0.00%	0.00%	0	0
343	Water and Sewer	1,200	0	1,200	DirSewer	0.00%	100.00%	0	1,200	Not Applicable	0.00%	0.00%	0	0
344	Trash, Garbage & Sludge Removal	72,500	0	72,500	DirSewer	0.00%	100.00%	0	72,500	Not Applicable	0.00%	0.00%	0	0
345	Equipment Rental	500	0	500	DirSewer	0.00%	100.00%	0	500	Not Applicable	0.00%	0.00%	0	0
346	Repair and Maintenance	89,750	0	89,750	DirSewer	0.00%	100.00%	0	89,750	Not Applicable	0.00%	0.00%	0	0
347	Printing	2,000	0	2,000	DirSewer	0.00%	100.00%	0	2,000	Not Applicable	0.00%	0.00%	0	0
348	Other Administrative Fees	3,000	0	3,000	DirSewer	0.00%	100.00%	0	3,000	Not Applicable	0.00%	0.00%	0	0
349	General Office Supplies	1,500	0	1,500	DirSewer	0.00%	100.00%	0	1,500	Not Applicable	0.00%	0.00%	0	0
350	Operating Supplies	67,300	0	67,300	DirSewer	0.00%	100.00%	0	67,300	Not Applicable	0.00%	0.00%	0	0
351	Subscriptions & Memberships	600	0	600	DirSewer	0.00%	100.00%	0	600	Not Applicable	0.00%	0.00%	0	0
352	Capital Outlay - Furniture and Equipment	0	0	0	DirSewer	0.00%	100.00%	0	0	Not Applicable	0.00%	0.00%	0	0
353	Total	671,615	0	671,615				0	671,615				0	0

Table 4-6

Department of Lee County Utilities
Water System

Development of Wholesale Water Rate

Line No.	Description	2002 Budget (1)	Adjustments	2002 As Adjusted	Water / Wastewater Allocation Methodology			Water Bulk / Retail Allocation Methodology		
					Allocation Basis	Allocation Percent	Allocation Amount	Allocation Basis	Allocation Percent	Allocation Amount
Wastewater Treatment - Fiesta Village (# 53624)										
354	Salaries and Wages	287,158	0	287,158	DirSewer	100.00%	0	Not Applicable	0.00%	0
355	Benefits	86,619	0	86,619	DirSewer	100.00%	0	Not Applicable	0.00%	0
356	Additional Personnel	0	0	0	DirSewer	100.00%	0	Not Applicable	0.00%	0
357	Professional Services	10,000	0	10,000	DirSewer	100.00%	0	Not Applicable	0.00%	0
358	Other Contracted Services	12,800	0	12,800	DirSewer	100.00%	0	Not Applicable	0.00%	0
359	Travel and Per Diem	4,500	0	4,500	DirSewer	100.00%	0	Not Applicable	0.00%	0
360	Communication	2,000	0	2,000	DirSewer	100.00%	0	Not Applicable	0.00%	0
361	Advertising	200	0	200	DirSewer	100.00%	0	Not Applicable	0.00%	0
362	Freight and Postage	200	0	200	DirSewer	100.00%	0	Not Applicable	0.00%	0
363	Electric	172,500	0	172,500	DirSewer	100.00%	0	Not Applicable	0.00%	0
364	Water and Sewer	1,200	0	1,200	DirSewer	100.00%	0	Not Applicable	0.00%	0
365	Trash, Garbage & Sludge Removal	83,000	0	83,000	DirSewer	100.00%	0	Not Applicable	0.00%	0
366	Equipment Rental	5,000	0	5,000	DirSewer	100.00%	0	Not Applicable	0.00%	0
367	Repair and Maintenance	135,250	0	135,250	DirSewer	100.00%	0	Not Applicable	0.00%	0
368	Printing	2,000	0	2,000	DirSewer	100.00%	0	Not Applicable	0.00%	0
369	Other Administrative Fees	3,000	0	3,000	DirSewer	100.00%	0	Not Applicable	0.00%	0
370	General Office Supplies	2,500	0	2,500	DirSewer	100.00%	0	Not Applicable	0.00%	0
371	Operating Supplies	130,000	0	130,000	DirSewer	100.00%	0	Not Applicable	0.00%	0
372	Subscriptions & Memberships	1,000	0	1,000	DirSewer	100.00%	0	Not Applicable	0.00%	0
373	Capital Outlay - Furniture and Equipment	0	0	0	DirSewer	100.00%	0	Not Applicable	0.00%	0
374	Total	938,927	0	938,927			0			0
Wastewater Treatment - Matlacha / Pine (# 53651)										
375	Salaries and Wages	90,310	0	90,310	DirSewer	100.00%	0	Not Applicable	0.00%	0
376	Benefits	27,949	0	27,949	DirSewer	100.00%	0	Not Applicable	0.00%	0
377	Additional Personnel	0	0	0	DirSewer	100.00%	0	Not Applicable	0.00%	0
378	Other Contracted Services	5,500	0	5,500	DirSewer	100.00%	0	Not Applicable	0.00%	0
379	Travel and Per Diem	4,500	0	4,500	DirSewer	100.00%	0	Not Applicable	0.00%	0
380	Communication	1,500	0	1,500	DirSewer	100.00%	0	Not Applicable	0.00%	0
381	Advertising	100	0	100	DirSewer	100.00%	0	Not Applicable	0.00%	0
382	Freight and Postage	200	0	200	DirSewer	100.00%	0	Not Applicable	0.00%	0
383	Electric	50,000	0	50,000	DirSewer	100.00%	0	Not Applicable	0.00%	0
384	Water and Sewer	1,200	0	1,200	DirSewer	100.00%	0	Not Applicable	0.00%	0
385	Trash, Garbage & Sludge Removal	19,500	0	19,500	DirSewer	100.00%	0	Not Applicable	0.00%	0
386	Equipment Rental	500	0	500	DirSewer	100.00%	0	Not Applicable	0.00%	0
387	Repair and Maintenance	53,750	0	53,750	DirSewer	100.00%	0	Not Applicable	0.00%	0
388	Printing	2,000	0	2,000	DirSewer	100.00%	0	Not Applicable	0.00%	0
389	Other Administrative Fees	3,000	0	3,000	DirSewer	100.00%	0	Not Applicable	0.00%	0
390	General Office Supplies	1,000	0	1,000	DirSewer	100.00%	0	Not Applicable	0.00%	0
391	Operating Supplies	58,300	0	58,300	DirSewer	100.00%	0	Not Applicable	0.00%	0
392	Subscriptions & Memberships	1,000	0	1,000	DirSewer	100.00%	0	Not Applicable	0.00%	0
393	Capital Outlay - Furniture and Equipment	0	0	0	DirSewer	100.00%	0	Not Applicable	0.00%	0
394	Aids to Private Organizations (LCRWSA)	0	0	0	DirSewer	100.00%	0	Not Applicable	0.00%	0
395	Total	320,309	0	320,309			0			0
Wastewater Treatment - Gateway										
396	Salaries and Wages	189,367	0	189,367	DirSewer	100.00%	0	Not Applicable	0.00%	0
397	Benefits	71,951	0	71,951	DirSewer	100.00%	0	Not Applicable	0.00%	0
398	Additional Personnel	0	0	0	DirSewer	100.00%	0	Not Applicable	0.00%	0
399	Other Contracted Services	8,250	0	8,250	DirSewer	100.00%	0	Not Applicable	0.00%	0
400	Travel and Per Diem	4,500	0	4,500	DirSewer	100.00%	0	Not Applicable	0.00%	0
401	Communication	1,500	0	1,500	DirSewer	100.00%	0	Not Applicable	0.00%	0
402	Advertising	100	0	100	DirSewer	100.00%	0	Not Applicable	0.00%	0
403	Freight and Postage	200	0	200	DirSewer	100.00%	0	Not Applicable	0.00%	0
404	Electric	126,500	0	126,500	DirSewer	100.00%	0	Not Applicable	0.00%	0
405	Water and Sewer	1,200	0	1,200	DirSewer	100.00%	0	Not Applicable	0.00%	0
406	Trash, Garbage & Sludge Removal	72,500	0	72,500	DirSewer	100.00%	0	Not Applicable	0.00%	0
407	Equipment Rental	5,000	0	5,000	DirSewer	100.00%	0	Not Applicable	0.00%	0

Table 4-6

Department of Lee County Utilities
Water System

Development of Wholesale Water Rate

Line No.	Description	2002 Budget (1)	Adjustments	2002 As Adjusted	Water / Wastewater Allocation Methodology			Water Bulk / Retail Allocation Methodology		
					Allocation Basis	Water Allocation Percent	Water Allocation Amount	Allocation Basis	Allocation Percent	Allocation Amount
408	Repair and Maintenance	90,250	0	90,250	DirSewer	100.00%	0	Not Applicable	0.00%	0
409	Printing	2,000	0	2,000	DirSewer	100.00%	0	Not Applicable	0.00%	0
410	Other Administrative Fees	3,000	0	3,000	DirSewer	100.00%	0	Not Applicable	0.00%	0
411	General Office Supplies	1,500	0	1,500	DirSewer	100.00%	0	Not Applicable	0.00%	0
412	Operating Supplies	58,500	0	58,500	DirSewer	100.00%	0	Not Applicable	0.00%	0
413	Subscriptions & Memberships	1,000	0	1,000	DirSewer	100.00%	0	Not Applicable	0.00%	0
414	Capital Outlay - Furniture and Equipment	0	0	0	DirSewer	100.00%	0	Not Applicable	0.00%	0
415	Total	637,318	0	637,318						
Wastewater Treatment - Pack Plants (# 53652)										
416	Professional Services	20,000	0	20,000	DirSewer	100.00%	0	Not Applicable	0.00%	0
417	Other Contracted Services	7,000	0	7,000	DirSewer	100.00%	0	Not Applicable	0.00%	0
418	Travel and Per Diem	1,500	0	1,500	DirSewer	100.00%	0	Not Applicable	0.00%	0
419	Electric	20,000	0	20,000	DirSewer	100.00%	0	Not Applicable	0.00%	0
420	Water and Sewer	1,200	0	1,200	DirSewer	100.00%	0	Not Applicable	0.00%	0
421	Trash, Garbage & Sludge Removal	20,000	0	20,000	DirSewer	100.00%	0	Not Applicable	0.00%	0
422	Repair and Maintenance	23,000	0	23,000	DirSewer	100.00%	0	Not Applicable	0.00%	0
423	Operating Supplies	7,800	0	7,800	DirSewer	100.00%	0	Not Applicable	0.00%	0
424	Total	100,500	0	100,500						
Wastewater Treatment Contract (# 53603)										
425	Other Contracted Services	4,707,967	0	4,707,967	DirSewer	100.00%	0	Not Applicable	0.00%	0
426	Total	4,707,967	0	4,707,967						
Property Appraiser (# 51314)										
427	Professional Services	5,000	0	5,000	Customer	60.66%	3,033	Direct Retail	100.00%	3,033
428	Total	5,000	0	5,000						
Non-Departmental (# 51903)										
429	Professional Services	100,000	0	100,000	Assets	35.99%	35,990	Total Assets	59.51%	21,416
430	Other Contracted Services	100,000	0	100,000	Assets	35.99%	35,990	Direct Retail	100.00%	35,990
431	Contingency	689,204	0	689,204	Contingency	40.34%	278,020	O&M	67.97%	188,984
432	Total	889,204	0	889,204			350,000			210,401
433	Total Operations and Maintenance	\$28,257,359	\$0	\$28,257,359			\$11,398,833			\$7,748,352
OTHER REVENUE REQUIREMENTS										
Debt Service										
434	Series 1993 Water/Sewer Revenue Bonds	2,823,351	0	2,823,351	Use of Funds	30.57%	863,098	Direct Bulk	100.00%	863,098
435	Series 1999A Water/Sewer Revenue Bonds	8,541,125	0	8,541,125	Use of Funds	64.26%	5,488,527	FCWC Assets	50.02%	2,745,571
436	SRF Indebtedness (Iona-McGregor)	720,926	0	720,926	Use of Funds	0.00%	0	Not Applicable	0.00%	0
437	SRF Indebtedness (Anticipated)	0	3,262,241	3,262,241	Use of Funds	81.32%	2,652,841	Direct Bulk	100.00%	2,652,841
438	Ft. Myers Beach G.O. Bonds-Series 1977	689,848	0	689,848	Use of Funds	0.00%	0	Not Applicable	0.00%	0
439	South Ft. Myers G.O. Bonds-Series 1983	617,667	0	617,667	Use of Funds	0.00%	0	Not Applicable	0.00%	0
440	Total Debt Service	13,392,917	3,262,241	16,655,158			9,004,467			6,261,510
441	Renewal and Replacement Transfer	2,351,512	0	2,351,512	Sales	62.64%	1,472,966	Total Assets	59.51%	876,509
442	Other Required Payment	0	0	0	Use of Funds	50.00%	0	Not Applicable	0.00%	0
443	Total Other Revenue Requirements	15,744,429	3,262,241	19,006,670			10,477,433			7,138,019
444	TOTAL GROSS REVENUE REQUIREMENTS	\$44,001,788	\$3,262,241	\$47,264,029			\$21,876,265			\$14,886,371
(LESS) Funds from Other Revenue Sources										
445	Water Tap Fees	260,000	0	260,000	Direct Water	100.00%	260,000	Direct Retail	100.00%	260,000
446	Ft. Myers Sludge Operating	200,000	0	200,000	Direct Sewer	0.00%	0	Not Applicable	0.00%	0
447	Sewer Tapping Fees	1,000	0	1,000	Direct Sewer	100.00%	1,000	Direct Retail	100.00%	1,000
448	Effluent Reuse	18,000	0	18,000	Direct Sewer	100.00%	18,000	Not Applicable	0.00%	0
449	Water - Other Income	17,500	0	17,500	Direct Water	100.00%	17,500	Direct Retail	100.00%	17,500
450	Sewer - Other Income	1,000	0	1,000	Direct Sewer	0.00%	0	Direct Retail	100.00%	1,000
451	Miscellaneous Service Charges	406,181	0	406,181	Customer	60.66%	246,399	Direct Retail	100.00%	246,399
452	Interest Earnings	1,835,169	0	1,835,169	Use of Funds	52.12%	956,415	Fund Use	33.08%	640,009
453	Other Miscellaneous Revenues	138,000	0	138,000	Customer	60.66%	83,714	Direct Retail	100.00%	83,714

Table 4-6

Department of Lee County Utilities
Water System

Development of Wholesale Water Rate

Line No.	Description	2002 Budget (1)	Adjustments	2002 As Adjusted	Water / Wastewater Allocation Methodology			Water Bulk / Retail Allocation Methodology		
					Allocation Basis	Allocation Percent	Allocation Amount	Allocation Basis	Allocation Percent	Allocation Amount
454	Total Revenues from Other Sources	2,876,850	0	2,876,850	Water	Water	Bulk	Bulk	Retail	Retail
455	NET REVENUE REQUIREMENTS	\$41,124,938	\$3,262,241	\$44,387,179		1,564,029	1,312,821	316,406	1,247,623	
456	TOTAL ESTIMATED FINISHED WATER SALES (000's)					\$20,312,236	\$24,074,943	\$14,569,965	\$5,742,271	
457	ESTIMATED WHOLESALÉ WATER RATE PER THOUSAND GALLONS							5,924,295		
458	ROUNDED RATE PER THOUSAND GALLONS							\$ 2,4594		
								\$ 2.46		

(1) Based on Preliminary Fiscal Year 2002 Operating Budget as provided by the County.

(2) Functionalization of contract operator expenditures (i.e., salaries, professional services, communications, etc.) within each department based on previously provided relationships of cost breakdowns. For purposes of this analysis, FY 2000 budgeted contractual services by department have been functionalized utilizing a proration of known relationships of cost functionalizations as identified in the current contract operators bid for system operations.

(3) Amounts shown based on estimation of FY 2000 water production at all County Treatment Plants based on current production statistics at these County facilities.

Table 4-7

Department of Lee County Utilities
Wastewater System

Development of Wholesale Wastewater Rate

Line No.	Description	2002			2002			Water / Wastewater Allocation Methodology			Sewer Bulk / Retail Allocation Methodology		
		Budget (I)	Adjustments	As Adjusted	Allocation Basis	Water		Sewer	Allocation Basis	Bulk		Retail	
						Allocation Percent	Allocation Amount			Allocation Percent	Allocation Amount		
OPERATING EXPENSES													
Administration (# 53663)													
1	Salaries and Wages	\$342,050	0	\$342,050	Salaries	49.40%	50.60%	\$168,988	DLCU Salaries	40.13%	59.87%	\$69,455	
2	Benefits	104,299	0	104,299	Salaries	49.40%	50.60%	51,528	DLCU Salaries	40.13%	59.87%	21,178	
3	Additional Personnel	0	0	0	Salaries	49.40%	50.60%	0	DLCU Salaries	40.13%	59.87%	0	
4	Legal Services	7,500	0	7,500	Salaries	49.40%	50.60%	3,705	DLCU Salaries	40.13%	59.87%	1,523	
5	Professional Services	126,000	0	126,000	Salaries	49.40%	50.60%	62,249	DLCU Salaries	40.13%	59.87%	25,585	
6	Other Contracted Services	60,000	0	60,000	Salaries	49.40%	50.60%	29,643	DLCU Salaries	40.13%	59.87%	12,183	
7	Travel and Per Diem	20,400	0	20,400	Salaries	49.40%	50.60%	10,078	DLCU Salaries	40.13%	59.87%	4,142	
8	Communication	10,546	0	10,546	Salaries	49.40%	50.60%	5,210	DLCU Salaries	40.13%	59.87%	2,141	
9	Advertising	5,000	0	5,000	Salaries	49.40%	50.60%	2,470	DLCU Salaries	40.13%	59.87%	1,015	
10	Freight and Postage	2,500	0	2,500	Salaries	49.40%	50.60%	1,235	DLCU Salaries	40.13%	59.87%	508	
11	Land, Building, Parking Rental	2,250	0	2,250	Salaries	49.40%	50.60%	1,112	DLCU Salaries	40.13%	59.87%	457	
12	Equipment Rental	10,000	0	10,000	Salaries	49.40%	50.60%	4,940	DLCU Salaries	40.13%	59.87%	2,031	
13	Self-Insurance Assessment	10,501	0	10,501	Salaries	49.40%	50.60%	5,188	DLCU Salaries	40.13%	59.87%	2,132	
14	Repair and Maintenance	21,080	0	21,080	Salaries	49.40%	50.60%	10,414	DLCU Salaries	40.13%	59.87%	4,280	
15	Printing	1,500	0	1,500	Salaries	49.40%	50.60%	741	DLCU Salaries	40.13%	59.87%	305	
16	Other Administrative Fees	17,000	0	17,000	Salaries	49.40%	50.60%	8,399	DLCU Salaries	40.13%	59.87%	3,452	
17	General Office Supplies	3,100	0	3,100	Salaries	49.40%	50.60%	1,532	DLCU Salaries	40.13%	59.87%	629	
18	Operating Supplies	4,561	0	4,561	Salaries	49.40%	50.60%	2,253	DLCU Salaries	40.13%	59.87%	926	
19	Subscriptions & Memberships	5,700	0	5,700	Salaries	49.40%	50.60%	2,816	DLCU Salaries	40.13%	59.87%	1,157	
20	Capital Outlay - Furniture and Equipment	0	0	0	Salaries	49.40%	50.60%	0	DLCU Salaries	40.13%	59.87%	0	
21	Total	753,987	0	753,987				372,502				153,100	
												228,384	
Water Meter Services (# 53609)													
22	Salaries and Wages	416,867	0	416,867	Customer	60.66%	39.34%	252,882	ERUs	0.08%	99.92%	134	
23	Benefits	175,774	0	175,774	Customer	60.66%	39.34%	106,629	ERUs	0.08%	99.92%	56	
24	Additional Personnel	0	0	0	Customer	60.66%	39.34%	0	ERUs	0.08%	99.92%	0	
25	Other Contracted Services	9,000	0	9,000	Customer	60.66%	39.34%	5,460	ERUs	0.08%	99.92%	3	
26	Travel and Per Diem	1,700	0	1,700	Customer	60.66%	39.34%	1,031	ERUs	0.08%	99.92%	1	
27	Repair and Maintenance	34,380	0	34,380	Customer	60.66%	39.34%	20,856	ERUs	0.08%	99.92%	11	
28	Printing	2,000	0	2,000	Customer	60.66%	39.34%	1,213	ERUs	0.08%	99.92%	1	
29	General Office Supplies	1,500	0	1,500	Customer	60.66%	39.34%	910	ERUs	0.08%	99.92%	0	
30	Operating Supplies	56,025	0	56,025	Customer	60.66%	39.34%	33,986	ERUs	0.08%	99.92%	18	
31	Total	697,246	0	697,246				422,967				224	
												274,056	
Billings & Collections (# 53610)													
32	Salaries and Wages	598,826	0	598,826	Customer	60.66%	39.34%	363,263	Metered Points	0.01%	99.99%	14	
33	Benefits	229,353	0	229,353	Customer	60.66%	39.34%	139,131	Metered Points	0.01%	99.99%	5	
34	Additional Personnel	0	0	0	Customer	60.66%	39.34%	0	Metered Points	0.01%	99.99%	0	
35	Professional Services	252,400	0	252,400	Customer	60.66%	39.34%	153,112	Metered Points	0.01%	99.99%	6	
36	Other Contracted Services	189,880	0	189,880	Customer	60.66%	39.34%	115,186	Metered Points	0.01%	99.99%	5	
37	Travel and Per Diem	7,500	0	7,500	Customer	60.66%	39.34%	4,550	Metered Points	0.01%	99.99%	0	
38	Communication	24,000	0	24,000	Customer	60.66%	39.34%	14,559	Metered Points	0.01%	99.99%	1	
39	Freight and Postage	333,000	0	333,000	Customer	60.66%	39.34%	202,006	Metered Points	0.01%	99.99%	8	
40	Electric	26,400	0	26,400	Customer	60.66%	39.34%	16,015	Metered Points	0.01%	99.99%	1	
41	Water and Sewer	2,000	0	2,000	Customer	60.66%	39.34%	1,213	Metered Points	0.01%	99.99%	0	
42	Trash, Garbage & Sludge Removal	528	0	528	Customer	60.66%	39.34%	320	Metered Points	0.01%	99.99%	0	
43	Equipment Rental	8,000	0	8,000	Customer	60.66%	39.34%	4,853	Metered Points	0.01%	99.99%	0	
44	Repair and Maintenance	14,420	0	14,420	Customer	60.66%	39.34%	8,748	Metered Points	0.01%	99.99%	0	
45	Printing	8,000	0	8,000	Customer	60.66%	39.34%	4,853	Metered Points	0.01%	99.99%	0	
46	Other Administrative Fees	1,000	0	1,000	Customer	60.66%	39.34%	607	Metered Points	0.01%	99.99%	0	
47	General Office Supplies	60,200	0	60,200	Customer	60.66%	39.34%	36,519	Metered Points	0.01%	99.99%	1	
48	Operating Supplies	9,200	0	9,200	Customer	60.66%	39.34%	5,581	Metered Points	0.01%	99.99%	0	
49	Subscriptions & Memberships	250	0	250	Customer	60.66%	39.34%	152	Metered Points	0.01%	99.99%	0	
50	Capital Outlay - Furniture and Equipment	0	0	0	Customer	60.66%	39.34%	0	Metered Points	0.01%	99.99%	0	
51	Total	1,764,957	0	1,764,957				1,070,666				42	
												694,291	

Table 4-7

Department of Lee County Utilities
Wastewater System

Development of Wholesale Wastewater Rate

Line No.	Description	2002 Budget (1)	Adjustments	2002 As Adjusted	Water / Wastewater Allocation Methodology			Sewer Bulk / Retail Allocation Methodology						
					Allocation Basis	Allocation Percent		Allocation Basis	Allocation Percent					
						Water	Sewer		Water	Sewer	Bulk	Retail		
Utilities Engineering (# 53607)														
52	Salaries and Wages	518,457	0	518,457	CIP	57.87%	42.13%	300,047	218,410	Applicable CIP	36.68%	63.32%	80,106	138,304
53	Benefits	150,886	0	150,886	CIP	57.87%	42.13%	87,322	63,564	Applicable CIP	36.68%	63.32%	23,313	40,251
54	Additional Personnel	0	0	0	CIP	57.87%	42.13%	0	0	Applicable CIP	36.68%	63.32%	0	0
55	Professional Services	150,000	0	150,000	CIP	57.87%	42.13%	86,810	63,190	Applicable CIP	36.68%	63.32%	23,176	40,014
56	Other Contracted Services	30,000	0	30,000	CIP	57.87%	42.13%	17,362	12,638	Applicable CIP	36.68%	63.32%	4,655	8,003
57	Travel and Per Diem	15,000	0	15,000	CIP	57.87%	42.13%	8,681	6,319	Applicable CIP	36.68%	63.32%	2,318	4,001
58	Communication	2,500	0	2,500	CIP	57.87%	42.13%	1,447	1,053	Applicable CIP	36.68%	63.32%	386	667
59	Freight and Postage	500	0	500	CIP	57.87%	42.13%	289	211	Applicable CIP	36.68%	63.32%	77	133
60	Land, Building, Parking Rental	1,750	0	1,750	CIP	57.87%	42.13%	1,013	737	Applicable CIP	36.68%	63.32%	270	467
61	Repair and Maintenance	12,500	0	12,500	CIP	57.87%	42.13%	7,234	5,266	Applicable CIP	36.68%	63.32%	1,931	3,335
62	Printing	11,000	0	11,000	CIP	57.87%	42.13%	6,366	4,634	Applicable CIP	36.68%	63.32%	1,700	2,934
63	Other Administrative Fees	10,500	0	10,500	CIP	57.87%	42.13%	6,077	4,423	Applicable CIP	36.68%	63.32%	1,622	2,801
64	General Office Supplies	3,500	0	3,500	CIP	57.87%	42.13%	2,026	1,474	Applicable CIP	36.68%	63.32%	541	934
65	Operating Supplies	3,950	0	3,950	CIP	57.87%	42.13%	2,286	1,664	Applicable CIP	36.68%	63.32%	610	1,054
66	Subscriptions & Memberships	3,300	0	3,300	CIP	57.87%	42.13%	1,910	1,390	Applicable CIP	36.68%	63.32%	510	880
67	Capital Outlay - Furniture and Equipment	0	0	0	CIP	57.87%	42.13%	0	0	Applicable CIP	36.68%	63.32%	0	0
68	Total	913,843	0	913,843				528,869	384,974				141,196	243,778
Construction / Utility Inspections (# 54119)														
69	Salaries and Wages	247,757	0	247,757	CIP	57.87%	42.13%	143,385	104,372	Applicable CIP	36.68%	63.32%	38,280	66,092
70	Benefits	82,655	0	82,655	CIP	57.87%	42.13%	47,835	34,820	Applicable CIP	36.68%	63.32%	12,771	22,049
71	Additional Personnel	0	0	0	CIP	57.87%	42.13%	0	0	Applicable CIP	36.68%	63.32%	0	0
72	Professional Services	20,916	0	20,916	CIP	57.87%	42.13%	12,105	8,811	Applicable CIP	36.68%	63.32%	3,232	5,580
73	Other Contracted Services	500	0	500	CIP	57.87%	42.13%	289	211	Applicable CIP	36.68%	63.32%	77	133
74	Travel and Per Diem	1,100	0	1,100	CIP	57.87%	42.13%	637	463	Applicable CIP	36.68%	63.32%	170	293
75	Communication	10,546	0	10,546	CIP	57.87%	42.13%	6,103	4,443	Applicable CIP	36.68%	63.32%	1,629	2,813
76	Self-Insurance Assessment	924	0	924	CIP	57.87%	42.13%	535	389	Applicable CIP	36.68%	63.32%	143	246
77	Repair and Maintenance	17,411	0	17,411	CIP	57.87%	42.13%	10,076	7,335	Applicable CIP	36.68%	63.32%	2,698	4,645
78	Other Administrative Fees	47,239	0	47,239	CIP	57.87%	42.13%	27,339	19,900	Applicable CIP	36.68%	63.32%	7,299	12,602
79	General Office Supplies	200	0	200	CIP	57.87%	42.13%	116	84	Applicable CIP	36.68%	63.32%	31	53
80	Operating Supplies	18,200	0	18,200	CIP	57.87%	42.13%	10,533	7,667	Applicable CIP	36.68%	63.32%	2,812	4,855
81	Total	447,448	0	447,448				258,952	188,496				69,134	119,362
Maintenance Department (# 53614)														
82	Salaries and Wages	381,505	0	381,505	Assets	35.99%	64.01%	137,304	244,201	Total Assets	31.54%	68.46%	77,013	167,189
83	Benefits	145,219	0	145,219	Assets	35.99%	64.01%	52,264	92,955	Total Assets	31.54%	68.46%	29,315	63,640
84	Additional Personnel	0	0	0	Assets	35.99%	64.01%	0	0	Total Assets	31.54%	68.46%	0	0
85	Professional Services	30,000	0	30,000	Assets	35.99%	64.01%	10,797	19,203	Total Assets	31.54%	68.46%	6,056	13,147
86	Other Contracted Services	205,250	0	205,250	Assets	35.99%	64.01%	73,869	131,381	Total Assets	31.54%	68.46%	41,433	89,948
87	Travel and Per Diem	3,460	0	3,460	Assets	35.99%	64.01%	1,245	2,215	Total Assets	31.54%	68.46%	698	1,516
88	Communication	3,500	0	3,500	Assets	35.99%	64.01%	1,260	2,240	Total Assets	31.54%	68.46%	707	1,534
89	Freight and Postage	500	0	500	Assets	35.99%	64.01%	180	320	Total Assets	31.54%	68.46%	101	219
90	Electric	3,000	0	3,000	Assets	35.99%	64.01%	1,080	1,920	Total Assets	31.54%	68.46%	606	1,315
91	Water and Sewer	1,200	0	1,200	Assets	35.99%	64.01%	432	768	Total Assets	31.54%	68.46%	242	526
92	Trash, Garbage & Sludge Removal	1,200	0	1,200	Assets	35.99%	64.01%	432	768	Total Assets	31.54%	68.46%	242	526
93	Equipment Rental	500	0	500	Assets	35.99%	64.01%	180	320	Total Assets	31.54%	68.46%	101	219
94	Repair and Maintenance	123,260	0	123,260	Assets	35.99%	64.01%	44,361	78,899	Total Assets	31.54%	68.46%	24,882	54,017
95	Printing	1,000	0	1,000	Assets	35.99%	64.01%	360	640	Total Assets	31.54%	68.46%	202	438
96	Other Administrative Fees	1,250	0	1,250	Assets	35.99%	64.01%	450	800	Total Assets	31.54%	68.46%	252	548
97	General Office Supplies	200	0	200	Assets	35.99%	64.01%	72	128	Total Assets	31.54%	68.46%	40	88
98	Operating Supplies	35,200	0	35,200	Assets	35.99%	64.01%	12,668	22,532	Total Assets	31.54%	68.46%	7,106	15,426
99	Subscriptions & Memberships	1,000	0	1,000	Assets	35.99%	64.01%	360	640	Total Assets	31.54%	68.46%	202	438
100	Capital Outlay - Furniture and Equipment	0	0	0	Assets	35.99%	64.01%	0	0	Total Assets	31.54%	68.46%	0	0
101	Total	957,244	0	957,244				337,314	599,930				189,197	410,732

Table 4-7

Department of Lee County Utilities
Wastewater System

Development of Wholesale Wastewater Rate

Line No.	Description	2002 Budget (1)	Adjustments	2002 As Adjusted	Water / Wastewater Allocation Methodology			Sewer Bulk / Retail Allocation Methodology					
					Allocation Basis	Allocation Percent	Allocation Amount	Allocation Basis	Allocation Percent	Allocation Amount			
Electronics Department (# 55615)													
102	Salaries and Wages	206,066	0	206,066	Assets	35.99%	64.01%	74,163	Total Assets	31.54%	68.46%	41,598	90,305
103	Benefits	71,295	0	71,295	Assets	35.99%	64.01%	25,659	Total Assets	31.54%	68.46%	14,392	31,244
104	Additional Personnel	0	0	0	Assets	35.99%	64.01%	0	Total Assets	31.54%	68.46%	0	0
105	Professional Services	35,000	0	35,000	Assets	35.99%	64.01%	12,597	Total Assets	31.54%	68.46%	7,065	15,338
106	Other Contracted Services	25,500	0	25,500	Assets	35.99%	64.01%	9,177	Total Assets	31.54%	68.46%	5,148	11,175
107	Travel and Per Diem	2,500	0	2,500	Assets	35.99%	64.01%	900	Total Assets	31.54%	68.46%	505	1,096
108	Communication	3,150	0	3,150	Assets	35.99%	64.01%	1,134	Total Assets	31.54%	68.46%	636	1,380
109	Freight and Postage	500	0	500	Assets	35.99%	64.01%	180	Total Assets	31.54%	68.46%	101	219
110	Electric	3,000	0	3,000	Assets	35.99%	64.01%	1,080	Total Assets	31.54%	68.46%	606	1,315
111	Water and Sewer	1,200	0	1,200	Assets	35.99%	64.01%	432	Total Assets	31.54%	68.46%	242	526
112	Trash, Garbage & Sludge Removal	1,200	0	1,200	Assets	35.99%	64.01%	432	Total Assets	31.54%	68.46%	242	526
113	Equipment Rental	1,200	0	1,200	Assets	35.99%	64.01%	432	Total Assets	31.54%	68.46%	242	526
114	Repair and Maintenance	500	0	500	Assets	35.99%	64.01%	180	Total Assets	31.54%	68.46%	101	219
115	Printing	36,700	0	36,700	Assets	35.99%	64.01%	13,208	Total Assets	31.54%	68.46%	7,408	16,083
116	Other Administrative Fees	400	0	400	Assets	35.99%	64.01%	144	Total Assets	31.54%	68.46%	81	175
117	General Office Supplies	300	0	300	Assets	35.99%	64.01%	108	Total Assets	31.54%	68.46%	61	131
118	Operating Supplies	200	0	200	Assets	35.99%	64.01%	72	Total Assets	31.54%	68.46%	40	88
119	Subscriptions & Memberships	17,800	0	17,800	Assets	35.99%	64.01%	6,406	Total Assets	31.54%	68.46%	3,593	7,801
120	Capital Outlay - Furniture and Equipment	700	0	700	Assets	35.99%	64.01%	252	Total Assets	31.54%	68.46%	141	307
121	Total	406,011	0	406,011	Assets	35.99%	64.01%	146,123	Total Assets	31.54%	68.46%	81,960	177,928
Support Services (# 53616)													
122	Salaries and Wages	337,740	0	337,740	Customer	60.66%	39.34%	204,881	ERUs	0.08%	99.92%	108	132,750
123	Benefits	127,573	0	127,573	Customer	60.66%	39.34%	77,389	ERUs	0.08%	99.92%	41	50,143
124	Additional Personnel	0	0	0	Customer	60.66%	39.34%	0	ERUs	0.08%	99.92%	0	0
125	Professional Services	15,000	0	15,000	Customer	60.66%	39.34%	9,099	ERUs	0.08%	99.92%	5	5,896
126	Other Contracted Services	32,000	0	32,000	Customer	60.66%	39.34%	19,412	ERUs	0.08%	99.92%	10	12,578
127	Travel and Per Diem	3,250	0	3,250	Customer	60.66%	39.34%	1,972	ERUs	0.08%	99.92%	1	1,277
128	Communication	12,500	0	12,500	Customer	60.66%	39.34%	7,583	ERUs	0.08%	99.92%	4	4,913
129	Freight and Postage	3,000	0	3,000	Customer	60.66%	39.34%	1,820	ERUs	0.08%	99.92%	1	1,179
130	Electric	18,000	0	18,000	Customer	60.66%	39.34%	10,919	ERUs	0.08%	99.92%	6	7,075
131	Water and Sewer	2,000	0	2,000	Customer	60.66%	39.34%	1,213	ERUs	0.08%	99.92%	1	786
132	Trash, Garbage & Sludge Removal	3,000	0	3,000	Customer	60.66%	39.34%	1,820	ERUs	0.08%	99.92%	1	786
133	Equipment Rental	10,000	0	10,000	Customer	60.66%	39.34%	6,066	ERUs	0.08%	99.92%	3	3,931
134	Repair and Maintenance	98,000	0	98,000	Customer	60.66%	39.34%	59,449	ERUs	0.08%	99.92%	31	38,519
135	Printing	3,500	0	3,500	Customer	60.66%	39.34%	2,123	ERUs	0.08%	99.92%	1	1,376
136	Other Administrative Fees	2,750	0	2,750	Customer	60.66%	39.34%	1,668	ERUs	0.08%	99.92%	1	1,081
137	General Office Supplies	3,250	0	3,250	Customer	60.66%	39.34%	1,972	ERUs	0.08%	99.92%	1	1,277
138	Operating Supplies	35,250	0	35,250	Customer	60.66%	39.34%	21,384	ERUs	0.08%	99.92%	11	13,855
139	Subscriptions & Memberships	750	0	750	Customer	60.66%	39.34%	455	ERUs	0.08%	99.92%	0	295
140	Capital Outlay - Furniture and Equipment	0	0	0	Customer	60.66%	39.34%	0	ERUs	0.08%	99.92%	0	0
141	Total	707,563	0	707,563	Customer	60.66%	39.34%	429,225	ERUs	0.08%	99.92%	227	278,111

Table 4-7

Department of Lee County Utilities
Wastewater System

Development of Wholesale Wastewater Rate

Line No.	Description	2002 Budget (I)	Adjustments	2002 As Adjusted	Water / Wastewater Allocation Methodology			Sewer Bulk / Retail Allocation Methodology					
					Allocation Basis	Allocation Percent	Allocation Amount	Allocation Basis	Allocation Percent	Allocation Amount	Allocation Basis	Allocation Percent	Allocation Amount
Water Operations (# 53662)													
142	Salaries and Wages	39,588	0	39,588	DirWater	100.00%	0.00%	39,588	Not Applicable	0.00%	0	0	
143	Benefits	20,260	0	20,260	DirWater	100.00%	0.00%	20,260	Not Applicable	0.00%	0	0	
144	Additional Personnel	0	0	0	DirWater	100.00%	0.00%	0	Not Applicable	0.00%	0	0	
145	Legal Services	5,000	0	5,000	DirWater	100.00%	0.00%	5,000	Not Applicable	0.00%	0	0	
146	Professional Services	204,900	0	204,900	DirWater	100.00%	0.00%	204,900	Not Applicable	0.00%	0	0	
147	Other Contracted Services	76,500	0	76,500	DirWater	100.00%	0.00%	76,500	Not Applicable	0.00%	0	0	
148	Travel and Per Diem	4,000	0	4,000	DirWater	100.00%	0.00%	4,000	Not Applicable	0.00%	0	0	
149	Communication	30,683	0	30,683	DirWater	100.00%	0.00%	30,683	Not Applicable	0.00%	0	0	
150	Advertising	1,500	0	1,500	DirWater	100.00%	0.00%	1,500	Not Applicable	0.00%	0	0	
151	Freight and Postage	1,500	0	1,500	DirWater	100.00%	0.00%	1,500	Not Applicable	0.00%	0	0	
152	Electric	35,000	0	35,000	DirWater	100.00%	0.00%	35,000	Not Applicable	0.00%	0	0	
153	Trash, Garbage & Sludge Removal	50,000	0	50,000	DirWater	100.00%	0.00%	50,000	Not Applicable	0.00%	0	0	
154	Land, Building, Parking Rental	250	0	250	DirWater	100.00%	0.00%	250	Not Applicable	0.00%	0	0	
155	Equipment Rental	1,500	0	1,500	DirWater	100.00%	0.00%	1,500	Not Applicable	0.00%	0	0	
156	Self-Insurance Assessment	34,337	0	34,337	DirWater	100.00%	0.00%	34,337	Not Applicable	0.00%	0	0	
157	Insurance and Bonds	30,000	0	30,000	DirWater	100.00%	0.00%	30,000	Not Applicable	0.00%	0	0	
158	Repair and Maintenance	113,548	0	113,548	DirWater	100.00%	0.00%	113,548	Not Applicable	0.00%	0	0	
159	Printing	2,000	0	2,000	DirWater	100.00%	0.00%	2,000	Not Applicable	0.00%	0	0	
160	Other Administrative Fees	333,493	0	333,493	DirWater	100.00%	0.00%	333,493	Not Applicable	0.00%	0	0	
161	Indirect Cost	212,000	0	212,000	DirWater	100.00%	0.00%	212,000	Not Applicable	0.00%	0	0	
162	General Office Supplies	2,500	0	2,500	DirWater	100.00%	0.00%	2,500	Not Applicable	0.00%	0	0	
163	Operating Supplies	37,816	0	37,816	DirWater	100.00%	0.00%	37,816	Not Applicable	0.00%	0	0	
164	Subscriptions & Memberships	1,100	0	1,100	DirWater	100.00%	0.00%	1,100	Not Applicable	0.00%	0	0	
165	Capital Outlay - Furniture and Equipment	0	0	0	DirWater	100.00%	0.00%	0	Not Applicable	0.00%	0	0	
166	Total	1,237,475	0	1,237,475				1,237,475			0	0	
Water Distribution (# 53602)													
167	Salaries and Wages	523,562	0	523,562	DirWater	100.00%	0.00%	523,562	Not Applicable	0.00%	0	0	
168	Benefits	178,365	0	178,365	DirWater	100.00%	0.00%	178,365	Not Applicable	0.00%	0	0	
169	Additional Personnel	0	0	0	DirWater	100.00%	0.00%	0	Not Applicable	0.00%	0	0	
170	Professional Services	42,000	0	42,000	DirWater	100.00%	0.00%	42,000	Not Applicable	0.00%	0	0	
171	Other Contracted Services	253,000	0	253,000	DirWater	100.00%	0.00%	253,000	Not Applicable	0.00%	0	0	
172	Travel and Per Diem	4,000	0	4,000	DirWater	100.00%	0.00%	4,000	Not Applicable	0.00%	0	0	
173	Communication	5,000	0	5,000	DirWater	100.00%	0.00%	5,000	Not Applicable	0.00%	0	0	
174	Freight and Postage	2,000	0	2,000	DirWater	100.00%	0.00%	2,000	Not Applicable	0.00%	0	0	
175	Electric	160,000	0	160,000	DirWater	100.00%	0.00%	160,000	Not Applicable	0.00%	0	0	
176	Trash, Garbage & Sludge Removal	3,600	0	3,600	DirWater	100.00%	0.00%	3,600	Not Applicable	0.00%	0	0	
177	Equipment Rental	2,000	0	2,000	DirWater	100.00%	0.00%	2,000	Not Applicable	0.00%	0	0	
178	Repair and Maintenance	194,500	0	194,500	DirWater	100.00%	0.00%	194,500	Not Applicable	0.00%	0	0	
179	Printing	3,000	0	3,000	DirWater	100.00%	0.00%	3,000	Not Applicable	0.00%	0	0	
180	Other Administrative Fees	3,000	0	3,000	DirWater	100.00%	0.00%	3,000	Not Applicable	0.00%	0	0	
181	General Office Supplies	500	0	500	DirWater	100.00%	0.00%	500	Not Applicable	0.00%	0	0	
182	Operating Supplies	62,250	0	62,250	DirWater	100.00%	0.00%	62,250	Not Applicable	0.00%	0	0	
183	Subscriptions & Memberships	1,500	0	1,500	DirWater	100.00%	0.00%	1,500	Not Applicable	0.00%	0	0	
184	Capital Outlay - Furniture and Equipment	0	0	0	DirWater	100.00%	0.00%	0	Not Applicable	0.00%	0	0	
185	Total	1,438,277	0	1,438,277				1,438,277			0	0	
Water Production - Olga (# 53601)													
186	Salaries and Wages	279,916	0	279,916	DirWater	100.00%	0.00%	279,916	Not Applicable	0.00%	0	0	
187	Benefits	103,694	0	103,694	DirWater	100.00%	0.00%	103,694	Not Applicable	0.00%	0	0	
188	Additional Personnel	0	0	0	DirWater	100.00%	0.00%	0	Not Applicable	0.00%	0	0	
189	Other Contracted Services	11,950	0	11,950	DirWater	100.00%	0.00%	11,950	Not Applicable	0.00%	0	0	
190	Travel and Per Diem	4,000	0	4,000	DirWater	100.00%	0.00%	4,000	Not Applicable	0.00%	0	0	
191	Communication	1,750	0	1,750	DirWater	100.00%	0.00%	1,750	Not Applicable	0.00%	0	0	
192	Advertising	200	0	200	DirWater	100.00%	0.00%	200	Not Applicable	0.00%	0	0	
193	Freight and Postage	2,000	0	2,000	DirWater	100.00%	0.00%	2,000	Not Applicable	0.00%	0	0	
194	Electric	165,000	0	165,000	DirWater	100.00%	0.00%	165,000	Not Applicable	0.00%	0	0	
195	Trash, Garbage & Sludge Removal	77,500	0	77,500	DirWater	100.00%	0.00%	77,500	Not Applicable	0.00%	0	0	

