

Laguna Madre Water District
Notes to Financial Statements

NOTE 2: RECONCILIATION OF GOVERNMENT-WIDE AND FUND FINANCIAL STATEMENTS (Continued)

Explanation of certain differences between the governmental fund statement of revenues, expenditures, and changes in fund balances and the government-wide statements of activities

Amounts reported for governmental activities in the statement of activities are different because:

Net change in fund balances – total governmental funds (pages 20-21)	\$ (5,578,643)
Governmental funds report capital outlays as expenditures. However, in the statement of activities the cost of those assets is allocated over their estimated useful lives and reported as depreciation expense. This is the amount by which capital outlays exceeded depreciation in the current period.	4,518,713
The net effect of various miscellaneous transactions involving capital assets (i.e., sales and donations) is to decrease net assets.	(146,274)
Contributions to the pension plan in the current fiscal year are not included in the statement of activities.	399,387
Revenues in the statement of activities that do not provide current financial resources are not reported as revenues in the funds.	(4,308)
The issuance of long-term debt (e.g. bonds, leases) provides current financial resources to governmental fund, while the repayment of the principal on long-term debt consumes the current financial resources of governmental funds. Neither transaction, however, has any effects on net assets. Also, governmental funds report the effect of issuance costs, premiums, discounts, and similar items when debt is first issued, whereas these amounts are deferred and amortized in the statement of activities. This amount is the net effect of these differences in the treatment of long-term debt and related items.	1,601,831
Some expenses reported in the statement of activities do not require the use of current financial resources and, therefore, are not reported as expenditures in governmental funds	(386,210)
<u>Change in net position of governmental activities (page 20-21)</u>	<u>\$ 404,496</u>

**Laguna Madre Water District
Notes to Financial Statements**

NOTE 2: RECONCILIATION OF GOVERNMENT-WIDE AND FUND FINANCIAL STATEMENTS (Continued)

Explanation of certain differences between the governmental fund statement of revenues, expenditures, and changes in fund balances and the government-wide statements of activities (Continued)

The governmental fund statement of revenues, expenditures, and changes in fund balances includes a reconciliation between *net changes in fund balances-total governmental funds* and *changes in net assets of governmental activities* as reported in the government-wide statement of activities. One element of that reconciliation explains that “governmental funds report capital outlays as expenditures. However, in the statement of activities the cost of those assets is allocated over their estimated useful lives and reported as depreciation expense.” The details of this \$4,518,713 difference are as follows:

Capital outlay	\$ 7,224,436
Depreciation expense	(2,705,723)
Net adjustment to increase <i>fund balance – total governmental funds</i> to arrive at <i>net position – governmental activities</i>	\$ 4,518,713

Another element of that reconciliation states that “the issuance of long-term debt (e.g., bonds, leases) provides current financial resources to governmental funds, while the repayment of the principal of long-term debt consumes the current financial resources of governmental funds. Neither transaction, however, has any effect on net position. Also, governmental funds report the effect of premiums, discounts, and similar items when debt is first issued, whereas these amounts are deferred and amortized in the statements of activities. This amount \$1,601,831, is the net effect of these differences in the treatment of long-term debt and related items.” The details of the \$1,601,831 difference are as follows:

Principal repayments:	
General obligation bonds	(835,000)
Revenue bonds	(755,000)
Capital lease	(11,831)
Net adjustment to increase <i>changes in fund balances-total governmental funds</i> to arrive at <i>changes in net position of governmental activities</i>	\$ (1,601,831)

**Laguna Madre Water District
Notes to Financial Statements**

NOTE 2: RECONCILIATION OF GOVERNMENT-WIDE AND FUND FINANCIAL STATEMENTS (Continued)

Explanation of certain differences between the governmental fund statement of revenues, expenditures, and changes in fund balances and the government-wide statements of activities (Continued)

Another element of that reconciliation states that "Some expenses reported in the statement of activities do not require the use of current financial resources and therefore are not reported as expenditures in governmental funds." The details of this \$386,210 difference are as follows:

Compensated absences	\$ (2,811)
Accrued interest	(9,041)
Net pension expense	394,957
Amortization of deferred charge on refunding	16,344
Amortization of bond premiums	(16,644)
Amortization of bond insurance	3,405
Net adjustment to decrease <i>changes in fund balances-total governmental funds</i> to arrive at <i>changes in net position of governmental activities</i>	\$ 386,210

NOTE 3: LEGAL COMPLIANCE

Budget

1. As required by the Texas Water Code, the General Manager submits to the Board of Directors the proposed executive budgets for the fiscal year prior to the beginning of such fiscal year.
2. Budget Workshops are conducted to obtain rate payers comments.
3. The original amount appropriated budgets and any revisions of such budgets that affect the overall fund total expenditures are made through appropriate budget resolutions by the Board of Directors. The original annual appropriated budgets are adopted by resolution by the Board of Directors prior to the beginning of the fiscal year as required by state law. The final annual amended appropriated budgets are shown in this report. The overall fund total of actual expenditures cannot exceed the overall fund total of appropriated expenditures for such funds.
4. The General Manager is authorized to transfer budgeted amounts between departments within any fund; however, any revisions that alter the overall total of appropriated expenditures of any fund must be approved by the Board of Directors. During the year, the budget was amended three times.
5. Appropriations lapse at the end of each fiscal year.

A Budget is not prepared for the Capital Projects fund since funds are budgeted over the life of the respective project and not on an annual basis.

Laguna Madre Water District
Notes to Financial Statements

NOTE 4: DEPOSITS AND INVESTMENTS

Deposits and investments as of September 30, 2018 are classified in the accompanying financial statements as follows:

Unrestricted – cash and cash equivalents	\$ 4,680,448
Unrestricted – investments (certificates of deposit)	2,421,668
Total	\$ 7,102,116

Restricted deposits and investments as of September 30, 2018 consist of the following:

Restricted – cash and cash equivalents	\$ 3,158,958
Restricted – investments (certificates of deposit)	2,675,452
Total	\$ 5,834,410

Investments Authorized by District Investment Policy – The table below identifies the investment types that are authorized for the District by its investment policy. The table also identifies certain provision of the District’s investment policy that address interest rate risk, credit risk, and concentration of credit risk.

Authorized Investment Type	Maximum Maturity	Maximum Percentage Of Portfolio	Maximum Investment In One Issuer
U.S. Treasury Obligations	2 years	None	None
Local Government Investment Pools	2 years	None	None
Money Market Funds	2 years	None	None
Time Certificates of Deposit	2 years	None	None

Interest Rate Risk – Interest rate risk is the risk that changes in market interest rates will adversely affect the fair value of an investment. Generally, the longer the maturity of an investment, the greater the sensitivity of its fair market value to changes in market interest rates. The investment policy of the District states that, to the extent possible, investments shall be matched with anticipated cash flow requirements and known future liabilities. Unless matched to a specific cash flow requirement, the District will not invest in securities maturing more than two years from the date of purchase. In addition, the District will invest operating funds primarily in financial institution deposits, shorter-term securities, money market mutual funds, or local government investment pools functioning as money market mutual funds. The District will also diversify maturities and stagger maturity dates to minimize the impact of market movements over time.

Laguna Madre Water District
Notes to Financial Statements

NOTE 4: DEPOSITS AND INVESTMENTS (Continued)

Credit Risk – Generally, credit risk is the risk that an issuer of an investment will not fulfill its obligation to the holder of the investment. This is measured by the assignment of a rating by a nationally recognized statistical rating organization. U.S. Treasury securities are not considered to have credit risk exposure.

Concentration of Credit Risk – The investment policy of the District contains no limitations on the amount that can be invested in any one issuer.

Custodial Credit Risk – Custodial credit risk for deposits is the risk that, in the event of the failure of a depository financial institution, the District would not be able to recover its deposits or would not be able to recover collateral securities that are in the possession of an outside party. Bank balances are covered by Federal Depositary Insurance Corporation (FDIC) insurance of \$250,000. Bank accounts in excess of FDIC insurance are covered with collateralized securities held by International Bank of Commerce in the District's name. As of September 30, 2018, the District's market value of pledged securities was \$21,770,484 and the bank deposits requiring collateral were \$12,036,329. The bank balances as of September 30, 2018 were fully insured by FDIC coverage and collateral pledged by financial institutions.

NOTE 5: RECEIVABLES

Receivables at September 30, 2018, including the applicable allowance for uncollectible accounts are as follows:

	General		Debt Service		Capital Projects		Total
Taxes	\$	-	\$	120,994	\$	-	\$ 120,994
Accounts		709,688		-		570,938	1,280,626
Miscellaneous		38,102		-		-	38,102
Gross receivables		747,790		120,994		570,938	1,439,722
Less: Allowance for uncollectible		(8,364)		(7,149)		-	(15,513)
Net total receivables	\$	739,426	\$	113,845	\$	570,938	\$ 1,424,209

Laguna Madre Water District
Notes to Financial Statements

NOTE 6: CAPITAL ASSETS

Capital asset activity for the fiscal year ended September 30, 2018 was as follows:

	Balance 9/30/17	Additions	Retirements	Reclassifications	Balance 9/30/18
Government Activities:					
<i>Capital assets, not depreciated:</i>					
Land and easements	\$ 1,411,177	\$ -	\$ -	\$ -	\$ 1,411,177
Construction in progress	7,290,292	7,074,988	(136,993)	(2,344,958)	11,883,329
Total capital assets, not depreciated	8,701,469	7,074,988	(136,993)	(2,344,958)	13,294,506
<i>Capital assets, being depreciated:</i>					
Buildings and improvements	4,505,856	-	-	-	4,505,856
Improvements other than buildings	9,261,927	-	-	288,058	9,549,985
Machinery and equipment	2,414,444	105,675	(39,800)	-	2,480,319
Infrastructure	99,381,102	43,773	(12,027)	2,056,900	101,469,748
Total capital assets, being depreciated	115,563,329	149,448	(51,827)	2,344,958	118,005,908
<i>Less accumulated depreciated for:</i>					
Buildings and improvements	(1,116,753)	(132,609)	-	-	(1,249,362)
Improvements other than buildings	(1,380,935)	(472,185)	-	-	(1,853,120)
Machinery and equipment	(1,682,305)	(122,114)	39,479	-	(1,764,940)
Infrastructure	(43,387,400)	(1,978,815)	3,067	-	(45,363,148)
Total accumulated depreciation	(47,567,393)	(2,705,723)	42,546	-	(50,230,570)
Total capital assets, being depreciated, net	67,995,936	(2,556,275)	(9,281)	-	67,775,338
Governmental activities Capital assets, net	\$ 76,697,405	\$ 4,518,713	\$ (146,274)	\$ -	\$ 81,069,844

Depreciation expense for the fiscal year was \$2,705,723.

NOTE 7: LONG-TERM DEBT

Bonds Payable

The District issues general obligation bonds to provide funds for the acquisition and construction of major capital facilities. The general obligation bonds are direct obligations and pledge the full faith and credit of the District. The bonds are collateralized by and payable from the levy of a continuing direct annual ad valorem tax, without limit as to the rate or amount, upon all taxable property within the District. These bonds generally are issued as 25-year serial bonds with equal amounts of principal maturing each year. The District currently has two general obligation tax bond issues outstanding.

On May 15, 2012, the District issued \$21,170,000 Unlimited Tax Bonds, Series 2012 for the purpose of water distribution improvements, wastewater collection improvements, wastewater effluent reuse improvements, improvements to the Cuates pump station and pipeline, and improvements to Water Plant No. 2.

Laguna Madre Water District
Notes to Financial Statements

NOTE 7: LONG-TERM DEBT (Continued)

Bonds Payable (Continued)

On March 2, 2016, the District issued \$2,580,000 Unlimited Tax Bonds, Series 2016 for the purpose of water distribution improvements, wastewater collection improvements, wastewater effluent reuse improvements, improvements to the Cuates pump station, and pipeline and improvements to Water Plant No. 2.

On April 1, 2015, the District issued \$6,345,000 Waterworks and Sewer System Revenue Refunding Bonds, Series 2015. The proceeds were used to advance refund \$6,070,000 of outstanding 2007 Series Waterworks and Sewer System revenue bonds.

On October 16, 2016, the District issued \$5,815,000 Revenue Bonds, series 2016 for the purpose in making improvements to its existing Port Isabel Wastewater Treatment Plant, including installing a new blower, new return activated sludge/waste activated sludge (RAS/WAS) pump station and new headworks on the existing plant site. Improvements also include replacing the plant's aeration basin, digester diffusers, air piping, electrical system and controls.

The following is a schedule of bonds outstanding at September 30, 2018:

	Bond Issue	Interest Rate	Balance at September 30, 2018
\$21,170,000 Unlimited Tax Bonds, Series 2012. Issued May 15, 2012. Maturity date June 1, 2032.		2% - 5%	\$ 12,245,000
\$2,580,000 Unlimited Tax Bonds, Series 2016. Issued March 2, 2016. Maturity date June 1, 2032.		2.29%	2,110,000
Total General Obligation Tax Bonds			14,355,000
\$6,345,000 Waterworks and Sewer System Revenue Refunding Bonds, Series 2015. Issued April 1, 2015. Maturity date March 1, 2027.		2.64%	4,885,000
\$5,815,000 Waterworks and Sewer System Revenue Bonds, Series 2016. Issued October 16, 2016. Maturity date March 1, 2036		.01% - 1.37%	5,255,000
Total Revenue Bonds			10,140,000
Total General Obligation and Revenue Bonds			\$ 24,495,000

Principal and interest on the bonds are payable from the proceeds of a continuing, direct, annual ad valorem tax, without legal limitation as to rate or amount, levied against taxable property within the District and additionally from net revenues derived from the operation of the District's water and wastewater system.

Laguna Madre Water District
Notes to Financial Statements

NOTE 7: LONG-TERM DEBT (Continued)

Advance Refunding

In prior years, the District defeased certain outstanding bonds by placing the proceeds of new bonds in an irrevocable trust to provide for all future debt service payments on the old bonds. Accordingly, the respective trust account assets and related liabilities for the defeased bonds are not included in the District's financial statements. At September 30, 2018, the following outstanding bonds are considered defeased:

Series	Ending Balance
2007	\$4,825,000

Changes in long-term liabilities

Changes in the District's long-term liabilities for the year ended September 30, 2018 are as follows:

	09/30/17	Additions	Reductions	09/30/18	Due Within One Year
Bonds payable					
General Obligation Tax Bonds	\$ 15,190,000	\$ -	\$ 835,000	\$ 14,355,000	\$ 860,000
Revenue Bonds	10,895,000	-	755,000	10,140,000	770,000
Plus: unamortized premium	249,650	-	16,644	233,006	-
Total bonds payable	26,334,650	-	1,606,644	24,728,006	1,630,000
Net pension liability	1,915,746	-	688,924	1,226,822	-
Lease payable	76,636	-	11,831	64,805	12,192
Compensated Absences	74,915	127,339	130,150	72,104	-
	\$ 28,401,947	\$ 127,339	\$ 2,437,549	\$ 26,091,737	\$ 1,642,192

The debt service fund makes the payments on the bonds payable. The net pension liability and the compensated absences are expected to be liquidated by the general fund.

The debt service requirements for the District's bonds are as follows:

Year Ended September 30	Revenue Notes		General Obligation Bonds	
	Principal	Interest	Principal	Interest
2019	770,000	164,412	860,000	484,832
2020	780,000	151,344	885,000	460,132
2021	795,000	137,932	905,000	434,718
2022	810,000	123,830	935,000	408,704
2023	820,000	108,908	970,000	374,126
2024 – 2028	3,730,000	302,186	5,285,000	1,417,448
2029 – 2033	1,490,000	107,873	4,515,000	450,907
2034 – 2037	945,000	19,307	-	-
Total	\$ 10,140,000	\$ 1,115,792	\$ 14,355,000	\$ 4,030,867

Laguna Madre Water District
Notes to Financial Statements

NOTE 8: EMERGENCY PREPARATION AND RECOVERY FUND

In lieu of a written minimum fund balance policy, the District created an Emergency Preparation and Recovery Fund to minimize the effects of natural or man-made emergencies that may arise and affect the District's operations. This policy, adopted by the Board, states that monies to be placed in this fund shall be in an amount to constitute no less than twenty percent of the District's operating budget. Prior to the use of these monies, the Board must first declare an emergency exists and approve the use of the funds.

NOTE 9: EMPLOYEE RETIREMENT SYSTEM

A. General Information about the Pension Plan

Plan description

The District provides retirement, disability, and death benefits for all of its nontemporary full-time and part-time employees through a nontraditional defined benefit pension plan in the statewide Texas County and District Retirement System (TCDRS). The TCDRS is an agent multiple-employer, statewide public employee pension plan established by the Texas Legislature in 1967 and administered by a nine member Board of Trustees. The retirement system consists of 602 nontraditional defined benefit pension plans. TCDRS in the aggregate issues a comprehensive annual financial report (CAFR) on a calendar year basis. The CAFR is available upon written request from the TCDRS Board of Trustees at P. O. Box 2034, Austin, Texas 78768-2034.

The plan provisions are adopted by the governing body of the employer, within the options available in the Texas state statutes governing TCDRS (TCDRS Act). Members can retire at ages 60 and above with 8 or more years of service, with 30 years of service regardless of age, or when the sum of their age and years of service equals 80 or more. Members are vested after 8 years of service but must leave their accumulated contributions in the plan to receive any employer-financed benefit. Members who withdraw their personal contributions in a lump sum are not entitled to any amounts contributed by their employer.

Benefit amounts are determined by the sum of the employees contributions to the plan, with interest, and employer-financed monetary credits. The level of these monetary credits is adopted by the governing body of the employer within the actuarial constraints imposed by the TCDRS Act so that the resulting benefits can be expected to be adequately financed by the employer's commitment to contribute. At retirement, death, or disability, the benefit is calculated by converting the sum of the employee's accumulated deposits and the employer-finance monetary credits to a monthly annuity using annuity purchase rates prescribed by the TCDRS Act.

Funding Policy

The employer has elected the annually determined contribution rate (ADCR) plan provisions of the TCDRS Act. The plan is funded by monthly contributions from both employee members and the employer based on the covered payroll of employee members.

Laguna Madre Water District
Notes to Financial Statements

NOTE 9: EMPLOYEE RETIREMENT SYSTEM (Continued)

Under the TCDRS Act, the contributions rate of the employer is actuarially determined annually and approved by the TCDRS Board of Trustees. The employer contributed using the actuarially determined rate of 14.39% and 14.27% for the calendar years 2017 and 2016, respectively. The contribution rate payable by the employee members for the calendar years 2017 and 2016 is the rate of 7% as adopted by the governing body of the employer. The employee contribution rate and the employer contribution rate may be changed by the governing body of the employer within the options available in the TCDRS Act.

Employees covered by benefit terms

At December 31, 2017, the following employees were covered by the benefit terms:

	Number of Employees
Inactive employees or beneficiaries currently receiving benefits	51
Inactive employees entitled to but not yet receiving benefits	40
Active employees	75
Total	166

Actuarial assumptions

The total pension liability in the December 31, 2017 actuarial valuation was determined using the following actuarial assumptions, applied to all periods included in the measurement:

Inflation	2.75%
Salary increases	4.9%, average over career, including inflation
Investment rate of return	8.00%, net of pension plan investment expense

Mortality rates were based on the following:

Depositing members	The RP-2000 Active Employee Mortality Table for males with a two-year set-forward and the RP-2000 Active Employee Mortality Table for females with a four-year setback, both projected to 2014 with scale AA and then projected with 110% of the MP-2014 Ultimate scale after that.
Service retirees, beneficiaries and non-depositing members	The RP-2000 Combined Mortality Table projected to 2014 with scale AA and then projected with 110% of the MP-2014 Ultimate scale after that, with a one-year set-forward for males and no age adjustment for females.
Disabled retirees	RP-2000 Disabled Mortality Table projected to 2014 with scale AA and then projected 110% of the MP-2014 Ultimate scale after that, with no age adjustment for males and a two year set-forward for females.

**Laguna Madre Water District
Notes to Financial Statements**

NOTE 9: EMPLOYEE RETIREMENT SYSTEM (Continued)

Updated mortality assumptions were adopted in 2015. All other actuarial assumptions that determined the total pension liability as of December 31, 2016 were based on the results of an actuarial experience study for the period January 1, 2009 – December 31, 2012 except where required to be different by GASB 68.

Discount Rate

Discount rate (*2)	8.10%	8.10%
Long-term expected rate of return, net of investment expense (*2)	8.10%	8.10%
Municipal bond rate(*3)	Does not apply	Does not apply

*(*2) This rate reflects the long-term rate of return funding valuation assumption of 8.00%, plus 0.10% adjustment to be gross of administrative expenses as required by GASB 68.*

*(*3) The plan's fiduciary net position is projected to be available to make all projected future benefit payments of current active, inactive, and retired members. Therefore, the discount rate for calculating the total pension liability is equal to the long-term expected rate of return, and the municipal bond rate does not apply.*

Depletion of Plan Assets/GASB Discount Rates

The discount rate is the single rate of return that, when applied to all projected benefit payments result in an actuarial present value of projected benefit payments that equal to the total of the following:

1. The actuarial present value of benefit payments projected to be made in future periods in which (a) the amount of the pension plan's fiduciary net position is projected to be greater than the benefit payments that are projected to be made in that period and (b) pension plan assets up to that point are expected to be invested using a strategy to achieve the long-term rate of return, calculated using the long-term expected rate of return on pension plan investments.
2. The actuarial present value of projected benefit payments not included in (1), calculated using the municipal bond rate.

Therefore, if plan investments in a given future year are greater than projected benefit payments in that year and are invested such that they are expected to earn the long-term rate of return, the discount rate applied to projected benefit payments in that year should be the long-term expected rate of return on plan investments. If future years exist where this is not the case, then an index rate reflecting the yield on a 20-year, tax-exempt municipal bond should be used to discount the projected benefit payments for those years.

**Laguna Madre Water District
Notes to Financial Statements**

NOTE 9: EMPLOYEE RETIREMENT SYSTEM (Continued)

The determination of a future date when plan investments are not sufficient to pay projected benefit payments is often referred to as a depletion date projection. A depletion date projection compares projections of the pension plan's fiduciary net position to projected benefit payments and aims to determine a future date, if one exists, when the fiduciary net position is projected to be less than projected benefit payments. If an evaluation of the sufficiency of the projected fiduciary net position compared to projected benefit payments can be made with sufficient reliability without performing a depletion date projection, alternative methods to determine sufficiency may be applied.

In order to determine the discount rate to be used by the employer we have used an alternative method to determine the sufficiency of the fiduciary net position in all future years. Our alternative method reflects the funding requirements under the employer's funding policy and the legal requirements under the TCDRS Act.

1. TCDRS has a funding policy where the Unfunded Actuarial Accrued Liability (UAAL) shall be amortized as a level percent of pay over 20-year closed layered periods.
2. Under the TCDRS Act, the employer is legally required to make the contribution specified in the funding policy.
3. The employer's assets are projected to exceed its accrued liabilities in 20 years or less. When this point is reached, the employer is still required to contribute at least the normal cost.
4. Any increased cost due to the adoption of a COLA is required to be funded over a period of 15 years, if applicable.

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Laguna Madre Water District Notes to Financial Statements

NOTE 9: EMPLOYEE RETIREMENT SYSTEM (Continued)

Long-term expected rate of return

The long-term expected rate of return on TCDRS assets is determined by adding expected inflation to expected long-term real returns, and reflecting expected volatility and correlation. The capital market assumptions and information shown below are provided by TCDRS' investment consultant, Cliffwater LLC. The numbers shown are based on January 2018 information for a 10-year time horizon.

Note that the valuation assumption for long-term expected return is re-assessed at a minimum of every four years, and is set based on a 30-year time horizon; the most recent analysis was performed in 2017. See Milliman's TCDRS Investigation of Experience report for the period January 1, 2013 – December 31, 2016 for more details.

Asset Class	Benchmark	Target Allocation (*1)	Geometric Real Rate of Return (Expected minus inflation) (*2)
US Equities	Dow Jones U.S. Total Stock Market Index	11.50%	4.55%
Private Equity	Cambridge Associates Global Private Equity & Venture Capital Index (*3)	16.00%	7.55%
Global Equities	MSCI World (net) Index	1.50%	4.85%
International Equities – Developed Markets	MSCI World Ex USA (net) Index	11.00%	4.55%
International Equities – Emerging Markets	MSCI EM Standard (net) Index	8.00%	5.55%
Investment –Grade Bonds	Bloomberg Barclays U.S. Aggregate Bond Index	3.00%	0.75%
Strategic Credit	FTSE High-Yield Cash-Pay Capped Index	8.00%	4.12%
Direct Lending	S&P/LSTA Leveraged Loan Index	10.00%	8.06%
Distressed Debt	Cambridge Associates Distressed Securities Index (*4)	2.00%	6.30%
REIT Equities	67% FTSE NAREIT Equity REITs Index + 33% S&P Global REIT (net) Index	2.00%	4.05%
Master Limited Partnerships (MLPs)	Alerian MLP Index	3.00%	6.00%
Private Real Estate Partnerships	Cambridge Associates Real Estate Index (*5)	6.00%	6.25%
Hedge Funds	Hedge Fund Research, Inc. (HFRI) Fund of Funds Composite Index	18.00%	4.10%

(*1) Target asset allocation adopted at the April 2018 TCDRS Board meeting.

(*2) Geometric real rates of return equal the expected return minus the assumed inflation rate of 1.95%, per Cliffwater's 2018 capital market assumptions.

(*3) Includes vintage years 2006-present of Quarter Pooled Horizon IRRs.

(*4) Includes vintage years 2005-present of Quarter Pooled Horizon IRRs.

(*5) Includes vintage years 2007-present of Quarter Pooled Horizon IRRs.

Laguna Madre Water District
Notes to Financial Statements

NOTE 9: EMPLOYEE RETIREMENT SYSTEM (Continued)

Changes in the Net Pension Liability

The District's net pension liability was measured as of December 31, 2017, and the total pension liability used to calculate the net pension liability was determined by an annual actuarial valuation as of that date.

The District's changes in net pension liability were as follows:

		Increase (Decrease)	
	Total Pension Liability (a)	Plan Fiduciary Net Position (b)	Net Pension Liability (a) – (b)
Balances as of December 31, 2016	\$ 12,270,739	\$ 10,354,992	\$ 1,915,747
Changes for the year:			
Service cost	355,712	-	355,712
Interest on total pension liability (*1)	994,321	-	994,321
Effect of plan changes (*2)	-	-	-
Effect of economic/demographic gains or losses	(6,355)	-	(6,355)
Effect of assumptions changes or inputs	13,650	-	13,650
Refund of contributions	(53,683)	(53,683)	-
Benefit payments	(662,021)	(662,021)	-
Administrative expenses	-	(7,771)	7,771
Member contributions	-	182,504	(182,504)
Net investment income	-	1,508,763	(1,508,763)
Employer contributions	-	365,000	(365,000)
Other (*3)	-	(2,243)	2,243
Balances as of December 31, 2017	\$ 12,912,363	\$ 11,685,541	\$ 1,226,822

(*1) Reflects the change in the liability due to the time value of money. TCDRS does not charge fees or interest.

(*2) No plan changes valued.

(*3) Relates to allocation of system-wide items.

Laguna Madre Water District
Notes to Financial Statements

NOTE 9: EMPLOYEE RETIREMENT SYSTEM (Continued)

Changes in the Net Pension Liability (Continued)

Sensitivity Analysis

The following presents the net pension liability/(asset) of the District, calculated using the discount rate of 8.10%, as well as what the District's net pension liability/(asset) would be if it were calculated using a discount rate that is 1 percentage point lower (7.10%) or 1 percentage point higher (9.10%) than the current rate:

	1% Decrease	Current Discount Rate	1% Increase
	7.10%	8.10%	9.10%
Total pension liability	\$ 14,670,518	\$ 12,912,363	\$ 11,439,637
Fiduciary net position	11,685,541	11,685,541	11,685,541
Net pension liability/(asset)	\$ 2,984,977	\$ 1,226,822	\$ (245,904)

Pension Plan Fiduciary Net Position

Detailed information about the pension plan's fiduciary net position is available in the separately issued TCDRS CAFR.

Pension Expense and Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions

For the year ended September 30, 2018, The District recognized pension expense of \$394,957. The District reported deferred inflows and outflows of resources related to pensions from the following sources:

	Deferred Inflows of Resources	Deferred Outflows of Resources
Differences between expected and actual experience	\$ 173,495	\$ 31,472
Changes in assumptions	-	51,220
Net difference between projected and actual earnings	141,977	-
Contributions made subsequent to measurement date (*1)	N/A	298,513
Total deferred inflows/outflows of resources related to pensions	\$ 315,472	\$ 381,205

(*1) Reflects employer contributions made subsequent to the measurement date through the employer's fiscal year end. This amount will be recognized as a reduction in Net Pension liability for the year ending September 30, 2019.

**Laguna Madre Water District
Notes to Financial Statements**

NOTE 9: EMPLOYEE RETIREMENT SYSTEM (Continued)

***Pension Expense and Deferred Outflows of Resources and Deferred Inflows of Resources
Related to Pensions (Continued)***

Amounts currently reported as deferred outflows of resources and deferred inflows of resources related to pensions, excluding contributions made subsequent to the measurement date, will be recognized in pension expense as follows:

Year ended December 31,

2018	\$	49,089
2019		22,760
2020		(161,105)
2021		(144,738)
2022		1,214
Thereafter (*1)		-

(*1) Total remaining balance to be recognized in future years. Note that additional future deferred inflows and outflows of resources may impact these numbers

NOTE 10: RISK MANAGEMENT

The District is exposed to various risk of loss related to torts, theft of damage to, and destruction of assets, error and omissions, inquiries to employees, and natural disasters. Significant losses are covered by commercial insurance for all major programs. There have been no significant reductions in insurance coverage.

During the year ended September 30, 2018, employees of the District were covered by a health, dental, and life insurance plan (the "Plan"). The District paid premiums of \$550.05 per month per employee to the Plan for health insurance and \$37.10 per month per employee to the Plan for dental, vision and life insurance. Employees, at their options, authorized payroll withholdings to pay premiums for dependents. All premiums were paid to a licensed insurer. The Plan was authorized by Article 3.51-2, Texas Insurance Code and was documented by contractual agreement. The contract between the District and the licensed insurer is renewable annually, and terms of coverage and premium costs are included in the contractual provisions. Latest financial statements for United Healthcare are filed with the Texas State Board of Insurance, Austin, Texas and are public records.

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Laguna Madre Water District
Notes to Financial Statements

NOTE 11: INTERFUND BALANCES AND TRANSFERS

The composition of interfund balances as of September 30, 2018 were as follows:

	Due From Other Funds	Due To Other Funds
Major Funds:		
General Fund	\$ 326,053	\$ 614,376
Debt Service Fund	5,117	-
Capital Projects Fund	609,359	326,053
Total	\$ 940,529	\$ 940,529

The balances primarily result from the time lag between the dates the 1) transactions are recorded in the accounting system and 2) payments between funds are made.

Interfund transfers for the year ended September 30, 2018 were as follows:

Transfer in:					
	General Fund	Capital Projects	Debt Service	Emergency Fund	Total
Transfer out:					
General Fund	\$ (1,871,276)	\$ 939,126	\$ 932,150	\$ -	\$ -

During the year, transfers are used to (1) move revenues from the fund with collection authorization to the debt service fund as debt service principal and interest payments become due and (2) move general fund resources to the capital projects fund.

NOTE 12: AUTHORIZED, ISSUED AND OUTSTANDING DEBT

On May 14, 2011, voters in the Laguna Madre Water District approved two propositions for issuing new bonds. At September 30, 2018, only a portion of that debt had been issued. The projects are as follows:

	Authorized	Issued May 15, 2012	Issued February 12, 2016	Remaining Authorization
System improvements	\$ 23,750,000	\$ 21,170,000	\$ 2,580,000	\$ -
Seawater desalination plant	15,655,000	-	-	15,655,000
	\$ 39,405,000	\$ 21,170,000	\$ 2,580,000	\$ 15,655,000

Laguna Madre Water District
Notes to Financial Statements

NOTE 13: MAJOR COMMITMENTS

As of September 30, 2018, the District has committed certain funds for major construction projects and capital acquisitions. The construction projects and capital acquisitions are as follows:

Projects/Capital Acquisitions:	Amount committed:
Wastewater Treatment Facility Sludge Holding Tank	
Upgrade and Lift Stations Rehabilitation	\$ 5,425,000
AMI Water Meters	2,940,000
Reuse Improvement	797,565
Vacuum Truck	325,489
Total	\$ 9,488,054

NOTE 14: CAPITAL LEASE COMMITMENTS

During fiscal year 2016, the District entered into a lease purchase agreement relating to the acquisition of a jetter truck. The agreement qualifies as a capital lease. The cost of the asset acquired through the lease was \$101,445. The lease purchase agreement provides for an eight-year lease in the principal amount of \$101,445 at an interest rate not to exceed 3.057% per annum, with a bargain purchase option of \$1 at the end of the lease term.

The future minimum leases obligations and the net present value of these minimum lease payments as of September 30, 2018, were as follows:

Year ending September 30,	
2019	\$ 14,174
2020	14,174
2021	14,174
2022	14,174
2023	14,174
Total minimum lease payments	70,870
Less: amount representing interest	(6,065)
Present value of minimum lease payments	\$ 64,805

NOTE 15: SUBSEQUENT EVENTS

On November 28, 2018, the District issued \$2,875,000 in Waterworks and Sewer System Revenues Notes, Series 2018. Proceeds from the sale of the Revenue Notes will be used to pay costs of issuance, to fund a debt service reserve fund and to finance the meter replacement project.

**REQUIRED SUPPLEMENTARY
INFORMATION SECTION**

Laguna Madre Water District
Schedule of Revenues, Expenditures, and Changes in Fund Balance
General Fund – Budget and Actual
For the Fiscal Year Ended September 30, 2018

	Budgeted Amounts		Actual	
	Original	Final	Amounts	Variance
Revenues:				
Water services	\$ 5,084,063	\$ 5,084,063	\$ 5,321,051	\$ 236,988
Wastewater services	3,480,340	3,480,340	3,650,725	170,385
Other water sales	104,234	104,234	119,597	15,363
Late fees	76,976	76,976	62,631	(14,345)
Tap fees	155,123	155,123	237,154	82,031
Investment earnings	14,836	14,836	89,446	74,610
Miscellaneous	350,269	350,269	104,782	(245,487)
Total revenues	9,265,841	9,265,841	9,585,386	319,545
Expenditures:				
Service operations:				
Administration	331,850	326,550	282,962	43,588
Contracted services	321,400	255,185	240,125	15,060
Insurance	199,801	217,026	200,962	16,064
Professional fees	143,500	210,370	206,570	3,800
Payroll and benefits	4,000,408	3,930,775	3,908,057	22,718
Utilities	767,315	701,157	690,553	10,604
Materials and supplies	979,862	895,356	936,154	(40,798)
Repairs and maintenance	434,262	323,499	292,266	31,233
Other	122,293	66,349	75,808	(9,459)
Capital outlay				
Capital Outlay	523,125	482,123	139,642	342,481
Lease principal	-	11,831	11,831	-
Interest and fiscal charges	-	2,343	2,343	-
Total expenditures	7,823,816	7,422,564	6,987,273	435,291
Excess (deficiency) of revenues over expenditures	1,442,025	1,843,277	2,598,113	754,836
Other financing sources/uses:				
Transfers-internal activities	(1,442,024)	(1,871,276)	(1,871,276)	-
Net other financing sources/uses	(1,442,024)	(1,871,276)	(1,871,276)	-
Excess (deficiency) of revenues and other financing sources over (under) expenditures and other financing uses	\$ 1	\$ (27,999)	726,837	\$ 754,836
Fund balance:				
Beginning of the year			6,317,368	
End of the year			\$ 7,044,205	

Laguna Madre Water District
Notes to Schedule of Revenues, Expenditures, and Changes in Fund Balance
General Fund – Budget and Actual

1. As required by the Texas Water Code, the General Manager submits to the Board of Directors the proposed executive budgets for the fiscal year prior to the beginning of such fiscal year.
2. Budget Workshops are conducted to obtain rate payers comments.
3. The original amount appropriated budgets and any revisions of such budgets that affect the overall fund total expenditures are made through appropriate budget resolutions by the Board of Directors. The original annual appropriated budgets are adopted by resolution by the Board of Directors prior to the beginning of the fiscal year as required by state law. The final annual amended appropriated budgets are shown in this report. The overall fund total of actual expenditures cannot exceed the overall fund total of appropriated expenditures for such funds.
4. The General Manager is authorized to transfer budgeted amounts between departments within any fund; however, any revisions that alter the overall total of appropriated expenditures of any fund must be approved by the Board of Directors. During the year, the budget was amended three times.
5. Appropriations lapse at the end of each fiscal year.

Laguna Madre Water District
Schedule of Changes in Net Pension Liability and Related Ratios

	Year Ended December 31,			
	2017	2016	2015	2014
Total Pension Liability				
Service cost	\$ 355,712	\$ 351,190	\$ 369,415	\$ 349,544
Interest on total pension liability	994,321	934,915	909,356	857,968
Effect of plan changes	-	-	(86,128)	-
Effect of assumption changes or inputs	13,650	-	79,690	-
Effect of economic/demographic (gains) or losses	(6,355)	(63,218)	(252,109)	94,417
Benefit payments/refunds of contributions	(715,704)	(631,962)	(763,280)	(588,331)
Net change in total pension liability	641,624	590,925	256,944	713,598
Total pension liability, beginning	12,270,739	11,679,814	11,422,870	10,709,272
Total pension liability, ending (a)	\$ 12,912,363	\$ 12,270,739	\$ 11,679,814	\$ 11,422,870
Fiduciary Net Position				
Employer contributions	\$ 365,000	\$ 346,147	\$ 350,544	\$ 369,552
Member contributions	182,504	177,303	177,449	187,581
Investment income net of investment expenses	1,508,763	725,930	(25,081)	643,747
Benefit payments/refunds of contributions	(715,704)	(631,962)	(763,280)	(588,331)
Administrative expenses	(7,771)	(7,894)	(7,167)	(7,549)
Other	(2,243)	(73,059)	(25,499)	15,773
Net change in in fiduciary net position	1,330,549	536,465	(293,034)	620,773
Fiduciary net position, beginning	10,354,992	9,818,527	10,111,561	9,490,788
Fiduciary net position, ending (b)	\$ 11,685,541	\$ 10,354,992	\$ 9,818,527	\$ 10,111,561
Net pension liability / (asset), ending = (a) - (b)	\$ 1,226,822	\$ 1,915,747	\$ 1,861,287	\$ 1,311,309
Fiduciary net position as a % of total pension liability	90.50%	84.39%	84.06%	88.52%
Pensionable covered payroll	\$ 2,607,198	\$ 2,532,895	\$ 2,534,988	\$ 2,679,726
Net pension liability as a % of covered payroll	47.06%	75.63%	73.42%	48.93%

This schedule will ultimately present information for the past ten years. However, recalculations of prior years are not required, and if prior years are not reported in accordance with the standards of GASB 68, should not be shown here.

**Laguna Madre Water District
Schedule of Employer Contributions**

Year Ending September 30,	Actuarially Determined Contribution	Actual Employer Contribution	Contribution Deficiency (Excess)	Pensionable Covered Payroll	Actual Contribution as a % of Covered Payroll
2015	352,564	352,564	-	2,551,846	13.8%
2016	344,556	344,556	-	2,518,460	13.7%
2017	360,462	360,462	-	2,590,525	13.9%
2018	399,387	399,387	-	2,707,139	14.8%

Notes to Schedule

Valuation Date: Actuarially determined contribution rates are calculated each December 31, two years prior to the end of the fiscal year in which contributions are reported.

Methods and assumptions used to determine contribution rates:

Actuarial Cost Method:	Entry Age
Amortization Method:	Level percentage of payroll, closed
Remaining Amortization period:	12.7 years (based on contribution rate calculated in 12/31/2017 valuation)
Asset Valuation Method:	5-year smoothed market
Inflation:	2.75%
Salary Increases:	Varies by age and service. 4.9% average over career including inflation.
Investment Rate of Return:	8.00%, net of administrative and investment expenses, including inflation.
Retirement Age:	Members who are eligible for service retirement are assumed to commence receiving benefit payments based on age. The average age at service retirement for recent retirees is 61.
Mortality :	130% of the RP-2014 Healthy Annuitant Mortality Table for males and 110% of the RP-2014 Healthy Annuitant Mortality Table for females, both projected with 110% of the MP-2014 Ultimate scale after 2014
Changes in Assumptions and Methods Reflected in the Schedule of Employer Contributions:	2015: New inflations, mortality and other assumptions reflected. 2017: New mortality assumptions were reflected.
Changes in Plan Provisions Reflected in the Schedule of Employer Contributions:	2015: No changes in plan provisions were reflected in the Schedule. 2016: No changes in plan provisions were reflected in the Schedule. 2017: New Annuity Purchase Rates were reflected for benefits earned after 2017.

OTHER SUPPLEMENTARY INFORMATION

Laguna Madre Water District
Schedule of Revenues, Expenditures, and Changes in Fund Balance
Debt Service Fund – Budget and Actual
For the Fiscal Year Ended September 30, 2018

	Budgeted Amounts		Actual	
	Original	Final	Amounts	Variance
Revenues:				
Property taxes	\$ 1,367,447	\$ 1,367,447	\$ 1,454,793	\$ 87,346
Penalties and interest	33,999	33,999	25,284	(8,715)
Investment earnings	5,988	5,988	39,839	33,851
Miscellaneous	-	-	61	61
Total revenues	1,407,434	1,407,434	1,519,977	112,543
Expenditures:				
Debt service:				
Principal	1,590,000	1,590,000	1,590,000	-
Interest	687,117	687,117	688,266	(1,149)
Contracted service	50,125	50,125	54,014	(3,889)
Total expenditures	2,327,242	2,327,242	2,332,280	(5,038)
Excess (deficiency) of revenues over expenditures	(919,808)	(919,808)	(812,303)	107,505
Other financing sources/(uses):				
Transfers-internal activities	932,150	932,150	932,150	-
Net other financing sources/uses	932,150	932,150	932,150	-
Excess (deficiency) of revenues and other financing sources over (under) expenditures and other financing uses	\$ 12,342	\$ 12,342	119,847	\$ 107,505
Fund balance:				
Beginning of the year			3,011,861	
End of the year			\$ 3,131,708	

**TEXAS SUPPLEMENTARY
INFORMATION (TSI) SECTION**

Laguna Madre Water District
Notes Required by the Water District Accounting Manual

CREATION OF DISTRICT

History

Laguna Madre Water District (the "District") is a governmental entity created by an election held on November 14, 1950, pursuant to Article XVI, Section 59, of the Texas Constitution and Article 7881, Revised Civil Statutes of Texas. The District Board held its first meeting on December 11, 1950, and issued its first bonds on July 16, 1951. Originally created as a Fresh Water Supply District, the District was converted into a Municipal Utility District by an order of the Texas Water Rights Commission on November 20, 1973. Effective February 16, 1996, the Texas Natural Resources Conservation Commission officially authorized the District to change its name to the Laguna Madre Water District. The District is under the authority of the Texas Commission on Environmental Quality and is operated under and governed by Chapter 54 of the Texas Water Code.

The District's principal function is to provide treated water and wastewater services to the City of Port Isabel, Texas and various other communities which are adjacent to Port Isabel, Texas.

The District obtains water from the Rio Grande under rights granted by the State of Texas permitting the use of up to 7,278.6 acre-feet annually. Additionally, new water rights were purchased on August 28, 2018 and are pending TCEQ approval which will increase the permitted use to 7,513.4 acre-feet annually. This water is pumped via the District's raw water transmission line from the Rio Grande River to Water Plant No. 2 in Laguna Vista.

Tax Revenues

There is no maximum applicable tax rate for the District and the extent of the taxable property is \$3,312,253,813.

The following notes which are required by the Water District Accounting Manual are fully disclosed in the Basic Financial Statement.

Pledge of Revenues is disclosed in Note 7, Long Term Debt.

Compliance with Debt Service Requirements is disclosed in Note 1, Restricted Assets.

Redemption of Bonds is disclosed in Note 7, Long Term Debt

Pension Coverage for District Employee is disclosed in Note 9, Employee Retirement System.

Laguna Madre Water District
TSI – 1. Services and Rates

For the year ended September 30, 2018

1. Services provided by the District during the fiscal year.

- Retail Water
- Retail Wastewater

2. Retail Service Providers

a. Retail rates for a 5/8" meter

	Minimum Charge	Minimum Usage	Flat Rate Y/N	Rate per 1,000 Gallons over minimum	Usage levels
WATER	\$ 12.26	4,000	N	\$ 2.47	4,001 to 10,000
				\$ 3.89	10,001 to 20,000
				\$ 5.55	20,001 plus
WASTEWATER *	\$ 13.46	3,000		\$ 2.73	3,001 to 4,500
				\$ 4.23	4,501 to 7,500
				\$ 6.00	7,501 plus

Surcharge: \$0.005

District employs winter averaging for wastewater usage? No
 Total water and wastewater charges per 10,000 gallons usage (including surcharge): \$53.10

Laguna Madre Water District
TSI – 1. Services and Rates (Continued)

For the year ended September 30, 2018

b. Water and Wastewater retail connections:

Meter Size	Total Connections	Active Connections	ESFC Factor	Active Factor
5/8"	4,966	4,871	-	-
1"	1,171	1,165	-	-
2"	335	302	-	-
4"	73	73	-	-
6"	36	33	-	-
8"	5	1	-	-
10"	0	0	-	-
16"	1	1	-	-
Total Water:	6,587	6,446	-	-
Total Wastewater:	5,626	5,557	-	-

3. Total water consumption during the fiscal year:

Gallons pumped into system: 1,443,198,000

Gallons billed to customers: 1,329,802,462

Water accountability ratio (gallons billed/gallons pumped); 92.10%

4. Location of the District:

County in which District is located: Cameron
 Is the District located entirely within one county? Yes
 Is the District located within a city? Yes
 Cities in which District located is located: Port Isabel, South Padre Island, Town of Laguna Vista
 Is the District located within a city's extra territorial jurisdiction (ETJ)? Yes - Partly
 ETJ's in which District is located: Laguna Heights (unincorporated)
 Are board members appointed by an office outside the District? No
 If yes, by whom? N/A

Laguna Madre Water District
TSI – 2. General Fund Expenditures

For the year ended September 30, 2018

Personnel (Including Benefits)	\$ 3,908,057
Professional Fees:	
Auditing	24,700
Legal	55,102
Engineering	30,291
Financial Advisor	54,995
IT Consultant	41,482
Contracted Services	210,200
Utilities	690,553
Repairs and Maintenance	292,266
Administrative Expenditures	
Office Supplies	29,740
Property Insurance	159,101
Other Administrative Expenditures	309,257
Capital Outlay:	139,642
Solid Waste Disposal	29,925
Materials and Supplies	936,154
Other Expenditures	75,808
Total Expenditures	\$ 6,987,273

Number of persons employed by the District: 77 Full Time

Laguna Madre Water District
TSI – 3. Temporary Investments

For the year ended September 30, 2018

Funds	Identification or Certificate Number	Interest Rate	Maturity Date	Balance at End of Year
General Fund				
Certificate of Deposit	01-72431591	2.55%	3/8/2019	\$ 500,769
Certificate of Deposit	01-72032853	2.25%	3/19/2019	1,012,779
Certificate of Deposit	01-72035342	2.74%	9/9/2019	200,330
Certificate of Deposit	238700	1.55%	10/18/2018	505,819
Certificate of Deposit	01-72318976	2.25%	3/9/2019	202,556
Total General Fund				2,422,253
Debt Service Fund				
Certificate of Deposit	01-72894387	2.74%	9/9/2018	250,413
Certificate of Deposit	01-72695969	2.25%	3/9/2019	506,390
Certificate of Deposit	01-72941067	2.74%	9/9/2019	250,413
Certificate of Deposit	01-72716515	2.25%	3/9/2019	253,195
Total Debt Service Fund				1,260,411
Capital Projects Fund				
Certificate of Deposit	01-72408716	2.25%	3/9/2019	151,916
Certificate of Deposit	01-72054984	2.55%	3/8/2019	250,385
Total Capital Projects Fund				402,301
Emergency Fund				
Certificate of Deposit	01-72705218	2.25%	3/19/2019	1,012,155
Total Emergency Fund				1,012,155
Total - All Funds				\$5,097,120

Laguna Madre Water District
TSI – 4. Texas Levied and Receivable

For the year ended September 30, 2018	Debt Service Taxes
Taxes Receivable Beginning of Year	\$ 126,630
2016 Original Tax Levy	1,452,755
Tax Roll Adjustments	(5,458)
Total to be accounted for	1,573,927

Tax Collections:

Current Year	1,428,212
Prior Year	24,721
Total Collections	1,452,933
Taxes Receivable, End of Year	\$ 120,994

Taxes Receivable, By Years

Prior Years	\$ 96,597
Current Year - 2017	24,397
Taxes Receivable, End of Year	\$ 120,994

September 30,	2017	2016	2015	2014
Property Valuations:				
Land	\$ 1,314,065,195	\$ 1,297,763,711	\$ 1,315,897,695	\$ 1,323,826,813
Improvements	2,062,696,293	2,041,412,552	2,040,487,372	2,027,911,719
Personal Property	147,044,871	99,482,510	100,511,349	98,291,083
Total Property Valuations	\$ 3,523,806,359	\$ 3,438,658,773	\$ 3,456,896,416	\$ 3,450,029,615

Tax Rates Per \$100 Valuation:

Debt Service Tax Rate	\$ 0.043860	\$ 0.045020	\$ 0.044643	\$ 0.039260
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Original Tax Levy:	\$ 1,452,755	\$ 1,451,488	\$ 1,445,227	\$ 1,271,531
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Percent of Taxes Collected

To Taxes Levied	98.31%	99.04%	98.58%	95.98%
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Laguna Madre Water District
TSI – 5. Long Term Debt Requirements by Years

Waterworks and Sewer System Revenue Notes, Series 2015

Due During Fiscal Year	Principal Due	Interest Due	
<u>Ending</u>	<u>March 1,</u>	<u>March 1 & Sept 1</u>	<u>Total</u>
2019	490,000	122,496	612,496
2020	500,000	109,428	609,428
2021	515,000	96,030	611,030
2022	530,000	82,236	612,236
2023	540,000	68,112	608,112
2024	555,000	53,658	608,658
2025	570,000	38,808	608,808
2026	585,000	23,562	608,562
2027	600,000	7,920	607,920
	<u>\$ 4,885,000</u>	<u>\$ 602,250</u>	<u>\$ 5,487,250</u>

Laguna Madre Water District
TSI – 5. Long Term Debt Requirements by Years (Continued)

Unlimited Tax Bonds, Series 2012

Due During Fiscal Year	Principal Due	Interest Due	
<u>Ending</u>	<u>June 1,</u>	<u>June 1 & Dec 1</u>	<u>Total</u>
2019	705,000	436,513	1,141,513
2020	725,000	415,362	1,140,362
2021	745,000	393,612	1,138,612
2022	770,000	371,263	1,141,263
2023	800,000	340,463	1,140,463
2024	820,000	316,463	1,136,463
2025	845,000	290,838	1,135,838
2026	875,000	263,375	1,138,375
2027	905,000	234,500	1,139,500
2028	935,000	203,956	1,138,956
2029	965,000	171,231	1,136,231
2030	1,005,000	136,250	1,141,250
2031	1,055,000	86,000	1,141,000
2032	1,095,000	43,800	1,138,800
	<u>\$ 12,245,000</u>	<u>\$ 3,703,626</u>	<u>\$ 15,948,626</u>

Laguna Madre Water District
TSI – 5. Long Term Debt Requirements by Years (Continued)

Unlimited Tax Bonds, Series 2016

Due During Fiscal Year	Principal Due	Interest Due	
<u>Ending</u>	<u>June 1,</u>	<u>June 1 & Dec 1</u>	<u>Total</u>
2019	155,000	48,319	203,319
2020	160,000	44,770	204,770
2021	160,000	41,106	201,106
2022	165,000	37,442	202,442
2023	170,000	33,660	203,660
2024	175,000	29,770	204,770
2025	175,000	25,763	200,763
2026	180,000	21,755	201,755
2027	185,000	17,633	202,633
2028	190,000	13,397	203,397
2029	195,000	9,046	204,046
2030	200,000	4,580	204,580
	<u>\$ 2,110,000</u>	<u>\$ 327,241</u>	<u>\$ 2,437,241</u>

Laguna Madre Water District
TSI – 5. Long Term Debt Requirements by Years (Continued)

TWDB Revenue Bonds, Series 2016

Due During Fiscal Year	Principal Due	Interest Due	
<u>Ending</u>	<u>March 1,</u>	<u>Mar 1 & Sept 1</u>	<u>Total</u>
2019	280,000	41,916	321,916
2020	280,000	41,916	321,916
2021	280,000	41,902	321,902
2022	280,000	41,594	321,594
2023	280,000	40,796	320,796
2024	280,000	39,550	319,550
2025	280,000	37,912	317,912
2026	285,000	35,975	320,975
2027	285,000	33,710	318,710
2028	290,000	31,092	321,092
2029	290,000	28,207	318,207
2030	295,000	25,105	320,105
2031	300,000	21,773	321,773
2032	300,000	18,248	318,248
2033	305,000	14,541	319,541
2034	310,000	10,620	320,620
2035	315,000	6,495	321,495
2036	320,000	2,192	322,192
	<u>\$ 5,255,000</u>	<u>\$ 513,544</u>	<u>\$ 5,768,544</u>