Table 4-7

Department of Lee County Utilities
Wastewater System

Development of Wholesale Wastewater Rate

Line No.	Description	2002 Budget (\$)	Adjustments	2002 As Adjusted	Water / Wastewater Allocation Methodology			Sewer Bulk / Retail Allocation Methodology		
					Allocation Basis	Water Allocation Percent	Water Allocation Amount	Allocation Basis	Bulk Allocation Percent	Bulk Allocation Amount
196	Repair and Maintenance	113,500	0	113,500	DirWater	100.00%	0	Not Applicable	0.00%	0
197	Printing	16,000	0	16,000	DirWater	100.00%	16,000	Not Applicable	0.00%	0
198	Other Administrative Fees	3,500	0	3,500	DirWater	100.00%	3,500	Not Applicable	0.00%	0
199	General Office Supplies	2,500	0	2,500	DirWater	100.00%	2,500	Not Applicable	0.00%	0
200	Operating Supplies	365,350	0	365,350	DirWater	100.00%	365,350	Not Applicable	0.00%	0
201	Subscriptions & Memberships	1,000	0	1,000	DirWater	100.00%	1,000	Not Applicable	0.00%	0
202	Capital Outlay - Furniture and Equipment	0	0	0	DirWater	100.00%	0	Not Applicable	0.00%	0
203	Total	1,147,860	0	1,147,860			1,147,860			0
204	Water Production - Corkscrew (# 53618)									
205	Salaries and Wages	262,279	0	262,279	DirWater	100.00%	262,279	Not Applicable	0.00%	0
206	Benefits	89,732	0	89,732	DirWater	100.00%	89,732	Not Applicable	0.00%	0
207	Additional Personnel	0	0	0	DirWater	100.00%	0	Not Applicable	0.00%	0
208	Professional Services	56,000	0	56,000	DirWater	100.00%	56,000	Not Applicable	0.00%	0
209	Other Contracted Services	11,700	0	11,700	DirWater	100.00%	11,700	Not Applicable	0.00%	0
210	Travel and Per Diem	4,000	0	4,000	DirWater	100.00%	4,000	Not Applicable	0.00%	0
211	Communication	1,750	0	1,750	DirWater	100.00%	1,750	Not Applicable	0.00%	0
212	Advertising	200	0	200	DirWater	100.00%	200	Not Applicable	0.00%	0
213	Freight and Postage	2,000	0	2,000	DirWater	100.00%	2,000	Not Applicable	0.00%	0
214	Electric	390,500	0	390,500	DirWater	100.00%	390,500	Not Applicable	0.00%	0
215	Repair and Maintenance	113,500	0	113,500	DirWater	100.00%	113,500	Not Applicable	0.00%	0
216	Printing	26,000	0	26,000	DirWater	100.00%	26,000	Not Applicable	0.00%	0
217	Other Administrative Fees	3,500	0	3,500	DirWater	100.00%	3,500	Not Applicable	0.00%	0
218	General Office Supplies	2,500	0	2,500	DirWater	100.00%	2,500	Not Applicable	0.00%	0
219	Operating Supplies	395,350	0	395,350	DirWater	100.00%	395,350	Not Applicable	0.00%	0
220	Subscriptions & Memberships	1,000	0	1,000	DirWater	100.00%	1,000	Not Applicable	0.00%	0
221	Capital Outlay - Furniture and Equipment	0	0	0	DirWater	100.00%	0	Not Applicable	0.00%	0
	Total	1,360,011	0	1,360,011			1,360,011			0
222	Water Production - Waterway (# 53625)									
223	Salaries and Wages	191,547	0	191,547	DirWater	100.00%	191,547	Not Applicable	0.00%	0
224	Benefits	69,443	0	69,443	DirWater	100.00%	69,443	Not Applicable	0.00%	0
225	Additional Personnel	0	0	0	DirWater	100.00%	0	Not Applicable	0.00%	0
226	Other Contracted Services	6,500	0	6,500	DirWater	100.00%	6,500	Not Applicable	0.00%	0
227	Travel and Per Diem	4,000	0	4,000	DirWater	100.00%	4,000	Not Applicable	0.00%	0
228	Communication	1,750	0	1,750	DirWater	100.00%	1,750	Not Applicable	0.00%	0
229	Advertising	200	0	200	DirWater	100.00%	200	Not Applicable	0.00%	0
230	Freight and Postage	2,000	0	2,000	DirWater	100.00%	2,000	Not Applicable	0.00%	0
231	Electric	95,700	0	95,700	DirWater	100.00%	95,700	Not Applicable	0.00%	0
232	Trash, Garbage & Sludge Removal	52,500	0	52,500	DirWater	100.00%	52,500	Not Applicable	0.00%	0
233	Repair and Maintenance	88,500	0	88,500	DirWater	100.00%	88,500	Not Applicable	0.00%	0
234	Printing	6,000	0	6,000	DirWater	100.00%	6,000	Not Applicable	0.00%	0
235	Other Administrative Fees	2,500	0	2,500	DirWater	100.00%	2,500	Not Applicable	0.00%	0
236	General Office Supplies	2,500	0	2,500	DirWater	100.00%	2,500	Not Applicable	0.00%	0
237	Operating Supplies	95,350	0	95,350	DirWater	100.00%	95,350	Not Applicable	0.00%	0
238	Subscriptions & Memberships	1,000	0	1,000	DirWater	100.00%	1,000	Not Applicable	0.00%	0
239	Capital Outlay - Furniture and Equipment	0	0	0	DirWater	100.00%	0	Not Applicable	0.00%	0
	Total	619,490	0	619,490			619,490			0
240	Water Production - College Parkway (# 53626)									
241	Electric	44,000	0	44,000	DirWater	100.00%	44,000	Not Applicable	0.00%	0
242	Trash, Garbage & Sludge Removal	12,500	0	12,500	DirWater	100.00%	12,500	Not Applicable	0.00%	0
243	Repair and Maintenance	53,500	0	53,500	DirWater	100.00%	53,500	Not Applicable	0.00%	0
244	Printing	5,050	0	5,050	DirWater	100.00%	5,050	Not Applicable	0.00%	0
245	Operating Supplies	22,500	0	22,500	DirWater	100.00%	22,500	Not Applicable	0.00%	0
246	Subscriptions & Memberships	500	0	500	DirWater	100.00%	500	Not Applicable	0.00%	0
	Total	138,050	0	138,050			138,050			0

Table 4-7

Department of Lee County Utilities
Wastewater System

Development of Wholesale Wastewater Rate

Line No.	Description	2002		2002 As Adjusted	Water / Wastewater Allocation Methodology			Sewer Bulk / Retail Allocation Methodology					
		Budget (1)	Adjustments		Allocation Basis	Allocation Percent		Allocation Amount	Allocation Basis	Allocation Percent		Allocation Amount	
						Water	Sewer			Bulk	Retail		
Water Production - Green Meadows (# 53627)													
247	Salaries and Wages	260,833	0	260,833	DirWater	100.00%	0.00%	260,833	0	Not Applicable	0.00%	0	0
248	Benefits	92,634	0	92,634	DirWater	100.00%	0.00%	92,634	0	Not Applicable	0.00%	0	0
249	Additional Personnel	0	0	0	DirWater	100.00%	0.00%	0	0	Not Applicable	0.00%	0	0
250	Professional Services	66,000	0	66,000	DirWater	100.00%	0.00%	66,000	0	Not Applicable	0.00%	0	0
251	Other Contracted Services	11,750	0	11,750	DirWater	100.00%	0.00%	11,750	0	Not Applicable	0.00%	0	0
252	Travel and Per Diem	4,000	0	4,000	DirWater	100.00%	0.00%	4,000	0	Not Applicable	0.00%	0	0
253	Communication	1,750	0	1,750	DirWater	100.00%	0.00%	1,750	0	Not Applicable	0.00%	0	0
254	Advertising	200	0	200	DirWater	100.00%	0.00%	200	0	Not Applicable	0.00%	0	0
255	Freight and Postage	2,000	0	2,000	DirWater	100.00%	0.00%	2,000	0	Not Applicable	0.00%	0	0
256	Electric	418,000	0	418,000	DirWater	100.00%	0.00%	418,000	0	Not Applicable	0.00%	0	0
257	Trash, Garbage & Sludge Removal	181,500	0	181,500	DirWater	100.00%	0.00%	181,500	0	Not Applicable	0.00%	0	0
258	Repair and Maintenance	101,000	0	101,000	DirWater	100.00%	0.00%	101,000	0	Not Applicable	0.00%	0	0
259	Printing	26,000	0	26,000	DirWater	100.00%	0.00%	26,000	0	Not Applicable	0.00%	0	0
260	Other Administrative Fees	3,500	0	3,500	DirWater	100.00%	0.00%	3,500	0	Not Applicable	0.00%	0	0
261	General Office Supplies	2,500	0	2,500	DirWater	100.00%	0.00%	2,500	0	Not Applicable	0.00%	0	0
262	Operating Supplies	365,350	0	365,350	DirWater	100.00%	0.00%	365,350	0	Not Applicable	0.00%	0	0
263	Subscriptions & Memberships	1,000	0	1,000	DirWater	100.00%	0.00%	1,000	0	Not Applicable	0.00%	0	0
264	Capital Outlay - Furniture and Equipment	0	0	0	DirWater	100.00%	0.00%	0	0	Not Applicable	0.00%	0	0
265	Total	1,538,017	0	1,538,017				1,538,017	0			0	0
Sewer Operations (# 53606)													
266	Salaries and Wages	38,438	0	38,438	DirSewer	100.00%	100.00%	0	38,438	DLCU Salaries	40.13%	15,426	23,012
267	Benefits	18,987	0	18,987	DirSewer	100.00%	100.00%	0	18,987	DLCU Salaries	40.13%	7,620	11,367
268	Additional Personnel	0	0	0	DirSewer	100.00%	100.00%	0	0	DLCU Salaries	40.13%	0	0
269	Legal Services	5,000	0	5,000	DirSewer	100.00%	100.00%	0	5,000	DLCU Salaries	40.13%	2,007	2,993
270	Professional Services	229,900	0	229,900	DirSewer	100.00%	100.00%	0	229,900	DLCU Salaries	40.13%	92,265	137,635
271	Other Contracted Services	101,500	0	101,500	DirSewer	100.00%	100.00%	0	101,500	DLCU Salaries	40.13%	40,735	60,765
272	Travel and Per Diem	4,000	0	4,000	DirSewer	100.00%	100.00%	0	4,000	DLCU Salaries	40.13%	1,605	2,395
273	Communication	129,683	0	129,683	DirSewer	100.00%	100.00%	0	129,683	DLCU Salaries	40.13%	52,045	77,638
274	Advertising	1,500	0	1,500	DirSewer	100.00%	100.00%	0	1,500	DLCU Salaries	40.13%	602	898
275	Freight and Postage	1,500	0	1,500	DirSewer	100.00%	100.00%	0	1,500	DLCU Salaries	40.13%	602	898
276	Electric	60,000	0	60,000	DirSewer	100.00%	100.00%	0	60,000	DLCU Salaries	40.13%	24,080	35,920
277	Trash, Garbage & Sludge Removal	50,000	0	50,000	DirSewer	100.00%	100.00%	0	50,000	DLCU Salaries	40.13%	20,066	29,934
278	Land, Building, Parking, Rental	250	0	250	DirSewer	100.00%	100.00%	0	250	DLCU Salaries	40.13%	100	150
279	Equipment Rental	1,500	0	1,500	DirSewer	100.00%	100.00%	0	1,500	DLCU Salaries	40.13%	602	898
280	Self-Insurance Assessment	33,585	0	33,585	DirSewer	100.00%	100.00%	0	33,585	DLCU Salaries	40.13%	13,479	20,106
281	Insurance and Bonds	30,000	0	30,000	DirSewer	100.00%	100.00%	0	30,000	DLCU Salaries	40.13%	12,040	17,960
282	Repair and Maintenance	7,200	0	7,200	DirSewer	100.00%	100.00%	0	7,200	DLCU Salaries	40.13%	2,890	4,310
283	Printing	2,000	0	2,000	DirSewer	100.00%	100.00%	0	2,000	DLCU Salaries	40.13%	803	1,197
284	Other Administrative Fees	333,492	0	333,492	DirSewer	100.00%	100.00%	0	333,492	DLCU Salaries	40.13%	133,839	199,653
285	Indirect Cost	212,000	0	212,000	DirSewer	100.00%	100.00%	0	212,000	DLCU Salaries	40.13%	85,081	126,919
286	General Office Supplies	2,500	0	2,500	DirSewer	100.00%	100.00%	0	2,500	DLCU Salaries	40.13%	1,003	1,497
287	Operating Supplies	30,825	0	30,825	DirSewer	100.00%	100.00%	0	30,825	DLCU Salaries	40.13%	12,371	18,454
288	Subscriptions & Memberships	1,100	0	1,100	DirSewer	100.00%	100.00%	0	1,100	DLCU Salaries	40.13%	441	659
289	Capital Outlay - Furniture and Equipment	0	0	0	DirSewer	100.00%	100.00%	0	0	DLCU Salaries	40.13%	0	0
290	Total	1,294,960	0	1,294,960				1,294,960	0			519,703	775,257
Wastewater Collection (# 53604)													
291	Salaries and Wages	641,481	0	641,481	DirSewer	100.00%	100.00%	0	641,481	Bulk Transmission	14.43%	92,574	548,907
292	Benefits	233,387	0	233,387	DirSewer	100.00%	100.00%	0	233,387	Bulk Transmission	14.43%	33,681	199,706
293	Additional Personnel	0	0	0	DirSewer	100.00%	100.00%	0	0	Bulk Transmission	14.43%	0	0
294	Legal Services	1,000	0	1,000	DirSewer	100.00%	100.00%	0	1,000	Bulk Transmission	14.43%	144	856
295	Professional Services	40,000	0	40,000	DirSewer	100.00%	100.00%	0	40,000	Bulk Transmission	14.43%	5,773	34,227
296	Other Contracted Services	253,600	0	253,600	DirSewer	100.00%	100.00%	0	253,600	Bulk Transmission	14.43%	36,598	217,002
297	Travel and Per Diem	6,000	0	6,000	DirSewer	100.00%	100.00%	0	6,000	Bulk Transmission	14.43%	866	5,134
298	Communication	9,250	0	9,250	DirSewer	100.00%	100.00%	0	9,250	Bulk Transmission	14.43%	1,335	7,915
299	Advertising	1,000	0	1,000	DirSewer	100.00%	100.00%	0	1,000	Bulk Transmission	14.43%	144	856
300	Electric	250,000	0	250,000	DirSewer	100.00%	100.00%	0	250,000	Bulk Transmission	14.43%	24,070	225,930

Table 4-7

Department of Lee County Utilities
Wastewater System

Development of Wholesale Wastewater Rate

Line No.	Description	2002 Budget (I)	Adjustments	2002 As Adjusted	Water / Wastewater Allocation Methodology			Sewer Bulk / Retail Allocation Methodology			
					Allocation Basis	Allocation Percent	Allocation Amount	Allocation Basis	Allocation Percent	Allocation Amount	
301	Water and Sewer	40,000	0	40,000	DirSewer	100.00%	0	BulkTransmission	14.43%	5,773	34,227
302	Trash, Garbage & Sludge Removal	30,000	0	30,000	DirSewer	100.00%	0	BulkTransmission	14.43%	4,329	25,671
303	Equipment Rental	5,000	0	5,000	DirSewer	100.00%	0	BulkTransmission	14.43%	722	4,278
304	Repair and Maintenance	1,005,317	0	1,005,317	DirSewer	100.00%	0	BulkTransmission	14.43%	145,081	860,236
305	Printing	1,000	0	1,000	DirSewer	100.00%	0	BulkTransmission	14.43%	144	856
306	Other Administrative Fees	3,000	0	3,000	DirSewer	100.00%	0	BulkTransmission	14.43%	433	2,567
307	General Office Supplies	1,000	0	1,000	DirSewer	100.00%	0	BulkTransmission	14.43%	144	856
308	Operating Supplies	686,050	0	686,050	DirSewer	100.00%	0	BulkTransmission	14.43%	99,006	587,044
309	Subscriptions & Memberships	3,600	0	3,600	DirSewer	100.00%	0	BulkTransmission	14.43%	520	3,080
310	Capital Outlay - Furniture and Equipment	0	0	0	DirSewer	100.00%	0	BulkTransmission	14.43%	0	0
311	Total	3,210,685	0	3,210,685						463,345	2,747,340
312	Wastewater Treatment - Beach (# 53605)										
313	Salaries and Wages	440,518	0	440,518	DirSewer	100.00%	0	Direct Bulk	100.00%	0	0
314	Benefits	138,527	0	138,527	DirSewer	100.00%	0	Direct Bulk	100.00%	0	0
315	Additional Personnel	0	0	0	DirSewer	100.00%	0	Direct Bulk	100.00%	0	0
316	Professional Services	40,000	0	40,000	DirSewer	100.00%	0	Direct Bulk	100.00%	0	0
317	Other Contracted Services	18,000	0	18,000	DirSewer	100.00%	0	Direct Bulk	100.00%	0	0
318	Travel and Per Diem	4,500	0	4,500	DirSewer	100.00%	0	Direct Bulk	100.00%	0	0
319	Communication	2,000	0	2,000	DirSewer	100.00%	0	Direct Bulk	100.00%	0	0
320	Advertising	200	0	200	DirSewer	100.00%	0	Direct Bulk	100.00%	0	0
321	Freight and Postage	200	0	200	DirSewer	100.00%	0	Direct Bulk	100.00%	0	0
322	Electric	350,000	0	350,000	DirSewer	100.00%	0	Direct Bulk	100.00%	0	0
323	Water and Sewer	1,200	0	1,200	DirSewer	100.00%	0	Direct Bulk	100.00%	0	0
324	Trash, Garbage & Sludge Removal	62,500	0	62,500	DirSewer	100.00%	0	Direct Bulk	100.00%	0	0
325	Equipment Rental	5,000	0	5,000	DirSewer	100.00%	0	Direct Bulk	100.00%	0	0
326	Repair and Maintenance	145,250	0	145,250	DirSewer	100.00%	0	Direct Bulk	100.00%	0	0
327	Printing	2,000	0	2,000	DirSewer	100.00%	0	Direct Bulk	100.00%	0	0
328	Other Administrative Fees	3,000	0	3,000	DirSewer	100.00%	0	Direct Bulk	100.00%	0	0
329	General Office Supplies	2,500	0	2,500	DirSewer	100.00%	0	Direct Bulk	100.00%	0	0
330	Operating Supplies	157,000	0	157,000	DirSewer	100.00%	0	Direct Bulk	100.00%	0	0
331	Subscriptions & Memberships	1,000	0	1,000	DirSewer	100.00%	0	Direct Bulk	100.00%	0	0
332	Capital Outlay - Furniture and Equipment	0	0	0	DirSewer	100.00%	0	Direct Bulk	100.00%	0	0
	Total	1,373,395	0	1,373,395						1,373,395	0
333	Wastewater Treatment - Waterway (# 53623)										
334	Salaries and Wages	188,235	0	188,235	DirSewer	100.00%	0	Direct Bulk	100.00%	0	0
335	Benefits	83,980	0	83,980	DirSewer	100.00%	0	Direct Bulk	100.00%	0	0
336	Additional Personnel	0	0	0	DirSewer	100.00%	0	Direct Bulk	100.00%	0	0
337	Professional Services	20,000	0	20,000	DirSewer	100.00%	0	Direct Bulk	100.00%	0	0
338	Other Contracted Services	8,250	0	8,250	DirSewer	100.00%	0	Direct Bulk	100.00%	0	0
339	Travel and Per Diem	4,500	0	4,500	DirSewer	100.00%	0	Direct Bulk	100.00%	0	0
340	Communication	1,500	0	1,500	DirSewer	100.00%	0	Direct Bulk	100.00%	0	0
341	Advertising	100	0	100	DirSewer	100.00%	0	Direct Bulk	100.00%	0	0
342	Freight and Postage	200	0	200	DirSewer	100.00%	0	Direct Bulk	100.00%	0	0
343	Electric	126,500	0	126,500	DirSewer	100.00%	0	Direct Bulk	100.00%	0	0
344	Water and Sewer	1,200	0	1,200	DirSewer	100.00%	0	Direct Bulk	100.00%	0	0
345	Trash, Garbage & Sludge Removal	72,500	0	72,500	DirSewer	100.00%	0	Direct Bulk	100.00%	0	0
346	Equipment Rental	500	0	500	DirSewer	100.00%	0	Direct Bulk	100.00%	0	0
347	Repair and Maintenance	89,750	0	89,750	DirSewer	100.00%	0	Direct Bulk	100.00%	0	0
348	Printing	2,000	0	2,000	DirSewer	100.00%	0	Direct Bulk	100.00%	0	0
349	Other Administrative Fees	3,000	0	3,000	DirSewer	100.00%	0	Direct Bulk	100.00%	0	0
350	General Office Supplies	1,500	0	1,500	DirSewer	100.00%	0	Direct Bulk	100.00%	0	0
351	Operating Supplies	67,300	0	67,300	DirSewer	100.00%	0	Direct Bulk	100.00%	0	0
352	Subscriptions & Memberships	600	0	600	DirSewer	100.00%	0	Direct Bulk	100.00%	0	0
353	Capital Outlay - Furniture and Equipment	0	0	0	DirSewer	100.00%	0	Direct Bulk	100.00%	0	0
	Total	671,615	0	671,615						671,615	0

Table 4-7

Department of Lee County Utilities
Wastewater System

Development of Wholesale Wastewater Rate

Line No.	Description	2002 Budget (1)	Adjustments	2002 As Adjusted	Water / Wastewater Allocation Methodology			Sewer Bulk / Retail Allocation Methodology					
					Water		Sewer	Bulk		Retail	Bulk		Retail
					Allocation Basis	Allocation Percent	Allocation Amount	Allocation Basis	Allocation Percent	Allocation Amount	Allocation Basis	Allocation Percent	Allocation Amount
Wastewater Treatment - Fiesta Village (# 53624)													
354	Salaries and Wages	287,158	0	287,158	DirSewer	100.00%	0	Direct Bulk	100.00%	287,158	0		
355	Benefits	86,619	0	86,619	DirSewer	100.00%	0	Direct Bulk	100.00%	86,619	0		
356	Additional Personnel	0	0	0	DirSewer	100.00%	0	Direct Bulk	100.00%	0	0		
357	Professional Services	10,000	0	10,000	DirSewer	100.00%	0	Direct Bulk	100.00%	10,000	0		
358	Other Contracted Services	12,800	0	12,800	DirSewer	100.00%	0	Direct Bulk	100.00%	12,800	0		
359	Travel and Per Diem	4,500	0	4,500	DirSewer	100.00%	0	Direct Bulk	100.00%	4,500	0		
360	Communication	2,000	0	2,000	DirSewer	100.00%	0	Direct Bulk	100.00%	2,000	0		
361	Advertising	200	0	200	DirSewer	100.00%	0	Direct Bulk	100.00%	200	0		
362	Freight and Postage	200	0	200	DirSewer	100.00%	0	Direct Bulk	100.00%	200	0		
363	Electric	172,500	0	172,500	DirSewer	100.00%	0	Direct Bulk	100.00%	172,500	0		
364	Water and Sewer	1,200	0	1,200	DirSewer	100.00%	0	Direct Bulk	100.00%	1,200	0		
365	Trash, Garbage & Sludge Removal	83,000	0	83,000	DirSewer	100.00%	0	Direct Bulk	100.00%	83,000	0		
366	Equipment Rental	5,000	0	5,000	DirSewer	100.00%	0	Direct Bulk	100.00%	5,000	0		
367	Repair and Maintenance	135,250	0	135,250	DirSewer	100.00%	0	Direct Bulk	100.00%	135,250	0		
368	Printing	2,000	0	2,000	DirSewer	100.00%	0	Direct Bulk	100.00%	2,000	0		
369	Other Administrative Fees	3,000	0	3,000	DirSewer	100.00%	0	Direct Bulk	100.00%	3,000	0		
370	General Office Supplies	2,500	0	2,500	DirSewer	100.00%	0	Direct Bulk	100.00%	2,500	0		
371	Operating Supplies	130,000	0	130,000	DirSewer	100.00%	0	Direct Bulk	100.00%	130,000	0		
372	Subscriptions & Memberships	1,000	0	1,000	DirSewer	100.00%	0	Direct Bulk	100.00%	1,000	0		
373	Capital Outlay - Furniture and Equipment	0	0	0	DirSewer	100.00%	0	Direct Bulk	100.00%	0	0		
374	Total	938,927	0	938,927			0			938,927	0		
Wastewater Treatment - Matlacha / Pine (# 53651)													
375	Salaries and Wages	90,310	0	90,310	DirSewer	100.00%	0	Direct Retail	100.00%	90,310	0		
376	Benefits	27,949	0	27,949	DirSewer	100.00%	0	Direct Retail	100.00%	27,949	0		
377	Additional Personnel	0	0	0	DirSewer	100.00%	0	Direct Retail	100.00%	0	0		
378	Other Contracted Services	5,500	0	5,500	DirSewer	100.00%	0	Direct Retail	100.00%	5,500	0		
379	Travel and Per Diem	4,500	0	4,500	DirSewer	100.00%	0	Direct Retail	100.00%	4,500	0		
380	Communication	1,500	0	1,500	DirSewer	100.00%	0	Direct Retail	100.00%	1,500	0		
381	Advertising	100	0	100	DirSewer	100.00%	0	Direct Retail	100.00%	100	0		
382	Freight and Postage	200	0	200	DirSewer	100.00%	0	Direct Retail	100.00%	200	0		
383	Electric	50,000	0	50,000	DirSewer	100.00%	0	Direct Retail	100.00%	50,000	0		
384	Water and Sewer	1,200	0	1,200	DirSewer	100.00%	0	Direct Retail	100.00%	1,200	0		
385	Trash, Garbage & Sludge Removal	19,500	0	19,500	DirSewer	100.00%	0	Direct Retail	100.00%	19,500	0		
386	Equipment Rental	500	0	500	DirSewer	100.00%	0	Direct Retail	100.00%	500	0		
387	Repair and Maintenance	53,750	0	53,750	DirSewer	100.00%	0	Direct Retail	100.00%	53,750	0		
388	Printing	2,000	0	2,000	DirSewer	100.00%	0	Direct Retail	100.00%	2,000	0		
389	Other Administrative Fees	3,000	0	3,000	DirSewer	100.00%	0	Direct Retail	100.00%	3,000	0		
390	General Office Supplies	1,000	0	1,000	DirSewer	100.00%	0	Direct Retail	100.00%	1,000	0		
391	Operating Supplies	58,300	0	58,300	DirSewer	100.00%	0	Direct Retail	100.00%	58,300	0		
392	Subscriptions & Memberships	1,000	0	1,000	DirSewer	100.00%	0	Direct Retail	100.00%	1,000	0		
393	Capital Outlay - Furniture and Equipment	0	0	0	DirSewer	100.00%	0	Direct Retail	100.00%	0	0		
394	Aids to Private Organizations (LCRWSA)	0	0	0	DirSewer	100.00%	0	Direct Retail	100.00%	0	0		
395	Total	320,309	0	320,309			0			320,309	0		
Wastewater Treatment - Gateway													
396	Salaries and Wages	189,367	0	189,367	DirSewer	100.00%	0	Direct Retail	100.00%	189,367	0		
397	Benefits	71,951	0	71,951	DirSewer	100.00%	0	Direct Retail	100.00%	71,951	0		
398	Additional Personnel	0	0	0	DirSewer	100.00%	0	Direct Retail	100.00%	0	0		
399	Other Contracted Services	8,250	0	8,250	DirSewer	100.00%	0	Direct Retail	100.00%	8,250	0		
400	Travel and Per Diem	4,500	0	4,500	DirSewer	100.00%	0	Direct Retail	100.00%	4,500	0		
401	Communication	1,500	0	1,500	DirSewer	100.00%	0	Direct Retail	100.00%	1,500	0		
402	Advertising	100	0	100	DirSewer	100.00%	0	Direct Retail	100.00%	100	0		
403	Freight and Postage	200	0	200	DirSewer	100.00%	0	Direct Retail	100.00%	200	0		
404	Electric	126,500	0	126,500	DirSewer	100.00%	0	Direct Retail	100.00%	126,500	0		
405	Water and Sewer	1,200	0	1,200	DirSewer	100.00%	0	Direct Retail	100.00%	1,200	0		
406	Trash, Garbage & Sludge Removal	72,500	0	72,500	DirSewer	100.00%	0	Direct Retail	100.00%	72,500	0		
407	Equipment Rental	5,000	0	5,000	DirSewer	100.00%	0	Direct Retail	100.00%	5,000	0		

Table 4-7

Department of Lee County Utilities
Wastewater System

Development of Wholesale Wastewater Rate

Line No.	Description	2002		2002		Water / Wastewater Allocation Methodology		Sewer Bulk / Retail Allocation Methodology		
		Budget (1)	Adjustments	As Adjusted	Allocation Basis	Allocation Percent	Allocation Amount	Allocation Basis	Allocation Percent	Allocation Amount
408	Repair and Maintenance	90,250	0	90,250	DirSewer	100.00%	0	Direct Retail	0.00%	0
409	Printing	2,000	0	2,000	DirSewer	100.00%	0	Direct Retail	0.00%	0
410	Other Administrative Fees	3,000	0	3,000	DirSewer	100.00%	0	Direct Retail	0.00%	0
411	General Office Supplies	1,500	0	1,500	DirSewer	100.00%	0	Direct Retail	0.00%	0
412	Operating Supplies	58,500	0	58,500	DirSewer	100.00%	0	Direct Retail	0.00%	0
413	Subscriptions & Memberships	1,000	0	1,000	DirSewer	100.00%	0	Direct Retail	0.00%	0
414	Capital Outlay - Furniture and Equipment	0	0	0	DirSewer	100.00%	0	Direct Retail	0.00%	0
415	Total	637,318	0	637,318						637,318
Wastewater Treatment - Pack Plants (# 53652)										
416	Professional Services	20,000	0	20,000	DirSewer	100.00%	0	Direct Retail	0.00%	0
417	Other Contracted Services	7,000	0	7,000	DirSewer	100.00%	0	Direct Retail	0.00%	0
418	Travel and Per Diem	1,500	0	1,500	DirSewer	100.00%	0	Direct Retail	0.00%	0
419	Electric	20,000	0	20,000	DirSewer	100.00%	0	Direct Retail	0.00%	0
420	Water and Sewer	1,200	0	1,200	DirSewer	100.00%	0	Direct Retail	0.00%	0
421	Trash, Garbage & Sludge Removal	20,000	0	20,000	DirSewer	100.00%	0	Direct Retail	0.00%	0
422	Repair and Maintenance	23,000	0	23,000	DirSewer	100.00%	0	Direct Retail	0.00%	0
423	Operating Supplies	7,800	0	7,800	DirSewer	100.00%	0	Direct Retail	0.00%	0
424	Total	100,500	0	100,500						100,500
Wastewater Treatment Contract (# 53603)										
425	Other Contracted Services	4,707,967	0	4,707,967	DirSewer	100.00%	0	Direct Bulk	100.00%	4,707,967
426	Total	4,707,967	0	4,707,967						4,707,967
427	Property Appraiser (# 51314)	5,000	0	5,000	Customer	60.66%	3,033	Direct Retail	0.00%	0
428	Professional Services	5,000	0	5,000	Customer	39.34%	3,033	Direct Retail	100.00%	1,967
429	Non-Departmental (# 51903)									
430	Professional Services	100,000	0	100,000	Assets	64.01%	35,990	Total Assets	31.54%	20,187
431	Other Contracted Services	100,000	0	100,000	Assets	64.01%	35,990	Direct Retail	0.00%	0
432	Contingency	689,204	0	689,204	Contingency	59.66%	278,020	O&M	56.73%	233,255
433	Total	889,204	0	889,204			350,000			253,442
434	Total Operations and Maintenance	\$28,237,359	\$0	\$28,237,359			\$11,298,833			\$9,563,474
OTHER REVENUE REQUIREMENTS										
Debt Service										
434	Series 1993 Water/Sewer Revenue Bonds	2,823,351	0	2,823,351	Use of Funds	30.57%	863,098	Direct Bulk	100.00%	1,960,253
435	Series 1999A Water/Sewer Revenue Bonds	8,541,125	0	8,541,125	Use of Funds	64.26%	5,488,577	FCWC Assets	60.11%	1,835,032
436	SRF Indebtedness (Iona-McGregor)	720,926	0	720,926	Use of Funds	0.00%	0	Direct Retail	0.00%	0
437	SRF Indebtedness (Anticipated)	3,262,241	0	3,262,241	Use of Funds	81.32%	2,652,841	Direct Bulk	100.00%	609,400
438	Ft. Myers Beach G.O. Bonds-Series 1977	689,848	0	689,848	Use of Funds	0.00%	0	Direct Retail	0.00%	0
439	South Ft. Myers G.O. Bonds-Series 1983	617,667	0	617,667	Use of Funds	0.00%	0	Direct Retail	0.00%	0
440	Total Debt Service	13,392,917	3,262,241	16,655,158			9,004,467			4,404,684
441	Renewal and Replacement Transfer	2,351,512	0	2,351,512	Sales	62.64%	1,472,966	Total Assets	31.54%	277,064
442	Other Required Payment	0	0	0	Use of Funds	50.00%	0	Not Applicable	0.00%	0
443	Total Other Revenue Requirements	15,744,429	3,262,241	19,006,670			10,477,433			4,681,748
444	TOTAL GROSS REVENUE REQUIREMENTS	\$44,001,788	\$3,262,241	\$47,264,029			\$21,876,265			\$14,245,222
(LESS) Funds from Other Revenue Sources										
445	Water Tap Fees	260,000	0	260,000	Direct Water	100.00%	260,000	Direct Retail	0.00%	0
446	Ft. Myers Sludge Operating	200,000	0	200,000	Direct Sewer	100.00%	0	Direct Bulk	100.00%	200,000
447	Sewer Tapping Fees	1,000	0	1,000	Direct Sewer	100.00%	0	Direct Retail	0.00%	0
448	Effluent Reuse	18,000	0	18,000	Direct Sewer	100.00%	0	Direct Bulk	100.00%	18,000
449	Water - Other Income	17,500	0	17,500	Direct Water	100.00%	17,500	Not Applicable	0.00%	0
450	Sewer - Other Income	1,000	0	1,000	Direct Sewer	100.00%	0	Direct Retail	0.00%	0
451	Miscellaneous Service Charges	406,181	0	406,181	Customer	60.66%	246,399	Direct Retail	0.00%	0
452	Interest Earnings	1,835,169	0	1,835,169	Use of Funds	52.12%	956,415	Fund Use	33.08%	290,714
453	Other Miscellaneous Revenues	138,000	0	138,000	Customer	60.66%	83,714	Direct Retail	0.00%	0

Table 4-7

Department of Lee County Utilities
Wastewater System

Development of Wholesale Wastewater Rate

Line No.	Description	2002 Budget (1)	Adjustments	2002 As Adjusted	Water / Wastewater Allocation Methodology			Sewer Bulk / Retail Allocation Methodology			
					Allocation Basis	Allocation Percent	Allocation Amount	Allocation Basis	Allocation Percent	Allocation Amount	
					Water	Sewer	Water	Sewer	Bulk	Retail	
454	Total Revenues from Other Sources	2,876,850	0	2,876,850			1,564,029	1,312,821	508,714	804,107	
455	NET REVENUE REQUIREMENTS	\$41,124,938	\$3,262,241	\$44,387,179			\$20,312,236	\$24,074,943	\$13,736,568	\$10,338,435	
456	TOTAL ESTIMATED WASTEWATER TREATED (000's)								4,089,414		
457	ESTIMATED WHOLESALE WASTEWATER RATE PER THOUSAND GALLONS								\$ 3.359		
458	ROUNDED RATE PER THOUSAND GALLONS								\$ 3.36		

(1) Based on Preliminary Fiscal Year 2002 Operating Budget as provided by the County.

(2) Functionalization of contract operator expenditures (i.e., salaries, professional services, communications, etc.) within each department based on previously provided relationships of cost breakdowns. For purposes of this analysis, FY 2000 budgeted contractual services by department have been functionalized utilizing a proration of known relationships of cost functionalizations as identified in the current contract operators bid for system operations.

(3) Amounts shown based on estimation of FY 2000 water production at all County Treatment Plants based on current production statistics at these County facilities.

SECTION 5
DEVELOPMENT OF SYSTEM CONNECTION FEES



SECTION 5

DEVELOPMENT OF SYSTEM CONNECTION FEES

5.1 General

The County as well as other local governments has experienced an increasing dilemma with regard to the funding of infrastructure requirements associated with new growth. This problem was the result of increased development that occurred and the inability to rapidly generate a sufficient level of funds to meet the new demands for service. One method being widely used to provide funds for capital needs in the State of Florida is the application of a system connection or capital recovery fees to fund a portion of the infrastructure requirements. A system connection fee is a charge imposed on new users of real property to help defray the capital cost of constructing new public facilities necessitated by the impact of new residents. Thus, the purpose of a system connection fee is to assign, to the extent practical, growth-related capital costs to those residents or users responsible for such additional costs. In summary, the system connection fee can be considered to be a new user's contribution to those facilities or capital costs that are required in order to provide a comparable level of service that is being provided to the existing residences or a level stated as the goal of a local government in the Comprehensive Plan.

The purpose of system connection fees includes the following:

- 1) to fund the capital cost of constructing new facilities necessitated by growth;
- 2) to shift the financial burden of constructing new facilities to the new residents for whose benefit the facilities will be built;
- 3) to maintain or reduce property tax rates while meeting the capital costs associated with growth; and
- 4) to exact connections for public facilities from developments which were platted prior to the establishment of mandatory dedication provisions to ensure payment comparable to that required from new developments.