Laguna Madre Water District
TSI – 5. Long Term Debt Requirements by Years (Continued)

Annual Requirements for All Series

Due During Fiscal Year	Principal Due	Interest Due	
<u>Ending</u>	<u>March 1,</u>	<u>Mar 1 & Sept 1</u>	<u>Total</u>
2019	1,630,000	649,244	2,279,244
2020	1,665,000	611,476	2,276,476
2021	1,700,000	572,650	2,272,650
2022	1,745,000	532,535	2,277,535
2023	1,790,000	483,031	2,273,031
2024	1,830,000	439,441	2,269,441
2025	1,870,000	393,321	2,263,321
2026	1,925,000	344,667	2,269,667
2027	1,975,000	293,763	2,268,763
2028	1,415,000	248,445	1,663,445
2029	1,450,000	208,484	1,658,484
2030	1,500,000	165,935	1,665,935
2031	1,355,000	107,773	1,462,773
2032	1,395,000	62,048	1,457,048
2033	305,000	14,541	319,541
2034	310,000	10,620	320,620
2035	315,000	6,495	321,495
2036	320,000	2,192	322,192
	<u>\$ 24,495,000</u>	<u>\$ 5,146,661</u>	<u>\$ 29,641,661</u>

Laguna Madre Water District
TSI – 6. Changes in Long-Term Bonded Debt

For the year ended September 30, 2018

	Bond Issues				
	Series 2012 Tax	Series 2015 Revenue	Series 2016 Tax	Series 2016 Revenue	Series Total
Interest rates	2.0 - 5.0%	2.64%	2.29%	.01 - 1.37%	
Dates Interest Payable	6/1, 12/1	3/1, 9/1	6/1, 12/1	3/1, 9/1	
Maturity dates	6/1/2012 to 6/1/2032	9/1/2015 to 3/1/2027	6/1/2016 to 6/1/2030	3/1/2017 to 3/1/2036	
Bonds outstanding at beginning of current year	\$12,930,000	\$5,360,000	\$2,260,000	\$5,535,000	\$26,085,000
Bonds sold during Current Year	-	-	-	-	-
Bonds refunded	-	-	-	-	-
Bonds retired	685,000	475,000	150,000	280,000	\$1,590,000
Bonds outstanding at end of current year	\$12,245,000	\$4,885,000	\$2,110,000	\$5,255,000	\$24,495,000
Interest paid during the Fiscal Year	\$457,063	\$135,234	\$51,754	\$41,916	\$685,967

Paying agent Name & City

Series 2012: Bank of New York Mellon, Corporate Trust, New York, New York

Series 2015: Regions Capital Advantage, Inc., Birmingham, Alabama

Series 2016 Tax: BOKF, NA Dallas, Texas

Series 2016 Revenue: Bank of New York Mellon, Corporate Trust, New York, New York

Bond Authority:	Tax Bonds	Revenue Bonds
Amount Authorized	\$39,405,000	\$12,160,000
Amount Issued	23,750,000	12,160,000
Remaining to be Issued	\$15,655,000	\$0

Debt Service Fund Cash and Temporary Investments balances as of September 30, 2018: \$3,081,257

Average annual Debt Service payment (principal & interest) for remaining term of all debt: \$1,360,833

Laguna Madre Water District
TSI – 7. Comparative Schedule of Revenues and Expenditures General Fund
and Debt Service Fund

For the year ended September 30,	2018	%	2017	%	2016	%	2015	%	2014	%
GENERAL FUND:										
REVENUE:										
Water Service	5,321,051	55.5%	5,481,245	56.3%	5,060,601	54.7%	4,596,999	57.3%	4,331,211	58.1%
Wastewater Service	3,650,725	38.1%	3,713,416	38.1%	3,496,971	37.8%	3,063,040	38.2%	2,828,501	37.9%
Other Water sales	119,597	1.2%	134,503	1.4%	124,459	1.3%	-	0.0%	-	0.0%
Late fees	62,631	0.7%	58,683	0.6%	76,976	0.8%	63,063	0.8%	57,194	0.8%
Tap Connection fees	237,154	2.5%	162,892	1.7%	134,898	1.5%	167,919	2.1%	111,151	1.5%
Interest on investments	89,446	0.9%	33,305	0.3%	14,836	0.2%	5,195	0.1%	5,990	0.1%
Miscellaneous	104,782	1.1%	154,440	1.6%	350,709	3.8%	126,676	1.6%	125,229	1.7%
TOTAL REVENUES	9,585,386	100.0%	9,738,484	100.0%	9,259,450	100.0%	8,022,892	100.0%	7,459,276	100.0%
EXPENDITURES:										
Professional fees	206,570	2.2%	337,497	3.5%	388,806	4.2%	346,321	4.3%	322,314	4.3%
Payroll and benefits	3,908,057	40.8%	3,657,751	37.6%	3,687,855	39.8%	3,668,463	45.7%	3,810,930	51.1%
Utilities	690,553	7.2%	738,882	7.6%	815,276	8.8%	804,031	10.0%	769,218	10.3%
Materials and supplies	936,154	9.8%	955,147	9.8%	1,162,026	12.5%	986,917	12.3%	846,303	11.3%
Repairs and Maintenance	292,266	3.0%	275,616	2.8%	341,278	3.7%	280,086	3.5%	255,350	3.4%
Other expenditures	799,857	8.3%	722,134	7.4%	196,707	2.1%	206,859	2.6%	167,627	2.2%
Capital outlay	139,642	1.5%	206,388	2.1%	417,400	4.5%	367,244	4.6%	508,905	6.8%
Lease principal	11,831	0.1%	11,480	0.1%	13,329	0.1%	-	0.0%	-	0.0%
Interest and fiscal charges	2,343	0.0%	2,694	0.0%	844	0.0%	-	0.0%	-	0.0%
TOTAL EXPENDITURES	6,987,273	72.9%	6,907,589	70.9%	7,023,521	75.9%	6,659,921	83.0%	6,680,647	89.6%
EXCESS REVENUES OVER (UNDER)										
EXPENDITURES	2,598,113	27.1%	2,830,895	29.1%	2,235,929	24.1%	1,362,971	17.0%	778,629	10.4%

Laguna Madre Water District
TSI – 7. Comparative Schedule of Revenues and Expenditures General Fund
and Debt Service Fund (Continued)

For the year ended September 30,	2018	%	2017	%	2016	%	2015	%	2014	%
DEBT SERVICE FUND:										
REVENUES:										
Property taxes	1,454,793	95.7%	1,473,558	96.7%	1,480,550	97.0%	1,348,644	96.0%	2,668,060	97.5%
Penalty and Interest	25,284	1.7%	30,409	2.0%	35,959	2.4%	51,639	3.7%	62,146	2.3%
Interest on investments	39,839	2.6%	19,365	1.3%	7,062	0.5%	3,663	0.3%	7,063	0.3%
Miscellaneous	61	0.0%	12	0.0%	2,115	0.1%	671	0.0%	-	0.0%
TOTAL REVENUES	1,519,977	100.0%	1,523,344	100.0%	1,525,686	100.0%	1,404,617	100.0%	2,737,269	100.0%
EXPENDITURES:										
Tax collection expense	35,367	2.3%	35,827	2.4%	42,532	2.8%	33,636	2.4%	3,423	0.1%
Appraisal charge	18,647	1.2%	18,605	1.2%	15,707	1.0%	30,221	2.2%	101,873	3.7%
Debt service, interest and fees	2,278,266	149.9%	2,279,584	149.6%	1,939,105	127.1%	2,504,931	178.3%	3,204,346	117.1%
Bond issue costs	-	0.0%	-	0.0%	-	0.0%	140,385	10.0%	-	0.0%
TOTAL EXPENDITURES	2,332,280	153.4%	2,334,016	153.2%	1,997,344	130.9%	2,709,173	192.9%	3,309,642	120.9%
EXCESS REVENUES OVER (UNDER)										
EXPENDITURES	(812,303)	(53.4%)	(810,672)	(53.2%)	(471,658)	(30.9%)	(1,304,556)	(92.9%)	(572,373)	(20.9%)
TOTAL ACTIVE RETAIL WATER										
CONNECTIONS	6,446		6,369		6,278		6,319		6,208	
TOTAL ACTIVE RETAIL WASTE WATER										
CONNECTIONS	5,557		5,519		5,466		5,413		5,344	

Laguna Madre Water District
TSI – 8. Board Members, Key Personnel and Accountants

For the year ended September 30, 2018

Complete District Mailing Address: 105 Port Road
Port Isabel, TX 78578
District Business Telephone (956) 943-2626

Submission Date of the most recent District Registration Form (TWC Sections 36.054 and 49.054): October 13, 2017

Limit on Fees of Office that a Director may receive during a fiscal year
(Set by Board Resolution - TWC 49.0060): \$ - 0 - .

Name and Address	Term of Office (Elected or Appointed) or Date Hired	Fees of Office Paid 9/30/2018	Expense Reimbursement 9/30/2018	Title at Year End
BOARD MEMBERS				
Scott Friedman PO Box 3897 South Padre Island, TX 78597	11/16 - 11/20	\$ -	\$ -	Chairman
Rick Wells 115 S Trevino Port Isabel, TX 78578	11/14 - 11/18	\$ -	\$ -	Vice-Chairman
Doyle Wells, III PO Box 3633 South Padre Island, TX 78596	7/16 - 11/18	\$ -	\$ -	Secretary
Alex Avalos 212 W Esperanza / PO Box 2867 South Padre Island, TX 78596	9/17 - 11/20	\$ -	\$ -	Director
Herb Houston 4 Whooping Crane Laguna Vista, TX 78578	9/17 - 11/20	\$ -	\$ -	Director

Laguna Madre Water District

TSI – 8. Board Members, Key Personnel and Accountants (Continued)

For the year ended September 30, 2018

Name and Address	Term of Office (Elected or Appointed) or Date Hired	Fees of Office Paid 9/30/2018	Expense Reimbursement 9/30/2018	Title at Year End
KEY ADMINISTRATIVE PERSONNEL				
Carlos J. Galvan, Jr. 1636 Oklahoma Street Port Isabel, TX 78578	2001	\$ -	\$ -	General Manager
Charles Ortiz 5587 Garden Breeze Ct. Brownsville, TX 78526	2013	\$ -	\$ -	District Engineer
Eduardo Salazar 33097 Washington Ave. Port Isabel, TX 78578	2018	\$ -	\$ -	Director of Finance
Robert Gomez 1425 Catherine Cir. Brownsville, TX 78520	2017	\$ -	\$ -	Director of Operations
CONSULTANTS				
Beatty Bangle Strama 400 West 15 St Ste 1450 Austin, TX 78701	2015	\$ 72,733.11	\$ -	Attorney
Estrada Hinojosa & Co., Inc. 1717 Main Street Dallas, TX 75201	1999	\$ 10,000.00	\$ -	Financial Advisor
G5 Internet Services 311-D Vogel Drive Mercedes, TX 78570	2012	\$ 40,135.80	\$ -	IT Consultant

OTHER INFORMATION

**Laguna Madre Water District
Top Ten Taxpayers**

For the year ended September 30, 2018

Owner ID	Taxpayer Name		Master Value		Taxable Value
642489	SAN ROMAN WIND I LLC	\$	52,800,430	\$	52,800,430
324942	AEP TEXAS INC	\$	16,592,720	\$	16,592,720
536143	SUBSEA 7 PORT ISABEL LLC	\$	11,375,685	\$	11,375,685
562039	SPI BEACH WATER RESORT WATERPARK LLC	\$	10,882,174	\$	10,882,174
336660	PENINSULA ISLAND RESORT & SPA LLC	\$	10,346,917	\$	10,346,917
580926	AGORA USA LP	\$	10,312,156	\$	10,312,156
526932	SAPPHIRE VP LP ATTN STEPHEN SWAN	\$	9,000,000	\$	9,000,000
541018	BAHIA MAR TOWER LLC	\$	7,361,990	\$	7,361,990
37416	AEP TEXAS CENTRAL CO	\$	7,188,180	\$	7,188,180
546094	AFFILIATED HOSPITALITY LLC	\$	6,689,867	\$	6,689,867

Laguna Madre Water District Top Ten Rate Payers

For the year ended September 30, 2018

Account Name	Address	City	Amount
LONG ISLAND VILLAGE	900 S GARCIA ST	PORT ISABEL	\$ 328,025
SCHLITTERBAHN SO PADRE	200 PADRE BLVD	SOUTH PADRE ISLAND	\$ 310,846
TEXAS PACK INC	508 PORT ROAD	PORT ISABEL	\$ 218,225
CAMERON COUNTY PARKS	1 PADRE BLVD	SOUTH PADRE ISLAND	\$ 169,748
SSPIBR, LTD DBA PEARL SO PADRE	310 PADRE BLVD	SOUTH PADRE ISLAND	\$ 155,163
WAL-MART STORES	1401 HWY 100	PORT ISABEL	\$ 85,235
SAPPHIRE CONDOS	310-A PADRE BLVD	SOUTH PADRE ISLAND	\$ 77,596
SAIDA TOWERS II	400 PADRE BLVD	SOUTH PADRE ISLAND	\$ 76,658
BRIDGEPOINT CONDOS	334 PADRE BLVD	SOUTH PADRE ISLAND	\$ 76,444
SOUTH PADRE ISLAND GOLF COURSE	1 GOLF HOUSE RD	LAGUNA VISTA	\$ 68,085

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COMPLIANCE SECTION

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**INDEPENDENT AUDITORS' REPORT ON INTERNAL CONTROL OVER FINANCIAL
REPORTING AND ON COMPLIANCE AND OTHER MATTERS BASED ON AN AUDIT OF FINANCIAL
STATEMENTS PERFORMED IN ACCORDANCE WITH *GOVERNMENT AUDITING STANDARDS***

To the Board of Directors
Laguna Madre Water District

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the financial statements of the governmental activities and each major fund of the Laguna Madre Water District as of and for the year ended September 30, 2018, and the related notes to the financial statements, which collectively comprise Laguna Madre Water District's basic financial statements, and have issued our report thereon dated February 6, 2019.

Internal Control Over Financial Reporting

In planning and performing our audit, we considered the Laguna Madre Water District's internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinions on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the Laguna Madre Water District's internal control. Accordingly, we do not express an opinion on the effectiveness of the Laguna Madre Water District's internal control.

A *deficiency in internal control* exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct misstatements on a timely basis. A *material weakness* is a deficiency, or a combination of deficiencies, in internal control such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis. A *significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit the attention of those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or, significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

Compliance and Other Matters

As part of obtaining reasonable assurance about whether the Laguna Madre Water District's financial statements are free of material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the entity's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the entity's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

Carr, Riggs & Ingram, L.L.C.

CARR, RIGGS & INGRAM, LLC

Brownsville, Texas
February 6, 2019

August 9, 2000

Mr. William W. Vaughan III
General Counsel
Landmark National
2817 Crain Highway
Upper Marlboro, Maryland 20774

Dear Mr. Vaughan:

Mr. Eduardo Hernandez asked that I review and respond to your letter dated July 28, 2000, because I calculated both the initial rate specified in the contract and the rate recently adopted by the District. Please allow me to take this opportunity to explain the basis for the recent rate change.

As you noted in your letter and further confirmed by legal counsel for the District, the March 1996 contract between Delos Partners and the District specified an initial rate that was to be in effect for forty-eight months. According to Section 3, after this initial period the rate "may be revised by the District from time to time *in accordance with rate-making policies acceptable to the Texas Natural Resource Conservation Commission* (emphasis added)." The section further states, "the rate *methodology* used to calculate the revised rates shall be the same *methodology* used to calculate the initial rate specified in Section 2 of this Agreement (emphasis added)".

The term *methodology* carries a specific meaning in the field of water ratemaking. The TNRCC and the American Water Works Association recognize two alternative methodologies for the setting of water rates. These methodologies are called the Cash Basis and the Utility Basis. Exhibit C to the contract shows that it was the Utility Basis *methodology* that was used to calculate the initial rate.

In order to calculate a rate using the Utility Basis methodology, the District must input five separate but intertwined factors. These factors are the Rate Base, the Rate of Return, Depreciation Expense, O&M expense, and Usage. AWWA and TNRCC precedents allow limited flexibility in calculating these factors under the Utility Basis. In other words, individual factors may be changed while keeping the calculation in accordance with an overall *methodology*.

You will note that the recent recalculation of the raw water rate resulted in *four of these five factors being revised to the benefit of the raw water customer*. Let us discuss each:

1. **Rate Base** – in both the original and revised calculations, the District limited the rate base only to the actual raw water transportation line itself (and an affiliated pump station). AWWA and TNRCC precedents would allow for the inclusion of some treatment plant assets into the rate base, most notably the raw water reservoirs. Further, to date the District has not included the value of its water rights, which in drought-stricken Texas has skyrocketed in recent years. The exclusion of these elements from the rate base represents an extremely conservative application of the Utility Basis Methodology.
2. **Rate of Return** – utilities typically calculate this factor to include both the cost of debt and a return on equity to compensate current ratepayers for the investment risk of new assets. Thus far the District has included only its current cost of debt in this rate of return, which represents

another conservative interpretation of the Utility Basis methodology. We estimate that including an equity factor would at least double the District's allowable rate of return.

3. **Depreciation Expense** – this is calculated on a straight-line basis over a forty-year useful life. If additional raw-water related assets were included in the rate base, this expense would increase.
4. **Operation and Maintenance Expense** –the revised calculation was based on a cursory review that assumed approximately 10.0% of the District's distribution-related O&M expense was devoted to the transmission line. This is less than the initial 1996 estimate. Given that the line is now in its tenth year of operation, a detailed operations review and analysis would likely result in a finding that significantly more than 10.0% of O&M is devoted to this line, which is the largest and most complex transmission line owned by the District. Also, please note that under the Utility Basis methodology, the District's raw water cost of service does *not* include debt service and reserves.
5. **Usage Factor** – the use of total line capacity as a usage factor is *not* in accordance with either the Utility Basis methodology or with ratemaking policies acceptable to the TNRCC and the American Water Works Association. It was both a special set of circumstances, and a desire by the District to ensure that the raw water rate was not unfairly penalizing to raw water users, that led to the 1996 forecast that usage would eventually be equivalent to the line's total capacity.

When the original rate was calculated, the District had no reliable estimate of the total amount of raw water that would be required by the golf course. While the contract included an estimate of a "maximum" usage level of 750 acre-feet per year, it is common for wholesale customers to exceed their limits (and the District was not prepared to limit the golf course's usage). The District was concerned that using actual 1996 volume for a four-year forecast period without a reliable estimate of golf course usage would result in a usage factor that was too low and consequently a unit rate that was too high. Therefore, to ensure that there was no chance that raw water customers would be inadvertently overcharged, the District initially estimated usage based on total line capacity.

Since 1996, there have been many changes that have impacted the District's ability to forecast its raw water usage. First, we now have four years of reliable, consistent data on the golf course's usage. Second, proration of water rights due to the ongoing drought have limited the District's ability to pump raw water from the Rio Grande. Third, the District's imposition of an "inverted block" retail water rate has achieved its conservation goal of reducing per meter usage. Fourth, a large water customer has converted to the use of sewer effluent to water its medians, thus further reducing the flow of raw water pumped through the transmission line.

In summary, while it was reasonable (although quite conservative and beneficial to raw water customers) in 1996 to forecast that usage would eventually approach the line's capacity, events since that time have not borne out that forecast. In maintaining consistency with "rate-making policies acceptable to the TNRCC", the usage factor is estimated based on actual previous year volume, the same standard used to calculate retail water rates.

As you can see, all five of the factors are interactive in the determination of a rate under the Utility Basis. If for any reason any factor is changed, all of the factors should be reconsidered to ensure that a just and reasonable rate is charged to raw water users. This will also ensure that retail ratepayers do not subsidize raw water users.

The result of this calculation is a raw water rate of \$0.43 per 1,000 gallons. This rate is significantly less than many other utilities charge for the use of raw water, providing it is even available. The percentage increase is not substantially different from the retail rate increase recently absorbed by the (predominantly low income) retail ratepayers of the District. Additionally, the average water and sewer rate increase across the United States during the 1996-2000 timeframe has been 25%, reflecting the fact that water is becoming an increasingly valuable commodity.

I have been advising the District on its rates for the past ten years and during this time the District has always sought to charge user rates that reflect both its cost of service and TNRCC policies. The predominant rate-related guideline used by the TNRCC is known as "public interest". This rule states that the rates imposed must not be adverse to the "public interest". Given that a) the revised calculation is a conservative interpretation of the Utility Basis methodology; b) the District's raw water rate is lower than that of many other communities in Texas; and c) the recent adjustment was not out of proportion compared to either the national average or other District ratepayers, we are confident that our cost-of-service based raw water rate is in accordance with the "public interest" guideline.

It is our sincere hope that this letter addresses your concern regarding the District's revised raw water rate. If you have any questions regarding the rate methodology, please do not hesitate to call me.

Very Truly Yours,

Dan V. Jackson
Partner

Cc: Eduardo Hernandez
Patrick Lindner, Davidson & Troilo

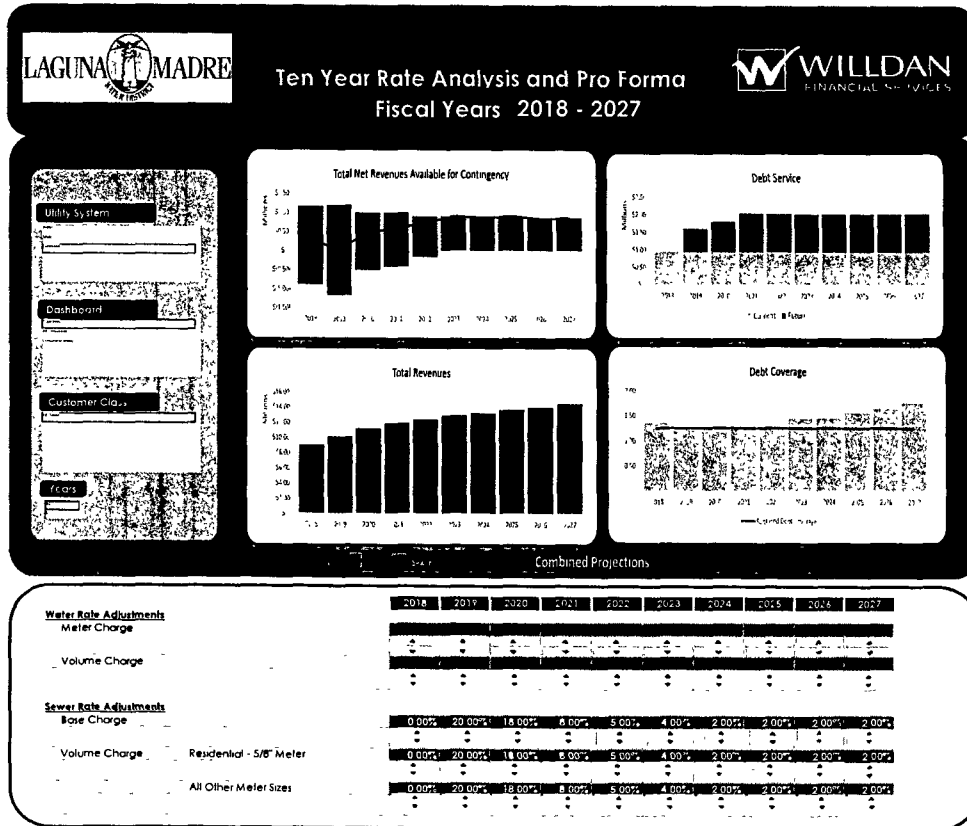
TABLE III-1 LMWD -- RAW WATER RATE SUMMARY CALCULATION		FY 2001
I. Invested Rate Base		
Book Value of Raw Water Line	\$	8,250,000
Less Accumulated Depreciation	\$	(2,062,500)
Net Book Value of Raw Water Line	\$	6,187,500
Other Capitalized Raw Water Assets	\$	427,441
Less Accumulated Depreciation		(106,860)
Net Other Costs	\$	320,581
Total Invested Rate Base	\$	6,508,081
II Return Component		
District Rate of Return		4.96%
Invested Rate Base	\$	6,508,081
Total Return Component	\$	322,810
III. Depreciation Expense		
Year Placed into Service		1992
Book Value of Raw Water Line	\$	8,250,000
Depreciable Lifespan of Raw Water Line		40
Sub-Total	\$	206,250
Net Other Capitalized Raw Water Costs	\$	427,441
Depreciable Lifespan (Weighted)		40
Sub-Total	\$	10,686
Total Depreciation Expense	\$	216,936
IV. O&M Expense		
Transmission Line O&M	\$	67,436
Total Revenue Requirement	\$	607,183
V. Raw Water Pumpage (Ac-ft)		
Total FY 2000 Raw Water Pumpage		4,330.921
VI. Calculation of Raw Water Rate		
Unit Rate per Acre-Foot	\$	140.20
Unit Rate per 1,000 Gal	\$	0.43

TABLE III-3 LMWD -- RAW WATER RATE O&M EXPENSE CALCULATION			
	Budget FY 2001	Allocable to Raw Water	Raw Water O&M Exp
Allocation Factor			10.00%
Water Plants:			
Total Personnel	\$ 404,364	\$ 404,364	\$ 40,436
Operating Expense:			
System Maintenance	23,000	23,000	2,300
Employee Uniforms	6,000	6,000	600
Vehicle Maintenance	6,000	6,000	600
Chemicals	100,000	-	-
Water Conservation	10,000	10,000	1,000
Safety Supplies	2,000	2,000	200
Supplies	20,000	20,000	2,000
Telephone	1,500	1,500	150
Electricity	185,000	185,000	18,500
Insurance	7,500	7,500	750
Travel & Training	7,000	7,000	700
Permits Tests & Inspections	20,000	-	-
Gas and Garbage	1,500	1,500	150
Misc.	500	500	50
Total Operating	390,000	270,000	27,000
Total Personnel & Operating	\$ 794,364	\$ 674,364	\$ 67,436

TABLE III-2 LMWD – RAW WATER RATE RATE OF RETURN CALCULATION			
Bond	Total Outstanding	FY 2001 Interest	Percent
Series 1992	\$ 1,635,000	\$ 83,385	5.10%
Series 1993	3,315,000	167,923	5.07%
Series 1994	1,210,000	56,980	4.71%
Series 1997	5,030,000	243,108	4.83%
Series 1999	<u>2,600,000</u>	<u>132,608</u>	<u>5.10%</u>
Weighted Cost of Capital	\$ 13,790,000	\$ 684,004	4.96%

**LAGUNA MADRE WATER DISTRICT
CALCULATION OF RAW WATER RATE
MAY 2000**

	Acre-Feet <u>Used</u>
Jan-April 1999	1,225.819
Total 1999	4,175.084
Jan – April 2000	1,381.656
Total FY 2000	4,330.921



Future Debt Term

	Alternative	Proposed
2018	\$	\$
2019	\$	2,500,000
2020	\$	\$
2021	\$	\$
2022	\$	\$
2023	\$	\$
2024	\$	\$
2025	\$	\$
2026	\$	\$
2027	\$	\$

	Alternative	Proposed
2018	\$	5,000,000
2019	\$	\$
2020	\$	3,000,000
2021	\$	\$
2022	\$	\$
2023	\$	\$
2024	\$	\$
2025	\$	\$
2026	\$	\$
2027	\$	\$

**LAGUNA MADRE WATER DISTRICT
WATER/WASTEWATER COST OF SERVICE MODEL**

Model Summary**Scenario: 2019 11 04 Scenario 1 – Status Quo**

1

Base Chg		4,000	\$	12.26	\$	12.26	\$	13.12	\$	13.38	\$	13.65	\$	13.65	\$	13.92	\$	13.92	\$	14.20	\$	14.20	\$	14.48
Usage Chg	4,001	10,000		2.47		2.47		2.64		2.70		2.75		2.75		2.80		2.80		2.86		2.86		2.92
Usage Chg	10,001	20,000		3.89		3.89		4.16		4.25		4.33		4.33		4.42		4.42		4.51		4.51		4.60
Usage Chg	20,001	Above		5.55		5.55		5.94		6.08		6.18		6.18		6.30		6.30		6.43		6.43		6.56

Wastewater Rates -- Residential

Base Chg		4,000	\$	13.46	\$	13.46	\$	16.15	\$	19.06	\$	20.58	\$	21.61	\$	22.48	\$	22.83	\$	23.39	\$	23.85	\$	24.33
Usage Chg	4,001	10,000		2.73		2.73		3.28		3.87		4.17		4.38		4.58		4.65		4.74		4.84		4.93
Usage Chg	10,001	20,000		4.23		4.23		5.08		5.99		6.47		6.79		7.06		7.21		7.35		7.50		7.65
Usage Chg	20,001	Above		6.00		6.00		7.20		8.50		9.18		9.63		10.02		10.22		10.42		10.63		10.85

2

5,000 Gal	Total		\$	30.24	\$	30.24	\$	34.37	\$	38.03	\$	40.11	\$	41.30	\$	42.62	\$	43.14	\$	44.00	\$	44.54	\$	45.43
	Increase			-		4.13		3.66		2.08		1.19		1.32		0.52		0.86		0.54		0.89		0.89
	Percent Inc			0.0%		13.7%		10.7%		5.5%		3.0%		3.2%		1.2%		2.0%		1.2%		2.0%		2.0%
10,000 Gal	Total			52.83		52.83		59.87		66.01		69.52		71.49		73.74		74.60		76.09		76.99		78.53
	Increase			-		7.04		6.14		3.51		1.97		2.26		0.86		1.49		0.89		1.54		1.54
	Percent Inc			0.0%		13.3%		10.3%		5.3%		2.8%		3.2%		1.2%		2.0%		1.2%		2.0%		2.0%
20,000 Gal	Total			123.45		123.45		139.56		153.39		161.34		165.73		170.89		172.81		176.27		178.27		181.83
	Increase			-		16.11		13.83		7.95		4.39		5.16		1.92		3.46		2.00		3.57		3.57
	Percent Inc			-		13.1%		9.9%		5.2%		2.7%		3.1%		1.1%		2.0%		1.1%		2.0%		2.0%
30,000 Gal	Total			223.95		223.95		252.95		277.68		291.94		299.78		309.06		312.48		318.73		322.29		328.74
	Increase			-		29.00		24.73		14.26		7.84		9.29		3.42		6.25		3.56		6.45		6.45
	Percent Inc			0.0%		12.9%		9.8%		5.1%		2.7%		3.1%		1.1%		2.0%		1.1%		2.0%		2.0%

Model Summary
Scenario: 2019 11 04 Scenario 1 – Status Quo

SCUMPS!S!S!S!S!S!

**LAGUNA MADRE WATER DISTRICT
WATER/WASTEWATER COST OF SERVICE MODEL**

Model Summary

Scenario: 2019 11 04 Scenario 1 -- Status Quo

5

Water Accounts

Total Accounts	6,781	6,831	6,881	6,931	6,981	7,031	7,081	7,131	7,181	7,231
New Accounts	-	50	50	50	50	50	50	50	50	50
Avg Annual Growth Rate	-	0.74%	0.73%	0.73%	0.72%	0.72%	0.71%	0.71%	0.70%	0.70%

Wastewater Accounts

Total Accounts	6,045	6,085	6,125	6,165	6,205	6,245	6,285	6,325	6,365	6,405
New Accounts	-	40	40	40	40	40	40	40	40	40
Avg Annual Growth Rate	-	0.66%	0.68%	0.65%	0.65%	0.64%	0.64%	0.64%	0.63%	0.63%

6

Water Volume

5/8" Meter	355,214,724	356,489,853	357,760,438	359,026,527	360,288,166	361,545,403	362,798,283	364,046,852	365,291,152	366,531,229
1" Meter	485,968,063	486,781,262	487,593,106	488,403,599	489,212,750	490,020,565	490,827,051	491,632,213	492,436,059	493,238,595
2" Meter	108,563,204	109,461,908	110,353,289	111,237,530	112,114,798	112,985,255	113,849,056	114,706,353	115,557,291	116,402,008
4" Meter	213,250,756	217,615,771	221,698,767	225,804,300	229,836,518	233,798,218	237,695,872	241,529,676	245,303,577	249,020,298
6" Meter	97,336,800	100,199,647	102,982,971	105,693,049	108,335,375	110,914,789	113,435,579	115,901,570	118,316,166	120,682,510
8" Meter	100	100	100	100	100	100	100	100	100	100
Other	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-
Total System	1,260,333,646	1,270,448,540	1,280,388,671	1,290,165,105	1,298,787,709	1,308,265,330	1,318,605,941	1,327,816,764	1,336,904,366	1,345,874,740

Wastewater Billing Units

5/8" Meter	224,961,846	226,222,842	227,483,839	228,744,836	230,005,833	231,266,830	232,527,827	233,788,824	235,049,821	236,310,818
1" Meter	313,267,536	314,583,786	315,900,036	317,216,286	318,532,536	319,848,786	321,165,036	322,481,287	323,797,537	325,113,787
2" Meter	69,748,883	70,964,020	72,179,157	73,394,295	74,609,432	75,824,569	77,039,707	78,254,844	79,469,981	80,685,119
4" Meter	153,997,429	160,240,568	166,483,707	172,726,846	178,969,985	185,213,124	191,456,263	197,699,402	203,942,541	210,185,680
6" Meter	55,209,368	58,555,390	61,901,412	65,247,435	68,593,457	71,939,479	75,285,501	78,631,524	81,977,546	85,323,568
8" Meter	75	75	75	75	75	75	75	75	75	75
Other	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-
Total System	817,185,135	830,566,681	843,948,226	857,329,772	870,711,318	884,092,863	897,474,409	910,855,955	924,237,500	937,619,046

**LAGUNA MADRE WATER DISTRICT
WATER/WASTEWATER COST OF SERVICE MODEL**

Forecast Summary

Scenario: 2019 11 04 Scenario 1 -- Status Quo

1

Revenues

Water Rate Revenues	\$ 5,077,328	\$ 5,465,497	\$ 5,659,338	\$ 5,836,216	\$ 5,908,905	\$ 6,080,895	\$ 6,154,014	\$ 6,330,586	\$ 6,404,251	\$ 6,585,595
Water Non-Rate Revenues	331,677	331,677	331,677	331,677	331,677	331,677	331,677	331,677	331,677	331,677
Total Revenues	5,409,004	5,797,174	5,991,014	6,167,893	6,240,581	6,412,572	6,485,691	6,662,263	6,735,927	6,917,272

Operating Expenses

01 -- Water Plant	1,440,534	1,562,696	1,689,712	1,759,923	1,833,220	1,809,747	1,989,657	2,073,111	2,160,277	2,251,329
03 -- Distribution	739,372	801,140	829,229	858,348	888,537	919,840	952,300	985,964	1,020,879	1,057,094
04 -- WW Collection	-	-	-	-	-	-	-	-	-	-
05 -- Maintenance	148,825	160,163	165,646	171,331	177,226	183,339	189,680	196,256	203,078	210,156
06 -- Laboratory	129,724	142,464	147,395	152,514	157,829	163,349	169,082	175,037	181,222	187,648
07 -- Administration	513,104	560,006	578,655	597,991	618,042	638,836	660,402	682,771	705,976	730,048
08 -- Wastewater Plant	-	-	-	-	-	-	-	-	-	-
10 -- Finance	521,689	569,583	589,557	610,297	631,834	654,202	677,435	701,570	726,642	752,693
11 -- Electrical	100,140	110,428	114,210	118,136	122,213	126,448	130,846	135,414	140,160	145,091
12 -- Construction and Maintenance	152,258	166,764	172,572	178,503	184,667	191,371	198,128	205,147	212,438	220,014
Water Source Alternatives	-	-	-	-	-	-	-	-	-	-
Total	3,745,645	4,093,246	4,286,975	4,447,143	4,613,768	4,787,132	4,967,530	5,155,269	5,350,671	5,554,072

Revenues Less Operating Expenses

	1,663,359	1,703,928	1,704,039	1,720,750	1,626,813	1,625,440	1,518,161	1,506,993	1,385,256	1,363,200
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Capital Expenses

Capital Outlays	161,076	165,908	170,885	176,012	181,292	186,731	192,333	198,103	204,046	210,167
Debt Service -- Current	339,907	340,690	339,828	340,177	340,471	338,725	338,415	337,812	338,953	337,824
Debt Service -- Future	-	-	200,951	200,951	200,951	200,951	200,951	200,951	200,951	200,951
Total	500,983	506,598	711,665	717,140	722,715	726,407	731,700	736,866	743,950	748,943

Total Cost of Service

	4,246,628	4,599,844	4,998,640	5,164,283	5,336,483	5,513,539	5,699,230	5,892,136	6,084,621	6,303,015
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Net Revenues for Contingency

	1,162,376	1,187,330	992,575	1,003,616	904,099	899,033	796,461	770,127	641,306	614,258
	21.5%	20.7%	16.6%	16.3%	14.5%	14.0%	12.1%	11.6%	9.5%	8.9%

Debt Coverage

	4.89	5.00	3.15	3.18	3.00	3.01	2.81	2.80	2.57	2.53
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**LAGUNA MADRE WATER DISTRICT
WATER/WASTEWATER COST OF SERVICE MODEL**

Forecast Summary

Scenario: 2019 11 04 Scenario 1 -- Status Quo

2 WASTEWATER Revenues and Expenses**Revenues**

WW Rate Revenues	\$ 3,513,303	\$ 4,236,421	\$ 5,098,290	\$ 5,644,103	\$ 6,046,246	\$ 6,404,063	\$ 6,655,991	\$ 6,904,832	\$ 7,161,169	\$ 7,424,893
WW Non-Rate Revenues	103,959	103,959	103,959	103,959	103,959	103,959	103,959	103,959	103,959	103,959
Total Revenues	3,617,261	4,340,380	5,202,249	5,748,062	6,150,205	6,508,022	6,759,950	7,008,791	7,265,128	7,528,852

Operating Expenses

01 -- Water Plant	-	-	-	-	-	-	-	-	-	-
03 -- Distribution	-	-	-	-	-	-	-	-	-	-
04 -- WW Collection	382,961	414,975	429,688	444,969	460,841	477,328	494,456	512,252	530,744	549,961
05 -- Maintenance	131,976	142,031	146,893	151,935	157,162	162,564	168,208	174,038	180,068	186,364
06 -- Laboratory	129,724	142,464	147,395	152,514	157,820	163,349	169,082	175,037	181,222	187,648
07 -- Administration	455,017	496,609	513,147	530,294	548,075	566,515	585,640	605,476	626,054	647,401
08 -- Wastewater Plant	1,674,560	1,839,108	1,963,545	2,094,084	2,177,683	2,264,855	2,355,765	2,450,586	2,549,498	2,652,692
10 -- Finance	357,127	389,913	403,586	417,784	432,528	447,840	463,744	480,266	497,429	515,262
11 -- Electrical	100,140	110,428	114,210	118,136	122,213	126,448	130,846	135,414	140,160	145,091
12 -- Construction and Maintenance	152,258	166,764	172,572	178,603	184,867	191,371	198,128	205,147	212,438	220,014
Water Source Alternatives	-	-	-	-	-	-	-	-	-	-
Total	3,383,763	3,702,293	3,891,037	4,088,319	4,241,199	4,400,290	4,565,868	4,738,216	4,917,634	5,104,433

Revenues Less Operating Expenses

	233,499	638,086	1,311,212	1,659,742	1,909,007	2,107,731	2,194,082	2,270,675	2,347,494	2,424,419
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Capital Expenses

Capital Outlays	533,342	549,342	565,823	582,797	600,281	618,290	636,838	655,944	675,622	695,891
Debt Service -- Current	592,242	593,722	591,715	592,755	593,358	590,183	589,792	588,907	590,585	588,805
Debt Service -- Future	-	866,515	869,358	906,428	885,048	885,114	884,704	883,816	882,456	890,470
Total	1,125,584	1,809,579	1,826,896	2,081,979	2,078,687	2,093,566	2,111,334	2,128,669	2,148,662	2,175,166

Total Cost of Service

	4,509,347	5,511,873	5,717,933	6,170,299	6,319,886	6,493,876	6,677,202	6,866,885	7,066,296	7,279,599
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Net Revenues for Contingency

	(892,086)	(1,171,493)	(515,684)	(422,237)	(169,681)	14,145	82,748	142,006	198,831	249,253
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	-24.7%	-27.0%	-9.9%	-7.3%	-2.8%	0.2%	1.2%	2.0%	2.7%	3.3%
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Debt Coverage

	0.39	0.51	1.04	1.11	1.29	1.43	1.49	1.54	1.59	1.64
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**LAGUNA MADRE WATER DISTRICT
WATER/WASTEWATER COST OF SERVICE MODEL**

Forecast Summary

Scenario: 2019 11 04 Scenario 1 -- Status Quo

3

Revenues										
Water Rate Revenues	\$ 5,077,328	\$ 5,465,497	\$ 5,659,338	\$ 5,836,216	\$ 5,908,905	\$ 6,080,895	\$ 6,154,014	\$ 6,330,586	\$ 6,404,251	\$ 6,585,595
Wastewater Rate Revenues	3,513,303	4,236,421	5,098,290	5,644,103	6,046,246	6,404,063	6,655,991	6,904,932	7,161,169	7,424,893
Non-Rate Revenues	435,635	435,635	435,635	435,635	435,635	435,635	435,635	435,635	435,635	435,635
Total Revenues	9,026,266	10,137,553	11,193,263	11,915,955	12,390,786	12,920,594	13,245,641	13,671,153	14,001,055	14,446,124
Operating Expenses										
01 -- Water Plant	1,440,534	1,582,696	1,689,712	1,759,923	1,833,220	1,909,747	1,989,657	2,073,111	2,160,277	2,251,329
03 -- Distribution	739,372	801,140	829,229	858,348	888,537	919,840	952,300	985,964	1,020,879	1,057,094
04 -- WW Collection	382,961	414,975	429,688	444,969	460,841	477,328	494,456	512,252	530,744	549,961
05 -- Maintenance	280,801	302,194	312,539	323,255	334,388	345,923	357,886	370,295	383,166	396,520
06 -- Laboratory	259,448	284,929	294,790	305,028	315,659	326,699	338,164	350,073	362,444	375,295
07 -- Administration	968,121	1,056,616	1,091,802	1,128,285	1,166,117	1,205,351	1,246,042	1,288,248	1,332,029	1,377,449
08 -- Wastewater Plant	1,874,560	1,839,108	1,863,545	2,094,084	2,177,683	2,284,855	2,355,765	2,450,586	2,549,498	2,652,892
10 -- Finance	878,816	959,497	993,143	1,028,081	1,064,362	1,102,042	1,141,190	1,181,835	1,224,072	1,267,955
11 -- Electrical	200,280	220,857	228,419	236,272	244,426	252,895	261,691	270,828	280,320	290,181
12 -- Construction and Maintenance	304,515	333,528	345,145	357,207	369,733	382,743	396,256	410,293	424,876	440,028
Water Source Alternatives	-	-	-	-	-	-	-	-	-	-
Total	7,129,408	7,795,539	8,178,012	8,535,462	8,854,966	9,187,422	9,533,398	9,893,486	10,268,305	10,658,505
Revenues Less Operating Expenses	1,896,858	2,342,014	3,015,251	3,380,493	3,535,820	3,733,171	3,712,243	3,777,668	3,732,750	3,787,619
Capital Expenses										
Capital Outlays	694,418	715,251	736,708	758,809	781,574	805,021	829,171	854,047	879,668	906,058
Debt Service -- Current	932,150	934,412	931,344	932,932	933,830	928,908	928,208	926,720	929,537	926,630
Debt Service -- Future	-	666,515	870,309	1,107,379	1,085,899	1,086,065	1,085,655	1,084,769	1,083,407	1,081,421
Total	1,626,568	2,316,177	2,538,361	2,799,120	2,801,402	2,819,993	2,843,034	2,865,535	2,892,612	2,924,108
Total Cost of Service	8,755,976	10,111,716	10,716,373	11,334,582	11,656,368	12,007,416	12,376,432	12,759,021	13,160,918	13,582,613
Net Revenues for Contingency	270,280	25,837	476,880	581,373	734,418	913,178	868,208	912,133	840,137	863,511
	3.0%	0.3%	4.3%	4.9%	5.9%	7.1%	6.6%	6.7%	6.0%	6.0%
Debt Coverage	2.03	1.46	1.67	1.66	1.75	1.85	1.84	1.88	1.85	1.88

Test Year W 1.0 – WATER Service Cost Functionalization
Scenario: 2019 11 04 Scenario 1 – Status Quo

	0	1	4100	REVENUE WATER SERVICE	\$ -	n/a	n/a	n/a	n/a	n/a
	1	0	1	4101	REVENUE BULK WATER SALES	-	n/a	n/a	n/a	n/a
	1	0	1	4102	REVENUE RAW WATER	72,735	n/a	n/a	n/a	n/a
	1	0	1	4104	REVENUE WATER TURN ON FEE	20,225	n/a	n/a	n/a	n/a
	1	0	1	4105	REVENUE OTHER WATER	23,986	n/a	n/a	n/a	n/a
	1	0	1	4108	CONTRACTS	-	n/a	n/a	n/a	n/a
	1	0	1	4107	OTHER FINANCING SOURCES	2,500	n/a	n/a	n/a	n/a
	1	0	2	4200	REVENUE SEWER SERVICES	-	n/a	n/a	n/a	n/a
	1	0	2	4204	REVENUE OTHER SEWER	-	n/a	n/a	n/a	n/a
	1	0	4	4430	REVENUE PENALTIES/INTERES	38,488	n/a	n/a	n/a	n/a
	1	0	8	4110	REVENUE WATER TAPPING FEE	72,229	n/a	n/a	n/a	n/a
	1	0	8	4115	REVENUE WATER SDC FEES	-	n/a	n/a	n/a	n/a
	1	0	8	4210	REVENUE SEWER TAPPING FEE	-	n/a	n/a	n/a	n/a
	1	0	8	4215	REVENUE SEWER SDC FEES	-	n/a	n/a	n/a	n/a
	1	0	7	5504	REVENUE INT CD GREEN BANK	1,981	n/a	n/a	n/a	n/a
	1	0	7	5505	REVENUE INTEREST - Operat	3,920	n/a	n/a	n/a	n/a
	1	0	7	5508	REVENUE INTEREST WSDC	786	n/a	n/a	n/a	n/a
	1	0	7	5507	REVENUE	-	n/a	n/a	n/a	n/a
	1	0	7	5508	REVENUE	963	n/a	n/a	n/a	n/a
	1	0	8	5981	REVENUE	2,425	n/a	n/a	n/a	n/a
	1	0	8	5982	REVENUE	-	n/a	n/a	n/a	n/a
	1	0	8	5983	REVENUE SALE OF MATERIALS	473	n/a	n/a	n/a	n/a
	1	0	8	5984	REVENUE SALE OF METERS	5,000	n/a	n/a	n/a	n/a
	1	0	8	5985	REVENUE BAD DEBT RECOVERE	50	n/a	n/a	n/a	n/a
	1	0	8	5986	REVENUE NSF CHARGES	754	n/a	n/a	n/a	n/a
	1	0	8	5987	REVENUE TANK RENTAL FEE	52,937	n/a	n/a	n/a	n/a
	1	0	8	5988	REVENUE CASH OVERSHORT	-	n/a	n/a	n/a	n/a
	1	0	8	5989	REVENUE MISCELLANEOUS	25,000	n/a	n/a	n/a	n/a
	1	0	49	5600	TRANSFER IN DEBT SERVICE	-	n/a	n/a	n/a	n/a
	1	0	49	5601	TRANSFER IN CAPITAL PROJE	-	n/a	n/a	n/a	n/a
	1	0	49	5602	TRANSFER IN EMERGENCY FUN	-	n/a	n/a	n/a	n/a
	1	0	49	5603	TRANSFER IN ASSET REPLACE	-	n/a	n/a	n/a	n/a
	1	0	49	5605	FUND BAL CARRIED FWD WSDC	-	n/a	n/a	n/a	n/a
	1	0	49	5610	FUND BAL CARRIED FWD SSDC	-	n/a	n/a	n/a	n/a
	1	0	49	5611	FD BAL CARRIED FWD - UNRE	-	n/a	n/a	n/a	n/a
	0	0	0	Other	-	n/a	n/a	n/a	n/a	n/a
	0	0	0	Other	-	n/a	n/a	n/a	n/a	n/a
	0	0	0	Other	-	n/a	n/a	n/a	n/a	n/a
	0	0	0	Other	-	n/a	n/a	n/a	n/a	n/a
	0	0	0	Other	-	n/a	n/a	n/a	n/a	n/a
Total Non-Rate Revenues					\$ 331,677					

LAGUNA MADRE WATER DISTRICT
WATER/WASTEWATER COST OF SERVICE MODEL

Test Year W 1.0 – WATER Service Cost Functionalization
Scenario: 2019 11 04 Scenario 1 -- Status Quo

[illegible]

LAGUNA MADRE WATER DISTRICT
WATER/WASTEWATER COST OF SERVICE MODEL

Test Year W 1.0 – WATER Service Cost Functionalization
Scenario: 2019 11 04 Scenario 1 -- Status Quo

Personnel and Operating															
1	3	12	\$410	OVERTIME	\$	6,000	\$	1,500	\$	-	\$	4,500	\$	-	-
1	3	12	\$411	SALARIES		315,238		78,810	-			236,428	-	-	-
1	3	12	\$412	FICA		24,118		6,028	-			18,087	-	-	-
1	3	12	\$413	UNEMPLOYMENT TAX		1,880		485	-			1,405	-	-	-
1	3	12	\$414	GROUP INSURANCE		82,723		20,881	-			62,042	-	-	-
1	3	12	\$415	WORKERS COMP		7,587		1,880	-			5,888	-	-	-
1	3	12	\$417	RETIREMENT		43,723		10,831	-			32,792	-	-	-
1	3	12	\$418	LONGEVITY		5,944		1,486	-			4,458	-	-	-
1	3	12	\$420	PENSION		-		0	-			1	-	-	-
1	3	12	\$454	TRAVEL & TRAINING		5,000		1,250	-			3,750	-	-	-
1	3	13	\$551	TELEPHONE		1,000		250	-			750	-	-	-
1	3	13	\$552	ELECTRICITY		-		-	-			-	-	-	-
1	3	13	\$558	GAS & GARBAGE		700		175	-			525	-	-	-
1	3	14	\$631	METERS		50,000		12,500	-			37,500	-	-	-
1	3	14	\$637	EMPLOYEE UNIFORM		2,500		625	-			1,875	-	-	-
1	3	14	\$638	NOTICE & PUBLICATION		250		63	-			188	-	-	-
1	3	14	\$639	FUEL		12,500		3,125	-			9,375	-	-	-
1	3	14	\$642	CHEMICAL		1,000		250	-			750	-	-	-
1	3	14	\$643	MINOR TOOLS & EQUI		6,000		1,500	-			4,500	-	-	-
1	3	14	\$644	MATERIALS		125,000		31,250	-			93,750	-	-	-
1	3	14	\$647	OFFICE SUPPLIES		1,000		250	-			750	-	-	-
1	3	14	\$648	SAFETY SUPPLIES		2,500		625	-			1,875	-	-	-
1	3	14	\$649	OPERATIONAL SUPPL		3,000		750	-			2,250	-	-	-
1	3	14	\$650	POSTAGE		-		-	-			-	-	-	-
1	3	14	\$655	LEASES		-		-	-			-	-	-	-
1	3	14	\$656	EQUIPMENT RENTAL		2,000		500	-			1,500	-	-	-
1	3	15	\$733	SOFTWARE, MAINT.		10,000		2,500	-			7,500	-	-	-
1	3	15	\$735	MINOR REPAIRS		5,000		1,250	-			3,750	-	-	-
1	3	15	\$740	HEAVY EQUIPMENT M		15,000		3,750	-			11,250	-	-	-
1	3	15	\$741	VEHICLE MAINTENAN		300		75	-			225	-	-	-
1	3	16	\$853	INSURANCE		7,350		1,888	-			5,463	-	-	-
1	3	16	\$858	FEES, DUES, SUBSC		250		63	-			188	-	-	-
1	3	16	\$899	MISCELLANEOUS		-		-	-			-	-	-	-
1	3	22	\$337	PERMITS & TESTING		1,500		375	-			1,125	-	-	-
0	0	0	0	Expense		-		-	-			-	-	-	-
0	0	0	0	Expense		-		-	-			-	-	-	-
0	0	0	0	Expense		-		-	-			-	-	-	-
0	0	0	0	Expense		-		-	-			-	-	-	-
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0	0	0	0	Expense		-		-	-			-	-	-	-
0	0	0	0	Expense		-		-	-			-	-	-	-
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0	0	0	0	Expense		-		-	-			-	-	-	-
0	0	0	0	Expense		-		-	-			-	-	-	-
0	0	0	0	Expense		-		-	-			-	-	-	-
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0	0	0	0	Expense		-		-	-			-	-	-	-
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0	0	0	0	Expense		-		-	-			-	-	-	-
0	0	0	0	Expense		-		-	-			-	-	-	-
0	0	0	0	Expense		-		-	-			-	-	-	-
0	0	0	0	Expense		-		-	-			-	-	-	-
0	0	0	0	Expense		-		-	-			-	-	-	-
0	0	0	0	Expense		-		-	-			-	-	-	-
0	0	0	0	Expense		-		-	-			-	-	-	-
0	0	0	0	Expense		-		-	-			-	-	-	-
0	0	0	0	Expense		-		-	-			-	-	-	-
0	0	0	0	Expense		-		-	-			-	-	-	-
0	0	0	0	Expense		-		-	-			-	-		