5.2 System Connection Fee Determination – County Customers

5.2.1 General

In order to accurately determine the system connection fees for water and wastewater systems two issues must be identified; i) the equitable portion of the costs associated with financing the expansion of the County's utility system, and ii) the available number of equivalent residential connections (ERUs) each system can support based on the level of service policies of the County until capacity is reached.

An ERU is a unit of measure which approximates the average demand of a single-family residential customer or customer receiving service based on certain attributes of the residential unit (e.g., single versus multi-family square footage). The ERU concept defines all types of development and facility uses as either a percentage or a multiple of a single-family residence on the basis of anticipated water use. For the purpose of calculating the County's current connection fees, a water and wastewater service ERU is based on the smallest water meter size which is generally considered a 5/8-inch service. The fees for the other service sizes are generally based on the maximum capacity requirements of the meters or service sizes in relation to the 5/8-inch service pursuant to actual sales or usage data of the utility. Several utilities in Florida, including the County, use meter equivalents based on published data developed by the American Waterworks Association (AWWA) which is also the meter equivalent capacities utilized by the Florida Public Service Commission (FPSC) with regards to rate setting practices for private utilities. Based on a review of the existing rates, the County utilizes standard ERU factors for both residential establishments and non-residential establishments.

The water and wastewater system ERU factors for residential structures currently reflected in the present system connection fee rate structure are summarized below:

User Category	Assumed County ERU Factor
Single-Family	1.00
Multi-Family (per dwelling unit)	0.80
Recreational Vehicle (per dwelling unit/lot)	0.40

The water and wastewater system ERU factors for non-residential service (commercial) structures currently reflected in the existing connection fee rate structure are summarized below:

Meter Size (Inches)	County ERU Factor
5/8	1.0
3/4	1.5
1	2.5
1½	5.0
2	8.0
3	16.0
4	25.0
6	50.0
8	80.0
10	145.0

5.2.2 Existing Capital Facilities

In the determination of the connection fee associated with the servicing of future customers, any excess capacity of the existing system available to serve such growth should be considered since this capacity is available to serve the incremental growth of the utility system in the short term. As shown on Table 5-1 at the end of this report and based on: i) the rated capacities of the water production and wastewater treatment facilities expressed on an average daily flow (ADF) basis; ii) projected and committed usage requirements of such facilities; and iii) the calculated net costs

of the facilities allocable to the fees, the amount of existing facility costs to be reflected in the fee determination was estimated to be as follows:

	<u>Water System [1]</u>	<u>Wastewater System [1]</u>
Net Production/Treatment Facility Costs	\$52,441,678	\$48,002,523 [2]
Estimated Capacity Remaining to Serve Incremental Growth	24.50%	40.16%
Net Treatment Facility Costs Allocable to Fee Determination	<u>\$12,847,686</u>	<u>\$19,279,696</u>

[1] Derived from Table 5-1.

[2] Reflects County owned and operated facilities only.

As can be seen above, it has been determined that the water system has approximately 24.5% of capacity available to serve new customer growth. With respect to the wastewater system, it is estimated that the utility has approximately 40.2% of available capacity which is owned/reserved by the County to serve new customer growth.

As can be seen on Table 5-1, the total cost of the existing wastewater system treatment and effluent disposal facilities does not include the cost of any facilities which were funded from grant proceeds provided by the Environmental Protection Agency (EPA). The grant funds represent cost free capital to the utility which has the effect of reducing the total capital cost which must be funded by the County's rates (e.g., in the form of the repayment of debt). The net effect of this adjustment was to reduce net plant in service of the existing wastewater facilities by \$10,164,000 as shown on Table 5-1. This adjustment had the effect of reducing the cost per ERU of the existing facilities by approximately \$100.00.

In the development of the capacity requirements of the water and wastewater facilities, the rated design capacities of the facilities were adjusted to reflect such capacities on an average daily flow basis. Specifically for the water system, the production/treatment facilities are designed on a peak day basis. Thus, to recognize the capacity on an average daily flow design and to be consistent with the level of service and ERU requirements for a typical water customer, the peak day capacity was adjusted by a peak day to average day factor of 1.25 which is representative of historical peak to average day flow relationships in the County. For the wastewater system, an adjustment to the design capacity to reflect average daily flow characteristics was also performed to be consistent with ERU determination criteria. Based on historical peak to average daily flow factors, the wastewater design capability was also adjusted to reflect average daily flow characteristics utilizing a 1.22 peak month to average daily flow factor based on historical County peak day to average day flow relationships.

5.2.3 Capital Improvement Program

As with any utility, the County is continually in the process of updating and expanding the water and wastewater plant facilities to serve increasing demand or capacity requirements. In order to develop a fee which is consistent with the capital related needs of the utility, the cost of the County's capital improvements anticipated for the next five fiscal years (through FY2006) was recognized. Based on discussions with the County, the improvements scheduled for the next five years will allow the County to provide utility services for a number of years. As outlined in Table 5-2 at the end of this section, approximately \$94,615,000 has been reflected in the fee

determination which will essentially meet the County's capital needs as well as provide for system renewals and replacements. This deals with system betterments of existing assets which have available capacity for new customers, as well as capital expenditures associated with serving new growth. The amount of capital needs reflected in the determination of the contribution charge is summarized below:

	Total Estimated Capital Expenditures	Amount Reflected in Fee Determination
Water System	\$87,522,616	\$54,644,437
Wastewater System	<u>63,501,838</u>	<u>39,971,184</u>
Total	\$151,024,454	\$94,615,621

As can be seen above, the County has identified an extensive amount of capital needs to serve the future growth of the County. Recognizing the amount of water and wastewater capacity requirements over the long term, the County is anticipating constructing additional production/treatment facilities to be able to serve the long-term growth. Based on assumptions regarding the anticipated extension of facilities to occur as a result of the County's five year capital improvement program, water and wastewater system treatment capacities are expected to increase as follows:

	Design Capacity (MGD)		
	2001 Actual	Anticipated Capacity Increase	Total Percent Change
Water System – Production	31.0	10.0	32.3%
Wastewater System – Treatment	11.25 [1]	3.4	30.2%

[1] Does not include 11.50 MGD reserved capacity at City of Fort Myers facilities since operations and maintenance and associated debt service payments to the City are not reflected in this analysis (considered as an operating expense).

The costs for on-site transmission, collection, or distribution facilities or main extensions required for service by the County have not been included in the determination of the connection fees. These capital costs (e.g., meters, hydrants, services, etc.) are generally recovered from other charges or contributed from developers during construction, and therefore, should not be included as a component of the impact fee determination. Additionally, to the extent that the proposed capital costs resulted in the retirement or renewal of a facility (e.g., lift station rehabilitation costs), such costs were not included in the analysis in order to avoid a "double count" of costs.

5.3 Design of Water System Connection Fee

As shown on Table 5-3, the proposed system connection fee for the water system is \$1,140 per ERU. This represents an increase in the fee of \$120 or 11.8% above the current fee for an ERU. The reason for the increase is due to the higher estimated cost of supply/treatment capacity during the planning horizon. As discussed hereafter, the proposed fees are comparable with other utilities.

In the development of the fee, several assumptions were utilized or incorporated in the analysis. The major assumptions utilized in the design of the proposed fee are:

1. The existing water production and treatment facilities have an estimated available capacity margin to serve new growth of approximately 24.5% of the average daily capacity of the facilities based on: i) the firm design capacity of the existing facilities; ii) actual peak day to average daily flow relationships experienced by the County; and iii) estimated flow requirements for the fiscal year 2002. The analysis is summarized on Table 5-1 herein.
2. All the capital facilities associated with the upgrades and expansion of the system reflect the most recent project costs as identified in the County's five year capital improvement program.
3. No capital facility expansion costs associated with major distribution facilities have been included in the calculation since the County requires the developer to contribute such facilities (contribution in aid of construction) as part of the County's main extension policies based on discussions with the County.
4. An ERU for the water system was assumed to require a capacity of 250 gallons per day consistent with the capacity planning and FDEP permitting requirements for the County.
5. A credit to the connection fee has been recognized to reflect an allowance of growth related system indebtedness paid from user fees. Since the connection fees generally represent all of the assigned capacity costs for incremental customers, the principal component of the debt was reflected as a credit in an attempt to avoid a potential "double count" of the payment of incremental facility costs. The calculation of the estimated fee credit was determined as follows:

	Water System Connection Fee Credit Allowance
Fiscal Year 2002 Debt Service Payment [1]	\$6,265,169
Water System Equivalent Residential Connections [2]	81,696
Average Annual Debt from Rates per ERC	\$76.69
Capital Contribution per ERC	<u>\$332.02</u>

[1] Derived from Table 3-1.

[2] Amount shown reflects Fiscal Year 2002 estimation of water system equivalent connections.

As shown on Table 5-3, the analysis was calculated utilizing estimated capital costs for the supply/treatment/transmission system, ERU service requirements, and current data available to PRMG regarding the water system. By designing the system connection fee to recover costs on a prospective basis, an attempt is made to design a fee which will provide funds on an equitable basis in order to meet the future needs of the system. It should be noted that in the event the construction costs, capacity requirements, or utility service area materially change from what was reflected on Table 5-3, the connection fee may possibly need to be modified.

As shown on Table 5-3, the proposed water connection fee is recommended to be \$1,140 per ERC or \$4.56 per gallon of reserved capacity. Based on the capital facilities associated with the

determination of the fee, the functional breakdown of the components of the rate for one (1) ERC is as follows:

Water Production/Treatment	\$820.35
Water Transmission	<u>319.65</u>
Total Fee	<u>\$1,140.00</u>

5.4 Design of Wastewater System Connection Fee

The development of the wastewater system connection fee for capacity reservation was developed in a similar manner as the water system connection fee. Specifically, the proposed system connection fee for system capacity or demand was predicated on the estimated project costs associated with the wastewater treatment plant, transmission and effluent disposal system to serve anticipated growth, and the utilization of existing facilities which have available capacity to serve new or incremental customers. As shown on Table 5-4, the proposed system connection fee for the wastewater system is \$1,735 per ERU or \$6.94 per gallon of reserved capacity.

In the development of the fee, several assumptions were utilized in the analysis. The major assumptions reflected in the design of the proposed fees are:

1. The existing wastewater treatment and effluent disposal facilities have an estimated available capacity margin to serve new growth of approximately 40.2% of the average daily capacity of the facilities based on: i) the firm design capacity of the existing facilities; ii) actual maximum month to average daily flow relationships experienced by the County; and iii) estimated flow requirements for the fiscal year 2002. The analysis is summarized on Table 5-1 herein.
2. All the capital facilities associated with the upgrades and expansion of the system reflect the most recent project costs as identified in the County's five year capital improvement program.
3. No capital facility expansion costs associated with major collection facilities have been included in the system connection fee calculation since the County generally requires the developer to contribute such facilities (contribution in aid of construction) as part of the County's main extension policies or have used special assessment programs to specifically fund such capital facilities based on discussions with the County.
4. The County currently has contracted for an allocation of 11.50 MGD of reserved capacity at the City of Fort Myers wastewater treatment facilities. No costs have been reflected in this analysis for this facility since i) the operating and capital costs are reflected by the County as an operating expense recovered from rates and ii) in order not to understate the capacity requirements of the County wastewater facilities in the determination of the capital costs per ERU.
5. An ERU for the sewer system was assumed to require a capacity of 250 gallons per day consistent with the capacity, planning and FDEP permitting requirements for the County.

6. A credit to the connection fee has been recognized to reflect an allowance of growth related system indebtedness paid from user fees. Since the connection fees generally represent all of the assigned capacity costs for incremental customers, the principal component of the debt was reflected as a credit in an attempt to avoid a potential "double count" of the payment of incremental facility costs. The calculation of the estimated fee credit was determined as follows:

	Wastewater System Connection Fee Credit Allowance
Fiscal Year 2002 Debt Service Payment [1] Wastewater System Equivalent	\$6,566,295
Residential Connections [2]	61,275
Average Annual Debt from Rates per ERC	\$107.16
Capital Contribution per ERC	<u>\$463.95</u>

[1] Derived from Table 3-2.

[2] Amount shown reflects Fiscal Year 2002 estimation of wastewater system equivalent connections.

The analysis was calculated utilizing estimated incremental capital costs for the wastewater treatment system, ERU service requirements, and current data available to PRMG regarding the wastewater system. By designing the system connection fee to recover costs on a prospective basis, an attempt is made to design a fee which will provide funds on an equitable basis in order to meet the future needs of the system. As previously mentioned, in the event the construction or capacity acquisition costs, capacity requirements, or utility service area materially change from what was reflected on Table 5-4, the system connection fee may possibly need to be modified.

As shown on Table 5-4, the proposed wastewater connection fee is recommended to be \$1,735 per ERC that is the equivalent of a customer receiving wastewater service for the sewage generated from potable water use. Based on the capital facilities associated with the determination of the fee, the functional breakdown of the components of the rate for one (1) ERC is as follows:

Wastewater Treatment/Effluent Disposal	\$895.51
Wastewater Collection/Transmission	<u>839.49</u>
Total Fee	<u>\$1,735.00</u>

5.5 Impact Fee Customer Application

With respect to the customer application, it is recommended that the residential class of customer (single-family, multi-family, and recreational vehicles) continue to be classified according to the existing ERU factors in which they are currently applied. These factors were based on the historical capacity requirements and service levels associated with these types of service and are estimated to be reasonable for purposes of this study. The commercial class of customer is currently charged based on the size of the meter and the meter equivalent factors as developed by the AWWA and utilized by the FPSC and other public utilities. The derivation for meter sizing is based on the estimated customer demand on rate of flow generally required by the customer. The meter is normally sized based on the anticipated capacity need of the customer and generally

represents an averaging approach to capacity needs and places a customer in a range of usage needs. Based on discussions with County staff, this method of commercial impact fee application may not be adequately recovering the cost in certain instances of capacity being required by customers connecting to the System. An example may be a hotel comprised of fifty (50) units served by a 3-inch meter. Under the current methodology, this customer would be assigned approximately sixteen (16) ERUs. During peak occupancy, in which County facilities are ultimately sized to serve, this customer can easily exceed the capacity requirement (16 ERCs x 250 gpd = 4,000 gpd) associated with its allocated reservation. To alleviate these instances, it is recommended the County consider alternatives to the meter based approach for the commercial class. One such alternative may be assigning each applicant for service a predetermined ERU value based on a count of the fixture units to be installed in the establishment. This methodology is widely used in the industry and tends to give a reasonable measurement of an individual's capacity needs. An additional methodology is the application of the State of Florida Chapter 10D-6 FAC Standards for On-Site Sewage Disposal System. This standard assigns flow factors (in gallons per day) to various commercial establishments and assists in quantifying an ERU determination to individual customers. By applying the methodology as defined in Chapter 10D-6, the number of ERUs assigned the same hotel described above would increase from 16 ERUs to 30 ERUs ([150 gpd per room x 50 rooms]/250 gpd LOS). As can be seen, the ERU count increases significantly in an effort to more accurately determine a commercial establishment's true capacity requirements. A copy of Chapter 10D-6 is included as Appendix A at the end of this report.

The County may want to consider altering the commercial methodology of connection fee application to a per gallon basis whereby the County identifies each commercial applicant's capacity requirement by either a fixture unit count, utilization of the State 10D-6 FAC Standards or other methodology. The proposed connection fees for the water system based on the analysis reflected on Table 5-3 at the end of this report and assuming the County does not adjust the commercial application methodology described above is as follows.

Proposed Water System Connection Fees		
	No. of ERUs (per unit)	Charge
Single-Family:	1.00	\$1,140
Multi-Family (per unit):	0.80	912
Recreational Vehicle (per unit/lot):	0.40	456
	Meter (Service) Size (inches)	Assumed No. of ERUs
Commercial [*]:	5/8	1.00
	3/4	1.50
	1	2.50
	1-1/2	5.00
	2	8.00
	3	16.00
	4	25.00
	6	50.00
	8	80.00
	10	145.00
		Charge
		\$1,140
		1,710
		2,850
		5,700
		9,120
		18,240
		28,500
		57,000
		91,200
		165,300

[*] Also applies to irrigation meters which requires separate tap to water main. Assumes current application methodology.

With respect to the wastewater system, it is proposed that the fee determination be consistent with the water system, the County may also wish to consider reviewing the commercial application methodology in the determination of wastewater system customer ERUs.

Based on the estimated charge per ERU of \$1,735 or \$6.94 per gallon of reserved capacity for the commercial class if the County adopts the recommended application methodology discussed earlier in this section and the current meter equivalent factors used for the rate determination process, the proposed connection fees for the wastewater system is summarized below:

Proposed Wastewater System Connection Fees		
	No. of ERUs	Charges
Residential:		
Single-Family Residence	1.00	\$1,735
Multi-Family (per unit)	0.80	1,388
Recreational Vehicle (per unit/lot)	0.40	456
Commercial [*]:		
	Meter Size (inches)	Charges
	5/8	\$1,735
	¾	2,605
	1	4,335
	1½	8,675
	2	13,880
	3	27,760
	4	43,375
	6	86,750
	8	138,800
	10	251,575

Note: Commercial unit use when combined with residential unit use on a single meter, or unmetered commercial use, is calculated individually based on Department of Lee County Utilities' estimates of wastewater discharge and the above schedule of rates.

Per County Resolution No. 99-0192, the County current collects 50% of the applicable connection fee from the developer at the time the County is requested to commit capacity with the remaining balance of the fee due at the time the developer constructed assets are contributed to LCU for operations and maintenance. With respect to the application of the increased fees proposed herein, it is recommended that the developers who have reserved committed capacity (paid initial 50% of connection fees) prior to the adoption of the revised fees be allowed to remain under the previous fee schedules in the determination of final payment (in other words, be grandfathered in). All new developments requesting capacity subsequent to the adoption of the new fees will be required to pay under the revised schedules. This will allow a smoother transition to the increase in fees if adopted.

In addition, an issue has been raised by staff with respect to the application of the revised fees to those new developments in the former Florida Cities Water Company service areas. Specifically, should the County apply the increase in LCU fees to those pre-paid applicants. In these instances, it is also recommended that those developers who reserved capacity prior to the adoption of new fees be grandfathered under the rates in effect at the time of capacity reservation

with all new development reserving capacity subsequent to revised fee adoption be subject to the new schedule of rates.

5.6 Comparison with Other Utilities

Table 5-5 provides a comparison of the existing and proposed system connection fees for single family residential connections for the County relative to the system connection fees currently imposed by other municipal/governmental water and wastewater systems located in southwest Florida. It is important to note that the reader must view the comparison with caution as no in-depth analysis has been performed to determine the methods used in the development of the system 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 connection fees, or some percentage less than 100% with the balance recovered through the user charges. Additionally, no analysis was conducted as to the rate of capital facilities currently in service or planned for the utility. For example, the costs of wastewater effluent disposal utilizing a deep injection well system generally have a higher capital cost per unit of capacity than percolation ponds.

As shown on Table 5-5, the average water and sewer system connection fee for the 19 governmental entities selected for this comparison is \$1,235 and \$1,714, respectively, for a single-family residence. Of the surveyed utilities, Sarasota County had the largest water system connection fee of \$2,700 and Charlotte County had the largest wastewater system connection fee of \$2,570. The proposed system connection fee of \$1,140 for water for Lee County is at the average for the group and the proposed wastewater system connection fee for the County of \$1,735 is slightly higher than the average charge for the group. Overall, the charges proposed in this study appear reasonable and competitive with the sample of neighboring utilities shown in Table 5-5.

**Table 5-1
Lee County, Florida
Total System**

**Development of Existing Production/Treatment Facility
Capacity Allocable to Serve Customer Growth**

Line No.	Water System	County Wastewater System
	Capacity of System (MGD)	
1	Corkscrew Water Plant	10.000
2	Olga Water Plant	5.000
3	Waterway Estates Water Plant	1.750
4	College Parkway Water Plant	0.750
5	Green Meadows Water Plant	13.500
6	City of Ft. Myers Entitlement	N/A
7	Ft. Myers Beach Wastewater Plant	N/A
8	Pine Island Wastewater Plant	N/A
9	Waterway Estates Wastewater Plant	N/A
10	Fiesta Village Wastewater Plant	N/A
11	Total Production/Treatment [1]	N/A
	31.000	22.750
12	Adjusted to Reflect Average Daily Flow [2]	24.880
	24.880	18.724
13	Average Daily Flow - Fiscal Year 2002	18.784 [3]
14	Remaining Capacity (ADF) at Existing Facilities	6.095
15	Percent of Total Capacity Allocable to Growth	24.50%
	24.50%	40.16%
	Capital Costs of Existing Facilities	
16	Existing Facility Costs [5]	\$38,217,579
17	Additional Costs [6]	14,224,099
18	Less Grant Funds Received from EPA [7]	0
19	Total Capital Costs of Existing Facilities	\$52,441,678
20	Estimated Amount Allocable to Incremental Growth	\$12,847,686
	\$12,847,686	\$48,704,655
		9,461,747
		(10,163,878)
		48,002,523
		\$19,279,696

[1] Reflects current design capacity of existing and anticipated facilities based on information provided in the County's Five Year Capital Improvement Program. Capacity amounts shown also reflect 11.50 MGD of wastewater treatment capacity reserved with the City of Ft. Myers based on an agreement entered into between the two entities.

[2] Water facilities rated on a Peak Day Flow basis and wastewater facilities rated on a Maximum Monthly Flow basis and therefore adjusted to reflect daily demand for consistency with fee calculations/determination.

[3] Reflects average daily flow estimated for the fiscal year 2002 consistent with the year of implementation date of the proposed impact fee and the customer and sales forecast reflected in the Rate Study for the County.

[4] Amounts reflect projected flows (ADF Basis) for the fiscal year 2002 of County owned and operated facilities coupled with flows anticipated to be treated at City of Ft. Myers facilities where the County reserves 11.50 MGD of treatment capacity.

[5] Reflects actual capital expenditures to date (as of September 2000) based on a summary of fixed asset records provided by the County.

[6] Based on information contained in the Five Year Capital Improvement Program associated with upgrade of, and renewals and replacements of the County's Water and Wastewater System.

[7] In order to allocate the existing capacity funded from the County, grant funds provided from the Environmental Protection Agency served as a reduction to the total cost to be funded by incremental growth. Based on information provided by the County, no additional grant funds have been received to fund treatment capital costs over the last several years.

Table 5-2
Lee County, Florida
Water and Wastewater System Rate Study
Five Year Estimated Capital Improvement Program

Line No.	Description	Fiscal Year Ending September 30,					Total	Amount		Percent		Treatment		Transmission		Total
		2001	2002	2003	2004	2005		2006	Existing	Growth	Existing	Growth	Existing	Growth	Existing	
1	Capital Projects - Water System	\$0	\$193,500	\$150,000	\$150,000	\$150,000	\$793,500	\$793,500	\$0	0.00%	\$0	\$396,750	\$0	\$396,750	\$0	\$793,500
2	Furniture and Equipment	0	0	0	0	0	0	0	0	0.00%	0	0	0	0	0	0
3	Miscellaneous Renewal and Replacements	0	0	0	0	0	0	0	0	0.00%	0	0	0	0	0	0
4	Total Departmental Capital Outlay - Water System	0	193,500	150,000	150,000	150,000	793,500	793,500	0	0.00%	0	396,750	0	396,750	0	793,500
5	CIP - Water System	170,613	0	1,400,000	0	0	1,400,000	1,057,014	342,986	24.50%	342,986	0	1,057,014	0	342,986	
6	7085 Aquifer Storage and Recovery Wells	0	0	0	0	0	0	128,815	41,798	24.50%	128,815	0	41,798	0	170,613	
7	Business 41 Line Upgrade - Littleton to Shell Factory	0	0	0	0	0	0	151,002	48,998	24.50%	151,002	0	48,998	0	200,000	
8	Business 41 Waterline Relocation - Moinima to Littleton	4,223,140	0	400,000	0	0	4,623,140	302,004	97,996	24.50%	302,004	0	97,996	0	400,000	
9	7114 Corleone Plant WTP Expansion to 15 MGD	2,500,000	0	2,150,000	0	0	4,650,000	6,373,140	0	100.00%	6,373,140	0	0	0	6,373,140	
10	7097 Corleone WTP Wellfield - Allico Road	800,000	0	5,850,000	0	0	6,650,000	0	0	0.00%	0	5,850,000	0	5,850,000		
11	7119 Cypress Lake Drive Water & Sewer Line Relocation	0	0	0	0	0	0	2,500,000	0	100.00%	2,500,000	0	0	0	2,500,000	
12	7120 Del Var Watermain Extension	0	0	0	0	0	0	198,982	0	0.00%	198,982	0	0	0	198,982	
13	7121 DunN Fine Protection Improvements	380,000	0	625,000	0	0	1,005,000	604,008	0	24.50%	604,008	0	0	0	604,008	
14	7092 Fire Hydrant Valve Installation	500,000	0	0	0	0	500,000	288,964	93,006	24.50%	288,964	0	93,006	0	380,000	
15	7122 Fluoridation System - (Former PCWC WTP)	650,000	0	350,000	350,000	0	1,350,000	1,698,773	551,227	24.50%	1,698,773	0	551,227	0	2,250,000	
16	7098 Fluoridation System - Water Treatment Plants	120,000	0	0	0	0	120,000	490,757	199,243	24.50%	490,757	0	199,243	0	650,000	
17	7126 Lime-Slaker Replacements	0	0	0	0	0	0	83,640	27,140	24.50%	83,640	0	27,140	0	110,780	
18	New Fire Hydrant Installations	0	0	0	0	0	0	90,601	29,399	24.50%	90,601	0	29,399	0	120,000	
19	7115 Olga Water Transmission Main	400,000	0	200,000	0	0	600,000	48,998	0	0.00%	48,998	0	0	0	400,000	
20	Olga WTP Reservoir and Plant Improvements	0	0	0	0	0	0	151,002	48,998	24.50%	151,002	0	48,998	0	200,000	
21	Olga WTP Reservoir and Plant Improvements	0	0	0	0	0	0	332,204	0	0.00%	332,204	0	0	0	332,204	
22	7127 Page Park Waterline Improvements	30,000	0	150,000	0	0	180,000	75,501	0	24.50%	75,501	0	0	0	100,000	
23	7106 State Route 739 Waterline Relocation	100,000	0	100,000	100,000	0	300,000	1,155,165	374,835	24.50%	1,155,165	0	374,835	0	1,530,000	
24	7109 State Route 739 Waterline Relocation	100,000	0	300,000	300,000	0	700,000	452,778	142,408	24.50%	452,778	0	142,408	0	842,186	
25	State Route 78 Waterline Relocation - Sliter to E75	150,000	0	150,000	150,000	0	450,000	452,778	142,408	24.50%	452,778	0	142,408	0	594,186	
26	Water System Improvements	20,000	0	20,000	0	0	40,000	1,384,583	449,277	24.50%	1,384,583	0	449,277	0	1,833,860	
27	7094 Water - Small Projects	275,186	0	300,000	200,000	0	775,186	0	0	0.00%	0	0	0	0	775,186	
28	7086 Water Transmission System Improvements (No C/O)	103,849	0	100,000	100,000	0	303,849	452,778	142,408	24.50%	452,778	0	142,408	0	546,257	
29	7128 Water Transmission Line for NLCWTP	333,860	0	300,000	300,000	0	933,860	452,778	142,408	24.50%	452,778	0	142,408	0	1,378,046	
30	7082 Waterline Extensions	147,426	0	150,000	150,000	0	447,426	0	0	0.00%	0	0	0	0	447,426	
31	7419 Waterline Relocation for Pondella Road Widening	226,000	0	0	0	0	226,000	897,426	0	100.00%	897,426	0	0	0	1,123,426	
32	7257 Waterline Relocation US 41 South of Allico Road	35,000	0	0	0	0	35,000	46,998	0	0.00%	46,998	0	0	0	81,998	
33	7111 Automated Flushing Devices	35,000	0	0	0	0	35,000	170,682	53,568	24.50%	170,682	0	53,568	0	224,250	
34	7110 ANR Wells at North Reservoir	233,535	0	0	0	0	233,535	264,425	83,755	24.50%	264,425	0	83,755	0	318,190	
35	7112 Backflow Prevention Devices	70,000	0	35,000	0	0	105,000	57,214	0	24.50%	57,214	0	0	0	162,214	
36	7113 Corleone WTR - Wellfield Check Valves	125,000	0	0	0	0	125,000	72,726	0	0.00%	72,726	0	0	0	197,726	
37	7116 Sampling Stations	25,000	0	0	0	0	25,000	30,624	0	0.00%	30,624	0	0	0	55,624	
38	7117 Water Reservoir Acquisition	50,000	0	0	0	0	50,000	16,125	0	0.00%	16,125	0	0	0	66,125	
39	Water & Sewer Line Relocation (Summerlin Road)	0	0	0	0	0	0	94,276	0	0.00%	94,276	0	0	0	94,276	
40	Water & Sewer Line Relocation (Three Oaks Parkway)	350,000	0	0	0	0	350,000	18,875	0	0.00%	18,875	0	0	0	368,875	
41	Water & Sewer Line Relocation (Tresline Avenue)	200,000	0	0	0	0	200,000	104,121	0	0.00%	104,121	0	0	0	304,121	
42	Water Line Relocate (Pondella Road Widening)	20,000	0	0	0	0	20,000	20,000	0	100.00%	20,000	0	0	0	40,000	
43	7118 Wellfield Monitors	1,999,500	0	0	0	0	1,999,500	489,857	0	24.50%	489,857	0	0	0	2,489,357	
44	7103 Allico Road Water Main Relocation	774,000	0	0	0	0	774,000	189,622	0	24.50%	189,622	0	0	0	963,622	
45	7103 Allico Road Water Main Relocation	1,139,624	0	0	0	0	1,139,624	271,196	0	24.50%	271,196	0	0	0	1,410,820	
46	7105 Green Meadows/Corkscrew Interconnect	150,000	0	0	0	0	150,000	35,748	0	24.50%	35,748	0	0	0	185,748	
47	7105 Green Meadows/Corkscrew Interconnect	170,000	0	0	0	0	170,000	113,252	0	24.50%	113,252	0	0	0	283,252	
48	7105 Green Meadows/Corkscrew Interconnect	0	0	0	0	0	0	128,532	41,648	24.50%	128,532	0	41,648	0	170,180	
49	7124 Green Meadows Water Storage Improvements	0	2,500,000	0	0	0	2,500,000	612,475	0	24.50%	612,475	0	0	0	3,112,475	
50	7124 Green Meadows Water Storage Improvements	0	480,000	0	0	0	480,000	187,523	0	24.50%	187,523	0	0	0	667,523	
51	7106 Green Meadows Transmission System Improvements	497,901	0	2,109,000	0	0	2,606,901	34,405	0	24.50%	34,405	0	0	0	2,641,306	
52	7106 Green Meadows Wellfield Emergency Generators	300,000	0	0	0	0	300,000	1,585,521	514,479	24.50%	1,585,521	0	514,479	0	2,100,000	
53	7104 Green Meadows WTP Improvements	150,000	0	1,000,000	0	0	1,150,000	375,920	121,981	24.50%	375,920	0	121,981	0	497,901	
54	7109 Minors Corner Reservoir Replacement	100,000	0	0	0	0	100,000	286,403	75,497	24.50%	286,403	0	75,497	0	300,000	
55	7109 Minors Corner Reservoir Replacement	349,886	0	0	0	0	349,886	1,094,765	355,235	24.50%	1,094,765	0	355,235	0	1,450,000	
56	7109 Minors Corner Reservoir Replacement	50,000	0	0	0	0	50,000	24,499	0	24.50%	24,499	0	0	0	74,499	
57	7107 Waterway Estates Interconnect	50,000	0	0	0	0	50,000	67,951	22,049	24.50%	67,951	0	22,049	0	72,000	
58	7107 Waterway Estates Interconnect	5,128	0	0	0	0	5,128	37,751	12,249	24.50%	37,751	0	12,249	0	40,000	
59	7107 Waterway Estates Interconnect	0	350,000	350,000	350,000	0	1,050,000	3,872	1,256	24.50%	3,872	1,256	0	5,128		
60	Water Quality Monitoring	0	40,000	0	0	0	40,000	1,750,000	0	0.00%	1,750,000	0	0	0	1,790,000	
61	Water Treatment Plant Improvements	0	200,000	200,000	200,000	0	600,000	90,601	29,399	24.50%	90,601	29,399	0	120,000		
62	7084 North Lee County Water Treatment Plant	0	0	0	0	0	0	244,990	755,010	24.50%	244,990	755,010	0	1,000,000		
63	7085 North Lee County Water Treatment Plant	445,138	0	0	0	0	445,138	7,157,351	0	0.00%	7,157,351	0	0	0	7,602,489	
64	7084 North Lee County Water Treatment Plant	0	0	0	0	0	0	445,338	0	0.00%	445,338	0	0	0	445,338	
65	7411 Chlorine Storage Facilities Improvements - 50%	3,677	0	0	0	0	3,677	2,776	901	24.50%	2,776	901	0	4,677		
66	7416 DOT Project Utility Relocate - 50%	875,000	0	250,000	250,000	0	1,375,000	1,099,326	327,674	24.50%	1,099,326	327,674	0	1,427,000		
67	7416 DOT Project Utility Relocate - 50%	205,000	0	0	0	0	205,000	154,777	50,223	24.50%	154,777	50,223	0	255,000		
68	4040 GIS System Upgrade - 50%	25,965	0	0	0	0	25,965	19,603	6,361	24.50%	19,603	6,361	0	25,965		
69	0726 MNIN Lateral King Jr. Utilize Relocation - 50%	5,000	0	0	0	0	5,000	1,025	333	24.50%	1,025	333	0	5,333		
70	7414 Day Tank Modifications (3 Lift Stations and 2 Reservoirs) - 50%	200,000	0	0	0	0	200,000	3,775	1,225	24.50%	3,775	1,225	0	4,000		
71	7417 Plant Pumping Improvements - 50%	742,500	0	0	0	0	742,500	560,595	181,905	24.50%	560,595	181,905	0	924,405		
72	7413 Chlorine System Improvements - 50%	0	0	0	0	0	0	32,143,578	54,583,							

Table 5-2
Lee County, Florida
Water and Wastewater System Rate Study
Five Year Estimated Capital Improvement Program

Line No.	Description	Fiscal Year Ending September 30,					Total	Percent Allocable to Growth		Amount Allocable to Growth		Treatment		Transmission		Total
		2001	2002	2003	2004	2005		2006	Existing	Growth	Existing	Growth	Existing	Growth	Existing	
76	CAPITAL PROJECTS - WASTEWATER SYSTEM															
77	Dep'tmental Capital Outlay - Wastewater System	\$0	\$193,500	\$0	\$150,000	\$150,000	\$150,000	0.00%	\$793,500	\$0	\$396,750	\$0	\$396,750	\$0	\$793,500	
78	Furniture and Equipment	0	0	0	0	0	0	100.00%	793,500	0	0	0	0	0	793,500	
79	Miscellaneous Renewal and Replacements	0	193,500	150,000	150,000	150,000	150,000	0.00%	793,500	0	0	0	0	793,500		
80	Total Dep'tmental Outlay - Wastewater System	0	193,500	150,000	150,000	150,000	150,000	0.00%	793,500	0	0	0	0	793,500		
81	CIP - Wastewater System															
82	Airport Sewer District Transmission System	1,000,000	2,500,000	0	0	0	0	100.00%	3,500,000	0	0	0	0	3,500,000		
83	Casual Estates Gravity Line	489,177	0	0	0	0	0	59.84%	89,754	62,246	0	0	0	152,000		
84	Daniels Parkway Master Pump Station	2,256,408	0	0	0	0	0	40.16%	292,704	196,473	0	0	0	489,177		
85	Fiesta Village WWP Expansion	1,050,000	0	0	0	0	0	59.84%	897,541	602,459	0	0	0	1,500,000		
86	Fiesta Village WWP Interconnect	2,256,408	0	0	0	0	0	40.16%	1,332,195	894,213	0	0	0	2,256,408		
87	Fiesta Village WWP Expansion	4,440,830	0	0	0	0	0	100.00%	5,496,499	0	0	0	0	5,496,499		
88	Fiesta Village WWP Expansion	338,003	0	0	0	0	0	100.00%	338,003	0	0	0	0	338,003		
89	Fiesta Village WWP Expansion	66,808	0	0	0	0	0	40.16%	39,975	26,833	0	0	0	66,808		
90	Fiesta Village WWP Expansion	335,000	0	0	0	0	0	59.84%	200,451	134,449	0	0	0	335,000		
91	Fiesta Village WWP Expansion	116,341	0	0	0	0	0	59.84%	69,614	46,727	0	0	0	116,341		
92	Fiesta Village WWP Expansion	2,262,815	0	0	0	0	0	100.00%	2,262,815	0	0	0	0	2,262,815		
93	Fiesta Village WWP Expansion	1,352,665	0	0	0	0	0	100.00%	77,123	77,123	0	0	0	1,429,788		
94	Fiesta Village WWP Expansion	147,335	0	0	0	0	0	59.84%	89,382	543,283	0	0	0	1,429,788		
95	Fiesta Village WWP Expansion	400,000	0	0	0	0	0	40.16%	88,159	58,176	0	0	0	488,159		
96	Fiesta Village WWP Expansion	250,000	0	0	0	0	0	59.84%	239,344	160,656	0	0	0	419,000		
97	Fiesta Village WWP Expansion	0	0	0	0	0	0	40.16%	1,030,899	691,866	0	0	0	1,722,765		
98	Fiesta Village WWP Expansion	0	0	0	0	0	0	59.84%	464,672	323,528	0	0	0	788,200		
99	Fiesta Village WWP Expansion	0	0	0	0	0	0	40.16%	81,153	54,473	0	0	0	135,626		
100	Fiesta Village WWP Expansion	0	0	0	0	0	0	59.84%	179,994	120,817	0	0	0	300,811		
101	Fiesta Village WWP Expansion	300,000	0	0	0	0	0	40.16%	38,993	26,107	0	0	0	338,993		
102	Fiesta Village WWP Expansion	83,667	0	0	0	0	0	59.84%	1,077,649	722,561	0	0	0	1,800,210		
103	Fiesta Village WWP Expansion	56,333	0	0	0	0	0	40.16%	576,621	387,046	0	0	0	963,667		
104	Fiesta Village WWP Expansion	0	0	0	0	0	0	59.84%	31,707	22,626	0	0	0	53,333		
105	Fiesta Village WWP Expansion	50,000	0	0	0	0	0	40.16%	119,672	80,328	0	0	0	139,999		
106	Fiesta Village WWP Expansion	50,000	0	0	0	0	0	59.84%	448,771	301,229	0	0	0	750,000		
107	Fiesta Village WWP Expansion	200,000	0	0	0	0	0	40.16%	29,918	20,082	0	0	0	229,900		
108	Fiesta Village WWP Expansion	50,000	0	0	0	0	0	59.84%	481,339	323,130	0	0	0	804,469		
109	Fiesta Village WWP Expansion	150,000	0	0	0	0	0	40.16%	74,795	50,205	0	0	0	224,995		
110	Fiesta Village WWP Expansion	2,402,409	0	0	0	0	0	59.84%	1,801,274	1,211,066	0	0	0	3,612,340		
111	Fiesta Village WWP Expansion	400,000	0	0	0	0	0	40.16%	2,991,804	2,068,196	0	0	0	5,060,000		
112	Fiesta Village WWP Expansion	750,000	0	0	0	0	0	100.00%	987,285	2,991,804	0	0	0	3,979,089		
113	Fiesta Village WWP Expansion	100,000	0	0	0	0	0	0.00%	0	0	0	0	0	100,000		
114	Fiesta Village WWP Expansion	100,000	0	0	0	0	0	100.00%	400,000	0	0	0	0	400,000		
115	Fiesta Village WWP Expansion	750,000	0	0	0	0	0	0.00%	999,330	0	0	0	0	1,749,330		
116	Fiesta Village WWP Expansion	100,000	0	0	0	0	0	59.84%	2,899,234	999,330	0	0	0	3,898,564		
117	Fiesta Village WWP Expansion	200,000	0	0	0	0	0	40.16%	616,481	413,802	0	0	0	1,030,283		
118	Fiesta Village WWP Expansion	75,000	0	0	0	0	0	59.84%	718,033	481,967	0	0	0	1,200,000		
119	Fiesta Village WWP Expansion	10,000	0	0	0	0	0	40.16%	329,088	229,902	0	0	0	559,000		
120	Fiesta Village WWP Expansion	200,000	0	0	0	0	0	59.84%	96,964	65,066	0	0	0	266,000		
121	Fiesta Village WWP Expansion	200,000	0	0	0	0	0	40.16%	756,703	507,924	0	0	0	1,264,627		
122	Fiesta Village WWP Expansion	600,000	0	0	0	0	0	59.84%	179,588	120,492	0	0	0	720,000		
123	Fiesta Village WWP Expansion	100,000	0	0	0	0	0	40.16%	388,935	261,065	0	0	0	650,000		
124	Fiesta Village WWP Expansion	35,000	0	0	0	0	0	59.84%	359,016	249,984	0	0	0	609,000		
125	Fiesta Village WWP Expansion	50,000	0	0	0	0	0	40.16%	20,943	14,057	0	0	0	64,000		
126	Fiesta Village WWP Expansion	100,000	0	0	0	0	0	59.84%	119,672	80,328	0	0	0	180,000		
127	Fiesta Village WWP Expansion	100,000	0	0	0	0	0	40.16%	149,590	100,410	0	0	0	250,000		
128	Fiesta Village WWP Expansion	100,000	0	0	0	0	0	59.84%	185,492	124,508	0	0	0	310,000		
129	Fiesta Village WWP Expansion	200,000	0	0	0	0	0	40.16%	531,525	361,475	0	0	0	593,000		
130	Fiesta Village WWP Expansion	100,000	0	0	0	0	0	59.84%	119,672	80,328	0	0	0	200,000		
131	Fiesta Village WWP Expansion	200,000	0	0	0	0	0	40.16%	299,180	200,820	0	0	0	500,000		
132	Fiesta Village WWP Expansion	3,677	0	0	0	0	0	100.00%	598,361	401,639	0	0	0	1,000,000		
133	Fiesta Village WWP Expansion	87,500	0	0	0	0	0	0.00%	0	0	0	0	0	87,500		
134	Fiesta Village WWP Expansion	205,000	0	0	0	0	0	100.00%	4,995,151	0	0	0	0	5,200,151		
135	Fiesta Village WWP Expansion	23,963	0	0	0	0	0	59.84%	3,677	2,200	0	0	0	26,163		
136	Fiesta Village WWP Expansion	5,000	0	0	0	0	0	40.16%	800,308	1,477	0	0	0	801,785		
137	Fiesta Village WWP Expansion	5,000	0	0	0	0	0	59.84%	537,192	61,332	0	0	0	600,000		
138	Fiesta Village WWP Expansion	200,000	0	0	0	0	0	40.16%	123,664	41,168	0	0	0	244,832		
139	Fiesta Village WWP Expansion	200,000	0	0	0	0	0	59.84%	15,536	7,768	0	0	0	207,768		
140	Fiesta Village WWP Expansion	5,000	0	0	0	0	0	40.16%	812	345	0	0	0	5,347		
141	Fiesta Village WWP Expansion	200,000	0	0	0	0	0	59.84%	2,008	0	0	0	0	2,008		
142	Fiesta Village WWP Expansion	742,500	0	0	0	0	0	40.16%	119,672	80,328	0	0	0	862,500		
143	Fiesta Village WWP Expansion	18,852,357	18,139,481	\$63,387,981	\$20,905,000	\$9,415,000	\$5,915,000	59.84%	22,759,572	39,948,466	9,461,747	27,545,030	13,275,407	12,426,134	62,708,338	
144	Fiesta Village WWP Expansion	\$46,126,473	\$63,387,981	\$20,905,000	\$9,415,000	\$5,915,000	\$5,915,000	59.84%	\$94,499,440	\$94,499,440	\$24,479,346	\$74,545,295	\$31,929,488	\$20,070,326	\$151,024,454	
TOTAL CAPITAL PROJECTS - WATER AND WASTEWATER SYSTEM																

**Table 5-3
Lee County, Florida
Water System**

Development of Water System Connection Fee

Line No.	Description	Amount
	Total Estimated Cost of Existing Water Production and Treatment Facilities:	
1	Cost of Existing Facilities [1]	\$52,441,678
2	Existing Plant Capacity (GPD) (MDF)	31,000,000
3	Existing Plant Capacity (GPD) (ADF) [2]	24,879,615
4	ERU Factor - GPD [3]	250
5	Estimated ERUs to be Served by Existing Facilities	99,518
6	Percent Remaining Capacity of Existing Facilities	24.50%
7	Allocation of Existing Facilities to Incremental Growth	12,847,686
8	Rate per ERU Associated with Existing Facilities	\$526.95
	Total Estimated Cost of Additional Water Production and Treatment Facilities: [4]	
9	Cost of Additional Facilities	\$47,000,245
10	Additional Plant Capacity (GPD) (MDF)	10,000,000
11	Additional Plant Capacity (GPD) (ADF) [2]	8,025,682
12	ERU Factor - GPD [3]	250
13	Estimated ERUs to be Served by Additional Facilities	32,103
14	Rate per ERU Associated with Additional Facilities	\$1,464.06
15	Rate per ERU of Water Production/Treatment Facilities	\$1,059.56
	Primary Transmission/Distribution System: [5]	
16	Existing Facilities [6]	\$47,461,831
17	Additional Costs Capitalized to Existing Facilities [4]	16,110,581
18	Total Existing Facility Costs	63,572,412
19	Percent Remaining Capacity of Existing Facilities	24.50%
20	Subtotal	15,574,605
21	New Facilities to Aid Growth [4]	7,644,192
22	Subtotal of Costs	23,218,796
23	Estimated Plant Capacity (GPD) (ADF) [7]	14,120,939
24	ERU Factor - GPD [3]	250
25	Estimated ERUs served by Transmission/Distribution Facil.	56,484
26	Rate per ERU of Transmission/Distribution Facilities	\$411.07
27	Total Combined Rate per ERU before Rate Adjustment	\$1,470.63
28	Rate Adjustment [8]	(332.02)
29	Total Combined Rate per ERU After Rate Adjustment	1,138.61
30	Rounded Rate	<u>\$1,140.00</u>
31	Equivalent Rate per Gallon of Reserved Capacity	<u>\$4.56</u>

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**Table 5-3
Lee County, Florida
Water System**

Development of Water System Connection Fee

Footnotes:

- [1] Amounts derived from Table 5-1.
- [2] The existing water production and treatment facilities are designed for a maximum daily flow of 15 MGD (Corkscrew and Olga WTP). The average daily flow was calculated assuming a maximum daily flow to average daily flow factor of 1.25 based on historical utility peaking factors for the past three years.
- [3] The ERU factor reflects a daily water demand and was based on the permitting requirements for new connections with the FDEP and the Level of Service requirements reflected in the County's Comprehensive Plan.
- [4] Amounts derived from Table 5-2.
- [5] Amounts do not include the estimated cost of on-site capital costs such as meters, hydrants, services and local distribution facilities.
- [6] Represents estimated original cost of transmission system fixed assets based on (1) plant asset listing data provided by the County, and (2) available fixed asset listing data provided by the County which was utilized to estimate the facilities which were contributed to the County from developers or customers (i.e., on-site distribution facilities).
- [7] Amounts based on the estimated total design capacity of the water production and treatment facilities consistent with the capital program and the Comprehensive Plan requirements that the facilities meet demand requirements for meeting service requirements of the service area based on discussions with the County. Such amounts reflect available existing and projected facility capacity consistent with the water treatment plant facilities.
- [8] Reflects estimated credit to the calculation of the impact fee due to the funding of incremental facilities in the existing water user fees (debt service associated with new plant).

**Table 5-4
Lee County, Florida
Wastewater System**

Development of Wastewater System Connection Fee

Line No.	Description	County System
	Total Estimated Cost of Existing Wastewater Treatment and Effluent Disposal Facilities:	
1	Cost of Existing Facilities [1]	\$48,002,523
2	Existing Plant Capacity (GPD) (MDF)	22,750,000
3	Existing Plant Capacity (GPD) (ADF) [2]	18,724,280
4	ERU Factor - GPD [3]	250
5	Estimated ERUs to be Served by Existing Facilities	74,897
6	Percent Remaining Capacity of Existing Facilities	40.16%
7	Allocation of Existing Facilities to Incremental Growth	19,279,696
8	Rate per ERU Associated with Existing Facilities	\$640.91
	Total Estimated Cost of Additional Wastewater Treatment and Effluent Disposal Facilities: [4]	
9	Cost of Additional Facilities	\$27,545,050
10	Additional Plant Capacity (GPD) (MDF)	3,400,000
11	Additional Plant Capacity (GPD) (ADF) [2]	2,798,354
12	ERU Factor - GPD [3]	250
13	Estimated ERUs to be Served by Additional Facilities	11,193
14	Rate per ERU Associated with Additional Facilities	\$2,460.83
15	Rate per ERU of Treatment/Effluent Disposal Facilities	\$1,134.46
	Primary Collection System: [5]	
16	Existing Facilities [6]	\$65,520,076
17	Additional Costs Capitalized to Existing Facilities [4]	13,275,407
18	Subtotal of Existing Facilities	78,795,483
19	Percent Remaining Capacity of Existing Facilities	40.16%
20	Subtotal	31,647,356
21	New Facilities to Aid Growth (4)	12,426,134
22	Subtotal of Costs	44,073,491
23	Estimated Plant Capacity (GPD) (ADF) [7]	10,318,759
24	ERU Factor - GPD [3]	250
25	Estimated ERUs served by Collection Facilities	41,275
26	Rate per ERU of Collection Facilities	\$1,067.80
27	Total Combined Rate per ERU before Rate Adjustment	\$2,202.26
28	Rate Adjustment [8]	(463.95)
29	Total Combined Rate per ERU After Rate Adjustment	1,738.31
30	Rounded Rate	<u>\$1,735.00</u>
31	Equivalent Rate per Gallon of Reserved Capacity	<u>\$6.94</u>

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**Table 5-4
Lee County, Florida
Wastewater System**

Development of Wastewater System Connection Fee

Footnotes:

- [1] Amounts derived from Table 5-1.
- [2] The existing Fort Myers Beach wastewater treatment and effluent disposal facilities are designed for a maximum monthly flow of 6.0 MGD. The average daily flow was calculated assuming a maximum monthly flow to average daily flow factor of 1.23 based on historical utility peaking factors.
- [3] The ERU factor reflects a daily water demand and was based on the permitting requirements for new connections with the FDEP and the Level of Service requirements reflected in the County's Comprehensive Plan.
- [4] Amounts derived from Table 5-2.
- [5] Amounts do not include the cost of on-site capital costs such as services and frontage lines or laterals.
- [6] Represents estimated original cost of transmission system fixed assets based on (1) plant asset listing data provided by the County, and (2) available fixed asset listing data provided by the County which was utilized to estimate the facilities which were contributed to the County from developers or customers (i.e., on-site distribution facilities).
- [7] Amounts based on the estimated total design and reserved capacity of the wastewater treatment and effluent disposal facilities consistent with the capital program and the Comprehensive Plan requirements that the facilities meet demand requirements for meeting service requirements of the service area based on discussions with the County. Such amounts reflect available, existing and projected capacity consistent with the wastewater treatment plant facilities.
- [8] Reflects estimated credit to the calculation of the impact fee due to the funding of incremental facilities in the existing wastewater user fees (debt service reflected in rates associated with funding plant expansion).

Table 5-5
Lee County, Florida
Water and Wastewater Rate Study

Comparison of Connection Fees for Water and Wastewater Service (1)

Line No.	Description	Residential 5/8" x 3/4" Meter		
		Water	Wastewater	Combined
Lee County				
1	Existing Impact Fees	\$1,020	\$1,460	\$2,480
2	Proposed Impact Fees	1,140	1,735	2,875
<u>Other Florida Utilities:</u>				
3	City of Bradenton	\$381	\$784	\$1,165
4	Bonita Springs Utilites, Inc.	1,550	2,183	3,733
5	Brevard County	1,903	2,257	4,160
6	Charlotte County	1,518	2,570	4,088
7	City of Clearwater	480	900	1,380
8	Collier County	1,275	1,575	2,850
9	Englewood Water District	2,267	1,690	3,957
10	FL Water Services - Lehigh - Lee County	700	1,300	2,000
11	City of Fort Myers (2)	2,023	1,966	3,989
Hillsborough County				
12	North Service Area	1,350	1,950	3,300
13	Central Service Area	1,245	1,930	3,175
14	South Service Area	1,245	1,930	3,175
15	Manatee County	1,035	1,378	2,413
16	City of Naples	870	1,220	2,090
17	City of North Port	860	1,280	2,140
18	Orange County	1,095	2,487	3,582
19	Pinellas County	512	2,060	2,572
20	City of Punta Gorda	2,000	1,500	3,500
21	City of Sarasota	900	1,550	2,450
22	Sarasota County	2,720	1,642	4,362
23	City of Tampa	0	1,844	1,844
24	Other Florida Utilities' Average	\$1,235	\$1,714	\$2,949

- (1) Unless otherwise noted, amounts shown reflect residential rates in effect August 2001 and are exclusive of taxes or franchise fees, if any, and reflect rates charged for inside the city service. All rates are as reported by the respective utility. This comparison is intended to show comparable charges for similar service for comparison purposes only and is not intended to be a complete listing of all rates and charges offered by each listed utility.
- (2) The connection fees for the City of Fort Myers have been temporarily waived by the mayor.

SECTION 6
MISCELLANEOUS SERVICE CHARGES



SECTION 6

MISCELLANEOUS SERVICE CHARGES

6.1 General

In addition to charging user fees for water and wastewater service, the County also charges customers fees for certain specifically requested services or needs. Examples of these fees include 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. Generally, these fees are designed on a cost recovery basis predicated on the specifics of the services requested. This section discusses the review of the miscellaneous service charges and the design of the proposed fees, where applicable.

6.2 Meter Connection Charges (Installation/Tap-In Fees)

An identifiable service which is provided to the County's water customers deals with the 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 or the installation of a new service or change in level of service (referred to as a tap-in). 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 water system customers for their share of the plant capacity associated with water production, treatment, and transmission allocable to such customer. Based on discussions with the staff, the County charges an installation charge (based on average cost) for connecting to the system, whether it is a meter installation only (i.e., the service already exists) or if it is a tap to the water main and the installation of a service line and a meter. It is recommended that the County maintain separating these two services and have a separate charge for each specific service. This would be more equitable to the customer requesting the connection to the System.

The currently effective rates for the installation or connection charge for the County are summarized below:

<u>Meter Size (Inches)</u>	<u>Current Installation</u>	<u>Current Tap-In Charge (*)</u>
5/8	\$110.00	\$395.00
3/4	135.00	425.00
1	190.00	455.00
1½	355.00	825.00
2	510.00	920.00
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 by the size of the meter or service being installed. The fees are generally based on the size of the meter to recognize differences in cost associated with the facility installations with the larger the service

size generally having the higher installation cost (whether it be the cost of materials such as meters, or the amount of time generally spent on the installation of the service). In addition, with respect to the tap-in fee, the fee represents the typical cost to install the service and connect the facilities to the water distribution system. Therefore, the costs for the tap-in services should reflect the average cost, recognizing that certain services require additional costs associated with the construction of a "long service" which may include a bore and jack under a roadway, etc. As can be seen above, 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.

The proposed tap-in and meter installation charges were based on the estimated cost to perform such services based on information provided by the County, cost of relationships of other utilities, and recognizing the total system revenue requirements for the water system. Thus, 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. The development of the meter installation and tap-in charges for the primary meter sizes (5/8" to 2") is summarized on Tables 6-1 and 6-2. The recommended fees are summarized below:

Proposed Water Installation Charges		
Meter Size (inches)	Meter Installation	Tap-In Charge (*)
	Charge	
5/8	\$125.00	\$470.00
3/4	145.00	490.00
1	195.00	560.00
1½	410.00	825.00
2	560.00	990.00
3 and Above	Actual Cost	Actual Cost

(*) Includes cost of meter installation.

As can be seen above, it is proposed that the County increase the fees for the meter installation and tap-in charges when compared to the rates that are currently in effect. The primary reason for the recommended fee increases are due solely to the increase cost of labor and materials and inflationary allowances. It should be noted and based on discussions with the County, the taps are generally made as major development occurs, thus the only cost normally incurred by the County at the time of the physical connection of the customer would be the installation of the meter or service. However, to recognize those 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. To the extent the County is required to tap into the water main as a condition of providing service which is of extraordinary nature (significant length of the service, needs to bore and jack under a major roadway, or any specific factors that would render the tap to be "non-typical"), the billing to the customer for the cost of the tap should be done on the same basis as taps made for services greater than 2" which is on "an actual cost" basis. 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.

6.3 Returned Check Charges

Several times during a typical billing month, checks are received by the County from the utility customer in payment of a bill that are subsequently refused by the bank. As a result, the County incurs costs or charges from the bank as a result of the check being returned to the customer. The County's customer base should not bear the increased costs due to the poor payment practices.

This fee covers the cost incurred by the County for the banking charges incurred, administrative costs (i.e., customer service charges), and provides an incentive allowance to encourage customers not to write or submit improperly funded checks. This fee is very common in the utility industry. Based on the parameters regarding violations involving checks and drafts as contained in Florida Statutes 832.07, it is recommended that the fee currently charged by the County which is a minimum of \$25.00 or 5% of the face amount of the check, whichever is greater, be continued.

6.4 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. This fee is very common in the industry, however the County does not currently charge such fee for these services.

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. The cost for providing this service includes customer service and utility personnel, vehicle cost, and administrative support services. 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 2002, the cost of testing a 5/8" to 1" water meter was estimated as follows:

Transmission and Distribution	Amount
Personnel Costs	
Labor	\$14.73
Employee Benefits	3.72
Departmental Overhead	<u>1.95</u>
Subtotal	20.40
Vehicle Costs	<u>16.80</u>
Total Transmission and Distribution	37.20

	<u>Amount</u>
Customer Service	
Personnel Costs	
Labor	3.25
Employee Benefits	0.82
Departmental Overhead	<u>0.52</u>
Total Personnel Costs	4.59
Utilities Management Allocation	<u>4.72</u>
Total Cost	\$46.52
Rounded Rate	<u>\$45.00</u>

As can be seen above, the estimated cost for a meter test for meter sizes ranging from 5/8" to 1" is approximately \$45.00 per individual test. For test of meters greater than 1", the test may either be done in the field or done at the meter test facilities (on the bench) of the County and 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. 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;
- Customer service cost;
- An allowance for utility management overhead or burdens equal to 38.49% of the total labor and benefits cost estimated by the County.

Based on the estimated cost for meter testing services and a comparison of fees charged by other utilities, it is recommended that the County adopt a fee for meter tests equal to \$45.00 per request for meter sizes of 5/8" through 1" and that such fees should only be retained by the County to the extent that the meter test proves to be within the acceptable accuracy limits of such meter. Furthermore, since the County has an ongoing meter testing and replacement program, there should be no "free tests" performed by the County at the customer's request. This is due to the fact that since the County has an ongoing meter replacement-testing program, the meter should generally operate within the accuracy limits as prescribed or determined by the County. Furthermore this test is generally 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 6.7 - Trip [Premise Visit] Charges).

6.5 Meter Re-Reads and Special Reads

There are several instances where a customer requests that the County re-read a water meter. A few reasons why this could occur would be: i) the customer is of the opinion that a meter reading error has occurred; or ii) the customer may be filling a swimming pool and wants to know the amount of usage. As a result of this request, certain customer service charges are incurred with respect to field visits to the premises by the meter readers, vehicle expenses, customer service and accounting expenses, and general administrative costs. Based on information provided by the County, comparable information of other utilities, and information reflected in the County's Fiscal Year 2002 Proposed Budget, the cost of a meter re-read or special read was estimated as follows:

Transmission and Distribution	Amount
Personnel Costs	
Labor	\$7.34
Employee Benefits	1.86
Departmental Overhead	<u>0.97</u>
Subtotal	10.17
Vehicle Costs	<u>7.15</u>
Total Transmission and Distribution	17.32
Customer Service	
Personnel Costs	
Labor	3.21
Employee Benefits	0.81
Departmental Overhead	<u>0.52</u>
Total Personnel Costs	4.54
Utilities Management Allocation	<u>2.77</u>
Total Cost	\$24.63
Rounded Rate	<u>\$25.00</u>

As can be seen above, it is estimated that the cost to perform a meter re-read or special read is approximately \$24.63. Based on the above analysis and comparisons with other utilities, it is recommended that a fee of \$25.00 per each meter re-read or special read be adopted by the County.

It is customary to request a meter re-read (not a special read such as filling a swimming pool) when one experiences an abnormally high bill. The increased bill could be the result of a leak on the customer's side of the meter, inadvertent usage, or an actual error in the read. Therefore, it is further recommended that no charge for a meter re-read should be levied for a single request within a 12-month period or if there was an error in the meter reading. For requests after the one time allowance (within the 12 month period), the fee should be charged in the next month's bill (provided no error was detected). The policy is fairly common in the utility industry as well as fair to the utility customer. Additionally, this fee should not be added to the meter test fee as discussed earlier if a test has been requested. This is a separate and distinct fee for a specific service.

6.6 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 general service or 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 generally 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 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	<u>5.00 days</u>	
Total Estimated Period of Risk (Time)	61.42 days	

As can be seen above, the estimated period of risk for a monthly period of utility service is over 60 days. The customer deposit for service should approximate the time period of risk associated with the service or approximately 60 days. It is recommended that an average deposit based on service requirements for the residential class be maintained. Since the deposit is based on the cost for service provided, an average bill concept should be utilized. However, because of the diversity of water use for general service customers within the larger services (i.e., above 2") and to provide the County with a mechanism to more accurately associate the customer deposit to service requirements, it is further recommended that the deposit for services for the general service class be calculated separately. One manner to more accurately determine the appropriate level of commercial deposits applied to each new applicant would be to gather actual usage patterns of existing County utility customer similar to the applicant requesting service. For example, if a new fast food chain restaurant requests service, the County could research its existing database of customers for related accounts to determine their average month usage pattern. If the typical monthly use were say 50,000 gpm, the County could then calculate the appropriate deposit assuming a two (2) month average bill requirement.

Currently, single family residential customers which receive service through a 5/8" or 3/4" metered account represent almost all of the single-family customers in such class. Based on detailed bill frequency information as prepared by the County, the median usage level for bills rendered to this customer classification is approximately 6,000 gallons per month. Based on the

median usage for this class and the proposed rates as discussed in Section 4, the average deposit for water service would be calculated as follows:

Monthly Bill Component	Based on Proposed Rates
Base Fee Portion	\$8.45
Volume Charge (*)	<u>13.56</u>
Subtotal	22.01
Adjust for Service Risk (x2.0)	44.02
Rounded Rate	<u>\$45.00</u>

(*) Based on 6,000 gallons of Monthly Service.

As can be seen above, the monthly deposit for water only service for the single family residential class is recommended to remain at \$45.00 for each new customer or existing customers which are required to update their deposit.

In addition to the water deposit, the County also requires a deposit for wastewater service. Since a majority of the water customers receive wastewater services, the charge is billed on the water bill, is based on water consumption, and presently contributes approximately 50% of the utility rate revenue, a deposit for this type of service is justifiable. Based on the billing components utilized in the determination of the water deposit, the corresponding single-family residential deposit for the sewer system (assuming 6,000 gallons of monthly metered water consumption) would be as follows:

Monthly Bill Component	Based on Proposed Rates
Base Fee Portion	\$13.35
Volume Charge (*)	<u>22.14</u>
Subtotal	35.49
Adjust for Service Risk (x2.0)	70.98
Rounded Rate	<u>\$70.00</u>

(*) Based on 6,000 gallons of Monthly Service.

Based on the above analysis, the recommended deposit for residential water and wastewater service for new customers requesting service would be \$115 (\$45 water deposit plus \$70 sewer deposit).

The general service deposits are based on the relationship of meter service sizes to the single family residential equivalent while multi-family and RV classes are established based on the ERC relationships to the single-family class. Since the existing fees do recognize deposit differentials for higher levels of service and customer class relationships, it is recommended that the existing deposit structure be maintained. For purposes of this study, it is recommended that water system customer deposits be maintained at the existing fee levels currently in effect. With respect to customer system deposits, based on the deposit parameters and the proposed utility service rates, the wastewater deposits for the County are recommended to be as follows:

Sewer System (Minimum Deposits)	
Meter Size (Inches)	Amount
Residential Service:	
Single-Family	\$75.00
Multi-Family (per Dwelling Unit)	60.00
Recreational Vehicle (per Dwelling Unit/Lot)	42.00
Commercial and Non-Residential Service:	
5/8	\$75.00
3/4	112.50
1	187.50
1½	375.00
2	600.00
3	1,200.00
4	1,875.00
6	3,750.00
8	6,000.00
10	10,875.00

It is recommended that the County adopt the proposed 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.

6.7 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;
- delinquency in the payment of a utility bill; and
- premises visit or special trip by a utility employee.

Based on discussions with the County 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:

	Initiation of Service/ Customer Request	For Non Payment	Premises Visit (Trip Charge)
Transmission and Distribution			
Personnel Costs			
Labor	\$10.28	\$10.28	\$7.34
Benefits	2.60	2.60	1.86
Departmental Overhead	<u>1.36</u>	<u>1.36</u>	<u>0.97</u>
Subtotal	14.24	14.24	10.17
Vehicle Costs	<u>11.76</u>	<u>11.76</u>	<u>7.15</u>
Total Transmission and Distribution	26.00	26.00	17.32

	<u>Initiation of Service/ Customer Request</u>	<u>For Non Payment</u>	<u>Premises Visit (Trip Charge)</u>
Customer Service			
Personnel Costs			
Labor	3.21	9.62	3.21
Benefits	<u>0.81</u>	<u>2.43</u>	<u>0.81</u>
Total Personnel Costs	4.02	12.06	4.02
Departmental Overhead	<u>0.52</u>	<u>1.55</u>	<u>0.52</u>
Total Customer Service	4.54	13.61	4.54
Utilities Management Allocation	<u>3.52</u>	<u>5.23</u>	<u>2.77</u>
Total Cost	\$34.08	\$44.83	\$21.76
Rounded Rate	<u>\$35.00</u>	<u>\$45.00</u>	<u>\$25.00</u>

In many instances, the County sends field personnel on special trips to a customer's premise (e.g., a trip charge or premises visit) for special circumstances. The current practice of the County is to charge \$20.00 per trip. Based on the cost of service, it is recommended that the trip charge be increased to \$25.00 per occurrence. With respect to the charge for turn-on and turn-off based on an estimate of costs as identified above, it is recommended the initiation of service during normal working hours remain at \$35.00.

For instances when a customer is turned-off due to non-payment, it is recommended that a higher charge be levied by the County. The County currently incurs higher customer service expenses under this situation due to customer identification and accounting of non-paying customers and additional administration due to handling such requests. In this situation, it is recommended that the trip charge or combined charge for a turn-off and turn-on due to non-payment be \$45.00 per occurrence.

In certain circumstances, the County must send field personnel after normal working hours in order to meet the customer demands or needs for service. 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. Generally, this request is made by a customer that requests the initiation or turn-on of a service earlier than what can be performed during normal hours and workload allowances. 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. For the services described above and after a review of the costs associated with performing such activities, the rates charged during periods of time other than normal working hours are recommended to be maintained at the current levels being charged by the County. These after hours fees are as follows:

Initiation of Service (Turn-on and off)	\$45.00
For Non-Payment (Turn-on and off)	\$55.00

6.8 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 of 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. Attendance of Board of County Commission meeting for Board Approval;
4. Pre-construction conference and field investigation of existing facilities;
5. Field testing and final inspection by County of facilities, (including T.V. and Video tape of lines as required);
6. Preparation of Resolution of Acceptance, Land Transfer Forms, and Board acceptance summary documentation (Blue sheet); and
7. Attendance of Board of County Commission meeting for acceptance of facilities.

The current review fee charged by the County is \$45.00 plus \$15.00 per additional ERC.

Based on discussion with the Engineering Section of the County, the review of the engineering documents and the field inspection of the facilities is labor intensive and also 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 a fee structure with a minimum cost and a variable component based on the size of the facilities be utilized 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.

Based on discussions with the County, in order to more accurately recover the costs incurred by the County to perform such services, a new method of fee application has been recommended. Based on an analysis of typical costs incurred by the County in the plan review process, it has been determined that the fee be based on 1.0% of the construction cost of the plan under review with a minimum charge of \$540.00. 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. The minimum bill attempts to recover the average cost incurred by the County to perform this service. This average cost determination is summarized below:

Transmission and Distribution	<u>Amount</u>
Personnel Costs	
Labor	\$412.76
Employee Benefits	<u>120.20</u>
Subtotal	532.96
Vehicle Costs	<u>10.00</u>
Total Cost	\$542.96
Rounded Rate	<u>\$540.00</u>

6.9 Reclaimed Water Service Rates

The County's primary method of effluent disposal for the County's wastewater treatment facilities is the use of spray irrigation at several sites (i.e., golf courses, residential developments, etc.) in the utility service area. The County and each of the effluent reuse customers have entered into an Agreement for the Delivery and Use of Reclaimed Effluent Water (the "Effluent Agreement") for such service. The Effluent Agreement provides for the terms and conditions of service, including the rates to be charged for such service.

The County currently charges two (2) distinct and separate rates for reclaimed water service: i) a low demand period rate of \$0.04 per 1,000 gallons which is in effect during the rainy season (June 1 through September 30); and ii) a normal demand period rate of \$0.21 per 1,000 gallons for the remaining months of the year (dry season). Based on information provided by the County, the low demand period rate was placed into effect several years ago when at that time only a handful of reclaimed customers existed and several as a mechanism to entice these users to continue applying the reclaimed water and assist the County in discarding the treated effluent. Since this point in time, the reclaimed customer base has increased significantly (nearing thirty large users) and the resulting need to sell the reuse water at a level below the cost of treating the product is no longer essential to the County. It is therefore recommended to eliminate the wet/dry season rate application structure currently in effect and adopt a year round rate which is designed to recover the costs to operate and maintain the reuse system. Based on an analysis of the costs associated with operating and maintaining these facilities that are allocable to the reuse system, a rate for reclaimed water service was developed. The rate is \$0.25 per 1,000 gallons and was developed as follows:

	FY 2002 Total Allocable System Costs
Operating and Maintenance Costs	\$573,917
Other System Revenue Requirements	447,365
Total Allocable System Costs	1,021,281
(Less) Allocable Revenues	<u>(18,000)</u>
Net Allocable System Costs	\$1,003,281
 Total Estimated Wastewater Treated (000s)	 4,089,414
 Rate	 \$0.245
Rounded	<u>\$0.25</u>

6.10 Private Fire Protection Charges

An incremental cost is assessed for fire protection that is incurred by providing additional water above amounts for general consumption for fire protection. Since the primary function of a water system is to provide water for general consumption, only those costs in addition to providing such water should be considered in the development of a fire protection charge.

In the classification of water system net revenue requirements as illustrated on Table 4-1 in Section 4 of this report, the revenue requirements of the System are allocated to their various ratemaking cost components. Based on this allocation of costs, it was determined that

approximately \$2,836,136 of the total Fiscal Year 2002 net revenue requirements were allocable to the water production, treatment and transmission operations and, therefore, determined to be recovered through application of the fire protection charge. The fire protection service is to provide reserved system capacity for the water system's hydrant and standby customers and to maintain such services in a state of readiness. Based on the allocated costs, meter or service equivalents associated with the total number of serviceable equivalent connections within the County service area, the private fire protection charges were calculated as follows:

	<u>Amount</u>
Classified Cost Allocable to Fire Protection (*)	\$2,836,136
Number of Available Water System Meter Equivalents	<u>1,488,000</u>
Monthly Rate Per Meter Equivalent	<u>\$1,9060</u>

(*) Derived from Table 4-1.

Based on the associated meter equivalent factors based on information presented by the American Water Works Association (AWWA) which pertains to the relative capacity for services, the following rates were designed:

<u>Service Size (inches)</u>	<u>Monthly Charge</u>
5/8	\$1.90
3/4	2.85
1	4.75
1-1/2	9.55
2	15.25
3	30.50
4	47.65
6	95.30
8	152.50
10	219.20

6.11 Service Line Tampering Penalty

Based on discussions with the County staff, a penalty charge was requested to be developed to deter customers connected to the County's wastewater system and from tampering with the clean-out portion of the service line. 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 service line thereby increasing the flow to the County's wastewater treatment facilities. Based on an analysis of the costs associated with LCU's 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:

	<u>Estimated Fee</u>
Labor	\$12.00
Benefits	4.09
Total Labor	16.09
Vehicle	10.00
	<u>Estimated Fee</u>
Departmental Overhead	1.70
Utilities Management Allocation	3.38
Subtotal	\$31.17
Flow allowance (000s)	10
Purposes Volumetric Rate	<u>\$3.91</u>
Flow Allowance Amount	39.10
Total Penalty	\$70.27
Rounded	<u>\$75.00</u>

In addition to the fine associated with the recovery of County costs incurred for cleaning out the collection line of debris caused by the line tampering, a fee should also be implemented to recover costs associated with restoring the illegal connection point to its original condition in addition to deterring future tampering with the County's wastewater collection system. Based on discussions with Utilities Division staff, it has been determined that a fee should be implemented to recover restoration costs and curtail individuals from tampering with the service lines in the future. It was determined after a review with Utilities Division staff that a penalty of approximately \$375.00 per occurrence should be implemented.

6.12 Water Line/Hydrant Tampering Charge

In order to deter the tampering of the County's water distribution system whereby individuals to access potable water with or without intending to reimburse the County for its use, it has been determined that a penalty fee should be implemented in order to prohibit such access. Based on discussions with County staff, it was determined that a fee should be established which is significant enough to deter these activities. A tampering fee of approximately \$500 per individual occurrence was determined to be an amount which would cause individuals to not illegally access the County water system.

6.13 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 which 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 which extend credit to customers (i.e., credit card companies). In general, the fee can usually 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.

In order to promote prompt payment, it is recommended that a fee of 1% of the outstanding amount with a minimum penalty of \$5.00 be adopted. 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 first time delinquent customer should be provided one notice during a twelve (12) month period that a late payment charge would normally have been charged, but since it is a first time occurrence, the fee has been waived in lieu of being charged. All other delinquent payments in a twelve (12) month period will be charged.
4. 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).

6.14 Fire Hydrant Meter/Backflow Preventor Deposit

The County currently loans out fire 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 appropriate 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 an analysis of costs associated with the purchase price of the meter and backflow preventors, the following deposit amounts were determined:

Meter Size	Amount
5/8" x 3/4"	\$190.00
1"	245.00
1 1/2"	460.00
2"	560.00

6.15 Plumbing Leak Inspection Charge

The County currently performs regular inspections of commercial establishments to ensure the on-site plumbing infrastructure is in proper working order, especially as it relates to identification of leaks which cause loss of water resources. Based on information provided by the County, once inspectors have toured the facilities and issued a notification identifying the problems to be repaired to the owner of the establishment, long periods of time may pass including subsequent inspection by the County until the repairs are initiated by the business owner. In order to encourage the customer to initiate repairs on a timely basis and to recover the costs incurred by the County associated with additional inspections performed by the County to ensure compliance, a fee has been designed to recoup such costs. Based on an analysis of the costs associated with performing follow-up inspections by the County, it is recommended a fee of \$45.00 be charged by the County for each follow-up inspection required until the problem has been repaired by the owner. In addition to recovering County costs, the fee will serve as an incentive to the customer to repair the problem on a more timely basis. Based on a review of costs associated with performing the plumbing inspection services, the proposed fee was estimated as follows:

	<u>Estimated Fee</u>
Labor	\$18.62
Benefits	<u>6.35</u>
Total Labor	\$24.97
Vehicle	\$10.00
Departmental Overhead	\$2.64
Utilities Management Allocation	<u>5.25</u>
Subtotal	\$42.86
Rounded Total	<u>\$45.00</u>

Table 6-1

Lee County, Florida
Water System

Development of the Cost of Meter Installation (Drop-in) Service

Line No.	Description	Standard Service				
		5/8	3/4	1	1 1/2	2
	Transmission and Distribution:					
1	Personal Costs					
2	Labor	\$30.20	\$30.20	\$40.27	\$80.54	\$80.54
3	Benefits	7.64	7.64	10.18	20.37	20.37
4	Subtotal	<u>37.84</u>	<u>37.84</u>	<u>50.45</u>	<u>100.91</u>	<u>100.91</u>
5	Departmental Overhead	21.79	21.79	29.06	58.11	58.11
6	Total Personal Costs	<u>59.63</u>	<u>59.63</u>	<u>79.51</u>	<u>159.02</u>	<u>159.02</u>
7	Materials					
8	Meter	25.66	45.32	68.67	164.80	310.07
9	Other	2.67	5.13	3.73	27.21	25.65
10	Subtotal	<u>28.33</u>	<u>50.45</u>	<u>72.40</u>	<u>192.01</u>	<u>335.72</u>
11	Equipment Cost	15.00	15.00	20.00	20.00	20.00
12	Total Transmissiion and Distribution	<u>102.96</u>	<u>125.08</u>	<u>171.91</u>	<u>371.03</u>	<u>514.74</u>
	Customer Service:					
13	Personal Costs					
14	Labor	3.22	3.22	3.22	3.22	3.22
15	Benefits	0.81	0.81	0.81	0.81	0.81
16	Subtotal	<u>4.03</u>	<u>4.03</u>	<u>4.03</u>	<u>4.03</u>	<u>4.03</u>
17	Departmental Overhead	2.59	2.59	2.59	2.59	2.59
18	Total Customer Service	<u>6.62</u>	<u>6.62</u>	<u>6.62</u>	<u>6.62</u>	<u>6.62</u>
19	Utilities Managment Allocation	8.78	8.78	11.43	22.01	22.01
20	Subtotal	<u>118.36</u>	<u>140.48</u>	<u>189.96</u>	<u>399.66</u>	<u>543.37</u>
21	Contingency Allowance	2.96	3.51	4.75	9.99	13.58
22	Total Meter Installation Cost:	<u>121.32</u>	<u>144.00</u>	<u>194.71</u>	<u>409.65</u>	<u>556.95</u>
21	Rounded Rate	<u>\$125.00</u>	<u>\$145.00</u>	<u>\$195.00</u>	<u>\$410.00</u>	<u>\$560.00</u>
22	Existing Rate	<u>\$110.00</u>	<u>\$135.00</u>	<u>\$190.00</u>	<u>\$355.00</u>	<u>\$510.00</u>

Table 6-2

Lee County, Florida
Water SystemDevelopment of the Cost of Tap-In Service

Line No.	Description	Standard Service				
		5/8	3/4	1	1 1/2	2
	Transmission and Distribution:					
1	Personal Costs					
2	Labor	\$90.61	\$90.61	\$90.61	\$135.91	\$135.91
3	Benefits	22.91	22.91	22.91	34.37	34.37
4	Subtotal	113.52	113.52	113.52	170.28	170.28
5	Departmental Overhead	65.38	65.38	65.38	98.07	98.07
6	Total Personal Costs	178.90	178.90	178.90	268.35	268.35
7	Materials					
8	Meter	25.66	45.32	68.67	164.80	310.07
9	Other	152.88	155.35	156.25	157.04	177.40
10	Subtotal	178.54	200.67	224.92	321.84	487.47
11	Equipment Cost	67.50	67.50	112.50	168.75	168.75
12	Total Transmission and Distribution	424.94	447.07	516.32	758.94	924.56
	Customer Service:					
13	Personal Costs					
14	Labor	3.21	3.21	3.21	3.21	3.21
15	Benefits	0.81	0.81	0.81	0.81	0.81
16	Subtotal	4.02	4.02	4.02	4.02	4.02
17	Departmental Overhead	2.58	2.58	2.58	2.58	2.58
18	Total Customer Service	6.60	6.60	6.60	6.60	6.60
19	Utilities Management Allocation	24.65	24.65	24.65	36.55	36.55
20	Subtotal	456.19	478.32	547.57	802.09	967.72
21	Contingency Allowance	11.40	11.96	13.69	20.05	24.19
22	Total Meter Installation Cost:	467.59	490.28	561.26	822.15	991.91
21	Rounded Rate	<u>\$470.00</u>	<u>\$490.00</u>	<u>\$560.00</u>	<u>\$825.00</u>	<u>\$990.00</u>
22	Existing Rate	<u>\$395.00</u>	<u>\$425.00</u>	<u>\$455.00</u>	<u>\$825.00</u>	<u>\$920.00</u>

SECTION 7
DEBT SERVICE COMPLIANCE



SECTION 7

DEBT SERVICE COMPLIANCE

7.1 General

This section provides a brief discussion of the ability of the water and wastewater systems to comply with certain of the bond covenants as defined in the Bond Resolution, which authorized the issuance of the Senior Lien Bonds. Specifically, the proposed rates as discussed in Section 4 must be sufficient to meet the minimum debt coverage ratios associated with the issuance of senior lien parity bonds, and meet the flow of funds dictated for the System in order to maintain financial sufficiency.

7.2 Debt Service Coverage and Covenants - Senior Lien Bonds

A major aspect which must be recognized in evaluation of utility rates is the ability of the proposed fees and charges to meet the rate covenants as contained in the Bond Resolution which authorized the issuance of the outstanding Senior Lien Bonds. Generally, these covenants are in the form of: i) certain debt service coverage ratios which are applicable to rate levels; ii) application of funds; and iii) providing no free service.

The County currently has outstanding approximately \$145,030,000 in the principal amount of senior lien revenue bonds for the System as summarized below:

<u>Issue Description</u>	<u>Principal Amount Outstanding [*]</u>
Series 1977 Bonds	\$2,420,000
Series 1983 Bonds	590,000
Series 1993 Bonds	12,105,000
Series 1999A Bonds	<u>129,915,000</u>
Total	<u>\$145,030,000</u>

[*] Outstanding as of October 1, 2001.

The above-referenced series of utility revenue bonds have been issued on a parity basis with respect to the Net Revenues of the combined water and wastewater system (collectively, the "System") being pledged towards the payment of such bonds (the series of bonds shown above being previously defined in this report as the Senior Lien Bonds).