LAGUNA MADRE WATER DISTRICT
WATER/WASTEWATER COST OF SERVICE MODEL

Test Year W10 – WATER Service Cost Functionalization
Scenario: 2019 11 04 Scenario 1 – Status Quo

[illegible]

LAGUNA MADRE WATER DISTRICT
WATER/WASTEWATER COST OF SERVICE MODEL

Test Year W10 - WATER Service Cost Functionalization
Scenario: 2019 11 04 Scenario 1 - Status Quo

		PERSONNEL AND OPERATIONS		GENERAL		SALES		ADMINISTRATIVE		TOTAL		
1	5	12	6410	OVERTIME	\$	530	\$	-	\$	265	\$	265
1	5	12	6411	SALARIES		55,003	-		27,502	27,502	-	-
1	5	12	6412	FICA		4,208	-		2,104	2,104	-	-
1	5	12	6413	UNEMPLOYMENT TAX		-	-		143	143	-	-
1	5	12	6414	GROUP INSURANCE		11,957	-		5,979	5,979	-	-
1	5	12	6415	WORKERS COMP		1,326	-		663	663	-	-
1	5	12	6417	RETIREMENT		7,929	-		3,914	3,914	-	-
1	5	12	6418	LONGEVITY		572	-		286	286	-	-
1	5	12	6420	Pension		1	-		0	0	-	-
1	5	12	6454	TRAVEL & TRAINING		795	-		398	398	-	-
1	5	13	6551	TELEPHONE		388	-		199	199	-	-
1	5	13	6552	ELECTRICITY		4,134	-		2,067	2,067	-	-
1	5	13	6558	GAS & GARBAGE		530	-		265	265	-	-
1	5	14	6637	EMPLOYEE UNIFORM		1,087	-		543	543	-	-
1	5	14	6638	NOTICE & PUBLICATION		265	-		133	133	-	-
1	5	14	6639	FUEL		822	-		411	411	-	-
1	5	14	6643	MINOR TOOLS & EQUIP		795	-		398	398	-	-
1	5	14	6644	MATERIALS		510	-		255	255	-	-
1	5	14	6647	OFFICE SUPPLIES		318	-		159	159	-	-
1	5	14	6648	SAFETY SUPPLIES		530	-		265	265	-	-
1	5	14	6648	OPERATIONAL SUPPLIES		2,332	-		1,166	1,166	-	-
1	5	14	6650	POSTAGE		53	-		27	27	-	-
1	5	14	6655	LEASES		1,003	-		502	502	-	-
1	5	14	6696	ELECTRICAL SUPPLIES		-	-		-	-	-	-
1	5	15	6733	SOFTWARE, MAINT, & REPAIRS		1,378	-		689	689	-	-
1	5	15	6735	MINOR REPAIRS		1,580	-		795	795	-	-
1	5	15	6740	HEAVY EQUIPMENT MAINT		2,850	-		1,325	1,325	-	-
1	5	15	6741	VEHICLE MAINTENANCE		18,550	-		9,275	9,275	-	-
1	5	16	6846	REPAINTING		-	-		-	-	-	-
1	5	16	6853	INSURANCE		10,800	-		5,300	5,300	-	-
1	5	16	6856	FEES, DUES, SUBSCRIPTIONS		424	-		212	212	-	-
1	5	16	6899	MISCELLANEOUS		-	-		-	-	-	-
1	5	21	6123	PROFESSIONAL FEES		-	-		-	-	-	-
1	5	22	6330	MAINTENANCE CONTR		18,550	-		9,275	9,275	-	-
0	0	0	0	Expense		-	-		-	-	-	-
0	0	0	0	Expense		-	-		-	-	-	-
0	0	0	0	Expense		-	-		-	-	-	-
0	0	0	0	Expense		-	-		-	-	-	-

LAGUNA MADRE WATER DISTRICT
WATER/WASTEWATER COST OF SERVICE MODEL

Test Year W1.0 – WATER Service Cost Functionalization
Scenario: 2019 11 04 Scenario 1 – Status Quo

[illegible]

LAGUNA MADRE WATER DISTRICT
WATER/WASTEWATER COST OF SERVICE MODEL

Test Year W1.0 – WATER Service Cost Functionalization
Scenario. 2019 11 04 Scenario 1 – Status Quo

Personnel and Operating													
1	7	12	6410	OVERTIME	\$	1,060	\$	-	\$	-	\$	785	\$ 265
1	7	12	6411	SALARIES		262,808	-	-	-	-	187,181		65,727
1	7	12	6412	FICA		20,112	-	-	-	-	15,084		5,028
1	7	12	6413	UNEMPLOYMENT TAX		763	-	-	-	-	572		181
1	7	12	6414	GROUP INSURANCE		31,886	-	-	-	-	23,514		7,971
1	7	12	6415	WORKERS COMP		6,338	-	-	-	-	4,752		1,584
1	7	12	6417	RETIREMENT		36,466	-	-	-	-	27,348		8,116
1	7	12	6418	LONGEVITY		2,280	-	-	-	-	1,717		572
1	7	12	6419	DEFERRED COMP		-	-	-	-	-	-		-
1	7	12	6420	PENSION		1	-	-	-	-	0		0
1	7	12	6454	TRAVEL TRAINING		13,250	-	-	-	-	9,838		3,313
1	7	13	6551	TELEPHONE		2,120	-	-	-	-	1,590		530
1	7	13	6552	ELECTRICITY		6,260	-	-	-	-	4,770		1,590
1	7	13	6558	GAS & GARBAGE		838	-	-	-	-	477		158
1	7	14	6637	EMPLOYEE UNIFORM		1,040	-	-	-	-	785		265
1	7	14	6638	NOTICE & PUBLICAT		5,300	-	-	-	-	3,975		1,325
1	7	14	6639	FUEL		795	-	-	-	-	596		199
1	7	14	6643	MINOR TOOLS & EQU		-	-	-	-	-	-		-
1	7	14	6647	OFFICE SUPPLIES		4,240	-	-	-	-	3,180		1,060
1	7	14	6648	SAFETY SUPPLIES		530	-	-	-	-	398		133
1	7	14	6649	OPERATIONAL SUPPL		5,300	-	-	-	-	3,975		1,325
1	7	14	6650	POSTAGE		795	-	-	-	-	596		199
1	7	14	6655	LEASES		3,180	-	-	-	-	2,385		795
1	7	14	6656	EQUIPMENT RENTAL		-	-	-	-	-	-		-
1	7	15	6733	SOFTWARE, MAINT.		30,820	-	-	-	-	23,190		7,730
1	7	15	6735	MINOR REPAIRS		2,650	-	-	-	-	1,888		663
1	7	15	6741	VEHICLE MAINTENAN		133	-	-	-	-	99		33
1	7	16	6824	ANNEXATION		-	-	-	-	-	-		-
1	7	16	6846	BEAUTIFICATION		159	-	-	-	-	119		40
1	7	16	6853	INSURANCE		8,666	-	-	-	-	6,499		2,166
1	7	16	6854	FEES, DUES, SUBSC		4,240	-	-	-	-	3,180		1,060
1	7	16	6862	ELECTION		-	-	-	-	-	-		-
1	7	16	6898	MISCELLANEOUS		-	-	-	-	-	-		-
1	7	21	6120	LEGAL FEES		15,900	-	-	-	-	11,825		3,975
1	7	21	6125	CONSULTING FEES		10,600	-	-	-	-	7,950		2,650
1	7	21	6130	COMPUTER CONSULTA		21,200	-	-	-	-	15,900		5,300
1	7	21	6135	ENGINEERING		13,250	-	-	-	-	9,838		3,313
1	7	22	6355	BAD DEBT		-	-	-	-	-	-		-
1	7	22	6357	PERMITS & TESTING		-	-	-	-	-	-		-
0	0	0	0	Expense		-	-	-	-	-	-		-
0	0	0	0	Expense		-	-	-	-	-	-		-
0	0	0	0	Expense		-	-	-	-	-	-		-
0	0	0	0	Expense		-	-	-	-	-	-		-
0	0	0	0	Expense		-	-	-	-	-	-		-
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0	0	0	0	Expense		-	-	-	-	-	-		-
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0	0	0	0	Expense		-	-	-	-	-	-		-
0	0	0	0	Expense		-	-	-	-	-	-		-
0	0	0	0	Expense		-	-	-	-	-	-		-
0	0	0	0	Expense		-	-	-	-	-	-		-
0	0	0	0	Expense		-	-	-	-	-	-		-
0	0	0	0	Expense		-	-	-	-	-	-		-
0	0	0	0	Expense		-	-	-	-	-	-		-
0	0	0	0	Expense		-	-	-	-	-	-		-
0	0	0	0	Expense		-	-	-	-	-	-		-
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0	0	0	0	Expense		-	-	-	-	-	-		-
0	0	0	0	Expense		-	-	-	-	-	-		-
0	0	0	0	Expense		-	-	-	-	-	-		-
0	0	0	0	Expense		-	-	-	-	-	-		-
0	0	0	0	Expense		-	-						

LAGUNA MADRE WATER DISTRICT
WATER/WASTEWATER COST OF SERVICE MODEL

Test Year W 1.0 -- WATER Service Cost Functionalization
Scenario: 2019 11 04 Scenario 1 -- Status Quo

[illegible]

LAGUNA MADRE WATER DISTRICT
WATER/WASTEWATER COST OF SERVICE MODEL

Test Year W 1.0 -- WATER Service Cost Functionalization
Scenario: 2019 11 04 Scenario 1 -- Status Quo

[illegible]

LAGUNA MADRE WATER DISTRICT
WATER/WASTEWATER COST OF SERVICE MODEL

Test Year W10 – WATER Service Cost Functionalization
Scenario: 2019 11 04 Scenario 1 -- Status Quo

[illegible]

LAGUNA MADRE WATER DISTRICT
WATER/WASTEWATER COST OF SERVICE MODEL

Test Year W10 – WATER Service Cost Functionalization
Scenario: 2019 11 04 Scenario 1 -- Status Quo

[illegible]

**LAGUNA MADRE WATER DISTRICT
WATER/WASTEWATER COST OF SERVICE MODEL**

Test Year W1.0 -- WATER Service Cost Functionalization
Scenario: 2019 11 04 Scenario 1 -- Status Quo

Port Isabel Reclamation	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
SPI Sewer Facility	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Total	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Percent		100.0%		100.0%		0.0%		0.0%		0.0%		0.0%
Percent	\$	3,745,645	\$	544,977	\$	1,410,736	\$	755,140	\$	776,095	\$	258,698
		100.0%		14.6%		37.7%		20.2%		20.7%		6.9%

**LAGUNA MADRE WATER DISTRICT
WATER/WASTEWATER COST OF SERVICE MODEL**

Test Year: W 1.0 -- WATER Service Cost Functionalization
Scenario: 2019 11 04 Scenario 1 -- Status Quo

01 -- Water Plant	\$ 58,831	\$ 14,708	\$ 44,123	\$ -	\$ -	\$ -
03 -- Distribution	45,000	21,250	-	83,750	-	-
04 -- WW Collection	-	-	-	-	-	-
05 -- Maintenance	1,305	-	652	652	-	-
06 -- Laboratory	-	-	-	-	-	-
07 -- Administration	12,190	-	-	-	9,143	3,048
08 -- Wastewater Plant	-	-	-	-	-	-
10 -- Finance	-	-	-	-	-	-
11 -- Electrical	-	-	-	-	-	-
12 -- Construction and Maintenance	3,750	-	1,875	1,875	-	-
Total Capital Outlays	\$ 161,076	\$ 35,958	\$ 46,651	\$ 66,277	\$ 9,143	\$ 3,048
Percent	100.0%	22.3%	29.0%	41.1%	5.7%	1.9%
TOTAL OPERATING/CAPITAL OUTLAYS	\$ 3,906,721	\$ 580,934	\$ 1,457,386	\$ 821,417	\$ 785,237	\$ 281,746
Percent	100.0%	14.9%	37.3%	21.0%	20.1%	6.7%
TOTAL WATER DEBT SERVICE -- CURRENT	\$ 339,807	\$ -	\$ 186,845	\$ 95,632	\$ -	\$ 57,430
Percent	100.0%	0.0%	55.0%	28.1%	0.0%	16.9%
TOTAL WATER DEBT SERVICE -- FUTURE	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Percent	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
TOTAL COST OF SERVICE	\$ 4,246,528	\$ 580,934	\$ 1,644,231	\$ 917,049	\$ 785,237	\$ 339,176
Percent	100.0%	13.7%	38.7%	21.6%	18.5%	7.5%
TOTAL NON-RATE REVENUES	\$ 331,677	\$ 45,373	\$ 128,420	\$ 71,626	\$ 61,330	\$ 24,928
Percent	100.0%	13.7%	38.7%	21.6%	18.5%	7.5%
TOTAL REVENUE REQUIREMENT	\$ 3,914,851	\$ 535,561	\$ 1,515,811	\$ 845,423	\$ 723,908	\$ 294,247
Percent	100.0%	13.7%	38.7%	21.6%	18.5%	7.5%

**LAGUNA MADRE WATER DISTRICT
WATER/WASTEWATER COST OF SERVICE MODEL**

Test Year W 2.0 – WATER Cost Allocations to Defined Customer Class Units
Scenario: 2019 11 04 Scenario 1 – Status Quo

5/8" Meter	355,214,724	973,191	129	1,252,113	278,922	58,500
1" Meter	485,968,063	1,331,419	146	1,939,354	607,834	17,928
2" Meter	108,563,204	297,433	145	432,046	134,612	3,624
4" Meter	213,250,758	584,248	161	943,542	359,293	900
6" Meter	97,336,800	268,676	167	497,651	230,975	408
8" Meter	100	0	200	1	0	12
Other	-	-	-	-	-	-
Other	-	-	-	-	-	-
Other	-	-	-	-	-	-
Other	-	-	-	-	-	-
Total System	1,260,333,846	3,452,968		5,064,707	1,811,738	81,372
Peaking Factor	1.47					
Allocation Factors						
Base	100.00%					
Maximum Day	58.82%				41.18%	
Maximum Hour	39.22%				60.78%	

5/8" Meter	28.18%	17.31%	71.85%
1" Meter	38.56%	37.72%	22.03%
2" Meter	8.61%	8.35%	4.45%
4" Meter	16.92%	22.29%	1.11%
6" Meter	7.72%	14.33%	0.50%
8" Meter	0.00%	0.00%	0.01%
Other	0.00%	0.00%	0.00%
Other	0.00%	0.00%	0.00%
Other	0.00%	0.00%	0.00%
Other	0.00%	0.00%	0.00%
Total System	100.00%	100.00%	100.00%

SOURCE: Volume Input spreadsheet

LAGUNA MADRE WATER DISTRICT
WATER/WASTEWATER COST OF SERVICE MODEL

Test Year W 3.0 -- Water Cost Functionalization
Scenario 1 2019 11 04 Scenario 1 -- Status Quo

01 -- Water Plant	58.82%	41.18%	0.00%	0.00%	\$	360,134	\$	211,843	\$	148,290	\$	-	\$	-
03 -- Distribution	58.82%	41.18%	0.00%	0.00%		184,843		108,731		75,112		-		-
04 -- WW Collection	58.82%	41.18%	0.00%	0.00%		-		-		-		-		-
05 -- Maintenance	58.82%	41.18%	0.00%	0.00%		-		-		-		-		-
06 -- Laboratory	58.82%	41.18%	0.00%	0.00%		-		-		-		-		-
07 -- Administration	58.82%	41.18%	0.00%	0.00%		-		-		-		-		-
08 -- Wastewater Plant	58.82%	41.18%	0.00%	0.00%		-		-		-		-		-
10 -- Finance	58.82%	41.18%	0.00%	0.00%		-		-		-		-		-
11 -- Electrical	58.82%	41.18%	0.00%	0.00%		-		-		-		-		-
12 -- Construction and Maintenance	58.82%	41.18%	0.00%	0.00%		-		-		-		-		-
Water Source Alternatives	58.82%	41.18%	0.00%	0.00%		-		-		-		-		-
Capital Outlays	58.82%	41.18%	0.00%	0.00%		-		-		-		-		-
Total Treatment					\$	35,858	\$	21,152	\$	14,806	\$	-	\$	-
					\$	580,934	\$	341,726	\$	239,208	\$	-	\$	-
01 -- Water Plant	58.82%	41.18%	0.00%	0.00%	\$	1,080,401	\$	635,530	\$	444,871	\$	-	\$	-
03 -- Distribution	58.82%	41.18%	0.00%	0.00%		-		-		-		-		-
04 -- WW Collection	58.82%	41.18%	0.00%	0.00%		-		-		-		-		-
05 -- Maintenance	58.82%	41.18%	0.00%	0.00%		74,412		43,772		30,540		-		-
06 -- Laboratory	58.82%	41.18%	0.00%	0.00%		129,724		76,308		53,416		-		-
07 -- Administration	58.82%	41.18%	0.00%	0.00%		-		-		-		-		-
08 -- Wastewater Plant	58.82%	41.18%	0.00%	0.00%		-		-		-		-		-
10 -- Finance	58.82%	41.18%	0.00%	0.00%		-		-		-		-		-
11 -- Electrical	58.82%	41.18%	0.00%	0.00%		50,070		28,453		20,617		-		-
12 -- Construction and Maintenance	58.82%	41.18%	0.00%	0.00%		76,128		44,782		31,347		-		-
Water Source Alternatives	58.82%	41.18%	0.00%	0.00%		-		-		-		-		-
Capital Outlays	58.82%	41.18%	0.00%	0.00%		46,651		27,442		19,208		-		-
Total Distribution					\$	1,457,386	\$	857,286	\$	600,100	\$	-	\$	-
01 -- Water Plant	39.22%	0.00%	60.78%	0.00%	\$	-	\$	-	\$	-	\$	-	\$	-
03 -- Distribution	39.22%	0.00%	60.78%	0.00%		554,529		217,462		-		337,067		-
04 -- WW Collection	39.22%	0.00%	60.78%	0.00%		-		-		-		-		-
05 -- Maintenance	39.22%	0.00%	60.78%	0.00%		74,412		28,181		-		45,231		-
06 -- Laboratory	39.22%	0.00%	60.78%	0.00%		-		-		-		-		-
07 -- Administration	39.22%	0.00%	60.78%	0.00%		-		-		-		-		-
08 -- Wastewater Plant	39.22%	0.00%	60.78%	0.00%		-		-		-		-		-
10 -- Finance	39.22%	0.00%	60.78%	0.00%		-		-		-		-		-
11 -- Electrical	39.22%	0.00%	60.78%	0.00%		50,070		19,635		-		30,435		-
12 -- Construction and Maintenance	39.22%	0.00%	60.78%	0.00%		76,128		29,854		-		46,274		-
Water Source Alternatives	39.22%	0.00%	60.78%	0.00%		-		-		-		-		-
Capital Outlays	39.22%	0.00%	60.78%	0.00%		66,277		25,991		-		40,286		-
Total Distribution					\$	821,417	\$	322,124	\$	-	\$	499,293	\$	-
01 -- Water Plant	0.00%	0.0%	0.0%	100.0%	\$	-	\$	-	\$	-	\$	-	\$	-
03 -- Distribution	0.00%	0.0%	0.0%	100.0%		-		-		-		-		-
04 -- WW Collection	0.00%	0.0%	0.0%	100.0%		-		-		-		-		-
05 -- Maintenance	0.00%	0.0%	0.0%	100.0%		-		-		-		-		-
06 -- Laboratory	0.00%	0.0%	0.0%	100.0%		-		-		-		-		-
07 -- Administration	0.00%	0.0%	0.0%	100.0%		128,276		-		-		-		128,276
08 -- Wastewater Plant	0.00%	0.0%	0.0%	100.0%		-		-		-		-		-
10 -- Finance	0.00%	0.0%	0.0%	100.0%		130,422		-		-		-		130,422
11 -- Electrical	0.00%	0.0%	0.0%	100.0%		-		-		-		-		-
12 -- Construction and Maintenance	0.00%	0.0%	0.0%	100.0%		-		-		-		-		-
Water Source Alternatives	0.00%	0.0%	0.0%	100.0%		-		-		-		-		-
Capital Outlays	0.00%	0.0%	0.0%	100.0%		3,048		-		-		-		3,048
Total Customer Billing					\$	261,746	\$	-	\$	-	\$	-	\$	261,746
					\$	3,121,484	\$	1,521,137	\$	839,338	\$	499,293	\$	261,746
						100.00%		48.73%		26.88%		16.00%		8.38%

**LAGUNA MADRE WATER DISTRICT
WATER/WASTEWATER COST OF SERVICE MODEL**

Test Year W 3.0 -- Water Cost Functionalization

Scenario: 2019 11 04 Scenario 1 -- Status Quo

01 -- Water Plant	48 73%	26 89%	16 00%	8 39%	\$	-	-	-	-	-
03 -- Distribution	48 73%	26 89%	16 00%	8 39%	-	-	-	-	-	-
04 -- WW Collection	48 73%	26 89%	16 00%	8 39%	-	-	-	-	-	-
05 -- Maintenance	48 73%	26 89%	16 00%	8 39%	-	-	-	-	-	-
06 -- Laboratory	48 73%	26 89%	16 00%	8 39%	-	-	-	-	-	-
07 -- Administration	48 73%	26 89%	16 00%	8 39%	384,828	187,531	103,473	61,555	32,269	-
08 -- Wastewater Plant	48 73%	26 89%	16 00%	8 39%	-	-	-	-	-	-
10 -- Finance	48 73%	26 89%	16 00%	8 39%	391,267	180,669	105,204	62,585	32,809	-
11 -- Electrical	48 73%	26 89%	16 00%	8 39%	-	-	-	-	-	-
12 -- Construction and Maintene	48 73%	26 89%	16 00%	8 39%	-	-	-	-	-	-
Water Source Alternatives	48 73%	26 89%	16 00%	8 39%	-	-	-	-	-	-
Capital Outlays	48 73%	26 89%	16 00%	8 39%	9,143	4,455	2,458	1,462	767	-
Total Administration					\$ 785,237	\$ 382,656	\$ 211,136	\$ 125,602	\$ 65,845	
Total Operating/Cap Outlays					\$ 3,906,721	\$ 1,893,782	\$ 1,050,444	\$ 624,895	\$ 327,580	
					100 00%	48 73%	26 89%	16 00%	8 39%	
Total	48 73%	26 89%	16 00%	8 39%	\$ 338,907	\$ 165,641	\$ 81,385	\$ 54,369	\$ 28,502	
Total	48 73%	26 89%	16 00%	8 39%	\$ -	\$ -	\$ -	\$ -	\$ -	
Total Cost of Service					\$ 4,246,828	\$ 2,068,433	\$ 1,141,838	\$ 679,264	\$ 356,083	
Percentage					100 00%	48 73%	26 89%	16 00%	8 39%	
Non-Rate Revenues	48 73%	26 89%	16 00%	8 39%	331,677	161,630	88,182	53,053	27,812	
Total Water Cost Classification					\$ 3,914,952	\$ 1,907,803	\$ 1,052,657	\$ 626,211	\$ 328,268	

LAGUNA MADRE WATER DISTRICT
WATER/WASTEWATER COST OF SERVICE MODEL

Forecast W40 – WATER Service Revenue Requirement Raised from Rates
Scenario: 2019 11 04 Scenario 1 – Status Quo

[illegible]

Forecast W 4.0 -- WATER Service Revenue Requirement Raised from Rates
Scenario: 2010 11 04 Scenario 1 -- Status Quo

Intellectual Property of Economics.com, LLC - Not
to be used without express written permission

Forecast W 4 0 -- WATER Service Revenue Requirement Raised from Rates
Scenario: 2019 11 04 Scenario 1 - Status Quo

Intellectual Property of Economics.com, LLC - Not
to be used without express written permission

**LAGUNA MADRE WATER DISTRICT
WATER/WASTEWATER COST OF SERVICE MODEL**

Forecast W 4.0 -- WATER Service Revenue Requirement Raised from Rates Scenario: 2019 11 04 Scenario 1 - Status Quo

[illegible]

**LAGUNA MADRE WATER DISTRICT
WATER/WASTEWATER COST OF SERVICE MODEL**

Forecast W 4.0 -- WATER Service Revenue Requirement Raised from Rates
Scenario: 2019 11 04 Scenario 1 -- Status Quo