The Bond Resolution covenants that the County will enact a rate ordinance which will fix, establish and maintain such rates, fees and charges and collect such fees, rates or other charges for the product services and facilities of the County System, and revise the same from time to time, whenever necessary, as will always provide in each fiscal year:

"...(A) Net Revenues and Special Assessment Proceeds adequate at all times to pay in each Fiscal Year at least one hundred percent (100%) of (i) the Annual Debt Service on all Outstanding Bonds becoming due in such Fiscal Year, (ii) any amounts required by the terms [of the Bond Resolution] to be deposited in the

Reserve Account (as a result of any deficiency therein)...(iii) the amounts required...to be repaid to the Water Connection Fees Funds and Sewer Connection Fees Fund, respectively, in such Fiscal Years, and (B) Net Revenues, Special Assessment Proceeds and Connection Fees in each Fiscal Year adequate to pay at least one hundred twenty percent (120%) of the Annual Debt Service on all Outstanding Bonds becoming due in such Fiscal Year."

As summarized on Table 7-1, the anticipated revenue for the water and wastewater system, assuming that the County adopts the proposed rates for the fiscal year and subsequent projected adjustments, should be adequate for the forecast period presented in this study to meet the rate covenant requirements defined in the County's Bond Resolution. The projected Debt Service Coverage requirements for Senior Lien Bonds, with and without the recognition of system connection fees is summarized below:

Fiscal Year	Net Revenues		Net Revenues and Connection Charges	
	Estimated Coverage	Required Coverage	Estimated Revenues	Required Coverage
2002	1.82	1.00	2.00	1.20
2003	1.72	1.00	1.90	1.20
2004	1.90	1.00	2.08	1.20
2005	1.82	1.00	1.99	1.20
2006	1.85	1.00	2.02	1.20

As can be seen above, it is anticipated that the County will meet the 1.20 debt service coverage requirement during the forecast period. Additionally, no increased revenues which could accrue to the System as a result of increased customer services fees and Connection Fees has been recognized due to the uncertainty of the increase or the amount of additional revenues which would be produced. If such increased revenues were reflected, it is anticipated that the debt service coverage ratio would be higher.

Based on the funding requirements for the Renewal and Replacement Fund as specified in the Bond Resolution for the Senior Lien Bonds, a minimum annual payment to the Renewal and Replacement Fund (R&R Fund) in the amount to five percent of the previous year's Gross Revenues is required unless the County's Consulting Engineers certify an amount necessary for the purposes of the Renewal and Replacement Fund. Based upon these funding requirements and discussions with the management of the County, an annual transfer to the Renewal and Replacement Fund equal to five percent of the previous years Gross Revenues was recognized. Based upon this assumption, the annual transfer to the Renewal and Replacement Fund for the forecast period is estimated as follows:

Fiscal Year	Transfer Amount
2002	\$2,351,512
2003	2,419,612
2004	2,464,194
2005	2,652,817
2006	2,690,428

7.3 Debt Service Coverage and Covenant - State Revolving Loan Program

In addition to the determination of whether rate covenants are being met for the County's revenue bond indebtedness, a separate analysis must be performed for the existing indebtedness secured from the State Revolving Loan Fund (SRF Loan) coupled with anticipated issuance of SRF indebtedness associated with proposed improvements to the County's water and wastewater system.

Based on discussions with the County and as reflected in the County's five year capital improvement budget, it is anticipated at this preliminary point in time that the County will ultimately finance approximately \$43,396,670 from the State Revolving Loan Fund. The County has currently secured approximately \$4,956,270 to finance pre-construction activities on several of the identified projects. Based on a preliminary analysis and based on discussions with County staff, it is anticipated that the full debt load (i.e., entire annual debt service payments), both pre-construction and full construction debt load, associated with the anticipated SRF Loan for this project will not begin until Fiscal Year 2005 when the estimated completion of the projects from which the borrowings are anticipated to fund were made will occur. This future SRF indebtedness as mentioned previously is in addition to the existing wastewater system SRF indebtedness for improvements to County wastewater facilities.

Pursuant to the terms and conditions of the existing State Revolving Loan Fund Agreement between the County and the FDEP (the "Loan Agreement") the SRF Loan is subordinate to the Senior Lien Bonds. Under terms of the Loan Agreement, the County shall covenant the following:

To fix, establish, and maintain such rates and charges for the services, products and facilities of, furnished by the System which will be sufficient to provide, in each Fiscal Year, Pledged Revenues equal to or exceeding 1.15 times the sum of the two Semiannual Loan Payments due in such Fiscal Year.

The anticipated revenues for the water and wastewater systems, respectively, assuming the County adopts the proposed rate increases through the forecast period presented in this study, are projected to be adequate to meet the rate covenant requirements anticipated to be required or defined in the Loan Agreements. The projected Subordinated Debt Service Coverage requirements for the individual SRF Loans, excluding the recognition of any capital connection changes, are summarized below:

	Net Pledged Revenues [1]	
	Estimated Coverage	Assumed Coverage
2002	12.94	1.15
2003	11.64	1.15
2004	13.42	1.15
2005	2.38	1.15
2006	2.47	1.15

[1] Net System Revenues less anticipated Senior Lien Bonds annual debt service applicable to the combined Water and Wastewater System.

As can be seen above, it is anticipated that the County will meet the 1.15 debt service coverage requirement during the forecast period for the two (2) individual series of subordinated indebtedness based on the assumptions reflected in the report.

7.4 Other Covenants

In addition to the rate covenant as it relates to the Net Revenues of the System meeting a defined coverage ratio, the County has other covenants with which it must comply. The following is a list of the major covenants made by the County in the Bond Resolution which has been considered in this study:

Covenant	Comments
Rate Covenant	The County has consistently established rates and charges designed so as to always provide a debt service coverage ratio of 120% of the maximum debt service requirements for its Senior Lien Bonds allocable to the System.
No Free Service	The County has implemented rates and charges designed to charge customers for all water and wastewater used and for stormwater service. All customers which receive service from the System are charged for such service.
Establishment of Funds	The County has established various funds and accounts as required by the Bond Resolution. These include a Revenue Fund, a Sinking Fund, a Renewal and Replacement Fund, a Reserve Fund, a Special Assessment Fund, and a Connection Fee Fund.
Records and Audits	The County has retained a nationally recognized public accounting firm to conduct an annual audit as required during the year.
Enforcement of Charges	The County has a number of written policies and procedures in place which are designed to compel the prompt payment of rates for services rendered, including service termination and delinquent payment procedures.
Operation and Maintenance	The County has identified a number of capital projects and improvement aimed at renewals, replacements, and upgrades of the System in order to continue to maintain the System in good condition as well as promote efficiency.

Table 7-1

Lee County, Florida
Water and Wastewater System

Analysis of Debt Service Coverage

Line No.	Description	Fiscal Year Ending September 30,				
		2002	2003	2004	2005	2006
Operating Revenues:						
1	Water System Sales Revenue	\$21,545,315	\$21,747,862	\$22,024,969	\$22,298,600	\$22,605,886
2	Wastewater System Sales Revenue	19,644,741	19,889,989	20,130,262	20,367,216	20,605,063
3	Additional Rate Revenue (2)	2,164,006	2,919,368	6,113,902	6,186,715	7,748,246
4	Subtotal	43,354,062	44,557,219	48,269,133	48,852,531	50,959,195
5	Other Operating Revenues (3)	3,203,003	3,303,110	3,384,439	3,471,551	3,565,010
6	Total Operating Revenues	46,557,066	47,860,328	51,653,572	52,324,082	54,524,206
Operating Expenses:						
7	Water System Operating Expenses	11,398,833	11,963,217	12,563,112	13,196,081	13,861,940
8	Wastewater System Operating Expenses	16,858,526	17,865,081	18,938,294	20,083,783	21,310,057
9	Total Operating Expenses	28,257,359	29,828,298	31,501,406	33,279,864	35,171,997
10	Net Operating Revenue	18,299,707	18,032,030	20,152,166	19,044,218	19,352,209
Non-Operating Income:						
11	Interest Income (4)	1,835,169	1,423,550	1,402,777	1,484,484	1,498,178
12	Special Assessments (5)	561,453	541,632	542,184	537,619	510,324
13	Total Non-Operating Income	2,396,622	1,965,181	1,944,961	2,022,104	2,008,502
14	Net Revenues Available for Other Payments	20,696,329	19,997,212	22,097,127	21,066,322	21,360,711
Other Required Payments						
15	Reserve Account (6)	0	0	0	0	0
16	Total Other Required Payments	0	0	0	0	0
17	Net Revenues Available for Debt Service	20,696,329	19,997,212	22,097,127	21,066,322	21,360,711
Pledged Connection Fee Revenues						
18	Pledged Connection Fees	2,079,120	2,035,360	1,991,600	1,969,720	1,969,720
19	Total Pledged Connection Fee Revenues	2,079,120	2,035,360	1,991,600	1,969,720	1,969,720
20	Net Revenues Available for Debt Service (Including Connection Fee Revenues)	22,775,449	22,032,572	24,088,727	23,036,042	23,330,431
Senior Lien Parity Debt Service:						
Existing Parity Indebtedness						
21	Series 1993 Water/Sewer Revenue Bonds	2,823,351	3,070,658	3,060,090	3,034,776	3,001,730
22	Series 1999A Water/Sewer Revenue Bonds	8,541,125	8,538,440	8,541,460	8,539,735	8,540,425
23	Total Senior Lien Debt Service	11,364,476	11,609,098	11,601,550	11,574,511	11,542,155
Debt Service Coverage						
25	Including Pledged Connection Fees	2.00	1.90	2.08	1.99	2.02
26	Required Coverage	1.20	1.20	1.20	1.20	1.20
27	Excluding Pledged Connection Fees	1.82	1.72	1.90	1.82	1.85
28	Required Coverage	1.00	1.00	1.00	1.00	1.00
Junior Lien Debt Service:						
29	SRF Indebtedness (Iona-McGregor)	720,926	720,926	720,926	720,926	720,926
30	SRF Indebtedness (Anticipated)	0	0	61,140	3,262,241	3,262,241
31	Total Junior Lien Debt Service	720,926	720,926	782,066	3,983,167	3,983,167
32	Junior Lien Debt Service Coverage	12.94	11.64	13.42	2.38	2.47
Other Debt Service Requirements (7)						
33	Ft. Myers Beach G.O. Bonds-Series 1977	689,848	697,198	693,963	639,788	0
34	South Ft. Myers G.O. Bonds-Series 1983	617,667	567,875	0	0	0
35	Total Other Debt Service Requirements	1,307,515	1,265,073	693,963	639,788	0
Net Funds Available After Payment of Debt Service						
36	Including Pledged Connection Fees	9,382,532	8,437,475	11,011,147	6,838,576	7,805,109
37	Excluding Pledged Connection Fees	\$7,303,412	\$6,402,115	\$9,019,547	\$4,868,856	\$5,835,389

**Lee County, Florida
Water and Wastewater System**

Analysis of Debt Service Coverage

- (1) Amounts shown reflect projections of System operations and are based on the County's Proposed Fiscal Year 2002 Operating and Capital Budget.
- (2) Amounts shown are additional revenues required (if any) during the forecast period in order to recover system expenditures and to meet the minimum bond covenant requirements (debt service coverage).
- (3) Amounts shown include miscellaneous revenues (e.g., meter installation fees, bulk and reuse sales, etc.) anticipated to be collected during the forecast period. Includes Town of Ft. Myers Beach bulk water revenues.
- (4) Amounts shown reflect estimated interest earnings on balances of the various funds created by the Bond Resolution including the Operation and Maintenance Fund, Sinking Fund, Debt Service Reserve Fund and the Renewal and Replacement Fund. Interest earned in the Water and Wastewater Impact Fees Fund have not been recognized since such earnings are restricted to such funds.
- (5) Amounts shown reflect special assessment revenues anticipated to be collected for the recovery of costs associated with system expansion programs originally funded through the issuance of revenue bonds.
- (6) Reflects required transfers (if any) to the Debt service Reserve Account in order to maintain the minimum balance requirements as defined in the Bond Resolution.
- (7) Assumes General Obligation Bond Indebtedness is subordinate to Senior Lien Indebtedness and Junior Lien Bonds (State Revolving Loan Bonds) of the System.

APPENDIX A
State of Florida Chapter 10D-6 FAC Standards
for On-Site Sewage Disposal System



STATE OF FLORIDA
DEPARTMENT OF HEALTH AND
REHABILITATIVE SERVICES
CHAPTER 10D-6, FLORIDA
ADMINISTRATIVE CODE
STANDARDS FOR ONSITE SEWAGE
DISPOSAL SYSTEMS
EFFECTIVE MARCH 17, 1992

PART I

10D-6.041 General.

(1) The provisions of Part I of this rule shall apply to all areas of the state except where specific provisions found in Part II exempt compliance with Part I requirements. Part II addresses the utilization of onsite sewage disposal systems in those counties where more than 60 percent of the surface and subsurface soils consist of Key Largo Limestone or Miami Limestone.

(2) It is the policy of the State of Florida to require that all buildings served by onsite sewage disposal systems, except approved onsite graywater systems developed under the provisions of law and administrative rules, connect to a publicly owned or investor-owned permitted sewerage system within 365 days after notification that such a system is available. However, a publicly owned or investor-owned sewerage system may, with the approval of the Department of Health and Rehabilitative Services, waive the requirement of mandatory connection to a sewerage system if it determines that such connection is not required in the public interest due to financial or public health considerations. Where a publicly owned or investor-owned sewerage system is not available, or where connection thereto is not required, the department may issue permits for the construction or installation of onsite sewage disposal systems under conditions as described in the following sections.

(3) Except for places of employment meeting the provisions of subsection 10D-10.038(1)(a)2., F.A.C., buildings used or intended for human occupancy, employment, or service to the public and locations where persons congregate shall connect toilets and other wastewater generating fixtures to an approved sewage waste disposal system. Also, property or locations where persons congregate, are employed, or where property is used by the public for temporary and short periods of duration, such as construction sites, fairs, carnivals, revivals, field locations for agricultural workers, encampments or other use shall be provided with an approved sewage waste disposal system.

(4) No municipality or political subdivision of the state shall issue a building or plumbing permit for any building requiring the use of an onsite sewage disposal system unless the owner or builder has received a construction permit for such system from the department. No municipality or political subdivision of the state shall issue an occupational license to an owner or tenant of a building or otherwise allow an individual or business to relocate into or within an area zoned or used for industrial or manufacturing purposes or its equivalent until the owner or tenant has received written approval from the department. Approval shall state that the onsite sewage disposal system serving the business has been evaluated, is not expected to receive toxic or hazardous waste, and is adequately designed to meet the sewage treatment and disposal needs of the business.

(5) Any onsite sewage disposal system hereafter designed, constructed, installed, utilized, operated or maintained in the State of Florida shall conform to the minimum requirements and provisions of this Chapter. Under emergency or epidemic conditions and when operated under its supervision, the department may approve temporary systems which may differ from standards set forth in this Chapter.

(6) Any existing and prior approved system which has been placed into use and which remains in satisfactory operating condition shall remain valid for use under the terms of the rule and permit under which it was approved. If the use of a building is changed or if additions or alterations to a building are made which will increase sewage flow or change sewage characteristics, any onsite sewage disposal system serving such building shall be brought into full compliance with the provisions and requirements of these rules. Provided, where only minor changes are made, the system, at the discretion of the HRS county public health unit, may not be required to be altered.

(7) No person shall construct, alter, modify, repair or install an onsite sewage disposal system without receiving a permit from the department. No person shall contract to construct, modify, alter, repair, service, or maintain any portion of an onsite sewage disposal system without meeting the requirements for registration as set forth in Part III of this Chapter. Property owners who personally perform construction, maintenance, or repairs to a system serving their own owner occupied single family residence are exempt from registration requirements, but shall be subject to all permitting requirements.

(8) Treatment and disposal of the sewage from a building or establishment shall be in compliance with the standards and rules of the Florida Department of Environmental Regulation, hereafter referred to as (DER when:

(a) The estimated volume of domestic sewage from an establishment exceeds 5000 gallons per day. Section 10D-6.048(1) shall be used for determining the total daily estimated establishment sewage flow from all sources located on one or more parcels of land. However, if both the HRS county public health unit and DER district office or DER delegated agency concur in writing, the HRS county public health unit shall be the permitting authority for an onsite sewage disposal system for estimated establishment flows exceeding 5000 gallons per day but not exceeding 10,000 gallons per day under the following conditions.

1. The average estimated daily sewage flow from the establishment shall be divided by the net land area associated with the establishment. The resulting number shall not exceed 1000 gallons per acre per day and,

2. No more than 2000 gallons of wastewater shall be discharged into any single onsite sewage disposal system serving the establishment.

(b) Sewage or wastewater contains industrial or toxic or hazardous chemical waste.

(c) An area is zoned for industrial or manufacturing use, or its equivalent, and where there is a likelihood the system will receive toxic, hazardous, or industrial waste.

(d) Total estimated volume of commercial sewage waste from an establishment exceeds 5000 gallons per day. Subsection 10D-6.048(1), Table II, shall be used for determining the estimated establishment sewage flow from all sources located on one or more parcels of land.

(9) With regard to subsection 10D-6.041(8)(a) and (d), when DER determines that installation of a sewage system meeting standards found in the 17 series of the Florida Administrative Code would be impractical, DER may recommend in writing that the applicant apply to the department for a variance for the use of an onsite sewage disposal system. If a variance is granted, the HRS county public health unit shall then become the permitting authority.

Specific Authority: 381.006(8), 381.0025, 381.0065, F.S.

Law Implemented: 381.006, 381.0025, 381.0065, 386 Part I, F.S.

History: New 12-22-82, Amended 2-5-85, 3-17-92

10D-6.042 Definitions For the purposes of this Chapter, the following words and phrases shall have the meanings indicated:

(1) Absorption surface - the total surface area of soil at the bottom of the soil absorption system drainfield.

(2) Aerobic treatment unit - a sewage treatment unit which incorporates a means of introducing air into sewage so as to provide aerobic biochemical stabilization within a treatment receptacle.

(3) Alternative system - any approved onsite sewage disposal system used in lieu of, including modifications to, a standard subsurface system.

(4) American National Standards Institute, hereafter referred to as ANSI - an organization comprised of trade associations, technical societies, professional groups, consumer organizations, and individual companies with headquarters located at 1430 Broadway, New York, New York 10018. This organization acts as a clearinghouse and coordinating body for voluntary standards activities in the United States, and approves as American National Standards those standards that have been developed according to its principles of openness, due process and consensus. Among its activities is accreditation of third-party certification programs.

(5) American Society for Testing Materials hereafter referred to as ASTM - a technical society with headquarters located at 1916 Race Street, Philadelphia, Pennsylvania, 19103, which develops and publishes national standards for the testing and quality assurance of construction materials.

(6) Approved - an onsite sewage disposal system constructed and installed in compliance with technical standards and requirements of this Chapter and which has received final installation approval. "Approved" installation does not imply that a system will perform satisfactorily for a specific period of time.

(7) Approved maintenance entity - any person or business entity which has been issued a written permit by the HRS county public health unit to provide maintenance services associated with approved onsite aerobic treatment units.

(8) Aquifer - a geological formation, group of formations, or part of a formation that is capable of yielding potentially usable quantities of potable water from wells or springs.

(9) Available - a municipal or investor-owned sewerage system shall be deemed available for the connection of the building plumbing if all of the following requirements are met:

(a) The sewerage system is not under a Department of Environmental Regulation moratorium;

(b) The sewerage system has adequate hydraulic capacity to accept the quantity of sewage to be generated by the proposed establishment.

(c) For all single family residences or for establishments with estimated sewage flows of 600 or less gallons per day, a sewerage system shall be considered available if a sewer line exists in a public easement or right-of-way which abuts the property, and if gravity flow can be maintained from the building drain to the sewer line.

(d) For estimated sewage flows exceeding 600 gallons per day, with the exception of single family residences, a sewerage system shall be considered available if a sewer line, force main, or lift station exists in a public easement or right-of-way which abuts the property or is within 100 feet of the property as accessed via rights-of-way or easements.

(e) For areas zoned or used for industrial or manufacturing purposes or its equivalent, a sewer line existing within 1/4 mile of the development as accessed via easements or rights-of-way shall be considered available. For repair or modification purposes, an available sewer is any sewer line within 500 feet of the building sewer stub out as accessed via rights-of-way or easements.

(10) Base Flood - the flood having a one percent chance of being equaled or exceeded in any given year.

(11) Bedroom - a room designed primarily for sleeping or a room which is expected to routinely provide sleeping accommodations for occupants.

(12) Building Area - that enclosed habitable area of a dwelling unit, excluding the garage, carport, exterior storage shed, or open or fully screened patios or decks. Calculations of building area shall be made by measurements of the outside building dimensions. Building area of each story of the structure shall be added to determine the total building area.

(13) Commercial Sewage Waste - Non-toxic, non-hazardous wastewater from commercial facilities which is usually similar in composition to domestic wastewater, but which may occasionally have one or more of its constituents exceed domestic ranges. Included in this definition are commercial and institutional food operations, self-service laundries with no more than 4 machines, and animal holding facilities.

(14) Department - the Department of Health and Rehabilitative Services including authorized agents of the individual HRS county public health units.

(15) Domestic sewage waste - human body waste and wastewater, including bath and toilet waste, residential laundry waste, residential kitchen waste and other similar waste from household or establishment appurtenances. Domestic sewage waste are further categorized as:

(a) Blackwater - waste carried off by toilets, urinals, and kitchen drains.

(b) Graywater - all domestic waste not covered in (a) above and including bath, lavatory, laundry and sink except kitchen sink waste.

(16) Drainage Ditch - a manmade trench dug for the purpose of draining water from the land or for transporting water for use on the land. Swales are excluded from this definition.

(17) Drainfield - a system of open-jointed or perforated piping, approved alternative distribution units, or other treatment facilities designed to distribute effluent for filtration, oxidation and absorption by the soil within the zone of aeration.

(18) Dwelling Unit - a residence for the housing of a single family whether such residence is a detached structure or a unit of a multiple family building.

(19) Effective capacity - the liquid volume of a tank contained below the liquid level line.

(20) Effective soil depth - the depth of slightly or moderately limited soil material at an onsite sewage disposal system drainfield site.

(21) Establishment - a multi-family housing, apartment, condominium or townhouse complex, a mobile home park or recreational vehicle park, or a non-residential commercial or institutional development including, but not limited to, shopping centers or a place of business, or assembly. An establishment includes all buildings or structures, and the land appertaining thereto and will generally have a homeowners association or other legal entity which is responsible for maintenance and operation of the development's sewage treatment and disposal facilities.

(22) Experimental - an onsite sewage disposal system not specifically described in this Chapter which has been submitted for review and has been approved by the State Health Office for limited or restricted use while undergoing a period of testing and evaluation.

(23) Failure - a condition existing within an onsite sewage treatment system which prohibits the system from functioning in a sanitary manner and which may result in the discharge of untreated or partially treated wastewater onto ground surface, into surface water, into ground water, or which may

result in the failure of building plumbing to discharge properly.

(24) Filled System - a drainfield system where a portion, but not all, of the drainfield trench

sidewalls or absorption bed sidewalls are located at an elevation above the elevations of undisturbed native soil on the site (see Figure 1).

FILLED TRENCH DRAINFIELD SYSTEM

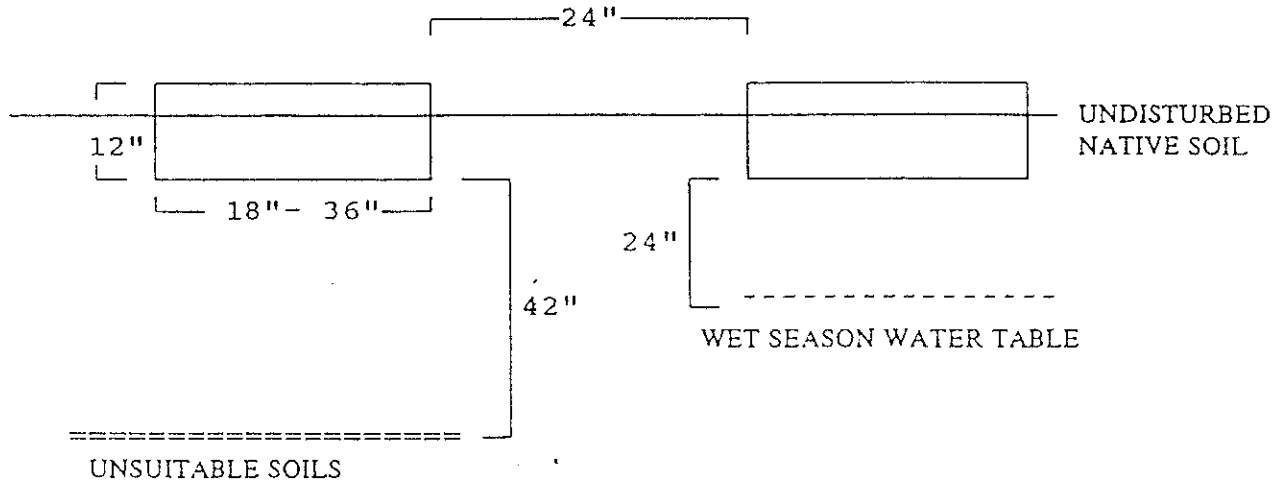


FIGURE 1

(25) Flooding - a covering of soil surface by water from any source, such as streams overflowing their banks, runoff from adjacent or surrounding slopes, elevation of the ground water table exceeding that of the soil surface, or combinations of these. Terms also associated with flooding and used elsewhere in this Chapter are:

(a) Frequent - flooding which occurs more than once every two years on the average;

(b) Ten year flood elevation - that flood elevation which has a 10 in 100 probability of being equaled or exceeded in any calendar year.

(26) Food Establishment Sludge - oils, fats, greases, food scraps and other grease interceptor pumpings generated by a food operation or institutional food preparation facility.

(27) Industrial, hazardous or toxic sewage waste - wastewater not otherwise defined as domestic sewage waste or commercial sewage waste. Wastewater carried off by floor drains, utility sinks and equipment drains located in buildings in industrial or manufacturing areas, estimated volumes of commercial sewage wastes exceeding 5000 gallons per day wastewater from commercial laundry facilities with more than 4 self-service

machines, and wastewater from car and truck washes are included in this definition.

(28) Limitation ratings - U.S. Department of Agriculture hereafter referred to as the USDA Soils Classification ratings which describe the relative suitability of soils to properly assimilate sewage effluent. The three rating categories as modified for the purpose of this rule are:

(a) Slightly limited - soil materials with favorable properties for the use of an onsite soil absorption system.

(b) Moderately limited - soil materials that have properties moderately favorable for use.

(c) Severely limited - soil materials which have one or more properties unsuitable for the use of an onsite soil absorption system.

(29) Lot - a parcel or tract of land described by metes and bounds or the least fractional part of subdivided lands having limited fixed boundaries, and an assigned number, letter or other name through which it may be identified.

(30) Mean high water - the average height of tidal high waters over a 19 year period.

(31) Mean high water line - the intersection of the tidal plane of mean high water with the shore.

(32) Mound system - a drainfield constructed at a prescribed elevation in a prepared area of fill material. All drainfields where any part of the bottom surface of the drainfield trench or absorption

bed is located at or above the elevation of undisturbed native soil in the drainfield area is a mound system (see Figure 2).

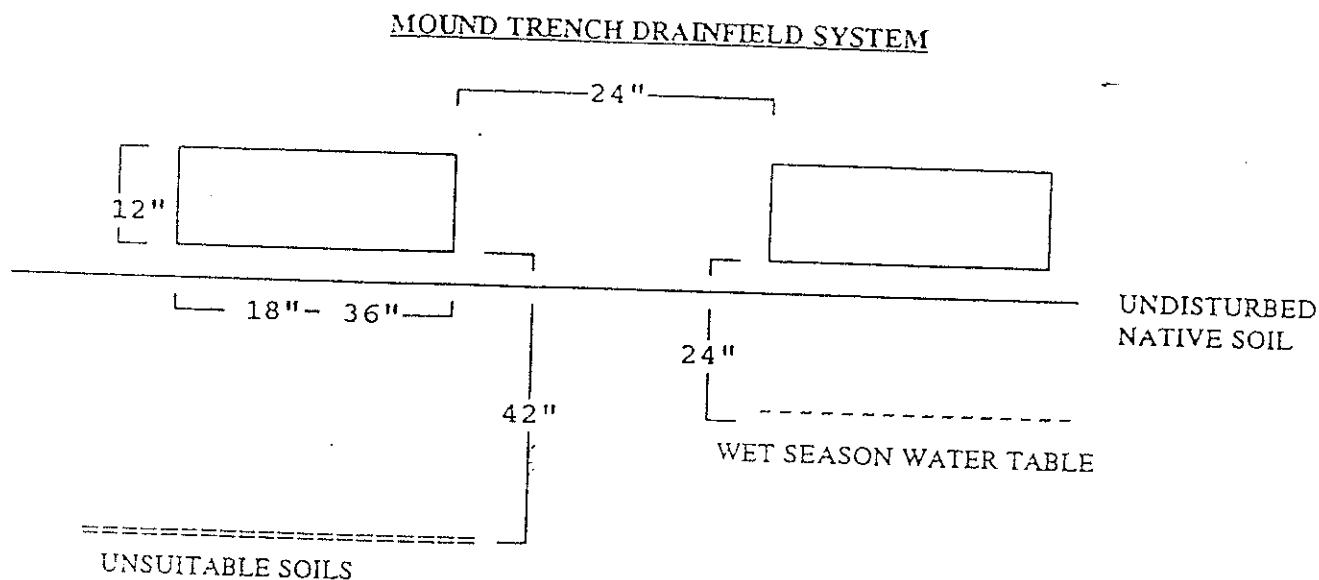


FIGURE 2

(33) National Sanitation Foundation International, hereafter referred to as NSF - a not for profit research, education and service organization located at 3475 Plymouth Road, Ann Arbor, Michigan, 48106, that develops standards and criteria for equipment, products and services that bear upon health.

(34) Non-potable water well - a well intended exclusively for irrigation purposes, or for supplying water to a heat pump system or a well for receiving discharge water from a heat pump system.

(35) "O" Horizon - the layer of organic matter on the surface of a mineral soil. This soil layer consists of decaying plant residues.

(36) Obstructed land - those areas on a lot or property used for such purposes as pools, concrete slabs, buildings, driveways, parking and similar areas which would prohibit, hinder, or affect the installation, operation or maintenance of an onsite sewage disposal system.

(37) Onsite sewage disposal system, also referred to as system - a sewage treatment and disposal facility, which may contain a standard subsurface, filled, or mound drainfield system, an aerobic treatment unit, a graywater system tank, a laundry wastewater system tank, a septic tank, a grease interceptor, a dosing tank, a solids or effluent

pump, alternative system or experimental system, installed or proposed to be installed beyond a building sewer on land of the owner or on other land to which the owner or owners have the legal right to install a system.

(38) Ordinary high water line, non-tidal - a line determined by examining the bed and banks of a water body and ascertaining where the presence and action of the water has marked upon the bed a character distinct from that of the banks with respect to vegetation or the nature of the soil itself.

(39) Potable water well - a source of water used for drinking, culinary or domestic purposes. The following classifications of potable wells are used in this Chapter.

(a) Private potable well - a well used only by 4 or less non-rental residences.

(b) Public drinking water well - a well serving any drinking water system other than a private water system. Public systems are classified in the following manner:

1. Community public water system - as defined in subsection 403.852(3), F.S., such water system serves a year-round residential population of at least 25 people per day or has a minimum of 15 year-round residential service connections.

(6) To prevent soil smear and excessive soil compaction, drainfields shall not be installed in soils with textures finer than sand, loamy sand, or sandy loam when the soil moisture content is above the point at which the soil changes from semi-solid to plastic.

(7) Onsite sewage disposal systems may be installed where a sewerage system is not available and when conditions in following subsections (a) through (e) are met. Individual onsite graywater tank and drainfield systems may be utilized provided blackwater is disposed into a sanitary sewerage system when such sewerage system is available. Graywater systems may also be utilized in conjunction with an onsite blackwater system where a sewerage system is not available for blackwater disposal.

(a) Subdivisions and lots where each lot has a minimum area of at least 1/2 acre and either a minimum dimension of 100 feet or a mean of at least 100 feet of the side bordering the street and the distance formed by a line parallel to the side bordering the street drawn between the two most distant points of the remainder of the lot, may be developed with private potable wells or wells serving water systems as defined in 10D-6.042(39)(b)4. and onsite sewage disposal systems, provided the projected daily domestic sewage flow does not exceed an average of 1500 gallons per acre per day and provided satisfactory drinking water can be obtained and all distance and setback, soil condition, water table elevation and other related requirements of Chapter 10D-6 are met. Dividing an approved lot into two or more lots or parcels for the purpose of conveying the ownership of a portion of the approved lot to another shall be considered a subdivision of the lot. The resulting lots shall meet the lot size provisions of this subsection. Subsection 10D-6.046(7)(d)3. shall be used for determining compliance with the 1500 gallons per acre per day sewage flow allowance of this subsection.

(b) Subdivisions and lots utilizing a public water system as defined in subsection 10D-6.042(39)(b)1., 2. and 3. may utilize onsite sewage disposal systems provided there are no more than four lots within any given usable acre of the subdivision, provided the projected daily domestic sewage flow does not exceed an average of 2500 gallons per acre per day, and provided that all distance and setback, soil condition, water table elevation and other related requirements which are generally applicable to the use of onsite sewage disposal systems are met. Dividing an approved lot into two or more lots or parcels for the purpose of

conveying the ownership of a portion of the approved lot to another shall be considered a subdivision of the lot. The resulting lots shall not exceed the four lot per acre provision of this subsection. Subsection 10D-6.046(7)(d)3. shall be used for determining compliance with the 2500 gallons per acre per day sewage flow allowance of this subsection.

(c) Provided mandatory sewerage system connection under the provisions of subsection 10D-6.041(2) has not been waived, subsections 10D-6.046(7)(a) and (b) shall not apply to areas where a municipally owned or investor-owned and approved public sewerage system is available contiguous to the proposed subdivision or within 1/4 mile as accessed via public rights-of-way or easements.

(d) Whenever onsite sewage waste disposal systems are used under the provisions of subsections 10D-6.046(7)(a),(b), or (e), the following shall apply:

1. The minimum area of each lot under subsection 10D-6.046(7)(a) shall consist of at least 1/2 acre (21,780 square feet) exclusive of all paved areas and prepared road beds within public rights-of-way or easements and exclusive of streams, lakes, normally wet drainage ditches, marshes or other such bodies of surface water.

2. The determination of lot densities under 10D-6.046(7)(b) shall be made on the basis of the net acreage of the subdivision which shall exclude from the gross acreage all paved areas and prepared road beds within public or private rights-of-way or easements and shall also exclude streams, lakes, normally wet drainage ditches, marshes or other such bodies of surface water.

3. Maximum daily sewage flow allowances specified in subsections 10D-6.046(7)(a),(b), and (e) shall be calculated on an individual lot by lot basis. The acreage or fraction of an acre of each lot or parcel of land shall be determined and this value shall be multiplied by 2500 gallons per acre per day if a public drinking water well serving a public system as defined in 10D-6.042(39)(b)1., 2., or 3. is utilized, or be multiplied by 1500 gallons per acre per day if a public drinking water well serving a public water system as defined in subsection 10D-6.042(39)(b)4., or a private potable well is utilized. Contiguous unpaved and noncompacted road rights-of-way, and easements with no subsurface obstructions that would affect the operation of drainfield systems, shall be included in total lot size calculations. Where an unobstructed easement is contiguous to two or more lots, each lot shall receive its pro rata share of the area contained in the

easement. Streams, lakes, normally wet drainage ditches, marshes and other such bodies of surface water shall not be included in total lot size calculations. Subsection 10D-6.048(1), Table II, shall be used for determining estimated average daily sewage flows for non-residential establishments. For residences and residential establishments, when determining compliance with this subsection, average daily sewage flow calculations shall be based on Table I. Where the number of bedrooms indicated on the floor plan and the corresponding building area of a dwelling unit in Table I do not coincide, the criteria which will result in the greatest estimated daily sewage flow shall apply.

TABLE I
For Determining Pro Rata Share of 1500 or 2500 Gallons per Acre

NUMBER OF BEDROOMS AND BUILDING AREA OF EACH DWELLING UNIT	GALLONS OF SEWAGE FLOW PER DAY PER DAY PER DWELLING UNIT
--	--

1 Bedroom with 750 Sq. Ft. or Less	150
--	-----

2 Bedrooms with 751 -1200 Sq. Ft.	250
--	-----

3 Bedrooms with 1201 -2250 Sq. Ft.	350
---	-----

4 Bedrooms with 2251 to 3300 Sq. Ft.	450
---	-----

Each additional bedroom or each additional 750 Sq. Ft. of building area or fraction thereof shall increase estimated sewage flows by 100 gallons per dwelling unit.

Residential spaces in mobile home parks shall be calculated at 200 gallons per space per day. Actual system design shall be calculated from figures found in Table II for mobile home parks.

4. The actual design and size of individual systems to serve non-residential establishments and residences shall be based on requirements found in sections 10D-6.048 and 10D-6.049.

(e) All provisions of these rules relating to soil condition, water table elevation, distance, and other

setback requirements shall be equally applied to all lots regardless of the date of platting, except that lots platted prior to 1972 shall be subject to a minimum surface water setback of 50 feet and shall not be subject to minimum lot size requirements specified for subdivisions in subsection 10D-6.046(7)(a) and (b). The daily sewage flow allowance for lots platted before 1972 shall be calculated as per subsection 10D-6.046(7)(e)3. and shall not exceed an average of:

1. Twenty-five hundred gallons per acre per day for lots served by a public drinking water system as defined in subsection 10D-6.042(39)(b)1., 2., and 3.

2. Fifteen hundred gallons per acre per day for lots served by private potable wells or wells serving systems as defined in 10D-6.042(39)(b)4. However, lots at least 5500 square feet in total size shall qualify for a single family residence having not more than two bedrooms or not more than 1000 square feet of building area.

3. When lots platted prior to 1972 are divided on or after January 1, 1972 and deeded to other existing lots of record which were also platted prior to 1972, the resulting combined lots must comply with standards for lots platted on or after January 1, 1972, regardless of the official date of platting.

Specific Authority: 381.006(8), 381.0065 F.S.

Law Implemented: 381.006(8), 381.0065, 386 Part I, F.S.

History: New 12-22-82, Amended 2-5-85, 3-17-92

10D-6.047 Site Evaluation Criteria. Onsite sewage disposal systems may be utilized where lot sizes are in compliance with requirements of subsection 10D-6.046(7) and all of the following criteria are met:

(1) The effective soil depth throughout the drainfield installation site extends 42 inches or more below the bottom surface of the drainfield trench or absorption bed. Subsections (a), (b) and (c) list soil texture classes with their respective limitation ratings.

(a) Coarse sand not associated with a high seasonal ground water table, sand, fine sand, loamy coarse sand, coarse sandy loam, loamy sand, and sandy loam are considered to be slightly limited soil materials.

(b) Very fine sand, loamy fine sand, loamy very fine sand, silt loam, silt, loam, fine sandy loam, very fine sandy loam, sandy clay loam, clay loam, silty clay loam, sandy clay and silty clay soil are considered to be moderately limited soil materials and are subject to evaluation with other influencing factors and local conditions.

(c) Clay, bedrock, fractured rock, hardpan, organic soil, gravel and coarse sand, when coarse sand is associated with an estimated wet season high water table within 48 inches of the bottom of the drainfield are severely limited soil materials. If severely limited soil material can be replaced with slightly limited soil material, see Footnotes 3 and 4 of Table IV for minimum requirements.

(2) The water table elevation at the wettest season of the year is at least 24 inches below the bottom surface of the drainfield trench or absorption bed. In addition, systems shall not be located where the wet season water table elevation in the area of the proposed system installation is determined to be at or above the elevation of the existing ground surface. However, when the department is satisfied that sufficient suitable fill material will be permitted to be placed on the property to construct a properly designed onsite sewage disposal system, the department shall authorize construction based on the final lot elevation. This provision does not authorize a property owner to fill or modify the site without first obtaining necessary permits for site preparation work from other agencies of government having jurisdiction. When available, the following information shall be used in determining the wet season water table elevations:

(a) U.S. Department of Agriculture Soil Conservation Service soils maps and soil interpretation records.

(b) Evaluation of soil color and the presence or absence of mottling.

(c) Evaluation of impermeable or semi-permeable soil layers.

(d) Evaluation of onsite vegetation.

(e) An on-site evaluation of the property which has used the above referenced sources of information and which has considered the season of the year when the evaluation was performed, historic weather patterns, and recent rainfall events.

(3) Setbacks in subsections 10D-6.046(1), (2), (3) and (4) are met.

(4) The site of the installation and the additional required unobstructed land referred to in subsection 10D-6.046(4) shall not be covered with asphalt or concrete, or be subject to vehicular traffic or other activity as defined in 10D-6.042(36) which would adversely affect the soil.

(5) The site of the installation and the additional required unobstructed land referred to in subsection 10D-6.046(4) is not subject to saturation from sources such as artificial drainage of ground surfaces, driveways, roads or roof drains.