Personnel and Operations																								
1	5	12	6410	OVERTIME	\$	530	\$	546	\$	562	\$	579	\$	597	\$	614	\$	633	\$	652	\$	671	\$	692
1	5	12	6411	SALARIES		55,003		56,654		58,353		60,104		61,807		63,764		65,677		67,647		69,677		71,767
1	5	12	6412	FICA		4,208		4,418		4,639		4,871		5,114		5,370		5,639		5,921		6,217		6,527
1	5	12	6413	UNEMPLOYMENT TAX		-		286		301		318		338		365		393		423		444		464
1	5	12	6414	GROUP INSURANCE		11,857		12,555		13,183		13,842		14,534		15,261		16,024		16,825		17,666		18,550
1	5	12	6415	WORKERS COMP		1,326		1,382		1,441		1,534		1,611		1,692		1,776		1,865		1,958		2,056
1	5	12	6417	RETIREMENT		7,629		8,010		8,411		8,831		9,273		9,737		10,223		10,735		11,271		11,835
1	5	12	6418	LONGEVITY		572		586		607		625		644		664		683		704		725		747
1	5	12	6420	Pension		1		6,050		6,050		6,050		6,050		6,050		6,050		6,050		6,050		6,050
1	5	12	6454	TRAVEL & TRAINING		785		818		843		869		895		922		949		978		1,007		1,037
1	5	13	6501	TELEPHONE		398		409		422		434		447		461		475		489		504		519
1	5	13	6502	ELECTRICITY		4,134		4,374		4,627		4,893		5,175		5,471		5,784		6,113		6,461		6,827
1	5	14	6508	GAS & GARBAGE		-		581		623		667		703		741		781		824		870		915
1	5	14	6637	EMPLOYEE UNIFORM		1,087		1,128		1,170		1,215		1,260		1,307		1,356		1,406		1,457		1,511
1	5	14	6838	NOTICE & PUBLICATION		285		275		285		298		307		319		331		343		355		368
1	5	14	6839	FUEL		922		946		972		998		925		962		991		1,010		1,041		1,072
1	5	14	6843	MINOR TOOLS & EOU		785		841		890		941		995		1,052		1,112		1,176		1,242		1,313
1	5	14	6844	MATERIALS		510		539		571		604		638		675		713		754		797		842
1	5	14	6847	OFFICE SUPPLIES		318		330		343		355		368		383		397		411		427		442
1	5	14	6848	SAFETY SUPPLIES		530		550		571		592		615		638		661		686		711		737
1	5	14	6849	OPERATIONAL SUPPL		2,323		2,403		2,475		2,548		2,625		2,705		2,788		2,856		2,950		3,042
1	5	14	6850	POSTAGE		53		55		57		58		61		64		68		71		74		77
1	5	14	6855	LEASES		1,003		1,041		1,081		1,122		1,164		1,207		1,252		1,298		1,346		1,395
1	5	14	6886	ELECTRICAL SUPPLI		-		-		-		-		-		-		-		-		-		
1	5	15	6733	SOFTWARE MAINT.		1,376		1,419		1,462		1,506		1,551		1,597		1,645		1,695		1,746		1,798
1	5	15	6735	MINOR REPAIRS		1,590		1,650		1,713		1,777		1,844		1,913		1,984		2,057		2,133		2,211
1	5	15	6740	HEAVY EQUIPMENT M		2,650		2,751		2,855		2,962		3,073		3,188		3,306		3,428		3,555		3,685
1	5	15	6741	VEHICLE MAINTENAN		18,550		19,107		19,680		20,270		20,878		21,505		22,150		22,814		23,489		24,204
1	5	16	6846	REAUTHENTICATION		-		-		-		-		-		-		-		-		-		
1	5	16	6853	INSURANCE		10,600		11,003		11,418		11,849		12,293		12,751		13,229		13,714		14,211		14,741
1	5	16	6856	FEES DUES SUBSC		424		440		457		474		492		510		529		549		569		590
1	5	16	6889	MISCELLANEOUS		-		-		-		-		-		-		-		-		-		
1	5	21	6123	PROFESSIONAL FEES		-		-		-		-		-		-		-		-		-		
1	5	22	6350	MAINTENANCE CONTR		18,550		19,107		19,680		20,270		20,878		21,505		22,150		22,814		23,489		24,204
0	0	0	0	Expense		-		-		-		-		-		-		-		-		-		
0	0	0	0	Expense		-		-		-		-		-		-		-		-		-		
0	0	0	0	Expense		-		-		-		-		-		-		-		-		-		
0	0	0	0	Expense		-		-		-		-		-		-		-		-		-		
0	0	0	0	Expense		-		-		-		-		-		-		-		-		-		
0	0	0	0	Expense		-		-		-		-		-		-		-		-		-		
0	0	0	0	Expense		-		-		-		-		-		-		-		-		-		
0	0	0	0	Expense		-		-		-		-		-		-		-		-		-		
0	0	0	0	Expense		-		-		-		-		-		-		-		-		-		
0	0	0	0	Expense		-		-		-		-		-		-		-		-		-		
0	0	0	0	Expense		-		-		-		-		-		-		-		-		-		
0	0	0	0	Expense		-		-		-		-		-		-		-		-		-		
0	0	0	0	Expense		-		-		-		-		-		-		-		-		-		
0	0	0	0	Expense		-		-		-		-		-		-		-		-		-		
0	0	0	0	Expense		-		-		-		-		-		-		-		-		-		
0	0	0	0	Expense		-		-		-		-		-		-		-		-		-		
0	0	0	0	Expense		-		-		-		-		-		-		-		-		-		
0	0	0	0	Expense		-		-		-		-		-		-		-		-		-		
0	0	0	0	Expense		-		-		-		-		-		-		-		-		-		
0	0	0	0	Expense		-		-		-		-		-		-		-		-		-		
0	0	0	0	Expense		-		-		-		-		-		-		-		-		-		
0	0	0	0	Expense		-		-		-		-		-		-		-		-		-		
0	0	0	0	Expense		-		-		-		-		-		-		-		-		-		
0	0	0	0	Expense		-		-		-		-		-		-		-		-		-		
0	0	0	0	Expense		-		-		-		-		-		-		-		-		-		
0	0	0	0	Expense		-		-		-		-		-		-		-		-		-		
0	0	0	0	Expense		-		-		-		-		-		-		-		-		-		
0	0	0	0	Expense		-		-		-		-		-		-		-		-				

LAGUNA MADRE WATER DISTRICT
WATER/WASTEWATER COST OF SERVICE MODEL

Forecast W 4.0 -- WATER Service Revenue Requirement Raised from Rates
Scenario: 2019 11 04 Scenario 1 -- Status Quo

		Personnel and Operations																						
1	6	12	6410	OVERTIME	\$	150	\$	155	\$	150	\$	164	\$	169	\$	174	\$	178	\$	184	\$	190	\$	196
1	6	12	6411	SALARIES		72,659		74,838		77,083		79,386		81,778		84,231		86,758		89,361		92,042		94,803
1	6	12	6412	FICA		5,558		5,836		6,126		6,435		6,756		7,094		7,449		7,821		8,212		8,623
1	6	12	6413	UNEMPLOYMENT TAX		0		360		387		417		458		497		537		577		618		659
1	6	12	6414	GROUP INSURANCE		15,041		15,783		16,582		17,411		18,282		19,196		20,156		21,163		22,222		23,333
1	6	12	6415	WORKERS COMP		1,751		1,839		1,930		2,027		2,128		2,235		2,347		2,464		2,587		2,716
1	6	12	6417	RETIREMENT		10,078		10,582		11,111		11,667		12,250		12,862		13,505		14,181		14,890		15,634
1	6	12	6418	LONGEVITY		1,502		1,547		1,593		1,641		1,691		1,741		1,793		1,847		1,903		1,960
1	6	12	6420	PENSION		1		7,892		7,892		7,892		7,892		7,892		7,892		7,892		7,892		7,892
1	6	12	6454	TRAVEL & TRAINING		1,000		1,030		1,061		1,093		1,126		1,159		1,194		1,230		1,267		1,305
1	6	13	6351	TELEPHONE		375		386		398		410		422		435		448		461		475		489
1	6	13	6352	ELECTRICITY		-		-		-		-		-		-		-		-		-	-	
1	6	13	6358	GAS & GARAGE		1,150		1,217		1,287		1,361		1,438		1,522		1,609		1,701		1,797		1,899
1	6	14	6637	EMPLOYEE UNIFORM		1,300		1,349		1,400		1,453		1,508		1,564		1,622		1,682		1,744		1,808
1	6	14	6638	NOTICE & PUBLICAT		400		415		431		447		464		481		498		516		537		556
1	6	14	6639	FUEL		1,000		1,030		1,061		1,093		1,126		1,159		1,194		1,230		1,267		1,305
1	6	14	6642	CHEMICAL		2,000		2,116		2,238		2,365		2,503		2,647		2,798		2,958		3,125		3,300
1	6	14	6643	MINOR TOOLS & EQU		100		106		112		118		125		132		140		148		156		165
1	6	14	6644	MATERIALS		875		1,012		1,050		1,090		1,131		1,173		1,216		1,261		1,308		1,356
1	6	14	6647	OFFICE SUPPLIES		350		383		377		381		408		421		437		453		470		487
1	6	1																						

**LAGUNA MADRE WATER DISTRICT
WATER/WASTEWATER COST OF SERVICE MODEL**

Forecast W4 0 -- WATER Service Revenue Requirement Raised from Rates
Scenario: 2019 11 04 Scenario 1 -- Status Quo

Personnel and Operations																								
1	7	12	6410	OVERTIME	\$	1,060	\$	1,092	\$	1,125	\$	1,158	\$	1,193	\$	1,228	\$	1,268	\$	1,304	\$	1,343	\$	1,383
1	7	12	6411	SALARIES		262,808		270,795		278,919		287,287		295,805		304,783		313,826		323,344		333,044		343,035
1	7	12	6412	PICA		20,112		21,118		22,174		23,283		24,447		25,668		26,955		28,300		29,715		31,201
1	7	12	6413	UNEMPLOYMENT TAX		783		801		841		883		928		974		1,023		1,074		1,128		1,184
1	7	12	6414	GROUP INSURANCE		31,886		33,480		35,154		36,912		38,757		40,695		42,730		44,867		47,110		49,465
1	7	12	6415	WORKERS COMP		6,338		6,553		6,986		7,335		7,702		8,087		8,491		8,916		9,361		9,829
1	7	12	6417	RETIREMENT		36,466		38,289		40,203		42,213		44,324		46,540		48,867		51,311		53,876		56,570
1	7	12	6418	LONGEVITY		2,290		2,358		2,428		2,502		2,577		2,654		2,734		2,816		2,900		2,987
1	7	12	6419	DEFERRED COMP		-		-		-		-		-		-		-		-		-		-
1	7	12	6420	PENSION		1		28,915		28,915		28,915		28,915		28,915		28,915		28,915		28,915		28,915
1	7	12	6454	TRAVEL & TRAINING		13,250		13,848		14,057		14,470		14,813		15,360		15,821		16,296		16,785		17,288
1	7	13	6551	TELEPHONE		2,120		2,243		2,373		2,509		2,654		2,806		2,966		3,135		3,313		3,501
1	7	13	6552	ELECTRICITY		6,340		6,729		7,118		7,526		7,961		8,417		8,888		9,405		9,840		10,503
1	7	13	6558	GAS & GARBAGE		636		650		685		711		738		765		793		823		853		884
1	7	14	6837	EMPLOYEE UNIFORM		1,060		1,100		1,142		1,185		1,229		1,275		1,322		1,371		1,422		1,474
1	7	14	6838	NOTICE & PUBLICAT		5,200		5,458		5,823		5,781		5,965		6,144		6,328		6,518		6,714		6,915
1	7	14	6839	FUEL		785		841		890		941		995		1,052		1,112		1,176		1,242		1,313
1	7	14	6843	MINOR TOOLS & EQU		-		-		-		-		-		-		-		-		-		-
1	7	14	6847	OFFICE SUPPLIES		4,240		4,401		4,568		4,740		4,917		5,101		5,290		5,488		5,688		5,896
1	7	14	6848	SAFETY SUPPLIES		530		550		571		592		615		638		661		686		711		737
1	7	14	6849	OPERATIONAL SUPPL		5,300		5,458		5,823		5,781		5,965		6,144		6,328		6,518		6,714		6,915
1	7	14	6850	POSTAGE		785		825		858		888		922		958		992		1,029		1,065		1,106
1	7	14	6855	LEASES		3,180		3,301		3,426		3,555		3,688		3,825		3,967		4,114		4,266		4,422
1	7	14	6856	EQUIPMENT RENTAL		-		-		-		-		-		-		-		-		-		-
1	7	15	6733	SOFTWARE MAINT.		30,920		31,847		32,803		33,787		34,800		35,844		36,920		38,027		39,168		40,343
1	7	15	6735	MINOR REPAIRS		2,850		2,751		2,855		2,862		3,073		3,188		3,306		3,428		3,555		3,685
1	7	15	6741	VEHICLE MAINTENAN		133		138		143		148		154		159		165		171		178		184
1	7	16	6854	ANNEXATION		-		-		-		-		-		-		-		-		-		-
1	7	16	6846	BEAUTIFICATION		158		165		171		178		184		191		198		206		213		221
1	7	16	6853	INSURANCE		8,566		8,995		9,335		9,687		10,048		10,424		10,811		11,211		11,624		12,051
1	7	16	6856	FEES, DUES SUBSC		4,240		4,401		4,568		4,740		4,917		5,101		5,290		5,488		5,688		5,896
1	7	16	6862	ELECTION		-		-		-		-		-		-		-		-		-		-
1	7	16	6899	MISCELLANEOUS		-		-		-		-		-		-		-		-		-		-
1	7	21	6120	LEGAL FEES		15,900		16,377		16,868		17,374		17,886		18,432		18,985		19,555		20,142		20,746
1	7	21	6125	CONSULTING FEES		10,600		11,130		11,687		12,271		12,884		13,529		14,205		14,915		15,661		16,444
1	7	21	6130	COMPUTER CONSULTA		21,200		21,836		22,491		23,165		23,861		24,577		25,314		26,073		26,856		27,661
1	7	21	6135	ENGINEERING		13,250		13,648		14,057		14,479		14,913		15,360		15,821		16,296		16,785		17,288
1	7	22	6357	PERMITS & TESTING		-		-		-		-		-		-		-		-		-		-
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LAGUNA MADRE WATER DISTRICT
WATER/WASTEWATER COST OF SERVICE MODEL

Forecast W 4.0 – WATER Service Revenue Requirement Raised from Rates
Scenario: 2010 11 04 Scenario 1 – Status Quo

[illegible]

Forecast W 4.0 -- WATER Service Revenue Requirement Raised from Rates
Scenario: 2019 11 04 Scenario 1 -- Status Quo

ANALYSTS' LAB

LAGUNA MADRE WATER DISTRICT
WATER/WASTEWATER COST OF SERVICE MODEL

Forecast W 4.0 -- WATER Service Revenue Requirement Raised from Rates Scenario: 2019 11 04 Scenario 1 -- Status Quo

[illegible]

LAGUNA MADRE WATER DISTRICT
WATER/WASTEWATER COST OF SERVICE MODEL

Forecast W40 -- WATER Service Revenue Requirement Raised from Rates
Scenario: 2019 11 04 Scenario 1 -- Status Quo

Personal and Operating																						
			\$	500	\$	515	\$	530	\$	546	\$	563	\$	580	\$	587	\$	615	\$	633	\$	652
1	12	12	6410	OVERTIME																		
1	12	12	6411	SALARIES	\$1,037	\$3,468	\$5,972	\$8,551	\$1,208	\$3,844	\$6,782	\$9,665	\$12,656	\$15,735	\$18,817	\$21,898	\$24,979	\$28,060	\$31,141	\$34,222	\$37,303	
1	12	12	6412	PICA	6,200	6,508	6,835	7,177	7,536	7,912	8,306	8,723	9,159	9,617	10,087	10,580	11,087	11,607	12,140	12,687	13,247	
1	12	12	6413	UNEMPLOYMENT TAX	450	473	499	521	547	574	603	633	665	698	732	767	803	840	878	917	957	
1	12	12	6414	GROUP INSURANCE	18,801	19,741	20,728	21,764	22,852	23,995	25,194	26,450	27,777	29,168	30,625	32,150	33,744	35,408	37,143	38,950	40,831	
1	12	12	6415	WORKERS COMP	1,953	2,051	2,153	2,261	2,374	2,493	2,617	2,748	2,885	3,030	3,181	3,338	3,501	3,670	3,845	4,027	4,216	
1	12	12	6417	RETIREMENT	11,240	11,802	12,382	13,012	13,682	14,395	15,153	15,956	16,807	17,707	18,657	19,658	20,711	21,818	22,980	24,198	25,474	
1	12	12	6418	LONGEVITY	1,052	1,084	1,118	1,150	1,184	1,220	1,256	1,294	1,333	1,373	1,414	1,456	1,500	1,545	1,592	1,640	1,689	
1	12	12	6420	PENSIONS	1	8,913	8,915	8,915	8,915	8,913	8,913	8,913	8,913	8,913	8,913	8,913	8,913	8,913	8,913	8,913	8,913	
1	12	12	6454	TRAVEL & TRAINING	875	801	928	956	985	1,014	1,045	1,076	1,108	1,142	1,178	1,215	1,254	1,294	1,335	1,378	1,422	
1	12	13	6551	TELEPHONE	400	412	424	437	450	464	478	492	507	522	537	553	569	585	602	619	637	
1	12	13	6552	ELECTRICITY	800	835	872	910	951	994	1,039	1,087	1,137	1,188	1,241	1,295	1,351	1,408	1,467	1,527	1,589	
1	12	13	6558	GAS & OIL	550	588	627	667	708	750	794	839	886	934	983	1,033	1,085	1,138	1,193	1,248	1,305	
1	12	14	6637	EMPLOYEE UNIFORM	1,375	1,427	1,481	1,537	1,595	1,654	1,715	1,779	1,844	1,911	1,979	2,049	2,121	2,195	2,271	2,348	2,427	
1	12	14	6638	FUEL	4,000	4,152	4,308	4,471	4,639	4,812	4,990	5,175	5,366	5,563	5,765	5,973	6,187	6,408	6,636	6,871	7,113	
1	12	14	6643	MINOR TOOLS & EQ	2,500	2,575	2,652	2,732	2,814	2,899	2,985	3,075	3,167	3,262	3,360	3,460	3,563	3,669	3,777	3,887	4,000	
1	12	14	6644	MATERIALS	2,500	2,645	2,798	2,958	3,129	3,308	3,495	3,689	3,890	4,098	4,314	4,538	4,769	5,007	5,252	5,502	5,757	
1	12	14	6647	OFFICE SUPPLIES	500	509	520	532	545	559	573	588	603	618	634	650	666	682	699	716	733	
1	12	14	6648	SAFETY SUPPLIES	1,250	1,280	1,347	1,397	1,450	1,504	1,560	1,617	1,677	1,738	1,799	1,862	1,926	1,992	2,059	2,127	2,197	
1	12	14	6649	OPERATIONAL SUPPL	1,000	1,038	1,077	1,116	1,160	1,203	1,248	1,294	1,341	1,389	1,438	1,488	1,539	1,591	1,644	1,698	1,753	
1	12	14	6655	LEASES	3,250	3,348	3,448	3,551	3,658	3,768	3,881	3,997	4,117	4,240	4,365	4,492	4,621	4,752	4,885	5,020	5,157	
1	12	15	6735	MINOR REPAIRS	1,500	1,557	1,618	1,682	1,749	1,820	1,892	1,967	2,044	2,123	2,204	2,287	2,372	2,459	2,548	2,638	2,730	
1	12	15	6740	HEAVY EQUIPMENT M	1,250	1,285	1,325	1,368	1,414	1,462	1,512	1,564	1,618	1,674	1,731	1,790	1,850	1,912	1,976	2,042	2,109	
1	12	15	6741	VEHICLE MAINTENAN	125	130	135	140	145	150	155	160	165	171	176	181	187	192	198	204	210	
1	12	16	6853	INSURANCE	3,000	3,090	3,183	3,278	3,377	3,478	3,582	3,690	3,800	3,914	4,030	4,148	4,269	4,392	4,518	4,646	4,776	
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0	0	0	0	Expense	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
0	0	0	0	Expense	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
0	0	0	0	Expense	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
0	0	0	0	Expense	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
0	0	0	0	Expense	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
0	0	0	0	Expense	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
0	0	0	0	Expense	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
0	0	0	0	Expense	-	-	-	-	-	-												

Forecast W 4.0 -- WATER Service Revenue Requirement Raised from Rates
Scenario: 2019 11 04 Scenario 1 -- Status Quo

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**LAGUNA MADRE WATER DISTRICT
WATER/WASTEWATER COST OF SERVICE MODEL**

Forecast W 5.0 – WATER Service Cost Functionalization
Scenario: 2019 11 04 Scenario 1 – Status Quo

Allocation Factor											
Supply/Transmission	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%
Treatment	75.0%	75.0%	75.0%	75.0%	75.0%	75.0%	75.0%	75.0%	75.0%	75.0%	75.0%
Distribution	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Administration	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Customer	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Total Cost											
Supply/Transmission	\$ 360,134	\$ 395,674	\$ 422,428	\$ 439,981	\$ 458,305	\$ 477,437	\$ 497,414	\$ 518,278	\$ 540,069	\$ 562,832	
Treatment	1,080,401	1,187,022	1,267,284	1,319,943	1,374,915	1,432,310	1,492,243	1,554,833	1,620,208	1,688,497	
Distribution	-	-	-	-	-	-	-	-	-	-	
Administration	-	-	-	-	-	-	-	-	-	-	
Customer	-	-	-	-	-	-	-	-	-	-	
Total	\$ 1,440,534	\$ 1,582,696	\$ 1,689,712	\$ 1,759,923	\$ 1,833,220	\$ 1,909,747	\$ 1,989,657	\$ 2,073,111	\$ 2,160,277	\$ 2,251,329	

Allocation Factor											
Supply/Transmission	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%
Treatment	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Distribution	75.0%	75.0%	75.0%	75.0%	75.0%	75.0%	75.0%	75.0%	75.0%	75.0%	75.0%
Administration	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Customer	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Total Cost											
Supply/Transmission	\$ 184,843	\$ 200,285	\$ 207,307	\$ 214,587	\$ 222,134	\$ 229,950	\$ 238,075	\$ 246,491	\$ 255,220	\$ 264,274	
Treatment	-	-	-	-	-	-	-	-	-	-	
Distribution	554,529	600,855	621,922	643,761	666,403	689,880	714,225	738,473	765,659	792,821	
Administration	-	-	-	-	-	-	-	-	-	-	
Customer	-	-	-	-	-	-	-	-	-	-	
Total	\$ 739,372	\$ 801,140	\$ 829,229	\$ 858,348	\$ 888,537	\$ 918,840	\$ 952,300	\$ 985,964	\$ 1,020,879	\$ 1,057,094	

Forecast W 5.0 -- WATER Service Cost Functionalization
Scenario: 2019 11 04 Scenario 1 ~ Status Quo

Allocation Factor	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Supply/Transmission	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Treatment	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Distribution	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Administration	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Customer	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Total Cost											
Supply/Transmission	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Treatment	129,724	142,464	147,395	152,514	157,829	163,349	169,082	175,037	181,222	187,648	
Distribution	-	-	-	-	-	-	-	-	-	-	
Administration	-	-	-	-	-	-	-	-	-	-	
Customer	-	-	-	-	-	-	-	-	-	-	
Total	\$ 129,724	\$ 142,464	\$ 147,395	\$ 152,514	\$ 157,829	\$ 163,349	\$ 169,082	\$ 175,037	\$ 181,222	\$ 187,648	

**LAGUNA MADRE WATER DISTRICT
WATER/WASTEWATER COST OF SERVICE MODEL**

Forecast W 5.0 – WATER Service Cost Functionalization
Scenario: 2019 11 04 Scenario 1 – Status Quo

Allocation Factor											
Supply/Transmission	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Treatment	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Distribution	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Administration	75.0%	75.0%	75.0%	75.0%	75.0%	75.0%	75.0%	75.0%	75.0%	75.0%	75.0%
Customer	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Total Cost											
Supply/Transmission	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Treatment	-	-	-	-	-	-	-	-	-	-	-
Distribution	-	-	-	-	-	-	-	-	-	-	-
Administration	384,828	420,005	433,991	448,493	463,532	479,127	495,302	512,078	529,482	547,536	
Customer	128,276	140,002	144,664	149,498	154,511	159,709	165,101	170,693	176,494	182,512	
Total	\$ 513,104	\$ 560,006	\$ 578,655	\$ 597,991	\$ 618,042	\$ 638,836	\$ 660,402	\$ 682,771	\$ 705,976	\$ 730,048	

Allocation Factor											
Supply/Transmission	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Treatment	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Distribution	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Administration	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Customer	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Cost											
Supply/Transmission	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Treatment	-	-	-	-	-	-	-	-	-	-	-
Distribution	-	-	-	-	-	-	-	-	-	-	-
Administration	-	-	-	-	-	-	-	-	-	-	-
Customer	-	-	-	-	-	-	-	-	-	-	-
Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Allocation Factor											
Supply/Transmission	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Treatment	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Distribution	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Administration	75.0%	75.0%	75.0%	75.0%	75.0%	75.0%	75.0%	75.0%	75.0%	75.0%	75.0%
Customer	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Total Cost											
Supply/Transmission	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Treatment	-	-	-	-	-	-	-	-	-	-	-
Distribution	-	-	-	-	-	-	-	-	-	-	-
Administration	391,267	427,188	442,168	457,722	473,876	490,652	508,077	526,177	544,982	564,519	
Customer	130,422	142,598	147,589	152,574	157,659	163,551	169,359	175,392	181,661	188,173	
Total	\$ 521,689	\$ 569,583	\$ 589,557	\$ 610,297	\$ 631,534	\$ 654,202	\$ 677,435	\$ 701,570	\$ 726,642	\$ 752,693	

**LAGUNA MADRE WATER DISTRICT
WATER/WASTEWATER COST OF SERVICE MODEL**

Forecast W 5.0 – WATER Service Cost Functionalization
Scenario: 2019 11 04 Scenario 1 – Status Quo

Allocation Factor												
Supply/Transmission	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Treatment	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%
Distribution	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%
Administration	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Customer	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Total Cost												
Supply/Transmission	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Treatment	50,070	55,214	57,105	58,068	61,107	63,224	65,423	67,707	70,080	72,545		
Distribution	50,070	55,214	57,105	58,068	61,107	63,224	65,423	67,707	70,080	72,545		
Administration	-	-	-	-	-	-	-	-	-	-		
Customer	-	-	-	-	-	-	-	-	-	-		
Total	\$ 100,140	\$ 110,428	\$ 114,210	\$ 118,138	\$ 122,213	\$ 126,448	\$ 130,846	\$ 135,414	\$ 140,160	\$ 145,091		

Allocation Factor												
Supply/Transmission	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Treatment	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%
Distribution	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%
Administration	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Customer	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Total Cost												
Supply/Transmission	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Treatment	76,129	83,382	86,286	89,302	92,433	95,686	99,064	102,573	106,219	110,007		
Distribution	76,129	83,382	86,286	89,302	92,433	95,686	99,064	102,573	106,219	110,007		
Administration	-	-	-	-	-	-	-	-	-	-		
Customer	-	-	-	-	-	-	-	-	-	-		
Total	\$ 152,258	\$ 166,764	\$ 172,572	\$ 178,603	\$ 184,867	\$ 191,371	\$ 198,128	\$ 205,147	\$ 212,438	\$ 220,014		

Allocation Factor												
Supply/Transmission	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Treatment	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Distribution	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Administration	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Customer	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Total Cost												
Supply/Transmission	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Treatment	-	-	-	-	-	-	-	-	-	-	-	-
Distribution	-	-	-	-	-	-	-	-	-	-	-	-
Administration	-	-	-	-	-	-	-	-	-	-	-	-
Customer	-	-	-	-	-	-	-	-	-	-	-	-
Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

**LAGUNA MADRE WATER DISTRICT
WATER/WASTEWATER COST OF SERVICE MODEL**

Forecast W 5.0 -- WATER Service Cost Functionalization
Scenario: 2019 11 04 Scenario 1 -- Status Quo

Supply/Transmission	\$ 544,977	\$ 595,959	\$ 629,735	\$ 654,568	\$ 680,439	\$ 707,397	\$ 735,489	\$ 764,769	\$ 795,289	\$ 827,106
Treatment	1,410,736	1,548,164	1,640,892	1,706,492	1,774,897	1,846,236	1,920,652	1,998,278	2,079,268	2,163,775
Distribution	755,140	819,533	848,136	877,796	908,556	940,459	973,552	1,007,881	1,043,497	1,080,451
Administration	776,095	847,192	876,159	906,216	937,407	969,778	1,003,378	1,038,256	1,074,463	1,112,056
Customer	258,698	262,397	292,053	302,072	312,469	323,269	334,459	346,085	358,154	370,685
Total Water Operating Expenses	\$ 3,745,645	\$ 4,093,246	\$ 4,286,975	\$ 4,447,143	\$ 4,613,768	\$ 4,787,132	\$ 4,967,530	\$ 5,155,269	\$ 5,350,671	\$ 5,554,072
Water Capital Outlays										
Supply/Transmission	\$ 35,958	\$ 37,036	\$ 38,145	\$ 39,282	\$ 40,471	\$ 41,685	\$ 42,935	\$ 44,223	\$ 45,550	\$ 46,917
Treatment	46,851	48,050	49,492	50,976	52,506	54,081	55,703	57,374	59,096	60,869
Distribution	66,277	68,266	70,314	72,423	74,596	76,834	78,139	81,513	83,958	86,477
Admin	9,143	9,417	9,699	9,990	10,290	10,599	10,917	11,244	11,581	11,929
Customer	3,048	3,139	3,233	3,330	3,430	3,533	3,639	3,746	3,860	3,976
Total Water Capital Outlays	\$ 161,076	\$ 165,908	\$ 170,885	\$ 176,012	\$ 181,282	\$ 186,731	\$ 192,333	\$ 198,103	\$ 204,046	\$ 210,167

**LAGUNA MADRE WATER DISTRICT
WATER/WASTEWATER COST OF SERVICE MODEL**

Forecast W5.0 – WATER Service Cost Functionalization
Scenario: 2019 11 04 Scenario 1 – Status Quo

Water Debt Service													
Supply/Transmission	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Treatment	186,845	187,299	186,683	187,002	187,182	186,195	186,055	185,758	186,321	185,739			
Distribution	95,632	95,748	95,591	95,670	95,670	95,299	95,078	94,758	95,358	94,872			
Admin	-	-	-	-	-	-	-	-	-	-			
Customer	57,430	57,643	57,354	57,605	57,619	57,231	57,282	57,296	57,273	57,213			
Total Water Debt Service	\$ 339,907	\$ 340,690	\$ 339,628	\$ 340,177	\$ 340,471	\$ 338,725	\$ 338,415	\$ 337,812	\$ 338,953	\$ 337,824			

Water Debt Service													
Supply/Transmission	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Treatment	-	-	-	-	-	-	-	-	-	-	-	-	-
Distribution	-	-	200,951	200,951	200,951	200,951	200,951	200,951	200,951	200,951	200,951	200,951	200,951
Admin	-	-	-	-	-	-	-	-	-	-	-	-	-
Customer	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Water Debt Service	\$ -	\$ -	\$ 200,951	\$ 200,951	\$ 200,951	\$ 200,951	\$ 200,951	\$ 200,951	\$ 200,951	\$ 200,951	\$ 200,951	\$ 200,951	\$ 200,951

Total Water COS													
Supply/Transmission	\$ 580,934	\$ 632,996	\$ 667,883	\$ 693,860	\$ 720,910	\$ 749,082	\$ 778,425	\$ 808,992	\$ 840,839	\$ 874,023			
Treatment	1,844,231	1,783,513	1,877,067	1,944,470	2,014,585	2,086,514	2,162,410	2,241,411	2,324,685	2,410,382			
Distribution	917,049	983,546	1,214,991	1,246,640	1,279,773	1,313,543	1,348,720	1,385,104	1,423,765	1,462,751			
Admin	785,237	856,609	885,858	916,206	947,697	980,377	1,014,295	1,049,500	1,086,045	1,123,984			
Customer	319,176	343,180	352,641	362,907	373,518	384,023	395,380	407,129	419,288	431,874			
Total	\$ 4,246,628	\$ 4,599,844	\$ 4,998,440	\$ 5,164,283	\$ 5,336,483	\$ 5,513,539	\$ 5,699,230	\$ 5,892,136	\$ 6,094,621	\$ 6,303,015			

**LAGUNA MADRE WATER DISTRICT
WATER/WASTEWATER COST OF SERVICE MODEL**

Forecast W 6.0 -- Water Cost Classification

Scenario: 2019 11 04 Scenario 1 -- Status Quo

Supply/Transmission	\$	580,934	\$	632,996	\$	667,883	\$	693,860	\$	720,910	\$	749,082	\$	778,425	\$	808,992	\$	840,839	\$	874,023	
Treatment		1,644,231		1,783,513		1,877,067		1,944,470		2,014,585		2,086,514		2,162,410		2,241,411		2,324,685		2,410,382	
Distribution		917,049		983,546		1,214,991		1,246,840		1,279,773		1,313,543		1,348,720		1,385,104		1,423,765		1,462,751	
Admin		785,237		856,609		865,858		916,206		947,697		980,377		1,014,295		1,049,500		1,086,045		1,123,984	
Customer		319,176		343,180		352,641		362,807		373,518		384,023		395,380		407,129		419,288		431,874	
Total Water Costs		4,248,628		4,599,844		4,998,440		5,164,283		5,336,483		5,513,539		5,699,230		5,892,136		6,094,821		6,303,015	
Base	48.73%	\$	2,068,433	\$	2,241,559	\$	2,435,800	\$	2,516,617	\$	2,600,532	\$	2,686,814	\$	2,777,303	\$	2,871,309	\$	2,969,982	\$	3,071,535
Max Day/Extra Capacity	26.89%		1,141,839		1,236,812		1,343,987		1,388,578		1,434,880		1,482,487		1,532,416		1,584,285		1,638,729		1,694,762
Max Hour/Extra Capacity	16.00%		678,264		735,782		799,519		826,046		853,590		881,911		911,613		942,469		974,857		1,008,191
Customer Billing	8.38%		356,093		385,711		419,134		433,041		447,480		462,327		477,898		494,073		511,052		528,627
Sub-Total	100.00%		4,248,628		4,599,844		4,998,440		5,164,283		5,336,483		5,513,539		5,699,230		5,892,136		6,094,821		6,303,015
Base	48.73%	\$	161,630	\$	161,630	\$	161,630	\$	161,630	\$	161,630	\$	161,630	\$	161,630	\$	161,630	\$	161,630	\$	161,630
Max Day/Extra Capacity	26.89%		89,182		89,182		89,182		89,182		89,182		89,182		89,182		89,182		89,182		89,182
Max Hour/Extra Capacity	16.00%		53,053		53,053		53,053		53,053		53,053		53,053		53,053		53,053		53,053		53,053
Customer Billing	8.38%		27,812		27,812		27,812		27,812		27,812		27,812		27,812		27,812		27,812		27,812
Sub-Total	100.00%		331,677		331,677		331,677		331,677		331,677		331,677		331,677		331,677		331,677		331,677
Base		\$	1,807,803	\$	2,079,929	\$	2,274,170	\$	2,354,987	\$	2,438,902	\$	2,525,184	\$	2,615,673	\$	2,709,679	\$	2,808,352	\$	2,909,905
Max Day/Extra Capacity			1,052,657		1,147,630		1,254,805		1,299,397		1,345,898		1,393,306		1,443,234		1,495,103		1,549,548		1,605,581
Max Hour/Extra Capacity			626,211		682,709		746,446		772,993		800,537		828,859		858,560		889,416		921,804		955,138
Customer Billing			328,280		357,899		391,322		405,228		419,668		434,515		450,086		466,261		483,240		500,715
Total			3,914,952		4,268,167		4,666,763		4,832,606		5,004,806		5,181,863		5,367,553		5,560,459		5,762,945		5,971,338

**LAGUNA MADRE WATER DISTRICT
WATER/WASTEWATER COST OF SERVICE MODEL**

Forecast W7.0 – Customer and Volume Totals

Scenario: 2019 11 04 Scenario 1 – Status Quo

Customer Class Units – Base Annual Usage

5/8" Meter	355,214,724	356,498,853	357,760,438	359,026,527	360,288,166	361,545,403	362,798,283	364,046,852	365,291,152	366,531,229
1" Meter	485,968,063	486,781,262	487,593,106	488,403,599	489,212,750	490,020,565	490,827,051	491,632,213	492,436,059	493,238,595
2" Meter	108,563,204	109,461,906	110,353,289	111,237,530	112,114,798	112,985,255	113,849,056	114,706,353	115,557,291	116,402,008
4" Meter	213,250,756	217,515,771	221,698,767	225,804,300	229,836,519	233,799,218	237,695,872	241,529,576	245,303,577	249,020,298
6" Meter	97,336,800	100,199,647	102,982,971	105,693,049	108,335,375	110,914,789	113,435,579	115,901,570	118,318,186	120,682,510
8" Meter	100	100	100	100	100	100	100	100	100	100
Other	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-
Total System	1,260,333,646	1,270,448,540	1,280,368,671	1,290,165,105	1,299,787,709	1,309,265,330	1,318,605,941	1,327,816,764	1,336,904,368	1,345,874,740

Percent of Total

5/8" Meter	28.18%	28.06%	27.94%	27.83%	27.72%	27.61%	27.51%	27.42%	27.32%	27.23%
1" Meter	38.56%	38.32%	38.08%	37.86%	37.64%	37.43%	37.22%	37.03%	36.83%	36.65%
2" Meter	8.61%	8.62%	8.62%	8.62%	8.63%	8.63%	8.63%	8.64%	8.64%	8.65%
4" Meter	16.92%	17.12%	17.31%	17.50%	17.68%	17.86%	18.03%	18.19%	18.35%	18.50%
6" Meter	7.72%	7.89%	8.04%	8.18%	8.33%	8.47%	8.60%	8.73%	8.85%	8.97%
8" Meter	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Other	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Other	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Other	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Other	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Total System	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

Minimum Volume

5/8" Meter	234,000,000	235,680,000	237,360,000	239,040,000	240,720,000	242,400,000	244,080,000	245,760,000	247,440,000	249,120,000
1" Meter	71,712,000	71,952,000	72,192,000	72,432,000	72,672,000	72,912,000	73,152,000	73,392,000	73,632,000	73,872,000
2" Meter	54,360,000	55,260,000	56,160,000	57,060,000	57,960,000	58,860,000	59,760,000	60,660,000	61,560,000	62,460,000
4" Meter	45,000,000	46,800,000	48,600,000	50,400,000	52,200,000	54,000,000	55,800,000	57,600,000	59,400,000	61,200,000
6" Meter	20,400,000	21,600,000	22,800,000	24,000,000	25,200,000	26,400,000	27,600,000	28,800,000	30,000,000	31,200,000
8" Meter	600,000	600,000	600,000	600,000	600,000	600,000	600,000	600,000	600,000	600,000
Other	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-
Total System	426,072,000	431,892,000	437,712,000	443,532,000	449,352,000	455,172,000	460,992,000	466,812,000	472,632,000	478,452,000

Net Annual Volume after Minimum

5/8" Meter	121,214,724	120,809,853	120,400,438	119,986,527	119,568,166	119,145,403	118,718,283	118,288,852	117,851,152	117,411,229
1" Meter	414,256,063	414,829,262	415,401,106	415,971,599	416,540,750	417,108,565	417,675,051	418,240,213	418,804,059	419,366,595
2" Meter	54,203,204	54,201,906	54,193,289	54,177,530	54,154,788	54,125,255	54,089,056	54,046,353	53,997,291	53,942,008
4" Meter	168,250,756	170,715,771	173,088,767	175,404,300	177,636,519	179,799,218	181,895,872	183,928,676	185,903,577	187,820,298
6" Meter	78,936,800	78,599,647	78,162,971	77,693,049	77,183,375	76,614,789	75,935,579	75,101,570	74,168,186	73,122,510
8" Meter	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-
Total System	834,861,546	839,156,440	843,276,571	847,233,005	851,035,609	854,693,230	858,213,641	861,604,664	864,872,268	868,022,640

**LAGUNA MADRE WATER DISTRICT
WATER/WASTEWATER COST OF SERVICE MODEL**

Forecast W 7.0 -- Customer and Volume Totals

Scenario: 2019 11 04 Scenario 1 -- Status Quo

Customer Class Units -- Base Daily Average

5/8" Meter	973,191	976,685	980,166	983,634	987,091	990,535	993,968	997,389	1,000,798	1,004,195
1" Meter	1,331,419	1,333,647	1,335,872	1,338,092	1,340,309	1,342,522	1,344,732	1,346,938	1,349,140	1,351,339
2" Meter	297,433	299,896	302,338	304,760	307,164	309,549	311,915	314,264	316,595	318,910
4" Meter	584,249	595,934	607,394	618,642	629,689	640,546	651,222	661,725	672,065	682,247
6" Meter	266,676	274,520	282,145	289,570	296,809	303,876	310,782	317,539	324,154	330,637
8" Meter	0	0	0	0	0	0	0	0	0	0
Other	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-
Total System	3,452,969	3,480,681	3,507,914	3,534,699	3,561,062	3,587,028	3,612,619	3,637,854	3,662,752	3,687,328

Customer Class Units -- Capacity Factor

5/8" Meter	129	129	129	129	129	129	129	129	129	129
1" Meter	146	146	146	146	146	146	146	146	146	146
2" Meter	145	145	145	145	145	145	145	145	145	145
4" Meter	161	161	161	161	161	161	161	161	161	161
6" Meter	187	187	187	187	187	187	187	187	187	187
8" Meter	200	200	200	200	200	200	200	200	200	200
Other	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-

Customer Class Units -- Total Capacity

5/8" Meter	1,252,113	1,256,608	1,261,087	1,265,550	1,269,997	1,274,428	1,278,845	1,283,246	1,287,632	1,282,003
1" Meter	1,939,354	1,942,599	1,945,839	1,949,073	1,952,302	1,955,526	1,958,744	1,961,958	1,965,166	1,968,368
2" Meter	432,046	435,622	439,170	442,689	446,180	449,644	453,082	456,494	459,880	463,242
4" Meter	943,542	962,413	980,921	999,086	1,016,927	1,034,460	1,051,701	1,068,664	1,085,362	1,101,807
6" Meter	497,651	512,286	526,516	540,374	553,883	567,071	579,959	592,567	604,912	617,010
8" Meter	1	1	1	1	1	1	1	1	1	1
Other	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-
Total System	5,064,707	5,109,531	5,153,535	5,196,772	5,239,290	5,281,130	5,322,332	5,362,929	5,402,952	5,442,431

**LAGUNA MADRE WATER DISTRICT
WATER/WASTEWATER COST OF SERVICE MODEL**

Forecast W7.0 -- Customer and Volume Totals**Scenario: 2019 11 04 Scenario 1 -- Status Quo****Customer Class Units -- Extra Capacity**

5/8" Meter	278,822	279,923	280,921	281,915	282,906	283,893	284,877	285,857	286,834	287,808
1" Meter	607,934	608,952	609,967	610,981	611,993	613,004	614,013	615,020	616,026	617,030
2" Meter	134,612	135,727	136,832	137,928	139,016	140,085	141,157	142,230	143,295	144,332
4" Meter	359,293	366,478	373,527	380,444	387,238	393,914	400,479	406,939	413,297	419,559
6" Meter	230,975	237,769	244,373	250,804	257,074	263,195	269,177	275,028	280,758	286,373
8" Meter	0	0	0	0	0	0	0	0	0	0
Other	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-
Total System	1,611,738	1,628,850	1,645,621	1,662,073	1,678,228	1,694,102	1,709,713	1,725,074	1,740,200	1,755,103

Percent of Total

5/8" Meter	17.31%	17.19%	17.07%	16.96%	16.86%	16.76%	16.66%	16.57%	16.48%	16.40%
1" Meter	37.72%	37.39%	37.07%	36.76%	36.47%	36.18%	35.91%	35.65%	35.40%	35.16%
2" Meter	8.35%	8.33%	8.31%	8.30%	8.28%	8.27%	8.26%	8.24%	8.23%	8.22%
4" Meter	22.29%	22.50%	22.70%	22.89%	23.07%	23.25%	23.42%	23.59%	23.75%	23.91%
6" Meter	14.33%	14.60%	14.85%	15.09%	15.32%	15.54%	15.74%	15.94%	16.13%	16.32%
8" Meter	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Other	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Other	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Other	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Other	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Total System	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

**LAGUNA MADRE WATER DISTRICT
WATER/WASTEWATER COST OF SERVICE MODEL**

Forecast W 7.0 -- Customer and Volume Totals

Scenario: 2019 11 04 Scenario 1 -- Status Quo

Total Bills										
5/8" Meter	58,500	58,920	59,340	59,760	60,180	60,600	61,020	61,440	61,860	62,280
1" Meter	17,928	17,988	18,048	18,108	18,168	18,228	18,288	18,348	18,408	18,468
2" Meter	3,624	3,684	3,744	3,804	3,864	3,924	3,984	4,044	4,104	4,164
4" Meter	900	936	972	1,008	1,044	1,080	1,116	1,152	1,188	1,224
6" Meter	408	432	456	480	504	528	552	576	600	624
8" Meter	12	12	12	12	12	12	12	12	12	12
Other	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-
Total System	81,372	81,972	82,572	83,172	83,772	84,372	84,972	85,572	86,172	86,772
Percentage of Total										
5/8" Meter	71.89%	71.88%	71.86%	71.85%	71.84%	71.82%	71.81%	71.80%	71.79%	71.77%
1" Meter	22.03%	21.94%	21.86%	21.77%	21.68%	21.60%	21.52%	21.44%	21.35%	21.28%
2" Meter	4.45%	4.49%	4.53%	4.57%	4.61%	4.65%	4.69%	4.73%	4.76%	4.80%
4" Meter	1.11%	1.14%	1.18%	1.21%	1.25%	1.28%	1.31%	1.35%	1.38%	1.41%
6" Meter	0.50%	0.53%	0.55%	0.58%	0.60%	0.63%	0.65%	0.67%	0.70%	0.72%
8" Meter	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%
Other	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Other	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Other	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Other	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Total System	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
Total Customers										
5/8" Meter	4,875	4,910	4,945	4,980	5,015	5,050	5,085	5,120	5,155	5,190
1" Meter	1,494	1,499	1,504	1,509	1,514	1,519	1,524	1,529	1,534	1,539
2" Meter	302	307	312	317	322	327	332	337	342	347
4" Meter	75	78	81	84	87	90	93	96	99	102
6" Meter	34	36	38	40	42	44	46	48	50	52
8" Meter	1	1	1	1	1	1	1	1	1	1
Other	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-
Total System	6,781	6,831	6,881	6,931	6,981	7,031	7,081	7,131	7,181	7,231

**LAGUNA MADRE WATER DISTRICT
WATER/WASTEWATER COST OF SERVICE MODEL**

Forecast W7 0 -- Customer and Volume Totals

Scenario: 2019 11 04 Scenario 1 -- Status Quo

NEW Customers										
5/8" Meter	35	35	35	35	35	35	35	35	35	35
1" Meter	5	5	5	5	5	5	5	5	5	5
2" Meter	5	5	5	5	5	5	5	5	5	5
4" Meter	3	3	3	3	3	3	3	3	3	3
6" Meter	2	2	2	2	2	2	2	2	2	2
8" Meter	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-
Total System	50	50	50	50	50	50	50	50	50	50
Monthly Volume Per Meter										
5/8" Meter	6,072	6,050	6,029	6,008	5,987	5,966	5,946	5,925	5,905	5,885
1" Meter	27,107	27,061	27,016	26,972	26,927	26,883	26,839	26,795	26,751	26,708
2" Meter	28,957	29,713	28,475	28,242	28,015	28,793	28,577	28,365	28,157	27,954
4" Meter	236,945	232,389	228,085	224,012	220,150	216,481	212,989	209,661	206,494	203,448
6" Meter	238,571	231,944	225,840	220,194	214,951	210,066	205,499	201,218	197,194	193,401
8" Meter	8	8	8	8	8	8	8	8	8	8
Other	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-
Total System	15,489	15,499	15,506	15,512	15,516	15,518	15,518	15,517	15,514	15,510

LAGUNA MADRE WATER DISTRICT
WATER/WASTEWATER COST OF SERVICE MODEL

Forecast W 8.0 – Raw Water Supply/Transmission Rate Calculation
Scenario: 2019 11 04 Scenario 1 – Status Quo

Supply/Transmission	\$ 580,934	\$ 632,996	\$ 667,883	\$ 693,860	\$ 720,910	\$ 749,082	\$ 778,425	\$ 808,992	\$ 840,839	\$ 874,023
Treatment	1,644,231	1,783,513	1,877,067	1,944,470	2,014,585	2,086,514	2,162,410	2,241,411	2,324,585	2,410,382
Distribution	917,049	983,546	1,214,991	1,246,840	1,279,773	1,313,543	1,348,720	1,385,104	1,423,765	1,462,751
Admin	785,237	856,609	885,858	916,206	947,697	980,377	1,014,295	1,049,500	1,086,045	1,123,984
Customer	319,176	343,180	352,641	362,907	373,518	384,023	395,380	407,129	419,288	431,874
Total Water Costs	4,246,628	4,599,844	4,998,440	5,184,283	5,336,483	5,513,539	5,699,230	5,892,136	6,094,621	6,303,015

Allocation of Administration to Supply/Transmission	\$ 580,934	\$ 632,996	\$ 667,883	\$ 693,860	\$ 720,910	\$ 749,082	\$ 778,425	\$ 808,992	\$ 840,839	\$ 874,023
Supply/Transmission	1,644,231	1,783,513	1,877,067	1,944,470	2,014,585	2,086,514	2,162,410	2,241,411	2,324,585	2,410,382
Treatment	917,049	983,546	1,214,991	1,246,840	1,279,773	1,313,543	1,348,720	1,385,104	1,423,765	1,462,751
Distribution	na	na	na	na	na	na	na	na	na	na
Admin	na	na	na	na	na	na	na	na	na	na
Customer	319,176	343,180	352,641	362,907	373,518	384,023	395,380	407,129	419,288	431,874
Total Water Costs	\$ 3,481,391	\$ 3,743,235	\$ 4,112,582	\$ 4,248,077	\$ 4,388,785	\$ 4,533,162	\$ 4,684,935	\$ 4,842,636	\$ 5,008,576	\$ 5,179,030

Percent Supply	16.8%	16.9%	16.2%	16.3%	16.4%	16.5%	16.6%	16.7%	16.8%	16.9%
Admin Allocation	131,788	144,856	143,853	149,649	155,670	162,002	168,530	175,325	182,325	189,686

Raw Water Line Replacement Cost										
Total Capital Cost	\$ 13,928,172									
Life Span (Years)	50									
Annual Replacement Cost	278,563	278,563	278,563	278,563	278,563	278,563	278,563	278,563	278,563	278,563
Original Water Line Cost	\$ 12,375,000	\$ 12,375,000	\$ 12,375,000	\$ 12,375,000	\$ 12,375,000	\$ 12,375,000	\$ 12,375,000	\$ 12,375,000	\$ 12,375,000	\$ 12,375,000
Accumulated Depreciation	990,000	1,237,500	1,485,000	1,732,500	1,980,000	2,227,500	2,475,000	2,722,500	2,970,000	3,217,500
Rate Base (Net BV)	11,385,000	11,137,500	10,890,000	10,642,500	10,395,000	10,147,500	9,900,000	9,652,500	9,405,000	9,157,500

Rate of Return	6%	ROI	683,100	668,250	653,400	638,550	623,700	608,850	594,000	579,150	564,300	549,450
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Total Supply/Transmission Costs																				
Supply/Transmission	\$	580,934	\$	632,996	\$	667,883	\$	693,860	\$	720,910	\$	749,082	\$	778,425	\$	808,992	\$	840,839	\$	874,023
Admin		131,788		144,856		143,863		149,649		155,670		162,002		168,530		175,325		182,325		189,686
Return on Raw Water Line Investment		683,100		668,250		653,400		638,550		623,700		608,850		594,000		579,150		564,300		549,450
Line Replacement Fund		278,563		278,563		278,563		278,563		278,563		278,563		278,563		278,563		278,563		278,563
Total		1,674,386		1,724,685		1,743,709		1,760,622		1,778,844		1,798,497		1,819,518		1,842,031		1,866,028		1,891,722

Water Consumption Percent Increase	0.82%	0.80%	0.78%	0.76%	0.75%	0.73%	0.71%	0.70%	0.68%	0.67%
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WTP #1											
WTP #2	1,637,161,000	1,650,653,678	1,663,901,111	1,676,919,659	1,689,723,814	1,702,326,498	1,714,739,298	1,726,972,657	1,739,036,034	1,750,938,027	1,762,686,489
Sub-Total	1,637,161,000	1,650,653,678	1,663,901,111	1,676,919,659	1,689,723,814	1,702,326,498	1,714,739,298	1,726,972,657	1,739,036,034	1,750,938,027	1,762,686,489

Supply/Transmission Cost	\$ 1,674,386	\$ 1,724,665	\$ 1,743,709	\$ 1,760,622	\$ 1,778,844	\$ 1,798,497	\$ 1,819,518	\$ 1,842,031	\$ 1,866,028	\$ 1,891,722
Production Gallons	1,650,653,678	1,663,901,111	1,676,919,659	1,689,723,814	1,702,326,498	1,714,739,298	1,726,972,657	1,739,036,034	1,750,938,027	1,762,686,489

Forecast W 9.0 – WATER Cost of Service by Customer Class
Scenario: 2019 11 04 Scenario 1 – Status Quo

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LAGUNA MADRE WATER DISTRICT
WATER/WASTEWATER COST OF SERVICE MODEL

Forecast W 9.0 – WATER Cost of Service by Customer Class
Scenario: 2019 11 04 Scenario 1 – Status Quo

Total Cost by Customer Class

Base	\$ 537,699	\$ 583,631	\$ 635,438	\$ 655,345	\$ 676,039	\$ 697,314	\$ 719,670	\$ 742,911	\$ 767,344	\$ 792,474
Extra Capacity	290,540	314,550	341,634	351,512	361,800	372,384	383,531	395,132	407,349	419,916
Customer	236,008	257,251	281,222	291,161	301,480	312,089	323,215	334,772	346,902	359,384
Total Cost of Service	\$ 1,064,246	\$ 1,155,433	\$ 1,258,294	\$ 1,298,018	\$ 1,339,320	\$ 1,381,787	\$ 1,426,417	\$ 1,472,815	\$ 1,521,595	\$ 1,571,775

Calculation of Customer Costs/Bill

Total Customer Costs	\$ 236,008	\$ 257,251	\$ 281,222	\$ 291,161	\$ 301,480	\$ 312,089	\$ 323,215	\$ 334,772	\$ 346,902	\$ 359,384
Total Bills	58,500	58,920	59,340	59,760	60,180	60,600	61,020	61,440	61,860	62,280
Customer Cost/Bill	\$ 4.03	\$ 4.37	\$ 4.74	\$ 4.87	\$ 5.01	\$ 5.15	\$ 5.30	\$ 5.45	\$ 5.61	\$ 5.77

Calculation of Non-Customer Charge

Total Non-Customer Costs	\$ 828,238	\$ 896,181	\$ 977,072	\$ 1,006,857	\$ 1,037,839	\$ 1,069,698	\$ 1,103,202	\$ 1,138,043	\$ 1,174,693	\$ 1,212,390
Total Volume (gallons)	355,214,724	356,489,853	357,760,438	359,026,527	360,288,166	361,545,403	362,798,283	364,046,852	365,291,152	366,531,229
Total Non-Customer Cost	\$ 2.33	\$ 2.52	\$ 2.73	\$ 2.80	\$ 2.88	\$ 2.96	\$ 3.04	\$ 3.13	\$ 3.22	\$ 3.31