(6) The existing lot elevation at the site of the proposed system installation and any contiguous land referred to in Section 10D-6.046(4), shall not be subject to frequent flooding. However, when the department is satisfied that sufficient suitable fill material will be permitted to be placed on the property to construct a properly designed onsite sewage disposal system, the department shall authorize construction based on the final lot elevation. This provision does not authorize a property owner to fill or modify the site without first obtaining necessary permits for site preparation work from other agencies of government having jurisdiction. In addition, the bottom surface of the drainfield trench or absorption bed shall not be subject to flooding based on 10-year flood elevations. U. S. Department of Agriculture Soil Conservation Service soils maps, State of Florida Water Management Districts data, and Federal Emergency Management Agency Flood Insurance maps are resources that can be used to identify flood prone areas. Mound systems, sand filters or other systems which require the placement of fill material or construction of above grade structures, will not be authorized within a regulatory floodway unless certified by an engineer registered in the State of Florida that the placement of such fill or structures will not increase the water surface elevation of the base flood. The certification of such systems shall be substantiated by data and method of calculation provided by the engineer and shall be subject to review and approval by the county public health unit.

Specific Authority: 381.006(8), 381.0065 F.S.

Law Implemented: 381.006(8), 381.0065, 386 Part I, F.S.

History: New 12-22-82, Amended 2-5-85, 3-17-92

10D-6.048 System Size Determinations.

(1) Minimum design flows for systems serving any structure, building or group of buildings shall be based on the estimated daily sewage flow as determined from Table II or the following:

(a) The HRS county public health unit may accept, for other than residences and food operations, metered water use data in lieu of the estimated sewage flows set forth in Table II. For metered flow consideration, the applicant shall provide authenticated monthly water use data documenting water consumption for the most recent 12 month period for at least six similar establishments. Similar establishments are those like size operations engaged in the same type of business or service, which are located in the same type of geographic environment, and which have

approximately the same operating hours. Metered flow values will not be considered to be a reliable indicator where one or more of the establishments utilized in the sample has exceeded the monthly flow average for all six establishments by more than 25 percent or where the different establishments demonstrate wide variations in monthly flow totals. When metered flow data is accepted in lieu of estimated flows found in Table II, the highest flow which occurred in any month for any of the six similar establishments shall be used for system sizing purposes.

(b) Where ultra low volume water saving toilets are used exclusively, a 15 percent reduction in estimated daily sewage flow shall be acknowledged for residential applications and a 25 percent reduction shall be allowed for non-residential applications where food is not prepared. However, use of ultra low volume water saving toilets shall not reduce average projected daily sewage flow calculations used for determining compliance with the provisions of 10D-6.046(7)(a), (b) and (e), or for the determination of septic tank capacities as provided in Table III. When onsite systems use multiple strategies to reduce the total estimated sewage flow or the drainfield size, only one reduction method shall be allowed.

TABLE II
For System Design
ESTIMATED SEWAGE FLOWS

TYPE OF ESTABLISHMENT GALLONS PER DAY

COMMERCIAL:

Airports, bus terminals, train stations, port & dock facilities	
(a) per passenger	5
(b) add per employee per 8 hour shift	20
Barber & beauty shops per service chair.....	100
Bowling alleys (no food operation toilet wastes only per lane	100
Country club	
(a) per resident.....	100
(b) add per member or patron	25
(c) add per employee per 8 hour shift.....	20
Dentist offices	
(a) per wet service chair.....	200
(b) add per non-wet service chair.....	50
Doctors offices	
(a) per practitioner	250
(b) add per employee per 8 hour shift	20
Factories, exclusive of industrial wastes gallons per employee per 8 hour shift	

(a) No showers provided	20
(b) Showers provided.....	35
Flea Market open 3 or less days per week	
(a) per non-food service vendor space.....	15
(b) add per food service establishment using single service articles only per 100 square feet of floor space	50
(c) per limited food service establishment	25
(d) for flea markets open more than 3 days per week estimated flows shall be doubled	
Food operations	
(a) Restaurant operating less than 20 hours per day per seat.....	50
(b) Restaurant operating 20 hours or more per day per seat.....	75
(c) Restaurant using single service articles only per seat	25
(d) Bar and cocktail lounge per seat.....	30
(e) Drive-in restaurant per car space.....	50
(f) Carry out only	
1 per 100 square feet of floor space.....	50
2 add per employee per 8 hour shift	20
(g) Institutions per meal.....	5
(h) Food Outlets excluding deli's, bakery, or meat department per 100 square feet of floor space.....	10
1. add for deli per 100 square feet of deli floor space	50
2. add for bakery per 100 square feet of bakery floor space	50
3. add for meat department per 100 square feet of meat department floor space	100
4. add per water closet.....	250
Hotels & Motels	
(a) Regular per room.....	150
(b) Resort hotels, camps, cottages per person.....	75
(c) Add for establishments with self service laundry facilities per machine	750
Mobile Home Park	
(a) per single wide mobile home space, less than 4 single wide spaces connected to a common onsite system	300
(b) per single wide mobile home space, 4 or more single wide spaces are connected to a common onsite system	250
(c) per double wide mobile home space, less than 4 double wide mobile	

home spaces connected to a common onsite system	400
(d) per double wide mobile home space, 4 or more double wide mobile home spaces connected to a common onsite system	350
Office building	
per employee per 8 hour shift or	20
per 100 square feet of floor space,	20
whichever is greater	
Recreational vehicle park	
(a) Recreational vehicle space for overnight stay, without water and sewer hookup per vehicle space	75
(b) Recreational vehicle space for overnight stay with water and sewer hookup per vehicle space	100
Service stations per water closet	250
Shopping centers without food or laundry	
per square foot of floor space	0.1
Stadiums, race tracks, ball parks per seat	5
Stores per square foot of floor space	0.1
Swimming and bathing facilities, public	
per person.....	10
Theaters	
(a) Indoor, auditoriums per seat	5
(b) Outdoor, drive-ins per space.....	10
Veterinary Clinic	
(a) per practitioner	250
(b) add per employee per 8 hour shift	20
(c) add per kennel, stall or cage	20
Warehouse, up to 100,000 square feet	
per 1000 square feet of floor space.....	75
Warehouse, over 100,000 square feet of floor space	
(a) per water closet	250
(b) add per employee per 8 hour shift	20
(c) add per loading bay	100

INSTITUTIONAL:

Churches per seat.....	3
Hospitals per bed which does not include kitchen wastewater flows	200
Nursing, rest homes, adult congregate living facilities per bed which does not include kitchen wastewater flows.....	100
Parks, public picnic	
(a) with toilets only per person	5
(b) with bathhouse, showers & toilets per person.....	10
Public institutions other than schools and hospitals per person which does not include kitchen wastewater flows.....	100

Schools per student	
(a) Day-type	15
(b) Add for showers	5
(c) Add for cafeteria.....	5
(d) Add for day school workers	20
(e) Boarding-type	75
Work/construction camps, semi-permanent per worker... ..	50

RESIDENTIAL:

Residences	
(a) Single or multiple family per dwelling unit	
1 bedroom with 750 sq. ft. or less of building area	150
2 bedrooms with 751-1200 sq. ft. of building area	300
3 bedrooms with 1201-2250 sq. ft. of building area	450
4 bedrooms with 2251-3300 sq. ft. of building area	600
For each additional bedroom or each additional 750 square feet of building area or fraction thereof in a dwelling unit, system sizing shall be increased by 150 gallons per dwelling unit.	
(b) Other per occupant	75

Footnotes to Table II:

1. For food operations, kitchen wastewater flows shall normally be calculated as 66 percent of the total establishment wastewater flow.
2. Systems serving high volume establishments, such as fast food restaurants, convenience stores and service stations located near interstate type highways and similar high-traffic areas, require special sizing consideration due to above average sewage volume expected from restroom facilities. Minimum estimated flows for these facilities shall be 3.0 times the volumes determined from the Table II figures.
3. For residences, the volume of wastewater shall be calculated as 50 percent blackwater and 50 percent graywater.
4. Where the number of bedrooms indicated on the floor plan and the corresponding building area of a dwelling unit in Table II do not coincide, the criteria which will result in the greatest estimated sewage flow shall apply.
5. Convenience store estimated sewage flows shall be determined by adding flows for food outlets and service stations as appropriate to the products and services offered.

6. Estimated flows for residential systems assumes a maximum occupancy of two persons per bedroom. Where residential care facilities will house more than two persons in any bedroom, estimated flows shall be increased by 75 gallons per each additional occupant.

(2) Minimum effective septic tank capacity shall be determined from Table III. However, where multiple family dwelling units are jointly connected to a septic tank system, minimum effective septic tank capacities specified in the table shall be increased 75 gallons for each dwelling unit connected to the system. When estimated sewage flows exceed 1500 gallons per day; when high volume water use fixtures such as spas and hot tubs are installed; when garbage grinders are used; or when commercial sewage waste is to be treated, a multiple chambered tank or tanks in series shall be required to attain the minimum effective tank capacities shown in Table III.

TABLE III
SEPTIC TANK CAPACITY

AVERAGE SEWAGE FLOW in Gallons/Day	MINIMUM EFFECTIVE CAPACITY in Gallons
0-500.....	900
501-600.....	1050
601-700.....	1200
701-800.....	1350
801-900.....	1500
901-1000.....	1650
1001-1250.....	1900
1251-1500.....	2200
1501-2000.....	2700
2001-2500.....	3200
2501-3000.....	3700
3001-3500.....	4300
3501-4000.....	4800

4001-4500.....5300

4501-5000.....5800

(3) Where a separate graywater tank and drainfield system is used, the minimum effective capacity of the graywater retention tank shall be 250 gallons with such system receiving not more than 75 gallons of flow per day. For graywater systems receiving flows greater than 75 gallons per day, minimum effective tank capacity shall be based on the average daily sewage flow plus 200 gallons for sludge storage. Design requirements for graywater retention tanks are described in subsection 10D-6.054(2). Where separate graywater and blackwater systems are utilized, the size of the blackwater system can be reduced, but in no case shall the blackwater system be reduced by more than 25 percent. However, the minimum capacity for septic tanks disposing of blackwater shall be 900 gallons.

(4) A separate laundry waste tank and drainfield system may be utilized for residences and may be required by the HRS county public health unit where building codes allow separation of discharge pipes of the residence to separate stubouts and where lot sizes and setbacks allow system construction. Where an aerobic treatment unit is used, all blackwater, graywater and laundry waste flows shall be consolidated and treated by the aerobic treatment unit. Where a residential laundry waste tank and drainfield system is used:

(a) The minimum laundry waste trench drainfield absorption area shall be 75 square feet for a one or two bedroom residence with an additional 25 square feet for each additional bedroom. The HRS county public health unit may require additional drainfield area depending on site specific conditions.

(b) The laundry waste interceptor shall meet requirements of subsection 10D-6.054(4).

(c) The drainfield absorption area serving the remaining wastewater fixtures in the residence may be reduced by 25 percent.

(5) The minimum absorption area for standard subsurface drainfield systems, graywater drainfield systems, and filled systems shall be based on estimated sewage flows and Table IV so long as estimated sewage flows are 300 gallons per day or higher. When estimated sewage flows are less than 300 gallons per day, system size shall be based on a minimum of 300 gallons per day.

TABLE IV
For Sizing of Drainfields Other Than Mounds

U.S. DEPARTMENT OF AGRICULTURE SOIL TEXTURAL CLASSIFICATION	SOIL TEXTURE LIMITATION (PERCOLATION RATE)	MAXIMUM SEWAGE LOADING RATE TO TRENCH & BED BOTTOM IN GALLONS PER SQUARE FOOT PER DAY	
		TRENCH	BED
Sand; Coarse Sand not associated with a high seasonal water table; Loamy Coarse Sand	Slightly limited (Less than 2 min/inch)	1.75	1.25
Loamy sand; Sandy Loam; Coarse Sandy Loam; Fine Sand	Slightly limited (2-4 min/inch)	1.25	1.00
Loam; Fine sandy loam; Silt Loam; Very Fine Sand; Very Fine Sandy Loam; Loamy Fine Sand; Loamy Very Fine Sand	Moderately limited (5-10 min/inch)	1.00	0.50
Silt; Sandy Clay Loam	Moderately limited (Greater than 10 min/inch but not exceeding 15 min/inch)	0.75	0.375
Clay Loam; Silty Clay Loam Sandy Clay; Silty Clay	Moderately limited (Greater than 15 min/inch but not exceeding 30 min/inch)	0.50	0.25
Clay; Organic Soils; Hardpan; Bedrock	Severely limited (Greater than 30 min/inch)	Unsatisfactory for standard subsurface system	
Coarse Sand with an estimated wet season high water table within 48 inches of the bottom of the proposed drainfield; Gravel or Fractured Rock	Severely limited (Less than 1 min/inch and a water table less than 4 feet below the drainfield)	Unsatisfactory for standard subsurface system	

Footnotes to Table IV:

1. U.S. Department of Agriculture major soil textural classification groupings and methods of field identification are explained in 10D-6.058(1)-(8). Laboratory sieve analysis of soil samples may be necessary to confirm field evaluation of specific soil textural classifications. The USDA Soil Conservation Service "Soil Textural Triangle" shall be used to classify soil groupings based on the proportion of sand, silt and clay size particles.

2. The permeability or percolation rate of a soil within a specific textural classification may be affected by such factors as soil structure, cementation and mineralogy. Where a percolation rate is determined using the falling head percolation test procedure described in the United States

Environmental Protection Agency Design Manual for Onsite Wastewater Treatment and Disposal Systems, October, 1980, incorporated by reference into this rule, the calculated percolation test rate shall be used with Table IV and evaluated by the HRS county public health unit with other factors such as history of performance of systems in the area in determining the minimum sizing for the drainfield area.

3. When all other site conditions are favorable, horizons or strata of moderately or severely limited soil may be replaced with slightly limited soil or soil of the same texture as the satisfactory slightly limited permeable layer lying below the replaced layer. The slightly limited permeable layer below the replaced layer shall be

identified within the soil profile which was submitted as part of the permit application. The resulting soil profile must show complete removal of the moderately or severely limited soil layer being replaced and must be satisfactory to a minimum depth of 54 inches beneath the bottom surface of the proposed drainfield. The width of the replacement area shall be at least three times the drain trench width and for absorption beds shall include an area at least 2 feet wider and longer than the proposed bed. Drainfields shall be centered in the replaced area. Where at least 33 percent of the moderately limited soils at depths greater than 54 inches below the bottom of the drainfield have been removed to the depth of slightly limited soil, drainfield sizing shall be based on the following sewage loading rates. Where severely limited soils are being removed at depths greater than 54 inches below the bottom of the drainfield, 100 percent of the severely limited soils at depths greater than 54 inches shall be removed down to the depth of an underlying slightly limited soil. Maximum sewage loading rates for standard subsurface systems installed in replacement areas shall be 1.25 gallons per square foot per day for trench systems and 1.0 gallon per square foot per day for absorption beds in slightly limited soil textures. Where moderately limited soil materials are found beneath the proposed drainfield, and where system sizing is based on that moderately limited soil, soil replacements of less than 33% may be permitted.

4. Where coarse sand, gravel, or fractured rock directly underlies the drainfield area, and where the water table at the wettest season of the year is less than four feet below the bottom surface of the proposed drainfield, the site may be approved provided a minimum depth of 24 inches of the rapidly percolating soil beneath the bottom absorption surface of the drainfield and a minimum 12 inches of rapidly percolating soil contiguous to the drainfield sidewall absorption surfaces, is replaced with slightly limited soil material. Where such replacement method is utilized, the drainfield size shall be determined using a maximum sewage application rate of 1.25 gallons per square foot per day of drainfield in trenches and 1.0 gallon per square foot per day for drainfield absorption beds.

5. Where more than one soil texture classification is encountered within a soil profile and it is not removed as part of a replacement, drainfield sizing shall be based on the most restrictive soil texture encountered within 36 inches of the bottom of the drainfield absorption surface.

Specific Authority: 381.006(8), 381.0065, F.S.

*Law Implemented: 381.006(8), 381.0065, 386 Part 1, F.S.
History: New 12-22-82, Amended 2-5-85, 3-17-92*

10D-6.049 Alternative Systems. When approved by the HRS county public health unit, alternative systems may be utilized in circumstances where standard subsurface systems are not suitable or where alternative systems are more feasible. Unless otherwise noted, all rules pertaining to siting, construction, and maintenance of standard subsurface systems shall apply to alternative systems. In addition, the HRS county public health unit may require the submission of plans prepared by an engineer registered in the State of Florida and qualified in the field of wastewater system design prior to considering the use of any alternative system. The HRS county public health unit shall require the design engineer to certify that the installed system complies with the approved design and installation requirements.

(1) Waterless, incinerating or organic waste composting toilets may be approved for use if found in compliance with standards for Wastewater Recycle/Reuse and Water Conservation Systems as defined by ANSI/NSF International Standard Number 41, revised May 1983, hereby incorporated by reference, and provided that graywater and any other liquid and solid waste is properly collected and disposed of in accordance with standards established in this Chapter.

(2) Sanitary pit privy - shall not be permitted except at remote locations where electrical service is unavailable. In no case shall such installations be permitted for permanent residences.

(3) Mound systems - may be used to overcome certain limited site conditions such as a seasonal high water table, shallow permeable soil overlying slowly permeable soil, and shallow permeable soil located over creviced or porous bedrock. Special installation instructions or design techniques to suit a particular site may be specified on the construction permit in addition to the following general requirements.

(a) Site preparation must render the site in compliance with requirements of subsections 10D-6.047(1)-(6).

(b) Prior to the construction of a mound system, all or a portion of a lot may be filled utilizing slightly limited soil.

(c) The "0" horizon of original topsoil, any black or very dark gray organic topsoil, and vegetation must be removed from the fill site and the exposed underlying soil plowed or roughened to prevent formation of an impervious barrier between

the fill and natural soil. Moderately limited soil required to be removed from the fill site may be used in the construction of mound systems, but shall only be used in the construction of mound slopes. If moderately or severely limited soil is to be replaced beneath the mound, the width of the replacement area shall be at least 2 feet wider and longer than the proposed drainfield. The drainfield shall be centered within the replacement area.

(d) Where the soil material underlying a mound system is of a similar slightly limited textural material as used in system construction, the mound drainfield size shall be based on the quality of fill material utilized in the mound system and shall be in compliance with the following:

Fill Material	Maximum Sewage Rate to Mound Drain Trench Surface in gallons per square foot per day	Maximum Sewage Rate to Mound Bed Bottom Absorption Bed Bottom Surface in gallons per square foot per day
Sand; Coarse Sand; Loamy Coarse Sand	1.50	1.20
Fine Sand	1.25	1.00
Sandy Loam; Sandy Loam; Loamy Sand	1.00	0.60

(e) Where moderately limited soils underlie the mound within 36 inches of the bottom of the drainfield, drainfield sizing shall be based on the most restrictive soil texture existing in the profile to a depth of 36 inches below the bottom of the drainfield.

(f) There shall be a minimum 5 feet separation between the shoulder of the fill and the nearest trench or absorption bed sidewall. Where a portion of the mound slope will be placed adjacent to a building foundation or other obstructed area, there shall be a minimum 7 foot separation between the sidewall of the absorption area and the obstructed or compacted area. Where mounds are placed on slopes exceeding 2 percent, the shoulder fill on the downslope side of the mound shall, at a minimum, extend an additional 1 foot for each additional 1 percent of slope. To taper the maximum elevation of the mound down to the toe of the slope, additional moderately or slightly limited fill shall be

placed at a minimum 5:1 grade, provided, that where the mound is to be sodded concurrent with its construction, the additional fill may be placed at a minimum 2:1 grade. Other vegetative covers providing protection from mound erosion equal to or better than sod may be approved by the State Health Office. When a mound is not sodded concurrent with its construction, the mound shall be seeded with grass and a layer of hay or similar cover shall be placed to prevent mound erosion. The mound shall be stabilized within seven days of completion of mound construction. Construction approval shall not be granted until stabilization of the mound has occurred.

(g) There shall be a 9 to 12 inch soil cap spread evenly over the drainfield gravel exclusive of the thickness of sod.

(h) The site shall be landscaped according to permit specifications and shall be protected from automotive traffic or other activity that could damage the system. Swales or other surface drainage structures shall be utilized to prevent surface water shed from mounds draining onto neighboring property.

(4) Filled systems - filled systems shall be constructed in accordance with the minimum requirements for mounds as specified in (3) above, except that sewage loading rates to trench or absorption bed bottom areas shall be based on values found in Table IV.

(5) Other alternative systems - systems such as low pressure pipe systems, small diameter gravity sewers, low pressure sewer systems, alternating absorption fields, and sand filters designed and submitted by an engineer who is registered in the State of Florida and who is qualified in the field of wastewater system design meeting the general requirements of this Chapter, may be approved by the HRS county public health unit where evidence exists that use of such systems will not create sanitary nuisance conditions, health hazards or pollute receiving waters. Use of an alternative system may require the establishment of procedures for routine maintenance, operational surveillance, and environmental monitoring to assure the system continues to function properly.

(a) Where experimental systems or products are proposed, the State Health Office will limit the total number of installations in the state and will require the submission of detailed system design and construction plans, the results of previous testing on the product or system and monitoring plans proposed by the manufacturer or distributor. Engineer certification of the performance

capabilities of the product or system may also be required. No experimental system will be permitted to be used in the state unless the manufacturer or other legally authorized person signs a contractual letter binding the company to specific performance criteria, warranty periods, access to monitoring and a statement acknowledging that they will bear the expense of replacing all experimental systems with systems meeting code should the department require such an action. The department shall require a performance bond issued by a bonding company acceptable to the department of sufficient amount to cover the cost of system replacement should an experimental type system fail to perform satisfactorily. No HRS county public health unit shall permit an experimental product or system without first submitting the application and appendices B and C of Policy Memorandum 90-2540, hereby incorporated by reference, and receiving written approval from the State Health Office for the installation. The department shall charge a fee for the review, monitoring, and approval of experimental systems. This fee shall be of a reasonable amount and shall be based on projections of the cost to the department to review, monitor, and evaluate these systems. Such fee shall not exceed \$5000 per system or product type to be evaluated.

(b) Use of a system to serve more than one residence or commercial building under separate ownership and when located on separate lots shall require the establishment of a local sewer district, maintenance franchise, or other legally binding arrangement for the operation and maintenance of such system.

Specific Authority: 381.006(8), 381.0065(11), F.S.

Law Implemented: 381.006(8), 381.0065, 386 Part I, F.S.

History: New 12-22-82, Amended 2-5-85, 3-17-92

10D-6.050 Maintenance. Any person owning or controlling property upon which an onsite sewage disposal system is installed shall be responsible for maintenance of the system. The following criteria are provided for guidance in proper system maintenance.

(1) Systems shall be maintained at all times to prevent seepage of sewage or effluent to the surface of the ground.

(2) Septic tanks and other sewage retention tanks should be checked at least once every three years, or once a year if garbage grinders are discharging to the tank, to determine if sludge needs to be removed. Tanks should be cleaned whenever the bottom of the scum layer is within 8 inches of

the bottom of the outlet device or when the sludge level is within 18 inches of the bottom of the outlet device.

(3) Grease interceptors shall be cleaned as often as necessary to maintain at least 50 percent of their grease retention capacity.

(4) Organic chemical solvents shall not be advertised, sold, or used in the state for the purpose of degreasing or declogging onsite sewage disposal systems. The following requirements also apply:

(a) All organic chemical solvents known to have been used as decloggers or degreasers of onsite sewage disposal systems or those which have a likelihood of being used in such manner shall be labeled on the front of each product container with the following language: "Florida Statute 381.0065 (13) prohibits the advertisement, sale or use of organic chemical solvents for the purpose of degreasing or declogging onsite sewage disposal systems in the state." This language may appear as a part of the usual labeling or may be affixed as a sticker. The language should not cover any other portion of labeling required under laws of federal, state or local governments.

(b) Persons who use organic chemical solvents for degreasing or declogging onsite sewage disposal systems shall be subject to revocation of their septage disposal service permits and shall be subject to other applicable penalties as described in Chapter 381, or 489 Part III, F. S.

Specific Authority: 381.006(8), 381.0065, F.S.

Law Implemented: 381.006(8), 381.0065, 386 Part I, F.S.

History: New 12-22-82, Amended 2-5-85, 3-17-92

10D-6.051 Systems for Temporary Use.

(1) The department may approve, on a temporary basis, portable toilets, privies, or holding tanks for fairs, carnivals, revivals, field locations, encampments and other locations which lack permanent structures where people congregate for short periods of time, provided the construction, maintenance, and utilization of such systems conform to the general provisions of this Chapter. Portable toilets or other toilet facilities shall be provided at construction sites for the duration of construction any time workers are present. The department may waive or reduce any of the setback requirements of subsections 10D-6.046(1)-(3), where it is determined no health hazard will result.

(2) Portable toilets shall be self-contained, have self closing doors, have screened vents and shall be designed and maintained so that insects are excluded from the waste container. Additional requirements are:

(a) Local plumbing codes shall be used to determine the required number of facilities. Where a local plumbing code does not address facility requirements, Chapter 10D-10, F.A.C. places of public assembly, shall be utilized.

(b) Waste receptacles shall be watertight and made of non-absorbent, acid resistant, non-corrosive and easily cleanable material.

(c) The floors and interior walls shall have a nonabsorbent finish and be easily cleanable.

(d) The inside of the structure housing the storage compartment shall be cleaned and disinfected on each service visit.

(e) Portable toilets shall be serviced weekly or at a more frequent interval to prevent the creation of insanitary conditions.

(3) Holding tanks shall be watertight and have no overflow vent at an elevation lower than the overflow level of the lowest fixture served. Additional requirements are as follows:

(a) Unless otherwise allowed by the HRS county public health unit, the projected daily sewage flow into a holding tank shall not exceed 150 gallons.

(b) The minimum liquid storage capacity shall be equal to the total anticipated sewage flow for a period of seven days.

(c) Holding tanks shall be designed and located to facilitate removal of contents by pumping.

(d) An applicant for a holding tank installation permit shall provide, to the HRS county public health unit, a copy of a contract with a permitted disposal company which states the scheduled tank pumping frequency.

(e) Holding tank waste shall be disposed of into a septage treatment and disposal facility approved by the department or into a treatment facility approved or permitted for such disposal by the Department of Environmental Regulation. Holding tank waste may be land applied under provisions of 10D-6.052(7) provided an approved DER treatment facility is not available and the wastes have been blended with domestic septage at a rate of 3 parts septage to 1 part holding tank waste prior to lime stabilization. Companies which service holding tanks which use quaternary ammonium sanitizing and deodorizing compounds are prohibited from having the wastes treated or disposed of at lime stabilization facilities.

(4) Persons servicing portable or temporary toilet systems shall obtain an annual permit from the HRS county public health unit in the county in which the service company is located. A servicing permit may be suspended, revoked or denied by the

department in accordance with Chapter 120, F.S. for failure to comply with requirements of this Chapter. Application for a portable or temporary toilet system service permit shall be made to the HRS county public health unit on Form HRS-H 4012.

(5) The following equipment, maintenance and service requirements shall be complied with:

(a) Tank trucks used for servicing portable toilets, privies and holding tanks shall be provided with a dual compartment tank and shall be approved by the HRS county public health unit. One tank shall be used for receiving and removing wastes and shall be equipped with a suction hose having a cut-off valve not more than 36 inches from the intake end. The second tank shall be used for clean water storage and shall have a capacity equal to at least 10% of the waste receiving tank holding capacity or 100 gallons, whichever is greater, to allow proper cleaning of each serviced unit. Water from the second tank shall be provided under pressure.

(b) Standby service equipment shall be available for use during breakdowns or emergencies. If equipment from another approved service is to be used for stand-by purposes, a written agreement between the services must be provided to the HRS county public health unit.

(c) The waste storage compartment of a tank truck shall be maintained as necessary to prevent the creation of sanitary nuisance conditions.

(d) Each portable or temporary toilet shall have listed in a conspicuous place the name, address and telephone number of the servicing company.

(e) Portable toilet waste shall be disposed of into a septage treatment and disposal facility approved by the department or into a treatment facility approved or permitted for such disposal by the Department of Environmental Regulation. Portable toilet waste may be land applied under provisions of 10D-6.052(7) provided a DER approved treatment facility is not available and the wastes have been blended with domestic septage at a rate of 3 parts septage to 1 part portable toilet waste prior to lime stabilization. Companies which service portable toilets which use quaternary ammonium sanitizing and deodorizing compounds are prohibited from having the wastes treated or disposed of at lime stabilization facilities.

Specific Authority: 381.006(8), F.S.

Law Implemented: 381.006(8), 381.0065, 386 Part I, F.S.

History: New 12-22-82, Amended 2-5-85, 3-17-92

10D-6.052 Disposal of Septage.

(1) No septic tank, grease interceptor, privy, portable toilet, holding tank or other receptacle associated with an onsite sewage disposal system shall be cleaned or have its contents removed until the service person has obtained an annual written permit (HRS-H Form 4013) from the HRS county public health unit in the county in which the service company is located. Permits issued under this section authorize the disposal service to handle liquid waste associated with food operations, portable toilets, holding tanks containing domestic waste, or domestic septage. Such authorization applies to all septage produced in the State of Florida, all holding tanks containing domestic waste, all portable toilet waste and food establishment sludge which is collected for disposal from onsite sewage disposal systems.

(2) Application for a septage disposal service permit shall be made to the HRS county public health unit on HRS-H Form 4012. The following must be provided for evaluation prior to issuance of a service permit:

(a) Evidence that the applicant possesses adequate equipment such as a tank truck with a liquid capacity of at least 1000 gallons, pumps, off truck stabilization tanks and pH testing equipment where lime stabilization and land application are proposed, as well as other appurtenances and tools necessary to perform the work intended. An existing 1000 gallon to 1499 gallon liquid capacity tank truck may be approved for use until December 31, 1995. Any new tank truck which has not been previously permitted by an HRS county public health unit and which is requested to be approved after the effective date of this rule must have a liquid capacity of at least 1500 gallons. After December 31, 1995, all tank trucks shall be required to have a liquid capacity of at least 1500 gallons. Equipment may be placed into service only after it has been inspected and approved by the HRS county public health unit. Lime stabilization tanks shall be constructed and installed to meet the standards set forth in subsection 10D-6.054(5).

(b) The permanent location and address of the business where operations will originate and where equipment is to be stored when it is not in use.

(c) The proposed disposal method and the site to be used for disposing of onsite sewage disposal system septage.

(d) The contractor registration number and certificate of authorization number, if applicable.

(3) When a permit is issued, the number of said permit along with the name of the company, its

phone number, and the gallon capacity of the truck shall be prominently and permanently displayed on the service truck in contrasting colors with 3 inch or larger letters. A septage disposal service permit may be suspended, revoked or denied by the department, in accordance with Chapter 120, F.S. for failure to comply with requirements of this Chapter.

(4) After septage is removed from an onsite waste disposal system, the original lid of the tank shall be put back in place, or be replaced with a new top if the original lid is broken. The tank lid shall be completely sealed and the ground backfilled and compacted so that the site is left in a nuisance free condition.

(5) Untreated food establishment sludges, portable toilet waste, holding tank waste, and septage shall be transported to an approved treatment facility in such a manner as to preclude leakage, spillage or the creation of a sanitary nuisance.

(6) Treated septage and sludges shall be transported to the disposal site in such a manner so as to preclude leakage, spillage or the creation of a sanitary nuisance.

(7) The food establishment sludge and contents from onsite waste disposal systems shall be disposed of at a site approved by the HRS county public health unit and by an approved disposal method. Untreated domestic septage or food establishment sludges shall not be applied to the land. Portable toilet wastes and the contents from holding tanks are not considered to be septage. Disposal of these liquid wastes shall be in compliance with provisions found in 10D-6.051(3)(e) and 10D-6.051(5)(e) and 10D-6.052(7). Criteria for approved stabilization methods and the subsequent land application of domestic septage or other domestic onsite wastewater sludges shall be in accordance with the following criteria for land application and disposal of domestic septage.

(a) Discharge of domestic septage into permitted domestic wastewater treatment facilities shall be subject to the requirements of Chapter 17-600 F.A.C.

(b) Land application of domestic septage and sludges may be permitted provided such septage and sludges have been properly treated by lime stabilization. Lime stabilization shall be in accordance with processes and designs described in Chapter 6, EPA 625/1-79-011, Process Design Manual for Sludge Treatment and Disposal, hereby incorporated by reference. Facilities approved for septage treatment under this rule shall not receive

and treat more than 10,000 gallons of septage or septage and combined domestic waste per day. Stabilization by lime shall raise the pH of the septage to a level of 12 for a minimum of two hours to be deemed sufficient.

1. Use on playgrounds, parks, golf courses, lawns, hospital grounds, or other unrestricted public access areas where frequent human contact is likely to occur is prohibited.

2. Application is limited to sod farms, pasture lands, forests, highway shoulders and medians, plant nursery use, land reclamation projects and soils used for growing human food chain crops. Application methods shall be conducted in a manner which will disperse the treated septage uniformly over the land application site.

a. Pasture vegetation on which stabilized septage or sludge has been applied shall not be cut for hay or silage nor grazed for a period of 30 days from the last application.

b. No human food chain crops except hay, silage, or orchard crops shall be harvested from a land application area for a period of 60 days following the last application of septage or sludges.

c. Domestic septage or sludge shall not be used for the growing or cultivation of tobacco, root crops, leafy vegetables, or vegetables to be eaten raw. Vegetables and fruits which come in contact with the ground surface shall not be grown on land used for septage application for a period of 18 months after the last application of septage or sludge.

d. When applied to unvegetated soils, stabilized domestic septage or sludge shall be incorporated into the soil within 48 hours of application.

(c) No land application of stabilized septage or food service sludge may occur until:

1. The site has been inspected and approved by department personnel.

2. The site evaluation fee has been submitted.

3. An agricultural use plan has been completed for the proposed application site.

a. Agricultural use plans shall describe the manner in which treated domestic septage and sludges are to be used as part of a planned agricultural operation. Methods of application, proposed crops and their fertilizer needs, vegetative types proposed, erosion management, access control for humans and animals, and anticipated harvesting periods shall be included.

b. Agricultural use plans shall include information on the soil and geologic conditions at

the disposal site which could limit the areas available for land application.

4. The plan has been submitted for review and approval to the HRS county public health unit having jurisdiction.

5. The HRS county public health unit has granted approval to use the site.

(d) No contractor or septage disposal service shall dispose of domestic septage or sludges or engage in a septage disposal service unless approved to provide contracted services in accordance with Chapter 489, Part III, F.S., and Part III of this rule.

(e) No person shall dispose of domestic septage or sludge by land application unless he or she has demonstrated to the HRS county public health unit that an adequate method of treatment and disposal will be used. Lime stabilization in the tank of a septage hauling vehicle or in the tank of an onsite sewage disposal system is not an approved septage treatment method.

(f) Land application of septage or sludge may occur after a two hour holding period of the stabilized septage unless prohibited during that time by the HRS county public health unit.

(g) All septage and domestic sludge haulers are to maintain a collection and hauling log which provides the following information:

1. Date of septage or sludge collection

2. Address of collection

3. Indicate whether the point of collection is a residence or business and if a business, the type of business

4. Estimated volume removed from the system

(h) A summary of the total volume of septage or sludge applied to each site shall be submitted to the HRS county public health unit quarterly.

(i) Mixing of unstabilized septage or sludge with stabilized domestic wastewater treatment sludge prior to land application is prohibited.

(j) Septic tank waste from industrial or commercial facilities which is toxic or hazardous in nature is not suitable for land application.

(k) The land application area shall not be located closer than 3000 feet to any Class I water body or Outstanding Florida Water as defined in Chapter 17-302, F.A.C. or 200 feet to any surface water except canals or bodies of water used for irrigation purposes which are located completely within and not discharging from the site. The land application area shall not be located closer than 500 feet to any shallow public water supply wells, nor closer than 300 feet to any private drinking water supply well. The application area shall be no closer than 300 feet to any habitable building and a

minimum of 75 feet from property lines and drainage ditches.

(l) The land application site shall have a minimum 24 inches of unsaturated soil above the ground water table at the time of septage or sludge application. The seasonal high ground water table for the site may be indicated in the Agricultural Use Plan by soil survey maps. If the wet season high ground water table is within 2 feet of the surface or is not determined in the Agricultural Use Plan, the water table encountered at the time of septage or sludge application shall be determined by use of a monitoring well.

(m) Septage or sludge shall not be applied during rain events of sufficient magnitude to cause runoff, or during periods in which surface soils of the land application area are saturated. The land application area shall have sufficient buffer areas or stormwater management structures to retain the runoff from a ten-year one-hour storm on the site. Sufficient septage storage capacity shall be provided for periods of inclement weather and equipment failure. Facilities shall be designed, located, and operated to prevent nuisance conditions and avoid site run-off.

(n) Land application area topographic grades shall not exceed 8 percent.

(o) The land application area and an area 200 feet wide adjacent to, and exterior of, the land application area boundary shall contain no subsurface fractures, solution cavities, sink holes, excavation core holes, abandoned holes, or any other natural or manmade conduits which allow contamination of ground water. Determinations of site conditions shall be made as part of a geophysical examination of the property by qualified persons.

(p) Florida water quality criteria for groundwater and surface water shall not be violated as a result of land application of septage or sludge. Water quality testing of application areas may be required if the department determines that septage application not conforming to this rule is evident. If water quality violations are indicated, the site owner shall suspend land application activities.

(q) A layer of permeable soil at least 2 feet thick shall cover the surface of the land application area.

(r) Application rates of septage and food establishment sludges are limited by the nitrogen content of the waste. The maximum annual application rate of total nitrogen is 500 pounds per acre during any 12-month period. This equates to 6 dry tons or 30,000 gallons of typical septage per acre per year. Application methods shall be

conducted in a manner which will disperse the treated septage uniformly over the land application site.

(s) Permanent records of actual application areas and application rates shall be kept. These records shall be maintained by the site owner, lessee, or the land applicator for a period of five years, and shall be available for inspection upon request by the department or by DER. An annual summary of the total septage or sludge applied shall be provided with the annual update to the Agricultural Use Plan. Records shall be kept and shall include:

1. Dates of septage or sludge land application
2. Weather conditions when applied
3. Location of septage or sludge application site
4. Amounts of septage or sludge applied
5. Specific area of the site where septage or sludge was applied
6. pH of stabilized septage or sludge being applied
7. Soil groundwater table when septage was applied
8. Vegetational status of application area

(t) Food establishment sludges may be discharged into permitted domestic wastewater treatment facilities pursuant to the requirements of Chapter 17-600, F.A.C.

(u) Application of food establishment sludge to the land shall be permitted if such food establishment sludge has been properly treated by lime stabilization, or by any other process which produces similar kills of microorganisms and has been approved by the State Health Office.

(w) Mixing of unstabilized food establishment sludge with stabilized septage prior to land application is not permitted.

(x) Food establishment sludge shall be blended with septage and treated prior to land application. The ratio of food establishment sludge to septage shall be no greater than 1:1.

Specific Authority: 381.006(8), 489.553(3) F.S.

Law Implemented: 381.006(8), 381.0065, 386 Part I, F.S.

History: New 12-22-82, Amended 2-5-85, 3-17-92

10D-6.053 Abandonment of Systems.

(1) Whenever the use of an onsite sewage disposal system is discontinued following connection to a sanitary sewer or following condemnation or demolition of a building or property, the system shall be abandoned and any further use of the system for any purpose shall be prohibited. However, the Department of

Environmental Regulation or its designee may approve the use of the retention tank where the tank is to become an integral part of a sanitary sewer system or stormwater management system.

(2) The following actions shall be taken, in the order listed, to abandon an onsite sewage disposal system:

(a) Property owner or agent shall apply for a permit from the department to abandon the existing onsite sewage system and submit the required fee. Upon receiving a permit:

(b) The tank shall be pumped out.

(c) The bottom of the tank shall be opened or ruptured so as to prevent the tank from retaining water, and

(d) The tank shall be filled with clean sand or other suitable material.

Specific Authority: 381.006(8), F.S.

Law Implemented: 381.006(8), 381.0065, 386 Part I, F.S.

History: New 12-22-82, Amended 2-5-85, 3-17-92

10D-6.054 General Standards for Treatment Receptacles.

(1) Septic Tank Design - The following requirements shall apply to all septic tanks manufactured for use in Florida unless specifically exempted by other provisions of these rules.

(a) Septic tanks shall be watertight and may have single or multiple compartments, or tanks may be placed in series, to achieve required liquid capacity. The first chamber of a multi-compartment tank or the first tank of two or more tanks placed in series shall have a minimum effective liquid capacity of at least two-thirds of the total required liquid capacity. Additional chambers shall have a minimum effective liquid capacity equal to or greater than one-half of the liquid capacity of the first chamber.

(b) Each compartment shall have access provided by 24 inch maximum width sectional lids, or have manholes, with each manhole having a minimum area of 225 square inches. Manholes or sectional lids shall be located so as to allow access to the inlet and outlet devices. For single compartment tanks, the access manhole or the sectional lid over the inlet shall extend to within 8 inches of finished grade. If a riser is used, and if the riser access lid opens directly to the tank interior, joints around the riser and tank shall be sealed and made waterproof to prohibit intrusion of ground water into the tank. For multi-compartment tanks or tanks in series, the manholes or sectional lids shall extend to within 8 inches of finished grade over the first compartment inlet and the last

compartment outlet. When exposed at ground surface, an appropriate mechanism shall be provided to make access manholes vandal, tamper, and child resistant. Acceptable protection of openings may include, but is not limited to:

1. A padlock.

2. An "O" ring with twist lock cover requiring special tools for removal.

3. Covers weighing 65 pounds or more, net weight.

4. Stainless steel or other corrosion resistant fasteners for fiberglass, metal or plastic lids.

(c) The liquid depth of compartments shall be at least 42 inches. Liquid depths greater than 72 inches shall not be considered in determining the effective liquid capacity.

(d) A minimum free board or airspace of 15 percent of the volume of the holding capacity of the tank shall be provided.

(e) The inlet invert shall enter the tank 1 to 3 inches above the liquid level of the tank. A vented inlet tee, vented sweep or a baffle may be provided at the discretion of the manufacturer to divert the incoming sewage. The inlet device, if utilized, shall have a minimum diameter of 4 inches and shall not extend below the liquid surface more than 33 percent of the liquid depth.

(f) A minimum 4 inch diameter vented outlet tee, sweep or baffle shall extend below the liquid level of the tank a distance not less than 30 percent nor greater than 40 percent of the liquid depth, and shall extend at least 4 inches above the liquid level. The submerged intake orifice of the outlet fixture shall be provided with an approved solids deflection device to reduce, by a minimum of 90 percent, the intake area of the outlet fixture exposed to the vertical rise and fall of solid particles within the tank. Turning the intake orifice of an outlet tee or sweep 90 degrees from the vertical will satisfy the solids deflection device requirement.

(g) The inlet and outlet devices shall be located at opposite ends of the tank so as to be separated by the maximum distance possible and shall be attached in a watertight manner.

(h) Sewage flow between the first and second chamber of a multi-chamber tank shall interconnect utilizing either a minimum 4 inch diameter hole or equivalent size slot in the wall or with a minimum 6 inch diameter vented and inverted U-fitting or a tee. Tanks in series shall interconnect utilizing a vented, inverted U-fitting or a tee. The intake of the outlet device or hole invert shall extend below the liquid surface approximately 33 percent of the tank liquid depth.

(i) Tanks shall be provided with a suitable legend cast or stamped into the wall at the inlet end, and within 6 inches of the top of the wall. The legend shall identify the manufacturer, the State Health Office's designated approval number for the tank, and the effective liquid capacity of the tank in gallons.

(j) All septic tanks, laundry tanks, graywater tanks, and grease interceptors distributed in the state shall be approved for use by the department prior to being installed. Such approval shall be obtained only after the manufacturer of a specific tank model has submitted engineered designs of the tank showing dimensions; production materials; liquid capacity; wall, bottom, and lid thickness; reinforcing materials used; and evidence that the tank model has undergone flow testing to confirm its liquid capacity and its water tightness. Such designs shall be submitted to the HRS county public health unit in whose jurisdiction the manufacturing facility is located and to the department State Health Office. The State Health Office will issue an approval number to the manufacturer only after confirmation from the HRS county public health unit that the tank model being constructed meets specifications as set forth by the manufacturer. All manufacturers shall comply with this provision by January 1, 1993.

(2) Graywater retention tanks - when a separate system is installed to dispose of graywater, the retention tank for such system shall meet the following minimum design standards.

(a) The minimum effective capacity shall be as specified in subsection 10D-6.048(3). Liquid depth shall be at least 30 inches.

(b) Retention tanks shall be baffled and vented as specified in the septic tank construction standards found elsewhere in this section provided that an inlet tee, ell, or baffle shall be provided for graywater tanks.

(3) Grease interceptors - are not required for a residence. However, one or more grease interceptors are required where grease waste is produced in quantities that could otherwise cause line stoppage or hinder sewage disposal. The design of grease interceptors shall be based on standards found in (a) below. In addition, the following general requirements found in (b),(c), and (d), apply when determining the proper use and installation of a grease interceptor used as a component of an onsite sewage disposal system.

(a) Grease interceptors shall comply with structural requirements applicable to septic tanks as described in this Chapter except that the inlet invert shall discharge a minimum 2 1/2 inches above the

liquid level line and the outlet pipe shall have a tee with a minimum diameter of 4 inches that extends to within 8 inches of the bottom of the tank.

(b) Interceptors must be located so as to provide easy access for routine inspection, cleaning and maintenance. Manholes shall be provided over the inlet and outlet of each interceptor and be brought to finished grade.

(c) Where a grease interceptor is required, only kitchen wastewater shall first pass through the interceptor and then be discharged into the first compartment of a septic tank or other approved system.

(d) Sizing of grease interceptors shall be based on the equations below. The minimum volume of any grease interceptor shall be 750 gallons and the maximum volume of a single grease interceptor shall be 1250 gallons. When the required effective capacity of the grease interceptor is greater than 1250 gallons, installation of grease interceptors in series is required.

1. Restaurants: $(S) \times (GS) \times (HR/12) \times (LF)$
= effective capacity of grease interceptor in gallons.

S = number of seats in the dining area

GS = gallons of wastewater per seat: Use 25 gallons for ordinary restaurant, use 10 gallons for single service article restaurants.

HR = number of hours establishment is open

LF = loading factor: use 2.0 interstate highways, 1.5 other freeways, 1.25 recreational areas, 1.0 main highways, and 0.75 other roads.

2. Other type establishments with commercial kitchens: $(M) \times (GM) \times (LF)$ = effective capacity of grease interceptor in gallons.

M = meals prepared per day

GM = gallons of wastewater per meal: use 5 gallons.

LF = loading factor: use 1.00 with dishwashing and 0.75 without dishwashing.

(4) Laundry waste interceptor - when a separate system is installed to dispose of effluent or drainage from home washing machines only, the retention tank or interceptor for such system shall meet the following minimum standards.

(a) The minimum effective capacity shall be 225 gallons.

(b) The interceptor shall be baffled and vented as specified in the septic tank construction standards found elsewhere in this Chapter, provided that a vented inlet tee, vented sweep, or a baffle shall be provided.

(c) The interceptor shall not receive waste flow from kitchen fixtures or be used as a grease trap.

(5) Tanks used for the stabilization of septage and food service sludges shall be constructed, sized, and operated in accordance with the following provisions:

(a) Stabilization tanks shall be constructed of durable materials not subject to corrosion or weathering. Tank materials shall be of concrete, fiberglass, corrosion-resistant steel, or other equally durable material approved by the department state health office. Tanks shall be watertight and shall be water tested for leaks prior to placing into service. The tank shall have a liquid capacity of at least 3000 gallons.

(b) Wall and bottom thickness of concrete tanks shall be at a minimum equal to that required of concrete septic tanks in subsection 10D-6.055(1). Tank bottom and sidewalls shall be reinforced to prevent cracking or leakage as a result of mixing and handling of the septage. Fiberglass tanks and tanks of similar materials shall be constructed in accordance with standards found in subsection 10D-6.055(2).

(c) Prior to discharge of septage or food establishment sludge into the stabilization tank, the septage or sludge shall be screened in a pretreatment tank or chamber which contains screens of minimum 1/2 inch mesh rock screen or other similar mesh sieve material. Material retained in the screening process shall be limed, containerized, and disposed of at an approved solid waste disposal facility. Septage or sludge shall pass from the pretreatment tank or chamber to the stabilization tank.

(d) Stabilization tanks shall contain aeration or mixing devices which will ensure thorough agitation or mixing of lime with the waste as specified in Chapter 6, EPA 625/1-79-011, Process Design Manual for Septage Treatment and Disposal.

(e) Stabilization tanks may be located at regional stabilization facilities, at sites owned by the disposal service or at sites owned by the owner or lessee of the septage land application site.

(f) Potable water supplies located at the stabilization tank site shall be provided with back flow prevention devices to prevent potential contamination of water supplies.

Specific Authority: 381.006(8), 381.0065, F.S.

Law Implemented: 381.006(8), 381.0065, 386 Part 1, F.S.

History: New 12-22-82, Amended 2-5-85, 3-17-92

10D-6.0541 Standards for the Construction, Operation, and Maintenance of Aerobic Treatment Units. Aerobic treatment units may be used for treating domestic and commercial sewage waste, provided that each unit is installed, operated

and maintained in conformance with the following provisions:

(1) Aerobic systems designed to treat up to 1500 gallons of sewage waste per day shall be listed by a third party certifying program approved by the State Health Office. Aerobic treatment units shall be in compliance with standards for Class I systems as defined by ANSI/NSF International Standard Number 40, revised July 1990, hereby incorporated by reference. An approved third party certifying program shall comply with the following provisions in order for units which it has certified to be approved for use in Florida:

(a) Be accredited by the American National Standards Institute.

(b) Have established procedures which send representatives to distributors in Florida on a recurring basis to conduct evaluations to assure that distributors of certified aerobic units are providing proper maintenance, have sufficient replacement parts available, and are maintaining service records.

(c) Notify the department State Health Office of the results of monitoring visits to manufacturers and distributors within 60 days of the conclusion of the monitoring. Approved distributors must be reported by the manufacturer to the certifying agency.

(d) Submit completion reports on testing for review by the State Health Office.

(e) Provide a registered certification mark or seal which must be affixed in a conspicuous location on the units it has certified. This mark or seal will alert persons evaluating or maintaining the unit that the unit is in compliance with ANSI/NSF Standard 40.

(2) The following additional requirements shall also apply to the construction, design, and operation of aerobic treatment units treating 1500 gallons per day or less:

(a) A visual and audio warning device shall be installed in a conspicuous location so that activation of such warning device will alert property occupants of aerobic unit malfunction or failure. All warning devices shall be wired separately from the aerobic unit so that disconnecting the aerobic unit from electricity will activate the warning device.

(b) Each unit shall be designed or equipped so that regardless of unusual patterns or frequencies of sewage flow into the system effluent discharged to the drainfield will be in compliance with Class I effluent quality standards as defined by ANSI/NSF Standard 40.

(c) Minimum required treatment capacities for systems serving any structure, building or group of

buildings shall be based on estimated daily sewage

flows as determined from Table V.

TABLE V
AEROBIC SYSTEMS PLANT SIZING

RESIDENTIAL:

Number of Bedrooms	Building Area in square feet	Minimum Required Treatment Capacity gallons per day	Standard Plant Sizes Available gallons per day
1	less than 750	150	400, 500
2	751-1200	300	400, 500
3	1201-2250	450	500, 600
4	2251-3300	600	600

For each additional bedroom or each additional 750 square feet of building area, or fraction thereof, system sizing shall be increased by 150 gallons per dwelling unit.

COMMERCIAL:

Estimated Sewage Flow in gallons per day	Minimum Required Treatment Capacity in gallons per day
0-400	400
401-500	500
501-600	600
600-700	700
700-750	750
751-800	800
800-1000	1000
1001-1200	1200
1201-1500	1500

Footnotes to Table V

1. Where the number of bedrooms and the corresponding building area in Table V do not coincide, the criteria which results in the greatest required treatment capacity shall apply.

2. These figures assume that the aerobic system will be treating only typical domestic strength sewage with BOD₅ and suspended solids values ranging between 100 and 300 milligrams per liter. For wastewaters with higher BOD₅, higher suspended solids values, or for facilities that exhibit short-term hydraulic surge conditions, additional treatment or pre-treatment facilities may be required when specified by design engineers, plant manufacturers, or by the HRS county public health unit.

(d) There shall be no bypass capability designed into the system which will allow waste to be discharged to the drainfield without undergoing all the treatment processes necessary to achieve the desired effluent quality. Bypassing, removing, or excluding any component or components of a system

after the system has received final installation approval is prohibited.

(e) Effluent from an aerobic treatment unit shall be disposed of on the owner's property in conformance with other requirements of this Chapter except as provided for in subsection 10D-6.0541(2)(f).

(f) Units meeting Class I Standards as specified by ANSI/NSF Standard 40 may receive consideration, via the variance review process, for use where daily domestic sewage flow limitations of section 10D-6.046 are exceeded or where a high level of sewage treatment is warranted. Also, for Class I units where slightly limited soil textures exist on a site, the required drainfield size may be reduced by 25 percent from the requirements in subsection 10D-6.048(5) or 10D-6.049(3)(d).

(g) A manufacturer, distributor or seller of aerobic treatment units shall furnish, to the State Health Office, 80 copies of completion reports and engineering drawings showing the design and construction details of all models of approved Class

I units to be constructed or installed under the provisions of this rule. The State Health Office will forward these drawings to each HRS county public health unit. No aerobic unit shall receive final installation approval until the unit is found to be in compliance with all provisions of this rule, including compliance with design and construction details shown on the engineering plans filed with HRS county public health units and the State Health Office.

(h) A distributor of a specific manufacturer's brand or model of an approved aerobic treatment unit shall provide to the HRS county public health unit and State Health Office written assurance that spare mechanical and structural parts are available, upon request, for purchase, to all other approved maintenance entities.

(i) Where local building occupancy codes require that the HRS county public health unit approve the means of sewage disposal prior to building occupancy or change of occupancy, and where an aerobic treatment unit is utilized, a current, unexpired aerobic treatment unit maintenance contract between the property owner or lessee and an approved maintenance entity shall be one of the required conditions of system approval.

(j) A copy of the signed maintenance agreement between the property owner or property lessee and an approved maintenance entity shall be provided to the HRS county public health unit by the maintenance entity. The maintenance agreement shall:

1. Initially be for a period of at least 2 years and subsequent maintenance agreement renewals shall be for at least 1 year periods for the life of the system.

2. Provide that a maintenance entity which desires to discontinue the provision of maintenance services, notify in writing, the property owners and lessees and the HRS county public health unit at least 30 days prior to discontinuance of service.

3. Provide that, if a private maintenance entity discontinues business, property owners who have previously contracted with the discontinued maintenance service shall, within 30 days of the service termination date, contract with an approved maintenance service and provide the HRS county public health unit a copy of the newly signed maintenance agreement.

4. Provide that each aerobic unit is inspected by an approved maintenance entity at least two times each year. Aerobic treatment units serving commercial establishments shall be inspected four times per year. The maintenance entity shall furnish

to the HRS county public health unit a listing of all aerobic units inspected or serviced during the respective reporting period. As a minimum, reports shall indicate the system owner or building lessee, the street address of the system, the date of system inspection or service and a statement as to the maintenance or service performed. The maintenance entity shall also include a list of the owners who have refused to renew their maintenance agreement.

(k) The HRS county public health unit shall, at least annually, monitor the maintenance and performance of aerobic treatment units by selecting a representative sample of in-use systems for evaluation. The HRS county public health unit shall also inspect each authorized maintenance entity, including review of their service records and maintenance agreements. A report summarizing results of field evaluations, aerobic treatment unit effluent sample analysis, and a summary of maintenance agreement and servicing records compliance, shall be provided annually to the State Health Office for a determination of the effectiveness of the provisions of this section in assuring proper operation, maintenance, performance and utilization of aerobic treatment unit systems.

(3) An aerobic treatment unit used for treating domestic sewage flows in excess of 1500 gallons per day but not exceeding 5000 gallons per day shall be designed and certified by an engineer registered in the State of Florida. The certification shall state that the unit is capable of consistently meeting, at minimum, secondary treatment standards established by DER in subsection 17-600.420, F.A.C. In addition, the following requirements shall also be met:

- (a) The drainfield system shall meet minimum setback and elevation requirements specified by this rule.

- (b) The owner or lessee of a system shall comply with the applicable maintenance and operational requirements of subsection 10D-6.0541(2). Unless the system owner or lessee is a state licensed wastewater treatment plant operator, the owner or lessee shall be required to have a system maintenance agreement with a permitted aerobic unit maintenance entity which has at least a Class D state certified operator who has been certified under the provisions of Chapter 17-602, F.A.C.

- (c) A permitted aerobic unit maintenance entity with a minimum Class D certified operator, or a system owner or lessee holding at minimum a Class D certification under the provisions of Chapter 17-

602, F.A.C, shall collect effluent quality samples and submit the sample analysis reports to the HRS county public health unit. Effluent quality samples for BOD₅, suspended solids and fecal coliform shall be collected at least semi-annually and such samples shall be analyzed by a department-approved laboratory.

(d) Written sample analysis reports shall be submitted to the HRS county public health unit by no later than the 15th of the next month following the semi-annual sampling period. However, if the sample analysis for BOD₅ or suspended solids exceed secondary treatment standards by more than 100 percent, the maintenance entity or certified operator shall notify the HRS county public health unit by telephone or in person within 24 hours after receipt of sample analysis results.

(e) The HRS county public health unit shall monitor the maintenance and performance of aerobic treatments units as required by subsection 10D-6.0541(2)(k).

(4) No aerobic treatment unit shall be serviced or repaired by a person or entity engaged in an aerobic treatment unit maintenance service until the service entity has obtained an annual written permit issued on HRS-H Form 4067 from the HRS county public health unit in the county where the service company is located. Application for an Aerobic Treatment Unit Maintenance Service Permit, HRS-H Form 4066, shall be made to the HRS county public health unit and shall contain the following information:

(a) Evidence that the maintenance entity possesses a manufacturer's maintenance and operations manual and has received training from the manufacturer in proper installation and service of the unit and has received written approval from the manufacturer to perform service on their units. The manual shall contain detailed instructions on proper operation and maintenance procedures, a replacement parts list for all models being installed and maintained, a statement giving the capabilities of each unit, instructions on how to detect a malfunctioning unit and what to expect from a properly functioning unit.

(b) A signed statement from the applicant attesting that the applicant has adequate staff, possesses proper equipment and has sufficient spare structural and mechanical parts and components to perform routine system monitoring and servicing and is able to make a service response within 36 hours after notification of the need for emergency repairs. The statement shall include confirmation that the location or locations of service personnel

and replacement parts will be no more than 200 miles from any aerobic treatment unit under contract for servicing.

(c) Payment of \$25.00 to the HRS county public health unit per annum for the aerobic treatment unit maintenance service permit.

Specific Authority: 381.006(8), 381.0065, F.S.

Law Implemented: 381.006(8), 381.0065, 386 Part I, F.S.

History: New 3-17-92

10D-6.055 Construction Materials for Treatment Receptacles.

(1) Concrete septic tanks - onsite wastewater treatment receptacles shall be watertight and may be built of precast or poured in place concrete which has a design mix for unit compressive strength of at least 3000 pounds per square inch after 28 days curing.

(a) Precast concrete septic tanks with a capacity of 1200 gallons or less shall have a minimum wall and bottom thickness of 2 inches. Precast tanks with a capacity exceeding 1200 gallons shall have a minimum wall and bottom thickness of 3 inches. Precast concrete septic tanks shall contain reinforcing to facilitate handling. Septic tanks made of concrete poured in place shall have a minimum wall and bottom thickness of 4 inches. The bottoms of concrete septic tanks shall be monolithic and an integral part of the walls.

(b) Septic tanks with capacities of 1200 gallons or less shall have tops or covers of concrete with a minimum thickness of 3 inches when precast and 4 inches when poured in place. When capacities exceed 1200 gallons, the tops shall be precast with a minimum thickness of 4 inches.

(c) Tops shall be reinforced with 3/8 inch steel reinforcing rods on 6 inch centers in each direction. Whenever vehicular traffic is anticipated to cross over the septic tank or other onsite waste receptacle, traffic lids shall be installed with manhole covers to finished grade. Traffic lids shall be designed to support a minimum load of 10 tons.

(d) When approved by the HRS county public health unit, septic tanks may be built of brick or concrete block. When constructed of these materials, tanks shall have a minimum wall thickness of 8 inches. The inside walls of the tanks must be plastered with cement mortar. Concrete block voids shall be filled with concrete or sand for structural support.

(2) Fiberglass reinforced plastic septic tanks - the following structural requirements are applicable to fiberglass septic tanks and tanks made of a comparable class of materials.

(a) Resins and sealants used in the tank manufacturing process shall be capable of effectively resisting the corrosive influences of the liquid components of sewage, sewage gases and soil burial. Materials used shall be formulated to withstand shock, vibration, normal household chemicals, earth and hydrostatic pressure when either full or empty.

(b) Not less than 30 percent of the total weight of the tank shall be fiberglass reinforcement. Fiberglass tanks with an effective liquid capacity of not over 1500 gallons shall have a minimum wall thickness of 1/4 inch. However, a wall thickness of not less than 3/16 inch will be allowed in small isolated areas of a tank.

(c) Internal surfaces shall be coated with an appropriate gel coating to provide a smooth, pore-free, watertight surface.

(d) Tanks shall be constructed so that all parts of the tank meet the following mechanical requirements.

1. Ultimate tensile strength - minimum 12,000 PSI when tested in accordance with ASTM D 638-89, Standard Method of Test for Tensile Properties of Plastics.

2. Flexural strength - minimum 19,000 PSI when tested in accordance with ASTM D 790-86, Standard Method of Test for Flexural Properties of Unreinforced and Reinforced Plastics and Electrical Insulating Materials.

3. Flexural modulus of elasticity - minimum 800,000 PSI when tested in accordance with ASTM D 790-86, Standard Method of Test for Flexural Properties of Unreinforced and Reinforced Plastics and Electrical Insulating Materials.

(e) A test report from an independent testing laboratory is required to substantiate that individual tank designs and material formulations meet the requirements of (d) 1., 2., and 3. above.

(f) Physical properties for tanks over 1500 gallons effective liquid capacity must be approved by the department.

(g) Tank lids shall be securely fastened or sealed to prevent unwarranted access to the contents of the tanks and to make tanks vandal, tamper, and child resistant. Acceptable protection of openings may include, but is not limited to:

1. A padlock.
2. An "O" ring, with twist lock cover requiring special tools for removal.
3. Covers weighing 65 pounds or more, net weight.
4. Stainless steel or other corrosion resistant fasteners for fiberglass, metal or plastic lids.

(3) Septic tanks to be constructed of other materials shall have prior approval from the State Health Office.

Specific Authority: 381.006(8), F.S.

Law Implemented: 381.006(8), 381.0065, 386 Part 1, F.S.

History: New 12-22-82, Amended 2-5-85, 3-17-92

10D-6.056 Construction Standards for Drainfield Systems.

(1) Distribution box - where gravity flow is possible, a distribution box may be required for distributing sewage from the septic tank or other waste receptacle to the drainfield lines. The distribution box may be built as an integral part of the septic tank or may be a separate unit set on solid ground and anchored in the drainfield.

(a) Distribution boxes shall be watertight, constructed of durable materials, have adequate structural strength, and be of sufficient size to accommodate the required number of drain pipe lines.

(b) Each drainfield line shall be connected individually to the box.

(c) The invert of inlets to the box shall be at least 1 inch above the invert of the outlets. The invert of all outlets shall be level with respect to each other.

(2) Header pipe - When approved by the HRS county public health unit, a header pipe may be used in lieu of a distribution box when the header pipe is installed in compliance with the following requirements:

(a) Header pipe shall meet requirements of ASTM D 3034-85b, Standard Specifications for Type PSM Poly(Vinyl Chloride) (PVC) Sewer Pipe and Fittings or ASTM F 405-85, Standard Specification for Corrugated Polyethylene (PE) Tubing and Fittings or ASTM F 810-85 for other pipe materials. Header pipe shall have a minimum inside diameter of 4 inches for gravity flow applications.

(b) The header pipe shall be laid level with direct, watertight connections to each drainfield line and the septic tank outlet pipe. The header pipe shall be encased in aggregate.

(c) When a distribution box is used, pipe which connects the septic tank outlet to the distribution box shall comply with the strength and material standards for header pipe as specified in this subsection.

(3) Automatic dosing - where the required area of the drainfield is greater than 1000 square feet, or where a septic tank or sewage waste receptacle must be placed too low to permit gravity flow into a

properly designed, constructed and located drainfield or absorption bed, an automatic dosing device shall be used. Plans and equipment specifications for automatic dosing systems shall be approved by the department prior to construction or installation. Pumps used to distribute sewage effluent must be certified by the manufacturer to be suitable for such purpose.

(a) Dosing systems for less than 2000 square feet of drainfield shall consist of a dosing tank that receives the flow from a septic tank or other sewage waste receptacle. This dosing tank shall be at least 24 inches in diameter, or equivalent rectangular size, and shall be provided with one or more pumps with level controls set in accordance with the requirements set forth in (c) and (d) of this section. Two pumps shall be required for commercial use where estimated establishment sewage flows exceed 500 gallons per day. The pumps shall dose alternately.

(b) Systems having more than 2000 square feet of drainfield shall have two dosing pumps, with each pump serving one-half of the total required absorption area. The pumps shall dose alternately.

(c) The volume of the dosing chamber between the pump operating levels shall be adequate to assure that the entire drain pipe is dosed each cycle. The liquid volume of pipe typically used in drainfield systems is as follows:

PIPE SIZE	LIQUID VOLUME OF CONDUIT
2"	0.16 Gal per foot
4"	0.65 Gal per foot
6"	1.47 Gal per foot

(d) When a drainfield is installed in slightly limited soil, operating levels should be adjusted to dose the drainfield a maximum of six times in a 24 hour period. For moderately limited soils the drainfield should be dosed no more than two times in a 24 hour period. More frequent dosing may be allowed with Class I effluent from an approved aerobic treatment unit.

(e) An audio and visual high water alarm shall be provided in a conspicuous location to warn of pump failures.

(4) Drain trenches and absorption beds are the standard subsurface drainfield systems used for disposing of effluent from septic tanks or other

sewage waste receptacles. When used, these systems shall be constructed as specified below.

(a) When utilizing the standard drain trench method, the width of the trench at the bottom shall be 18 to 36 inches. There shall be a minimum separation distance of 2 feet between the sidewalls of adjacent trenches.

(b) Absorption beds, when approved by the HRS county public health unit, may be used in lieu of the standard drain trench method. An absorption bed consists of an area in which the entire earth content of the required absorption area is removed and replaced with aggregate and distribution pipe. The distance between the centers of distribution lines in standard beds shall be a maximum of 3 feet. The distance between the side wall of the bed and the center of the outside drain line shall be no more than 1 1/2 feet. Where header pipe is used in lieu of a distribution box, the header shall extend to within 18 inches of the bed sidewalls. In no case shall the bottom surface of an absorption bed exceed a total of 1500 square feet. Where two or more beds are used to obtain the necessary absorption area, there shall be a minimum 10 foot separation between the sidewalls of adjacent absorption beds. Absorption beds shall be designed to achieve the maximum length to width ratio practical.

(c) When utilizing a drainfield system that requires aggregate, all portions of the header pipe, drain tile, or perforated pipe shall be installed in washed coarse aggregate conforming to ASTM C33-86 or lightweight aggregate conforming to ASTM C330-87 meeting State of Florida Department of Transportation (FDOT) specifications under Section 901, "Standard Specifications for Road and Bridge Construction, 1991". Scallop shells shall not be used for drainfield aggregate. Approved standard sizes for various drainfield aggregates are:

MATERIAL	FDOT SIZE NUMBER
Limestone, slag, lightweight aggregate and other equally durable materials	3, 4, 357, 467, or 5
Quartz rock, granite, and river gravel	3, 4, 5, 357, 467 or 6

1. All aggregate materials shall come from a source approved by the FDOT and shall be produced and shipped under an approved FDOT quality control program.

2. A copy of the freight bill-of-lading shall be part of the documentation of aggregate size and quality and records shall be available for department review for a period of two years from the date of purchase.

(d) Coarse or lightweight aggregate shall encase the distribution pipe to a minimum depth of 6 inches under the pipe and have a total depth of at least 12 inches extending throughout the width of the trench or absorption bed.

(e) The aggregate in place shall be protected from infiltration of earth backfill by an effective barrier of untreated building paper, polyester bonded filament or other acceptable material as determined by the department.

(f) Providing the requirements of subsections 10D-6.047(1), (2) and (6) are met, the maximum depth from the invert of the drain pipe or distribution pipe to the finished ground surface shall not exceed 24 inches. The minimum earth cover over the top of the drainfield aggregate, distribution box or header pipe in standard subsurface drainfields shall be 6 inches.

(g) The inside diameter of the drain pipe used in drainfields shall be determined based on the type and design of the proposed absorption system. However, for standard gravity gravel drainfield systems, inside pipe diameter shall not be less than 4 inches. Perforated pipe shall have a minimum perforated area of 1 1/2 square inches per linear foot. Perforations shall be located on either side of the center line of the bottom of the pipe. However, for drainfield systems over 500 square feet in size, drainpipe perforation area and hole configuration shall assure that effluent is distributed as equally as possible throughout the drainfield area. All plastic pipe shall conform to the standards of ASTM F 405-85 or ASTM F 810-85.

(h) Depending on the type of drainfield system being utilized, drainlines may be placed level or with a downward slope not exceeding 1/2 inch per 10 feet. However, for standard gravity aggregate drainfield systems, drainlines shall be graded with a downward slope of 1/4 inch to 1/2 inch per 10 feet.

(i) The maximum length of drain lines shall not exceed 100 feet and where two or more drain lines are used, they shall be, as near as practical, the same length. The ends of two or more drain lines in bed and mound systems shall be connected to produce a continuous circuit. A continuous circuit arrangement is also recommended for standard drain trench systems.

Specific Authority: 381.006(8), 381.0065, F.S.

*Law Implemented: 381.006(8), 381.0065, 386 Part I, F.S.
History: New 12-22-82, Amended 2-5-85, 3-17-92*

10D-6.057 Percolation Test Procedures.

History: New 12-22-82, Amended 2-5-85, Repealed 3-17-92

10D-6.0571 Permitting and Construction of Repairs. All repairs made to a failing onsite sewage disposal system shall be made only with prior knowledge and written approval from the HRS county public health unit having jurisdiction over the system. Approval may be granted only if all of the following conditions are met:

(1) Any property owner or lessee who has an onsite sewage disposal system which is improperly constructed or maintained, or which fails to function in a safe or sanitary manner shall request from the HRS county public health unit, either directly or through their agent, a permit to repair the system prior to initiating the repair of the system. A permit may be issued on HRS-H Form 4016 only after the submission of an application accompanied by the necessary exhibits and fees. HRS-H Form 4015 shall be used for this purpose. Applications shall contain the following information:

(a) A site plan, showing the system configuration and location on the property, the building location, the general slope of the property, property lines and easements, any obstructed areas, any private or public wells, or any surface water bodies and stormwater systems in proximity to the onsite sewage system which may restrict replacement or relocation of the drainfield system.

(b) The size of the septic tank or other treatment tank currently in use and the approximate square footage and elevation of the drainfield existing on the site.

(c) The quantity and type of waste being discharged to the system. Where water use records cannot be obtained, estimates shall be made from values found in section 10D-6.048, Table II.

(d) The soil textures encountered within the existing and proposed drainfield areas, and the estimated water table during the wettest season of the year.

(e) Any unusual site conditions which may influence the system design or function such as sloping property, drainage structures such as roof drains or curtain drains, and any obstructions such as patios, decks, swimming pools or parking areas.

(f) The person performing the site evaluation shall provide a brief description of the nature of the failure which is occurring.

(2) Site evaluations necessary to obtain the above referenced information shall be conducted at the expense of the owner or lessee by either department personnel, or by an engineer who is registered in the State of Florida and has a knowledge and understanding of onsite sewage system design. Department County Public Health Units may accept soil evaluations from a person qualified to perform septic tank contracting services as specified in Part III of this rule. Site specific information may be obtained through examination of department records of permits previously issued for the site.

(3) The department shall make every effort to issue a permit within 2 working days after receiving the application for system repair. Repair permits shall be valid for 90 days from the date of issuance.

(4) Construction standards applicable to system repairs shall be no different than those required for new system construction. Any failing system which has sufficient land area to accommodate an onsite sewage disposal system constructed in compliance with the minimum standards found in sections 10D-6.046, 10D-6.048, or 10D-6.049 shall be brought into full compliance with those requirements. Systems unable to meet current requirements due to limited land area, insufficient unobstructed area, or an inability to meet setbacks required by current standards shall, at a minimum, be repaired in accordance with the following criteria:

(a) For systems which were installed from 1983 onward and where system failure is due to drainfield clogging, the original permitted drainfield shall have a drainfield addition which is at a minimum 50 percent larger than that originally approved or shall be replaced with a drainfield meeting the minimum criteria required in sections 10D-6.046, 10D-6.048 and 10D-6.049 of this rule, whichever is greater. No encroachment shall be authorized for the repair area toward any surface water body or drinking water supply well. System repairs may be made as close as 2 feet to property lines.

(b) For systems installed prior to 1983 which are experiencing drainfield clogging, no repair shall be performed which will place any part of the drainfield area closer than 50 feet to any surface water body or any closer than is presently being maintained from a drinking water supply well. However, where setbacks of the existing system to drinking water supply wells are less than 75 feet, a 75 foot setback shall be required where possible. If a 75 foot setback cannot be maintained, the maximum setback possible, not less than 50 feet,

shall be required. System repairs may be made as close as 2 feet to property lines.

(c) For systems installed prior to 1972 which are experiencing drainfield clogging, repairs shall be allowed which do not move the system closer than 50 feet from surface water bodies and maintain the setbacks to drinking water supply wells specified in 10D-6.046(1). The repair may also remove the existing drainfield and replace it with a new one in the same location as that which was removed, provided that this location is at least 25 feet from a surface water. However, where setbacks of the existing system to drinking water supply wells are less than 50 feet, the maximum setback possible, not less than 50 feet shall be maintained. System repairs may be made as close as 2 feet to property lines.

(d) For systems installed in areas with high wet season water tables or where unsuitable soils exist close to the absorption surface of the drainfield, a minimum 12 inch separation from the bottom surface of the drainfield to wet season high water table and 42 inches to any severely limited soils shall apply to any system permitted prior to 1983. If a dosing pump must be installed to obtain the 12 inch separation to the seasonal high water table, then additional suitable fill shall be required and a 24 inch separation to the wet season high water table shall be maintained.

(e) Minimum sizing of repairs for residential systems installed prior to 1983 shall be based on the values given in Tables VI and VII below.

Table VI

Residential sizing for slightly limited soil textures

Number of Bedrooms	Square Feet of Trench Area	Square Feet of Absorption Bed
1	75	100
2	150	200
3	225	300
4	300	400
Add per bedroom	75	100

Table VII

Residential sizing for Moderately-limited soil textures

Number of Bedrooms	Square Feet of Trench Area	Square Feet of Absorption Bed
1	100	125
2	200	250
3	300	375
4	400	500
Add per bedroom	100	125

(f) Repairs of commercial systems installed prior to 1983 shall be based on the following criteria:

1. Sewage flows shall be determined from values found in Table II of 10D-6.048 or on the highest monthly flow for the previous 18 month period from documented water use records, whichever is higher.

2. Sewage loading rates to trench or absorption bed bottom areas shall be in accordance with the values in Table VIII which are applicable to subsurface and filled drainfield systems.

Table VIII
in gallons/square foot/day

	Trenches	Absorption
Beds		
Slightly limited textures	1.75	1.25
Moderately limited textures	1.00	.75

(g) Where the cause of system failure is determined to be from root clogging of the distribution box or drainfield line of a system, and where removal of the root mass and replacement of damaged drainfield material will restore the system to its original design function, upon inspection and verification of the repair work by the health unit, permit satisfaction will be considered to be achieved.

(h) For systems installed prior to 1983, tanks need not be replaced as part of the repair if the health unit determines the tank to be structurally sound, constructed of approved materials, and if such tank has a liquid capacity within two tank sizes of the capacities required by Table III. In addition, the tank shall be pumped and a solids deflection device shall be installed as a part of the outlet of the tank.

(5) System repairs shall be performed by persons who are qualified to do so as set forth in Part III of this rule.

Specific Authority: 381.006(8), 381.0065, F.S.

Law Implemented: 381.006(8), 381.0065, 386 Part I, F.S.

History: New 3-17-92

10D-6.058 U.S. Department of Agriculture Soil Textural Classification System.

(1) Soil texture is a term commonly used to designate the proportionate distribution of different sized mineral particles in a soil. Individual particles, based on their size, are grouped into separates. These soil separates are classified by size into the groupings shown below:

Separate	Diameter Limit in Millimeters
Very coarse sand	2.00 - 1.00
Coarse sand	1.00 - .50
Medium sand	.50 - .25
Fine sand	.25 - .10
Very fine sand	.10 - .05
Coarse silt	.05 - .005
Fine silt	.005 - .002
Clay	less than .002

(2) Florida's major soil texture classifications and some of the characteristics which can be utilized in the field for identification of these soils are listed below:

(a) Sand - A sand is loose and single grained. The individual grains can readily be seen or felt. Squeezed in the hand when dry it will fall apart when the pressure is released. Squeezed when moist, it will form a cast, but will crumble when touched.

(b) Sandy loam - A sandy loam contains much sand but has enough silt and clay to make it somewhat cohesive. The individual sand grains can readily be seen and felt. Squeezed in the hand when dry, it will form a cast which will readily fall apart, but if squeezed when moist a cast may be formed that will bear careful handling without breaking.

(c) Loam - A loam contains a relatively even mixture of different grades of sand, silt, and clay. It is mellow with a somewhat gritty feel, yet fairly smooth and slightly plastic. Squeezed in the hand when dry, it will form a cast that will bear careful handling, but when moist the cast formed by squeezing may be handled quite freely without breaking.

(d) Silt loam - A silt loam contains a moderate amount of the fine grades of sand, only a small amount of clay, and over half of the particles being of the silt size. When dry it may appear cloddy but the lumps can be readily broken, and when pulverized it feels soft and floury. When wet this material readily runs together and puddles. Either dry or moist it will form casts that can be freely handled without breaking, but when moistened and squeezed between thumb and finger it will not "ribbon" but will give a broken appearance.

(e) Clay loam - A clay loam contains fine-textured soil separates which usually break into clods or lumps that are hard when dry. When moistened and squeezed between the thumb and finger it will form a thin "ribbon" which will break readily, barely sustaining its own weight. The moist soil is plastic and will form a cast that will bear

much handling. When kneaded in the hand it does not crumble readily but tends to work into a heavy compact mass.

(f) Clay - A clay contains fine-textured soil separates that usually form very hard lumps or clods when dry and are quite plastic and usually sticky when wet. When moistened and squeezed between the thumb and finger it will form a long, flexible, "ribbon."

(g) Organic soils - Muck, peat, and mucky peat are used in place of textural class names in organic soils. Muck is well decomposed organic soil material; peat consists of raw undecomposed organic soil material; and mucky peat designates materials intermediate in decomposition between muck and peat.

(3) Definitions of the soil texture classes according to distribution of size classes of mineral particles less than 2 millimeters in diameter are as follows:

(a) Sands - 85 percent or more sand and the percentage of silt plus 1 1/2 times the percentage of clay is 15 or less.

1. Coarse sand - 25 percent or more very coarse and coarse sand and less than 50 percent any other single grade of sand.

2. Sand - 25 percent or more very coarse, coarse and medium sand, but less than 25 percent very coarse and coarse sand, and less than 50 percent either fine sand or very fine sand.

3. Fine sand - 50 percent or more fine sand; or less than 25 percent very coarse, coarse, and medium sand and less than 50 percent very fine sand.

4. Very fine sand - 50 percent or more very fine sand.

(b) Loamy sands - At the upper limit 85 to 90 percent sand and the percentage of silt plus 1 1/2 times the percentage of clay is 15 or more; at the lower limit 70 to 85 percent sand and the percentage of silt plus twice the percentage of clay is 30 or less.

1. Loamy coarse sand - 25 percent or more very coarse and coarse sand and less than 50 percent any other single grade of sand.

2. Loamy sand - 25 percent or more very coarse, coarse, and medium sand and less than 50 percent either fine sand or very fine sand.

3. Loamy fine sand - 50 percent or more fine sand; or less than 50 percent very fine sand and less than 25 percent very coarse, coarse, and medium sand.

4. Loamy fine sand - 50 percent or more very fine sand.

(c) Sandy loams - 20 percent or less clay and 52 percent or more sand and the percentage of silt plus twice the percentage of clay exceeds 30; or less than 7 percent clay, less than 50 percent silt, and between 43 and 52 percent sand.

1. Coarse sandy loam - 25 percent or more very coarse and coarse sand and less than 50 percent any other single grade of sand.

2. Sandy loam - 30 percent or more very coarse, coarse, and medium sand, but less than 25 percent very coarse and coarse sand, and less than 30 percent either fine sand or very fine sand.

3. Fine sandy loam - 30 percent or more fine sand and less than 30 percent very fine sand; or between 15 and 30 percent very coarse, coarse, and medium sand; or more than 40 percent fine and very fine sand, at least half of which is fine sand, and less than 15 percent very coarse, coarse, and medium sand.

4. Very fine sandy loam - 30 percent or more very fine sand; or more than 40 percent fine and very fine sand, at least half of which is very fine sand, and less than 15 percent very coarse, coarse, and medium sand.

(d) Loam - 7 to 27 percent clay, 28 to 50 percent silt, and less than 52 percent sand.

(e) Silt loam - 50 percent or more silt and 12 to 27 percent clay; or 50 to 80 percent silt and less than 12 percent clay.

(f) Silt - 80 percent or more silt and less than 12 percent clay.

(g) Sandy clay loam - 20 to 35 percent clay, less than 28 percent silt, and 45 percent or more sand.

(h) Clay loam - 27 to 40 percent clay and 20 to 45 percent sand.

(i) Silty clay loam - 27 to 40 percent clay and less than 20 percent sand.

(j) Sandy clay - 35 percent or more clay and 45 percent or more sand.

(k) Silty clay - 40 percent or more clay and 40 percent or more silt.

(l) Clay - 40 percent or more clay, less than 45 percent sand, and less than 40 percent silt.

Specific Authority: 381.006(8), 381.0065, F.S.

Law Implemented: 381.006(8), 381.0065, 386 Part I, F.S.

History: New 12-22-82, Amended 2-5-85, 3-17-92

10D-6.059 Fees.

(1) The following fees are required to accompany applications for site evaluations, construction or repair permits, and other services provided by the department.

- (a) Soil Testing & Site evaluation which includes an evaluation of criteria specified in subsection 10D-6.044(3), and 10D-6.0571(1).....\$80
- (b) Application for permitting of subsurface drainfield system, which includes plan review, issuance of construction permit and installation inspection \$100
- (c) Application for permitting of mound, filled, or other alternative drainfield system which includes plan review, issuance of construction permit, and installation inspections..... \$100
- (d) Annual operating permit fee for systems in industrial, manufacturing, and equivalent areas, and for systems receiving commercial sewage waste. \$150
- Amendments or changes to the operating permit during the permit period per change or amendment.....\$25
- (e) Aerobic treatment unit operating permit per annum..... \$150
- The following fee is to be collected in addition to, and concurrent with, the above permit fees: Research to be collected from 10/1/88 until 6/30/93..... \$5
- (f) Repair Permit which includes inspection.....\$40
- (g) Approval of System Previously In Use which includes inspection of system.....\$40
- (h) System abandonment permit, includes permit issuance, inspection, and approval.....\$40
- (i) Tank Manufacturer's Inspection per annum.....\$50
- (j) Septage Disposal Service permit per annum.....\$50
- Additional charge per pumpout vehicle.....\$25
- (k) Portable or Temporary Toilet Service permit per annum.....\$50
- Additional charge per pumpout vehicle.....\$25
- (l) Lime stabilization facility inspection fee per annum per facility..... \$150
- (m) Septage disposal site evaluation fee per annum..... \$100
- (n) Reinspection fee per visit for site inspections after system construction

- approval.....\$25
- (o) Installation Re-inspection for non-compliant system per each visit.....\$25
- (p) Aerobic treatment unit maintenance entity permit per annum.....\$25
- (q) Variance Application for a single family residence per each lot or building site... \$150
- (r) Variance Application for a multi-family or commercial building per each building site..... \$200

(2) Except for the time limited research fee which is to be placed in a designated account, all fees collected pursuant to subsection 10D-6.059(1)(a) through 10D-6.059(1)(p) shall be deposited in an individual HRS county public health unit trust fund to be used to meet the cost of administering the onsite sewage disposal program. Five dollars from the monies collected by the HRS county public health units pursuant to subsection 10D-6.059(1)(b) and (c) shall be transferred to a special account set up by the department's State Health Office to offset the headquarters cost of providing technical, monitoring, training and administrative assistance for this program.

(3) Fees collected pursuant to subsections 10D-6.059(1)(q) and (r) shall be used to offset administrative costs associated with the variance review process described in section 10D-6.045. The variance application fee shall be collected by respective HRS county public health units. Fifty percent of the amount collected shall be placed in the appropriate HRS county public health unit trust fund and the remaining 50 percent of the fee shall be transferred to a special account set up by the State Health Office.

Specific Authority: 381.0066, F.S.

Law Implemented: 381.0066, F.S.

History: New 2-5-85, Amended 3-17-92

10D-6.060 Enforcement and Penalties.

(1) Department personnel may enter onto property to conduct pre-construction site evaluations, during system construction, during system repair, and thereafter to conduct necessary inspections of the onsite sewage disposal system to determine the compliance of the system design, construction, maintenance, and operation with standards set forth in this chapter.

(2) This section shall apply to all areas of the state and may be used to enforce the provisions of Parts I, II, and III of this rule. The department shall enforce the provisions of this rule using one or more of the following:

(a) The department may apply for an injunction to the proper circuit court restraining any person from violating or continuing to violate any of the provisions of this chapter, as provided in section 381.0012, F.S., or;

(b) In addition to any administrative action authorized by Chapter 120, F.S. or by other law, the department may impose an administrative fine, which shall not exceed \$500 for each violation, as provided in section 381.0061 for violation of sections 381.0065, 381.0066, Chapter 489, Part III, F.S., or any rule adopted thereunder. Notice of intent to impose such a fine shall be given by the department to the alleged violator. Each day a violation continues may constitute a separate violation.

(3) Any person who interferes with, hinders, or opposes any employee of the department in the discharge of their duties pursuant to the provisions of this chapter, is guilty of a misdemeanor of the second degree, punishable as provided in s. 775.082 or s. 775.083, F.S.

(4) Any person who knowingly commits an assault or battery upon department personnel who are engaged in the lawful performance of their duties is guilty as delineated in section 381.0025, F.S.

Specific Authority: 381.0012, 381.0025, 381.0061, 381.0065, F.S.

Law Implemented: 381.0012, 381.0025, 381.0061, 381.0065, F.S.

History: New 3-17-92

PART II

10D-6.061 General. This part pertains to onsite sewage disposal system requirements for system installation in Key Largo Limestone or Miami Limestone rock formations:

(1) Geographic areas specifically intended for inclusion under the provisions of Chapter 10D-6, Part II, include the entire Keys portion of Monroe County and those areas of Dade County in which Key Largo Limestone or Miami Oolite exists within 18 inches of the natural ground surface.

(2) Except for the specific provisions of this part, all definitions, provisions and requirements in Chapter 10D-6, Part I, shall apply to those areas of the state indicated in subsection 10D-6.061(1). Provisions of this part, unless otherwise noted, shall apply regardless of the date of lot platting or lot subdivision.

(3) For system sizing purposes only, estimated domestic sewage flows listed in Table II of Part I

shall be reduced by 10 percent for those residences and establishments served potable water by the Florida Keys Aqueduct Authority or for those residences utilizing a cistern as the sole water supply source.

(4) Subdivisions and lots platted after December 31, 1971 and served by a public water system or cisterns may be developed utilizing onsite sewage disposal systems provided there are no more than four lots per acre. Subdivisions and lots platted after December 31, 1971 may be developed with private potable wells and onsite sewage disposal systems provided each lot has a minimum area of at least 1/2 acre. For lots platted prior to 1972 minimum lot size requirements shall not apply.

(5) Sewage flow values as listed in Table I of Part I shall be used in making determinations pertaining to sewage flow limitations as detailed in Part I, paragraphs 10D-6.46(7)(d) and (e). In addition, where a cistern is the sole water supply source for a residence, and where there is not a potable drinking water well within 200 feet of the proposed system, sewage flow limitation calculations shall be based on 2500 gallons per acre per day. Where lots in a subdivision are served by private potable wells or where a system cannot be located at least 200 feet from 1 or more potable drinking water wells, sewage flow limitation calculations for a particular lot or property shall be based on 1500 gallons per acre per day.

(6) No onsite sewage disposal system shall be constructed, installed, replaced or repaired without prior approval of the HRS county public health unit. Routine servicing or maintenance of an approved aerobic treatment unit or septic tank shall not constitute a system repair. Emergency service necessary to prevent or eliminate an imminent sanitary nuisance condition caused by failure of a mechanical component of an aerobic treatment unit shall be reported by the approved aerobic unit maintenance entity, in writing, to the appropriate HRS county public health unit no later than 5 working days after the date of the emergency service.

(7) A system not permitted, located, constructed, operated or maintained in accordance with the provisions of this part is a non-compliant system and is in violation of Chapters 381 and 386, F. S.

(8) Systems installed under the provisions of this part shall be installed to maintain the maximum possible setbacks to surface waters and wetlands.

Specific Authority: 381.006(8), 381.0065(12) F.S.

Law Implemented: 381.0065(12) F.S. *History:* New 7-15-86,

10D-6.062 Definitions. Definitions in Chapter 10D-6, Part I, are also applicable to Chapter 10D-6, Part II.

(1) Effective grain size - that size soil particle or grain, in millimeters, in which 10 percent by weight of the soil particles in a sample are smaller.

(2) Salt Marsh and Buttonwood Associations - two plant associations that are sometimes collectively or individually referred to as the "transitional zone."

(a) The salt marsh community is a wetland area subject to tidal influence wherein the dominant vegetation includes, but is not limited to, the following:

1. *Batis maritima* Saltwort
2. *Distichlis spicata* Salt grass
3. *Fimbristylis castanea* Chestnut sedge
4. *Monanthochloe littoralis* Key grass
5. *Salicornia* spp. Glasswort
6. *Sesuvium portulacastrum* Sea purslane
7. *Spartina* spp. Cordgrass
8. *Fimbristylis castanea* Chestnut sedge

The woody vegetation that may be present includes red, white and black mangroves, as well as buttonwood (*Conocarpus erectus*); the salt marsh community is distinguished by the dominance of nonwoody plants, and the woody species have a coverage of less than 40 percent. The salt marsh community may be associated and intermixed with areas of almost bare ground on which the vegetation may be limited to mats of algae.

(b) The buttonwood association is an association that is usually present in the more landward zone, and may intermix with more upland communities. The vegetation may include, but is not limited to, the following species:

1. *Borrchia* spp. Sea oxeye daisy
2. *Bumelia celastrina* Saffron plum
3. *Coccoloba uvifera* Sea grape
4. *Conocarpus erectus* Buttonwood
5. *Erithalis fruticosa* Black torch
6. *Fimbristylis castanea* Chestnut sedge
7. *Jacquinia keyensis* Joewood
8. *Lycium carolinianum* Christmas berry
9. *Maytenus phyllanthoides* Mayten
10. *Spartina* spp. Cordgrass

The buttonwood association is distinguished from the salt marsh association by the dominance of buttonwood trees, usually occurring as an open stand that permits the growth of an understory of groundcovers and shrubs.

(3) Underground injection well - a conduit provided for the routing of effluent, having received treatment from a Class I aerobic treatment unit and

filter unit, into an underground geologic formation with such conduit and geologic formation providing for final domestic wastewater effluent disposal.

(4) Uniformity coefficient - the number representing the degree of homogeneity in the distribution of particle size of filter sand or other granular material. The coefficient is calculated by determining the ratio of the grain size in a soil sample that has 60 percent by weight finer than itself to the grain size which has 10 percent of the soil sample by weight finer than itself.

Specific Authority: 381.006(8), 381.0065(12) F.S.

Law Implemented: 381.0065(12) F.S.

History: New 7-15-86, Amended 3-17-92

10D-6.063 System Location, Design and Maintenance Criteria. Table IV of Chapter 10D-6, Part I, and other subsections of Part I pertaining to soil texture, soil depth, and maximum sewage loading rates for specific soils shall not apply to areas subject to the provisions of Chapter 10D-6, Part II. However, maximum system loading rates, approved system design criteria, system location, operation and maintenance requirements of subsections 10D-6.063(1), (2), (3) and (4) shall apply.

(1) The following general requirements apply for the use of a septic tank and drainfield system where a minimum 12 inch thick filter layer of quartz sand is placed beneath the bottom of the gravel drainfield absorption surface and a minimum 12 inch wide and minimum 24 inch thick filter layer of quartz sand is placed contiguous to the drainfield sidewall absorption surfaces in order to provide an additional level of effluent treatment prior to effluent passing into the surrounding natural limestone rock:

(a) Sand filter material shall have either an effective grain size in the range of 0.35 millimeter to 1.00 millimeter and shall have a uniformity coefficient of less than 3.5 or, the material shall be of such size whereby at least 90 percent of the sand particles pass a U.S. Standard Number 20 sieve and less than 10 percent pass a number 40 sieve. The HRS county public health unit shall require the installer of sand underlined drainfield systems to provide certification from the installer's sand supplier that the sand supplied for such type of installations meets requirements of this subsection.

(b) No part of a septic tank and gravel drainfield with underlined sand filter system shall be located within 50 feet of the mean high water line of tidal surface water bodies or within 50 feet of the

ordinary high water line of lakes, ponds or other non-tidal surface waters.

(c) Where such system is located between 50 feet and 75 feet from surface water, the bottom surface of the sand filter layer shall be at least 12 inches above the water table elevation at the wettest season of the year in non-tidally affected areas, or at least 18 inches above mean high water in tidally affected areas.

(d) Where a system is located greater than 75 feet from surface water, the bottom surface of the sand filter layer shall be at least 6 inches above the water table elevation at the wettest season of the year in non-tidally affected areas, or at least 12 inches above mean high water in tidally affected areas.

(e) In addition to the minimum system setbacks specified in subparagraphs 10D-6.063(1)(b),(c) and (d) for surface waters, the drainfield component of a system must, where possible, be located a minimum distance of 50 feet from salt marsh and Buttonwood Association habitat areas where the dominant vegetation species are those typical of salt marsh communities. If it is not possible to maintain a minimum 50 feet setback from these areas, the maximum setback possible, but not less than 25 feet, shall be maintained.

(f) The maximum sewage loading rate to an absorption bed drainfield with a sand filter shall be 1.25 gallons per square foot of drainfield per day. However, in no case shall a drainfield with sand filter liner used for septic tank effluent disposal be less than 100 square feet in size.

(g) Appropriate shallow root vegetative cover shall be established over drainfield systems to maximize the beneficial effects of evapotranspiration.

(2) A Class I aerobic treatment unit which meets the location, construction, maintenance and operational requirements of paragraphs 10D-6.063(2)(a) and (b) and the certification, construction, operational and maintenance requirements of 10D-6.0541 shall be approved.

(a) Where a Class I aerobic treatment unit is utilized, and where final effluent disposal is into a sand filter lined drainfield system as described in paragraph 10D-6.063(1), the following general requirements shall apply:

1. No part of the system shall be within 25 feet of the mean high water line of tidal surface water bodies or within 25 feet of the ordinary high water line of lakes, ponds or other non-tidal surface waters. In addition, no part of the drainfield system shall be within 20 feet of salt marsh and Buttonwood

Association habitat areas where the dominant vegetation species are those typical of salt marsh communities.

2. The bottom surface of the sand filter layer shall be at least 6 inches above the water table elevation at the wettest season of the year in non-tidally affected areas, or at least 12 inches above mean high water in tidally affected areas.

3. The maximum sewage loading rate to an aerobic unit absorption bed drainfield with underlying sand filter shall be 1.5 gallons per square foot per day. However, in no case shall a drainfield with an underlying sand filter layer used for aerobic unit effluent disposal be less than 75 square feet in size.

4. Appropriate shallow root vegetative cover shall be established over drainfield systems to maximize the beneficial effects of evapotranspiration.

(b) Provided a Class I aerobic treatment unit is utilized and provided effluent from the treatment unit, prior to discharge into an underground injection well, is passed through a gravel filter unit as described in subparagraph 10D-6.063(2)(b) or where effluent is passed through a filter unit of another design which has been determined by the State Health Office to be at least equal to the gravel filter unit with regard to sewage treatment capability, an underground injection well shall be approved provided setbacks from salt marsh/buttonwood habitats and other surface waters cannot be met by another effluent disposal system noted above, and provided the installation is in compliance with the following:

1. An underground injection well shall not be permitted or installed under the provisions of this part in any area designated by the United States Environmental Protection Agency as having a single or sole source aquifer. Single source aquifer is defined in Chapter 17-3, Florida Administrative Code.

2. In areas where underground injection wells are approved for use, the HRS county public health unit shall be the permitting agent for the aerobic treatment unit, the filter unit and the underground injection well where a single family residence is involved. For multi-family residential establishments, institutions or commercial establishments having a total daily domestic sewage flow of not greater than 5000 gallons, the HRS county public health unit shall be the permitting authority for the aerobic treatment unit and the filter unit. The Department of Environmental Regulation shall be the permitting agent for the underground injection

well and any additional associated effluent treatment device.

3. The interior of the aerobic treatment unit, the top surface of the gravel filter soil cover, and the ground surface within a distance of at least 10 feet in all directions around the underground injection well, filter unit and aerobic treatment unit shall not be subject to surface or ground water flooding. In addition, the invert of the effluent inlet pipe to the underground injection well shall be a minimum 18 inches above the estimated seasonal high water level.

4. If there is adequate vertical and horizontal clearance to allow for proper maintenance, repair or replacement of the aerobic treatment unit, filter unit and underground injection well, such components of the onsite sewage disposal system may be placed beneath an elevated building.

5. If a gravel filter as referred to in paragraph 10D-6.063(2)(b) is utilized, effluent discharge from the aerobic unit shall be by gravity or pressure distribution to a perforated pipe distribution system as specified in Part I, section 10D-6.056. Such distribution system shall be placed within the walls of the gravel filter, shall have at least 4 inches of soil cover and shall be placed above a gravel filter layer which shall be at least 24 inches thick. Gravel filter material shall have either an effective size in the range of 2.36 millimeters to 4.75 millimeters and shall have a uniformity coefficient of less than 3.5 or the material shall be equivalent in size to Florida Department of Transportation rock classification number eight or nine. The HRS county public health unit shall require the installer of gravel filter systems to provide certification from the installer's gravel supplier that the gravel supplied meets requirements of this sub-paragraph.

6. The maximum sewage loading rate to the gravel filter shall be 7.5 gallons per square foot per day based upon the top surface area of the filter layer. The maximum sewage loading rate to an approved filter unit other than a gravel filter as described in this section shall be determined by the State Health Office based on unit design, size, filter media characteristics and expected functional life of the unit.

7. Effluent having passed through a gravel filter shall collect in an underdrain for gravity discharge into an underground injection well. The underdrain shall consist of minimum 4 inch diameter perforated drainpipe which is encased within a minimum 8 inch depth of 1 to 2 inch diameter washed and durable aggregate. The walls and bottom of the filter unit shall be reinforced concrete

or other material of adequate strength and durability to withstand hydrostatic and earth stresses to which the unit will be subjected. The walls and bottom of the unit shall be made waterproof so that the total volume of effluent passed through the gravel filter will be collected in the filter underdrain for discharge into the underground injection well.

8. Prior to discharge into an underground injection well, effluent from the filter unit shall be disinfected by chlorination or other disinfection method approved by the State Health Office. A minimum disinfection level equivalent to a free chlorine residual of 0.5 milligram per liter measured at the point of effluent discharge into the underground injection well, shall be maintained in the effluent at all times.

9. An underground injection well for a single family residence shall meet minimum construction criteria a., b. and c. of this sub-paragraph. The HRS county public health unit shall not approve an underground injection well for use until the contractor for the well construction has certified, in writing to the HRS county public health unit, that the well has been installed in compliance with the provisions of this sub-paragraph.

a. An underground injection well shall be constructed, in part, utilizing a casing of polyvinyl chloride, commonly referred to as PVC, pipe extending to a minimum depth of 50 feet. The minimum PVC casing weight and strength classification shall be schedule 40 and the minimum outside diameter of the casing shall be 4 inches. Other casing materials having strength and corrosion resistance properties equal to or greater than PVC schedule 40 pipe shall also be approved.

b. An open hole having a minimum diameter of 6 inches shall extend to a depth of not less than 35 feet below the bottom of the casing.

c. The annular space between the casing and the natural rock wall of the borehole shall be grouted the full length of the casing.

10. If an underground injection well is discontinued for effluent disposal use such underground injection well shall be properly abandoned and plugged by filling the underground injection well from bottom to top with cement grout.

(3) For an aerobic treatment unit treating domestic sewage flows in excess of 1500 gallons per day but not exceeding 5000 gallons per day, where effluent from the treatment unit will be discharged to a soil absorption drainfield system, the following requirements shall be met:

(a) The soil absorption drainfield system shall meet at least minimum setback and elevation requirements specified in section 10D-6.063(2).

(b) The owner or lessee of a system shall comply with the general maintenance and operational requirements of section 10D-6.0541(2) and (3).

(4) In addition to the systems specified in subsections 10D-6.063(1), (2) and (3), an applicant may use systems as described in subsections 10D-6.049(1), (3), or (4), or may apply for a variance to utilize an alternative system as described in subsection 10D-6.049(5). Such alternative system shall meet the general intent of Part I and Part II of this rule.

Specific Authority: 381.006(8), 381.0065(12) F.S.

Law Implemented: 381.0065(12) F.S.

History: New 7-15-86, Amended 3-17-92

10D-6.064 Fees. Fees for all onsite sewage disposal related services provided by the department shall be as specified in section 10D-6.059, Part I.

Specific Authority: 381.006(8), 381.0065(12) F.S.

Law Implemented: 381.0065(12) F.S.

History: New 7-15-86, Amended 3-17-92

Part III

10D-6.070 General Provisions.

(1) Persons shall not hold themselves out as septic tank contractors or contract to provide septic tank services in the state unless registered by the department in accordance with the provisions of this rule.

(2) Persons licensed pursuant to subsection 489.105(3)(m), F.S., shall not be prohibited by this Part from engaging in the profession for which they are licensed.

(3) Persons licensed by the Department of Professional Regulation as either general contractors, building contractors, or residential contractors and the companies by whom they are employed shall be required to meet the requirements of this rule if they do not subcontract the construction, installation, modification, or repair of onsite sewage disposal systems to a person registered by the department in compliance with this rule.

(4) A property owner shall not be subject to registration requirements when personally performing construction, installation, alteration, maintenance, or repair of an onsite system on his or her own owner-occupied residence. However, property owners subcontracting the construction,

installation, alteration, maintenance, or repair of an onsite sewage disposal system must subcontract with a contractor authorized to provide contracted septic tank services.

(5) Compliance with the provisions of this rule does not exempt persons from compliance with other applicable state and local requirements pertaining to contracting activities.

Specific Authority: 489.552, 489.553(3) F.S.

Law Implemented: 489.552, 489.553(3) F.S.

History: New 10-25-88, Amended 3-17-92

10D-6.071 Definitions.

(1) Person - any individual, partnership, firm, company, corporation, trustee, association, public body or private entity engaged in the onsite sewage disposal trade.

(2) Septic Tank Contractor - a person responsible for a contracted project who, for compensation, undertakes to, submits a bid to, or does himself or by others construct, install, alter, repair, modify, or maintain an onsite sewage disposal system. A contractor must possess the experience, knowledge, skill and ability to provide services in the septic tank trade pertaining to installation, maintenance, construction, alteration, repair, pumping or design where not prohibited by law, of any kind of onsite sewage disposal system or its components.

Specific Authority: 489.551, 489.553(3) F.S.

Law Implemented: 489.551, 489.553(3) F.S.

History: New 10-25-88, Amended 3-17-92

10D-6.072 Requirements for Registration.

(1) Persons subject to registration - A person shall be subject to the requirements of this rule if he or she contracts to provide services to the public or holds himself or herself out as being capable of performing services related to any of the following activities in the onsite sewage disposal industry regulated by the department:

(a) Installation of onsite sewage disposal systems,

(b) Repair of onsite sewage disposal systems,

(c) Modification of onsite sewage disposal systems,

(d) Maintenance of onsite sewage disposal systems,

(e) Septic tank pumping and septage disposal services, excluding companies which only provide portable toilet services.

(2) Any person seeking registration shall apply to the department to take the registration examination on HRS-H Form 4075, October 88,

Application for Septic Tank Contractor Registration incorporated by reference in these rules.

(3) A person shall be eligible to take the registration examination if they submit necessary exhibits and fees and meet the following requirements:

- (a) Is 18 years of age.
- (b) Is of good moral character; and
- (c) Has a total of at least 3 years of active

experience as a worker who has learned the trade by serving an apprenticeship under a registered septic tank contractor. Related work experience may be substituted on a year for year basis but shall not be substituted for more than 2 years of the active contracting experience.

(4) Completed applications for examination must be received by the department's State Health Office at least 30 days prior to examination. In order to be complete, the application must have all appropriate spaces filled, be signed by the applicant, be reviewed by the HRS county public health unit where the applicant provides service, include a money order or sufficiently funded check in the correct amount and contain all necessary support documentation. Support documentation shall include:

(a) A list of all contracts by the applicant or business organization under way at the time of filing, if any, along with a list of all contracts completed 3 years immediately preceding the date of filing or, in the alternative, a list of the 25 most recent contracts performed. This list shall include the description of each job, location, owner, construction permit number if applicable, date job completed, and general contractor, if applicable.

(b) Affidavits from two persons not related to the applicant for whom the applicant has provided contracted services, stating that the applicant is of good moral character.

(5) An applicant who wishes to be administered a verbal examination must submit the same application and supporting documents required of other applicants.

(6) Within 30 days of receipt of the completed application by the State Health Office, the applicant shall be notified as to whether he or she meets the general requirements of this rule and is eligible for examination.

(a) If eligible for examination, the department shall schedule the applicant for examination.

(b) If an applicant is determined ineligible for registration, the department shall provide the applicant with reasons for the determination. When the decision is made that the applicant is not

qualified for registration, the applicant may petition for a hearing under section 120.57, F.S.

(7) Eligible applicants must successfully complete an examination administered by the department. Minimum passing score for the examination shall be a 70 percent correct response to all questions comprising the exam.

(a) No more than 3 hours will be allowed to complete the examination.

(b) Examinations shall be hand or machine graded by or under the supervision of the department.

(c) The department shall notify the applicant of examination results no later than 30 days after the examination date.

(d) If an applicant fails to achieve a passing score on the examination, the applicant will be notified of the failure, the right to re-apply to take the examination, the review and appeal rights and procedures, and that the applicant is being denied registration because of failure to achieve a passing score on the examination. Applicants who fail the examination may request to review their examination results by making application for such a review to the department within 15 days of the date of notification of examination results.

(8) The department shall inform applicants receiving a passing score of their status and provide necessary instructions for receiving a certificate of registration.

(9) Examination results are valid for a period of 2 years from the date of examination.

Specific Authority: 489.553 F.S.

Law Implemented: 489.553 F.S.

History: New 10-25-88, Amended 3-17-92

10D-6.073 Issuance of Registration Certificates and Renewals.

(1) Upon receipt of the required registration fee, the department shall issue a certificate of registration to each applicant who meets the requirements of section 10D-6.072, F.A.C.

(2) All certificates of registration expire on September 30, following the effective date of the certificate.

(3) Certificates of registration shall be renewed only after information has been provided to the department that the contractor has successfully completed within the previous 12-month period, 6 classroom hours of approved instruction regarding the public health and environmental effects of onsite sewage disposal systems or on other matters the department determines necessary for the proper installation and use of onsite sewage disposal

systems. Such information shall be accompanied by necessary renewal fees and a completed renewal application on HRS-H Form 4076, Application for Septic Tank Contractor Registration Renewal, incorporated by reference in these rules.

(4) Any registration renewal application which for any reason is not submitted in a timely and complete manner shall revert to inactive status. Each application for renewal shall be considered filed in a timely manner if the application has been postmarked prior to the close of business on the date of expiration of the registration. If that date falls on a weekend or legal holiday, the date of expiration shall be the first working day after the expiration date on the certificate of registration.

(5) A registered contractor may request inactive status. Inactive registrations not renewed in two renewal cycles from the date of inactivation shall be considered null and void. Persons wishing to renew an inactive registration must make application on HRS-H Form 4076 and substantiate 6 classroom hours of approved instruction for each year the registration was considered inactive. Application must be accompanied by necessary exhibits and renewal fees.

Specific Authority: 489.553, 489.554 F.S.

Law Implemented: 489.553, 489.554 F.S.

History: New 10-25-88, Amended 3-17-92

10D-6.0731 Notifications of Changes.

(1) A certificate holder or registrant shall notify the department within thirty (30) days of a change in name style or address from that which appears on his current certificate or any change in business organization affiliation. Failure to do so may constitute cause for disciplinary action.

(2) A business organization which loses its qualifying person shall have sixty (60) days from the date the qualifier terminated his affiliation within which to obtain another qualifying person. This period may be extended by the department upon a showing of good cause.

Specific Authority: 489.553, 489.555 F.S.

Law Implemented: 489.553, 489.555 F.S.

History: New 3-17-92

10D-6.074 Suspension, Revocation, or Denial of Registration.

(1) Certificates of registration may be suspended or revoked in accordance with Chapter 120, F. S. and the disciplinary guidelines of section 10D-6.077, upon a showing that the registrant has:

(a) Violated provisions of this rule or any lawful order rendered by the department.

(b) Obtained registration or any other order, ruling, or authorization by means of fraud, misrepresentation, or concealment of material facts.

(c) Been found guilty of gross misconduct in the pursuit of his or her profession.

(2) The department shall deny a registration if it determines that an applicant does not meet all requirements as set forth in this rule or has violated any provisions of the statutes or rules relating to the practice of septic tank contracting. Any applicant aggrieved by such a denial shall be entitled to a hearing, after notice of registration denial, upon filing a written request for such hearing in accordance with Chapter 120, F.S.

(3) The department shall report any criminal violation of this rule to the proper prosecuting authority for prompt enforcement action.

(4) Violations of the provisions of the act upon which this rule is promulgated are misdemeanors of the first degree, punishable as provided in sections 775.082 and 775.083 F.S.

Specific Authority: 381.0061, 489.553(3), 489.556, 489.558, 489.559 F.S.

Law Implemented: 381.0061, 489.553(3), 489.556, 489.558, 489.559 F.S.

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History: New 10-25-88, Amended 3-17-92

10D-6.075 Standards of Practice.

(1) It shall be the responsibility of persons registered under this rule to see that work for which they have contracted and which has been performed by them or under their supervision is carried out in conformance with the requirements of all applicable Florida Statutes and Chapter 10D-6, F.A.C.

(2) No contractor shall construct, alter, modify, repair, or install an onsite sewage disposal system without receiving a permit from the department.

(a) No contractor shall install, modify or repair an onsite sewage disposal system which will violate standards set forth in Chapter 381, F.S. or Chapter 10D-6, F.A.C., without evidence that a variance has been granted.

(b) No contractor shall perform service on an onsite sewage disposal system which is clearly not necessary to improve the function or design of the system without notifying the property owner that such work is optional and will not enhance system operation.

(c) No contractor shall perform services which will cause or increase the likelihood of pollution to ground or surface waters or which will increase the threat to the health and safety of the public.

(3) Each contractor shall be responsible for maintaining records of services provided as required by law or rule.

(4) The following actions by a person included under this rule shall be deemed unethical and subject to penalties as set forth in section 10D-6.0751:

(a) Providing contracted services without obtaining registration from the department, failure to obtain a certificate of authorization for a firm which provides contracted services, acting under a name not registered or authorized by the department, offering to provide septic tank contracting services without maintaining a current registration or authorization.

(b) Permit violations.

1. Late permits. Contractor initiates work to install, upgrade, or repair a system when no permit has been issued by the department. A permit is issued after construction is started but prior to completion of the contracted work. No inspections are missed.

2. Contracted work is completed without a permit having been issued, or no permit application was received until contracted work was completed, resulting in missed inspection or inspections.

(c) Contracting with a delinquent registration.

(d) Failure to call for required inspections.

(e) False payment statements which are the result of assessing charges to a customer for work not performed.

(f) Misconduct by failure to reasonably honor warranty.

(g) Abandoning, without good cause, a project in which the contractor is engaged or is under contractual obligation to perform. The failure of a contractor to perform work without just cause for 90 consecutive days shall create a presumption that the contractor has abandoned the project.

(h) Aiding or abetting evasion of Chapter 489, F.S.

(i) Obtaining registration through fraud or misrepresentation.

(j) Convicted or found guilty of a crime relating to contracting.

(k) Practicing fraud or deceit, making misleading or untrue representations.

(l) Gross negligence, incompetence, or misconduct which:

1. Causes no monetary or other harm to a customer, or physical harm to any person. Example of such a violation would be the illegal disposal of septage by a contractor.

2. Causes monetary or other harm to a customer, or physical harm to any person.

(m) Operating a septage disposal service without a valid department operating permit.

(n) Failure to properly treat or properly dispose of septage or food establishment sludge.

(o) Failure to maintain completed records of septage treatment and disposal activities.

(p) Violation of any applicable state law or local ordinance.

Specific Authority: 489.553(3) F.S.

Law Implemented: 381.0061, 381.0065, 386, Part 1, 489.553(3), 489.556, 489.558 8 F.S.

History: New 10-25-88, Amended 3-17-92

10D-6.0751 Disciplinary Guidelines.

(1) The following guidelines shall be used in disciplinary cases, absent aggravating or mitigating circumstances and subject to other provisions of this section.

(a) Providing contracted services without obtaining registration from the department, failure to obtain a certificate of authorization for a firm which provides contracted services, acting under a name not registered or authorized by the department, offering to provide septic tank contracting services without maintaining a current registration or authorization. First violation, letter of warning; repeat violation, \$500 fine.

(b) Permit violations.

1. Late permits. Contractor initiates work to install, modify, or repair a system when no permit has been issued by the department. A permit is issued after construction is started but prior to completion of the contracted work. No inspections are missed. First violation, letter of warning; repeat violation, 30 day suspension and \$250 fine.

2. Contracted work is completed without a permit having been issued, or no permit application is received until after contracted work was completed, resulting in missed inspection or inspections. First violation, 90 day suspension and \$500 fine; repeat violation, revocation.

(c) Contracting with a delinquent registration. First violation, letter of warning; repeat violation, \$500 fine.

(d) Failure to call for required inspections. First violation, letter of warning; repeat violation, 90 day suspension and \$500 fine.

(e) False payment statements which are the result of assessing charges to a customer for work not performed. First violation, \$250 to \$500 fine; repeat violation, \$500 fine and one year suspension.

(f) Misconduct by failure to reasonably honor warranty. First violation, \$250 to \$500 fine; repeat violations, \$500 fine and one year suspension.

(g) Abandoning without good cause, a project in which the contractor is engaged or under contractual obligation to perform. First violation, \$500 fine; repeat violation, revocation.

(h) Aiding or abetting evasion of Chapter 489, F.S. First violation, \$500 fine; repeat violation, \$500 fine and one year suspension.

(i) Obtaining registration through fraud or misrepresentation. Revocation.

(j) Convicted or found guilty of a crime relating to contracting. Use penalty for violation most closely resembling the act underlying the conviction; repeat violation, revocation.

(k) Practicing fraud or deceit, making misleading or untrue representations. First violation, \$500 fine; repeat violation, revocation.

(l) Gross negligence, incompetence, or misconduct which:

1. Causes no monetary or other harm to a customer, or physical harm to any person. First violation, letter of warning; repeat violation, \$500 fine and 90 day suspension.

2. Causes monetary or other harm to a customer, or physical harm to any person. First violation, \$500 fine and 90 day suspension; repeat violation, \$500 fine and revocation.

(m) Operating a septage disposal service without a valid department operating permit. First violation, \$500 fine; repeat violation revocation.

(n) Failure to properly treat or properly dispose of septage or food service sludge. First violation, \$500 fine; repeat violation, revocation.

(o) Failure to maintain completed records of septage treatment and disposal activities. First violation, letter of warning; repeat violation, \$500 fine and 90 day suspension.

(p) Violation of any applicable state or local laws. First violation, \$250 to \$500 fine; repeat violation, \$500 fine and 90 day suspension.

(q) The absence of any violation from this section shall be viewed as an oversight, and shall not be construed as an indication that no penalty is to be assessed.

(2) Circumstances which may be considered for the purposes of mitigation or aggravation of penalty shall include, but are not limited to, the following:

(a) Monetary or other damage to the registrant's customer, in any way associated with the violation, which damage the registrant has not relieved, as of the time the penalty is to be assessed.

(b) Actual job-site violations of this code or conditions exhibiting gross negligence, incompetence or misconduct by the contractor, which have not been corrected as of the time the penalty is being assessed.

(c) The severity of the offense.

(d) The danger to the public.

(e) The number of repetitions of the offense.

(f) The number of complaints filed against the contractor.

(g) The length of time the contractor has practiced.

(h) The actual damage, physical or otherwise, to the customer.

(i) The effect of the penalty upon the contractor's livelihood.

(j) Any efforts at rehabilitation.

(k) Any other mitigating or aggravating circumstances.

(3) As used in this rule, a repeat violation is any violation on which disciplinary action is being taken where the same licensee had previously had disciplinary action taken against him or received a letter of warning in a prior case. This definition applies regardless of the chronological relationship of the violations and regardless of whether the violations are of the same or different subsections of this rule. The penalty given in the above list for repeat violations is intended to apply only to situations where the repeat violation is of a different subsection of this rule than the first violation. Where the repeat violation is the very same type of violation as the first violation, the penalty set out above will generally be increased over what is shown for repeat violations.

(4) Where several of the above violations shall occur in one or several cases being considered together, the penalties shall normally be cumulative and consecutive.

(5) Probation may also be assessed in any case, where, in the department's opinion it is advisable for the public welfare, in order to assure the licensee operates properly and within the law in the future, to require the licensee to report to the department periodically, or to otherwise serve a probationary period. Failure to comply with the terms and conditions of the probation shall be prima facie evidence of misconduct as defined by Section 489.556, F.S.

(6) The provisions of this section shall not be construed so as to prohibit civil action or criminal prosecution as provided in Part III of Chapter 489 and Section 381.0065 or for a violation of any provision of Chapter 386, F.S. No provision of this

section shall be construed as to limit the ability of the department to enter into binding stipulation with the accused party per subsection 120.57(3), F.S.

Specific Authority: 381.0061, 489.553(3), 489.556 F.S.

Law Implemented: 381.0061, 381.0065, 386, Part I, 489.553(3), 489.556 F.S.

History: New 3-17-92

10D-6.076 Certification of Partnerships and Corporations.

(1) Any corporation, partnership, or association which offers septic tank contracting services or any individual practicing septic tank contracting under a fictitious name shall be required to obtain a certificate of authorization from the department. Authorization of a corporation is only effective as to that corporation; subsidiaries or parents of authorized corporations must be separately authorized.

(a) Application for a certificate of authorization shall be made to the department on HRS-H Form 4077, Application for Certificate of Authorization, incorporated by reference into this rule, and shall be accompanied by all necessary exhibits and fees.

b) Certificates of authorization shall be valid for 2 years. All certificates of authorization issued during the biennial period expire March 31, of odd years beginning in 1993. New businesses making application for certificates of authorization during the second year of the biennium shall only be required to pay half of the biennial fee.

(c) Any certificate of authorization not renewed in a timely manner shall revert to inactive status. Applications for renewal shall be considered timely filed if the application has been post marked prior to the close of business on the date of expiration of the certificate. If that date falls on a weekend or legal holiday, the day of expiration shall be the first working day after the expiration date of the certificate. Inactive certificates not renewed within 2 years from the date of expiration shall be considered null and void.

(2) Corporations and others specified under this section shall be required to have at least one of the principle officers of the corporation or one of the partners of a partnership and all personnel of the corporation or partnership who act in its behalf as septic tank contractors registered under the provisions of this rule. A registered contractor may not be the sole qualifying contractor for more than one business requesting a certificate of authorization.

(3) Nothing in this rule shall be construed to mean that a certificate of registration to practice

septic tank contracting shall be held by a corporation or partnership. However, disciplinary action against a partnership or corporation shall be carried out in a manner consistent with actions against registered contractors.

Specific Authority: 489.555, 489.553(3) F.S.

Law Implemented: 489.555, 489.553(3) F.S.

History: New 10-25-88, Amended 3-17-92

10D-6.077 Fees.

The following fees are required to accompany applications for registration of individuals or for a certificate of authorization for partnerships and corporations.

(1) Application for registration including initial examination.....	\$ 75
(2) Initial registration.....	\$ 75
(3) Renewal of registration.....	\$ 75
(4) Renewal of inactive registration.....	\$100
(5) Certificate of authorization per biennium.....	\$120
(6) Renewal of inactive certificate of authorization.....	\$150

Specific Authority: 489.557 and 489.553(3), F.S.

Law Implemented: 489.553(3), 489.554, 489.555, 489.557, F.S.

History: New 10-25-88, Amended 3-17-92

RESOLUTION NO.:

A RESOLUTION OF THE BOARD OF COUNTY COMMISSIONERS OF LEE COUNTY, FLORIDA RELATING TO THE STATE REVOLVING FUND LOAN PROGRAM: APPROVING THE LEE COUNTY UTILITIES WATER FACILITIES PLAN DATED APRIL 2002, APPROVING THE LEE COUNTY UTILITIES DEDICATED REVENUE AND CAPITAL FINANCING PLAN, AUTHORIZING SUBMISSION OF THE PLAN TO THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (FDEP); DESIGNATING AUTHORIZED REPRESENTATIVES; AND APPROVING AN EFFECTIVE DATE

WHEREAS, Lee County has determined that the Water System Improvements recommended in the Lee County Water Facilities Plan are in the best interest of the citizens; and

WHEREAS, Lee County has examined the Water Facilities Plan prepared by Lee County Utilities and Angie Brewer & Associates, L.C. and has discussed the results and recommendations of the plan at an advertised public hearing; and

WHEREAS, Lee County intends to enter into a loan agreement with the Florida Department of Environmental Protection under the State Revolving Fund for project financing; and

WHEREAS, Lee County has held a duly advertised public hearing in accordance with the State SRF Program requirements.

NOW, THEREFORE, BE IT RESOLVED BY THE COUNTY COMMISSIONERS OF LEE COUNTY, FLORIDA, AS FOLLOWS:

SECTION I. Lee County does hereby adopt the Lee County Water Facilities Plan, attached hereto and incorporated herein by reference.

SECTION II. The Lee County Dedicated Revenue and Capital Financing Plan has been reviewed and discussed in a public hearing of Lee County and is hereby adopted.

SECTION III. The Utilities Director of Lee County is hereby designated as the authorized representative to provide the assurances and commitments required by the SRF program.

SECTION IV. The Utilities Director of Lee County is authorized to represent the County in carrying out the County's responsibilities under the SRF program. The Utilities Director is authorized to delegate responsibility to appropriate County staff to carryout technical, financial and administrative activities associated with the program.

SECTION V. Effective Date. This Resolution shall become effective immediately upon its adoption.

PASSED AND DULY ADOPTED by the Board of County Commissioners of Lee County, Florida, this 23rd day of April, 2002.

**BOARD OF COUNTY COMMISSIONERS
OF LEE COUNTY, FLORIDA**

Attest:

BY: _____
Chairman

APPROVED AS TO FORM:

BY: _____
Clerk

BY: _____
Office of the County Attorney