Calculation of Minimum Charge

Monthly Minimum Volume	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000
Non-Customer Charge/1,000 Gal	\$ 2.33	\$ 2.52	\$ 2.73	\$ 2.80	\$ 2.88	\$ 2.96	\$ 3.04	\$ 3.13	\$ 3.22	\$ 3.31
Monthly Non-Customer Charge	\$ 9.33	\$ 10.08	\$ 10.92	\$ 11.22	\$ 11.52	\$ 11.83	\$ 12.16	\$ 12.50	\$ 12.86	\$ 13.23
Monthly Customer Charge	\$ 4.03	\$ 4.37	\$ 4.74	\$ 4.87	\$ 5.01	\$ 5.15	\$ 5.30	\$ 5.45	\$ 5.61	\$ 5.77

Calculation of Volumetric Charge

Monthly Minimum Charge	\$ 13.36	\$ 14.44	\$ 15.66	\$ 16.09	\$ 16.53	\$ 16.98	\$ 17.46	\$ 17.95	\$ 18.47	\$ 19.00
Total Bills	58,500	58,920	59,340	59,760	60,180	60,600	61,020	61,440	61,860	62,280
Revenue from Minimum Charge	\$ 781,815	\$ 851,050	\$ 929,471	\$ 981,527	\$ 994,894	\$ 1,029,274	\$ 1,065,416	\$ 1,103,040	\$ 1,142,613	\$ 1,183,409
Total Cost of Service	\$ 1,064,246	\$ 1,155,433	\$ 1,258,294	\$ 1,298,018	\$ 1,339,320	\$ 1,381,787	\$ 1,426,417	\$ 1,472,815	\$ 1,521,595	\$ 1,571,775
Net Cost of Service	\$ 282,631	\$ 304,382	\$ 328,823	\$ 336,491	\$ 344,426	\$ 352,513	\$ 361,000	\$ 369,775	\$ 378,983	\$ 388,366
Test Year Annual Volume after Minimum	121,214,724	120,809,853	120,400,438	119,986,527	119,568,166	119,145,403	118,718,283	118,286,852	117,851,152	117,411,229

LAGUNA MADRE WATER DISTRICT
WATER/WASTEWATER COST OF SERVICE MODEL

Forecast W 9.0 – WATER Cost of Service by Customer Class
Scenario: 2019 11 04 Scenario 1 – Status Quo

Base	\$ 735,624	\$ 796,939	\$ 866,041	\$ 891,502	\$ 917,951	\$ 945,104	\$ 973,637	\$ 1,003,275	\$ 1,034,430	\$ 1,066,427
Extra Capacity	633,255	684,279	741,793	751,815	782,860	804,081	826,548	850,124	874,851	900,255
Customer	72,327	76,538	85,532	88,225	91,015	93,874	96,869	99,974	103,229	106,569
Total Cost of Service	\$ 1,441,206	\$ 1,559,756	\$ 1,693,367	\$ 1,741,541	\$ 1,791,627	\$ 1,843,059	\$ 1,897,154	\$ 1,953,373	\$ 2,012,511	\$ 2,073,251
Calculation of Customer Costs/Bill										
Total Customer Costs	\$ 72,327	\$ 76,538	\$ 85,532	\$ 88,225	\$ 91,015	\$ 93,874	\$ 96,869	\$ 99,974	\$ 103,229	\$ 106,569
Total Bills	17,928	17,988	18,048	18,108	18,168	18,228	18,288	18,348	18,408	18,468
Customer Cost/Bill	\$ 4.03	\$ 4.37	\$ 4.74	\$ 4.87	\$ 5.01	\$ 5.15	\$ 5.30	\$ 5.45	\$ 5.61	\$ 5.77
Calculation of Non-Customer Charge										
Total Non-Customer Costs	\$ 1,368,879	\$ 1,481,219	\$ 1,607,834	\$ 1,653,316	\$ 1,700,612	\$ 1,749,185	\$ 1,800,285	\$ 1,853,399	\$ 1,909,281	\$ 1,966,682
Total Volume (gallons)	485,968,063	485,781,262	487,593,106	488,403,599	489,212,750	490,020,565	490,827,051	491,632,213	492,436,059	493,238,595
Total Non-Customer Cost	\$ 2.82	\$ 3.04	\$ 3.30	\$ 3.39	\$ 3.48	\$ 3.57	\$ 3.67	\$ 3.77	\$ 3.88	\$ 3.99
Calculation of Minimum Charge										
Monthly Minimum Volume	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000
Non-Customer Charge/1,000 Gal	\$ 2.82	\$ 3.04	\$ 3.30	\$ 3.39	\$ 3.48	\$ 3.57	\$ 3.67	\$ 3.77	\$ 3.88	\$ 3.99
Monthly Non-Customer Charge	\$ 11.27	\$ 12.17	\$ 13.19	\$ 13.54	\$ 13.90	\$ 14.28	\$ 14.67	\$ 15.08	\$ 15.51	\$ 15.95
Monthly Customer Charge	\$ 4.03	\$ 4.37	\$ 4.74	\$ 4.87	\$ 5.01	\$ 5.15	\$ 5.30	\$ 5.45	\$ 5.61	\$ 5.77
Calculation of Volumetric Charge										
Monthly Minimum Charge	\$ 15.30	\$ 16.54	\$ 17.93	\$ 18.41	\$ 18.91	\$ 19.43	\$ 19.97	\$ 20.53	\$ 21.12	\$ 21.72
Total Bills	17,928	17,988	18,048	18,108	18,168	18,228	18,288	18,348	18,408	18,468
Revenue from Minimum Charge	\$ 274,326	\$ 297,479	\$ 323,585	\$ 333,418	\$ 343,639	\$ 354,142	\$ 365,180	\$ 376,654	\$ 388,717	\$ 401,117
Total Cost of Service	\$ 1,441,206	\$ 1,559,756	\$ 1,693,367	\$ 1,741,541	\$ 1,791,627	\$ 1,843,059	\$ 1,897,154	\$ 1,953,373	\$ 2,012,511	\$ 2,073,251
Net Cost of Service	\$ 1,166,880	\$ 1,262,277	\$ 1,369,782	\$ 1,408,123	\$ 1,447,988	\$ 1,488,917	\$ 1,531,974	\$ 1,576,719	\$ 1,623,794	\$ 1,672,133
Test Year Annual Volume after Minimum	414,256,063	414,829,262	415,401,106	415,971,599	416,540,750	417,108,565	417,675,051	418,240,213	418,804,059	419,366,595

**LAGUNA MADRE WATER DISTRICT
WATER/WASTEWATER COST OF SERVICE MODEL**

Forecast W 9.0 – WATER Cost of Service by Customer Class
Scenario: 2019 11 04 Scenario 1 – Status Quo

Base	\$ 164,335	\$ 179,207	\$ 196,095	\$ 203,046	\$ 210,371	\$ 217,915	\$ 225,838	\$ 234,082	\$ 242,744	\$ 251,672
Extra Capacity	140,219	152,516	166,404	171,979	177,784	183,764	190,053	196,600	203,486	210,582
Customer	14,620	16,085	17,743	18,534	19,357	20,209	21,103	22,035	23,015	24,028
Total Cost of Service	\$ 319,175	\$ 347,808	\$ 380,152	\$ 393,559	\$ 407,511	\$ 421,888	\$ 436,994	\$ 452,716	\$ 469,245	\$ 486,283
Calculation of Customer Costs/Bill										
Total Customer Costs	\$ 14,620	\$ 16,085	\$ 17,743	\$ 18,534	\$ 19,357	\$ 20,209	\$ 21,103	\$ 22,035	\$ 23,015	\$ 24,028
Total Bills	3,624	3,684	3,744	3,804	3,864	3,924	3,984	4,044	4,104	4,164
Customer Cost/Bill	\$ 4.03	\$ 4.37	\$ 4.74	\$ 4.87	\$ 5.01	\$ 5.15	\$ 5.30	\$ 5.45	\$ 5.61	\$ 5.77
Calculation of Non-Customer Charge										
Total Non-Customer Costs	\$ 304,554	\$ 331,723	\$ 362,409	\$ 375,025	\$ 388,154	\$ 401,679	\$ 415,882	\$ 430,681	\$ 446,230	\$ 462,254
Total Volume (gallons)	108,563,204	109,461,906	110,353,289	111,237,530	112,114,798	112,985,255	113,849,056	114,706,353	115,557,291	116,402,008
Total Non-Customer Cost	\$ 2.81	\$ 3.03	\$ 3.28	\$ 3.37	\$ 3.46	\$ 3.56	\$ 3.65	\$ 3.75	\$ 3.86	\$ 3.97
Calculation of Minimum Charge										
Monthly Minimum Volume	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000
Non-Customer Charge/1,000 Gal	\$ 2.81	\$ 3.03	\$ 3.28	\$ 3.37	\$ 3.46	\$ 3.56	\$ 3.65	\$ 3.75	\$ 3.86	\$ 3.97
Monthly Non-Customer Charge	\$ 42.08	\$ 45.46	\$ 49.26	\$ 50.57	\$ 51.93	\$ 53.33	\$ 54.80	\$ 56.32	\$ 57.92	\$ 59.57
Monthly Customer Charge	\$ 4.03	\$ 4.37	\$ 4.74	\$ 4.87	\$ 5.01	\$ 5.15	\$ 5.30	\$ 5.45	\$ 5.61	\$ 5.77
Calculation of Volumetric Charge										
Monthly Minimum Charge	\$ 46.11	\$ 49.82	\$ 54.00	\$ 55.44	\$ 56.94	\$ 58.48	\$ 60.08	\$ 61.77	\$ 63.53	\$ 65.34
Total Bills	3,624	3,684	3,744	3,804	3,864	3,924	3,984	4,044	4,104	4,164
Revenue from Minimum Charge	\$ 167,117	\$ 183,550	\$ 202,177	\$ 210,905	\$ 220,021	\$ 228,464	\$ 239,407	\$ 249,791	\$ 260,732	\$ 272,069
Total Cost of Service	\$ 319,175	\$ 347,808	\$ 380,152	\$ 393,559	\$ 407,511	\$ 421,888	\$ 436,994	\$ 452,716	\$ 469,245	\$ 486,283
Net Cost of Service	\$ 152,057	\$ 164,258	\$ 177,975	\$ 182,654	\$ 187,490	\$ 192,423	\$ 197,588	\$ 202,925	\$ 208,513	\$ 214,214
Test Year Annual Volume after Minimum	54,203,204	54,201,906	54,193,289	54,177,530	54,154,798	54,125,255	54,089,056	54,046,353	53,997,291	53,942,008

**LAGUNA MADRE WATER DISTRICT
WATER/WASTEWATER COST OF SERVICE MODEL**

Forecast W 9.0 – WATER Cost of Service by Customer Class
Scenario: 2019 11 04 Scenario 1 – Status Quo

Base	\$ 322,804	\$ 358,108	\$ 393,772	\$ 412,189	\$ 431,262	\$ 450,929	\$ 471,509	\$ 492,890	\$ 515,294	\$ 538,405
Extra Capacity	374,258	411,813	454,253	474,365	495,227	516,700	539,167	562,499	586,946	612,143
Customer	3,631	4,067	4,606	4,911	5,230	5,562	5,911	6,277	6,662	7,063
Total Cost of Service	\$ 700,693	\$ 772,008	\$ 852,631	\$ 891,445	\$ 931,719	\$ 973,191	\$ 1,016,588	\$ 1,061,667	\$ 1,108,902	\$ 1,157,610
Calculation of Customer Costs/Bill										
Total Customer Costs	\$ 3,631	\$ 4,067	\$ 4,606	\$ 4,911	\$ 5,230	\$ 5,562	\$ 5,911	\$ 6,277	\$ 6,662	\$ 7,063
Total Bills	900	936	972	1,008	1,044	1,080	1,116	1,152	1,188	1,224
Customer Cost/Bill	\$ 4.03	\$ 4.37	\$ 4.74	\$ 4.87	\$ 5.01	\$ 5.15	\$ 5.30	\$ 5.45	\$ 5.61	\$ 5.77
Calculation of Non-Customer Charge										
Total Non-Customer Costs	\$ 697,062	\$ 767,921	\$ 848,025	\$ 886,534	\$ 926,489	\$ 967,629	\$ 1,010,677	\$ 1,055,390	\$ 1,102,240	\$ 1,150,547
Total Volume (gallons)	213,250,756	217,515,771	221,696,767	225,804,300	229,836,519	233,799,216	237,695,872	241,528,676	245,303,677	249,020,286
Total Non-Customer Cost	\$ 3.27	\$ 3.53	\$ 3.83	\$ 3.93	\$ 4.03	\$ 4.14	\$ 4.25	\$ 4.37	\$ 4.49	\$ 4.62
Calculation of Minimum Charge										
Monthly Minimum Volume	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000
Non-Customer Charge/1,000 Gal	\$ 3.27	\$ 3.53	\$ 3.83	\$ 3.93	\$ 4.03	\$ 4.14	\$ 4.25	\$ 4.37	\$ 4.49	\$ 4.62
Monthly Non-Customer Charge	\$ 163.44	\$ 176.52	\$ 191.26	\$ 196.31	\$ 201.55	\$ 206.94	\$ 212.60	\$ 218.48	\$ 224.67	\$ 231.01
Monthly Customer Charge	\$ 4.03	\$ 4.37	\$ 4.74	\$ 4.87	\$ 5.01	\$ 5.15	\$ 5.30	\$ 5.45	\$ 5.61	\$ 5.77
Calculation of Volumetric Charge										
Monthly Minimum Charge	\$ 167.47	\$ 180.89	\$ 196.00	\$ 201.18	\$ 206.56	\$ 212.09	\$ 217.80	\$ 223.93	\$ 230.26	\$ 236.79
Total Bills	900	936	972	1,008	1,044	1,080	1,116	1,152	1,188	1,224
Revenue from Minimum Charge	\$ 150,724	\$ 169,310	\$ 190,507	\$ 202,787	\$ 215,652	\$ 229,053	\$ 243,171	\$ 257,986	\$ 273,568	\$ 289,825
Total Cost of Service	\$ 700,693	\$ 772,008	\$ 852,631	\$ 891,445	\$ 931,719	\$ 973,191	\$ 1,016,588	\$ 1,061,667	\$ 1,108,902	\$ 1,157,610
Net Cost of Service	\$ 549,969	\$ 602,698	\$ 662,124	\$ 688,657	\$ 716,066	\$ 744,138	\$ 773,416	\$ 803,700	\$ 835,333	\$ 867,785
Test Year Annual Volume after Minimum	168,250,756	170,715,771	173,098,767	175,404,300	177,636,519	179,799,216	181,895,872	183,929,676	185,903,577	187,820,296

**LAGUNA MADRE WATER DISTRICT
WATER/WASTEWATER COST OF SERVICE MODEL**

Forecast W 9.0 – WATER Cost of Service by Customer Class
Scenario: 2019 11 04 Scenario 1 – Status Quo

Base	\$ 147,341	\$ 164,043	\$ 182,914	\$ 192,926	\$ 203,279	\$ 213,922	\$ 225,018	\$ 236,521	\$ 248,539	\$ 260,927
Extra Capacity	240,595	267,181	297,187	312,720	328,765	345,234	362,394	380,164	398,720	417,823
Customer	1,646	1,886	2,161	2,339	2,525	2,719	2,924	3,138	3,365	3,601
Total Cost of Service	\$ 389,583	\$ 433,110	\$ 482,262	\$ 507,984	\$ 534,568	\$ 561,875	\$ 590,336	\$ 619,823	\$ 650,824	\$ 682,350
Calculation of Customer Costs/Bill										
Total Customer Costs	\$ 1,646	\$ 1,886	\$ 2,161	\$ 2,339	\$ 2,525	\$ 2,719	\$ 2,924	\$ 3,138	\$ 3,365	\$ 3,601
Total Bills	408	432	456	480	504	528	552	576	600	624
Customer Cost/Bill	\$ 4.03	\$ 4.37	\$ 4.74	\$ 4.87	\$ 5.01	\$ 5.15	\$ 5.30	\$ 5.45	\$ 5.61	\$ 5.77
Calculation of Non-Customer Charge										
Total Non-Customer Costs	\$ 387,937	\$ 431,224	\$ 480,101	\$ 505,646	\$ 532,043	\$ 559,156	\$ 587,412	\$ 616,684	\$ 647,259	\$ 678,749
Total Volume (gallons)	97,335,800	100,199,647	102,982,971	105,693,049	108,335,375	110,914,789	113,435,579	115,901,570	118,316,186	120,682,510
Total Non-Customer Cost	\$ 3.99	\$ 4.30	\$ 4.66	\$ 4.78	\$ 4.91	\$ 5.04	\$ 5.16	\$ 5.32	\$ 5.47	\$ 5.62
Calculation of Minimum Charge										
Monthly Minimum Volume	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000
Non-Customer Charge/1,000 Gal	\$ 3.99	\$ 4.30	\$ 4.66	\$ 4.78	\$ 4.91	\$ 5.04	\$ 5.16	\$ 5.32	\$ 5.47	\$ 5.62
Monthly Non-Customer Charge	\$ 199.28	\$ 215.18	\$ 233.10	\$ 239.20	\$ 245.55	\$ 252.07	\$ 258.92	\$ 266.04	\$ 273.53	\$ 281.21
Monthly Customer Charge	\$ 4.03	\$ 4.37	\$ 4.74	\$ 4.87	\$ 5.01	\$ 5.15	\$ 5.30	\$ 5.45	\$ 5.61	\$ 5.77
Calculation of Volumetric Charge										
Monthly Minimum Charge	\$ 203.31	\$ 219.55	\$ 237.84	\$ 244.08	\$ 250.66	\$ 257.22	\$ 264.22	\$ 271.49	\$ 279.14	\$ 286.98
Total Bills	408	432	456	480	504	528	552	576	600	624
Revenue from Minimum Charge	\$ 82,950	\$ 94,845	\$ 108,453	\$ 117,157	\$ 126,284	\$ 135,810	\$ 145,847	\$ 156,378	\$ 167,482	\$ 178,078
Total Cost of Service	\$ 389,583	\$ 433,110	\$ 482,262	\$ 507,984	\$ 534,568	\$ 561,875	\$ 590,336	\$ 619,823	\$ 650,824	\$ 682,350
Net Cost of Service	\$ 306,633	\$ 338,265	\$ 373,808	\$ 390,827	\$ 408,284	\$ 426,065	\$ 444,489	\$ 463,446	\$ 483,142	\$ 503,272
Test Year Annual Volume after Minimum	75,936,800	78,589,647	80,182,971	81,693,049	83,135,375	84,514,789	85,835,579	87,101,570	88,316,186	89,482,510

**LAGUNA MADRE WATER DISTRICT
WATER/WASTEWATER COST OF SERVICE MODEL**

Forecast W 9.0 -- WATER Cost of Service by Customer Class
Scenario: 2019 11 04 Scenario 1 -- Status Quo

Base	\$	0	\$	0	\$	0	\$	0	\$	0	\$	0	\$	0	\$	0	\$	0	\$	0	\$	0
Extra Capacity		0		0		0		0		0		0		0		0		0		0		0
Customer		48		52		57		58		60		62		64		65		67		69		69
Total Cost of Service	\$	48	\$	53	\$	57	\$	59	\$	61	\$	62	\$	64	\$	66	\$	68	\$	68	\$	70
Calculation of Customer Costs/Bill																						
Total Customer Costs	\$	48	\$	52	\$	57	\$	58	\$	60	\$	62	\$	64	\$	65	\$	67	\$	69	\$	69
Total Bills		12		12		12		12		12		12		12		12		12		12		12
Customer Cost/Bill	\$	4.03	\$	4.37	\$	4.74	\$	4.87	\$	5.01	\$	5.15	\$	5.30	\$	5.45	\$	5.61	\$	5.77	\$	5.77
Calculation of Non-Customer Charge																						
Total Non-Customer Costs	\$	0	\$	0	\$	1	\$	1	\$	1	\$	1	\$	1	\$	1	\$	1	\$	1	\$	1
Total Volume (gallons)		100		100		100		100		100		100		100		100		100		100		100
Total Non-Customer Cost	\$	4.37	\$	4.72	\$	5.11	\$	5.24	\$	5.38	\$	5.52	\$	5.67	\$	5.83	\$	5.99	\$	6.18	\$	6.18
Calculation of Minimum Charge																						
Monthly Minimum Volume		50,000		50,000		50,000		50,000		50,000		50,000		50,000		50,000		50,000		50,000		50,000
Non-Customer Charge/1,000 Gal	\$	4.37	\$	4.72	\$	5.11	\$	5.24	\$	5.38	\$	5.52	\$	5.67	\$	5.83	\$	5.99	\$	6.18	\$	6.18
Monthly Non-Customer Charge	\$	218.38	\$	235.79	\$	255.40	\$	262.07	\$	269.01	\$	276.12	\$	283.61	\$	291.38	\$	299.57	\$	307.97	\$	307.97
Monthly Customer Charge	\$	4.03	\$	4.37	\$	4.74	\$	4.87	\$	5.01	\$	5.15	\$	5.30	\$	5.45	\$	5.61	\$	5.77	\$	5.77
Calculation of Volumetric Charge																						
Monthly Minimum Charge	\$	222.41	\$	240.18	\$	260.14	\$	266.94	\$	274.02	\$	281.27	\$	288.91	\$	296.84	\$	305.18	\$	313.74	\$	313.74
Total Bills		12		12		12		12		12		12		12		12		12		12		12
Revenue from Minimum Charge	\$	2,669	\$	2,882	\$	3,122	\$	3,203	\$	3,288	\$	3,375	\$	3,467	\$	3,562	\$	3,662	\$	3,765	\$	3,765
Total Cost of Service	\$	48	\$	53	\$	57	\$	59	\$	61	\$	62	\$	64	\$	66	\$	68	\$	68	\$	70
Net Cost of Service	\$	(2,620)	\$	(2,829)	\$	(3,064)	\$	(3,144)	\$	(3,228)	\$	(3,313)	\$	(3,403)	\$	(3,496)	\$	(3,594)	\$	(3,695)	\$	(3,695)
Test Year Annual Volume after Minimum		-		-		-		-		-		-		-		-		-		-		-

Forecast W 9.0 – WATER Cost of Service by Customer Class
Scenario: 2019 11 04 Scenario 1 – Status Quo

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Forecast W 9.0 – WATER Cost of Service by Customer Class
Scenario: 2019 11 04 Scenario 1 – Status Quo

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Forecast W 9 0 -- WATER Cost of Service by Customer Class
Scenario: 2019 11 04 Scenario 1 -- Status Quo

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Forecast W 10.0 -- WATER Service Cost Functionalization
Scenario: 2019 11 04 Scenario 1 -- Status Quo

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**LAGUNA MADRE WATER DISTRICT
RAW WATER SALES**

Year	Total	SPI Golf Touchstone Golf	Port Isabel	Espiritu Santo
1996	\$ 8,121	\$ 8,121	\$ -	\$ -
1997	27,597	27,597	-	-
1998	33,420	33,420	-	-
1999	34,607	34,607	-	-
2000	57,730	57,730	-	-
2001	63,714	63,714	-	-
2002	61,955	61,955	-	-
2003	53,766	53,766	-	-
2004	69,039	69,039	-	-
2005	58,937	58,937	-	-
2006	81,292	81,292	-	-
2007	72,945	72,945	-	-
2008	79,386	79,386	-	-
2009	67,561	67,561	-	-
2010	42,232	42,232	-	-
2011	28,147	28,147	-	-
2012	26,981	26,981	-	-
2013	48,244	48,244	-	-
2014	47,824	47,824	-	-
2015	45,723	45,723	-	-
2016	87,071	84,791	2,281	-
2017	93,633	89,234	4,399	-
2018	89,340	88,770	570	-
2019	83,317	81,029	607	1,682

LAGUNA MADRE WATER DISTRICT
RAW WATER SALES 2013 - 2019

11-2209-01 SP1 GOLF CLUB																
Jan	1,484.77	39,720	1,485.94	46,224	1,184.56	30,323	1,788.40	49,099	1,675.45	32,253	5,004.86	109,296	1,418.57	26,473	2,721.34	56,770
Feb	396.16	5,808	1,137.25	28,853	1,739.51	47,246	1,951.33	59,862	1,108.60	19,136	3,879.11	81,246	3,859.81	83,246	1,868.19	25,720
Mar	1,589.71	42,923	1,784.35	49,284	2,138.35	60,021	2,605.93	74,520	2,445.84	50,080	3,896.64	81,698	1,721.50	33,518	2,460.76	50,730
Apr	737.73	16,418	2,882.19	81,310	1,510.08	40,445	3,280.55	95,497	4,721.37	102,736	7,326.54	163,020	4,995.94	109,970	2,802.23	
May	1,844.09	50,831	4,655.87	138,262	4,415.93	130,801	3,149.73	91,429	8,094.77	180,797	7,607.44	169,520	4,993.46	109,610	6,736.25	140,523
Jun	2,839.53	75,564	4,070.05	120,046	3,920.37	115,392	4,266.09	126,142	8,678.57	194,306	8,805.79	197,250	8,288.98	186,250	5,145.25	107,334
Jul	4,859.55	144,593	5,431.26	162,994	2,414.96	68,582	7,403.99	164,812	6,061.03	133,736	9,010.63	201,990	5,322.84	117,270	6,165.64	128,820
Aug	4,537.56	133,951	4,360.13	129,066	4,807.54	136,759	8,443.01	188,855	8,983.62	201,365	6,617.81	146,520	100.23		8,999.92	187,724
Sep	4,335.47	128,299	3,371.53	98,326	4,007.60	118,104	8,538.16	191,057	7,353.46	163,643	8,267.42	184,792	13,768.04	313,670	13,768.04	287,211
Oct	2,291.99	64,758	1,694.14	46,168	3,092.00	89,634	9,899.95	222,569	4,272.10	92,340	772.90	11,368	769.05	11,368	13,824.97	288,399
Nov	2,723.03	78,161	1,500.73	40,154	1,548.32	41,634	3,814.29	111,093	4,391.21	95,096	6,301.70	139,305	483.53	4,728	4,322.32	94,002
Dec	5,397.64	161,323	1,397.42	36,942	758.86	17,084	1,772.13	48,593	2,472.11	50,688	6,017.14	86,440	280.23		4,054.77	87,790
ANNUAL TOTAL																

11-2209-01																
SP1 GOLF CLUB																
	Billed	Consumption	Billed	Consumption	Billed	Consumption	Billed	Consumption	Billed	Consumption	Billed	Consumption	Billed	Consumption	Billed	Consumption
Jan	2,723.34	56,769	2,056.99	41,820	3,675.51	79,960	5,871.02	129,339	7,107.56	158,775	3,126.49	70,682	2,963.69	62,408	868.64	13,684
Feb	2,558.80	53,378	4,844.60	101,590	1,353.03	29,600	4,425.65	96,405	6,227.04	138,298	3,431.10	76,381	2,912.48	61,215	469.99	4,413
Mar	4,237.31	91,040	5,796.32	120,630	3,530.18	75,350	4,812.92	105,644	4,822.92	105,644	3,203.63	67,972	3,473.75	74,368	584.93	7,086
Apr	4,795.66	100,041	5,876.68	130,150	6,888.08	153,671	4,463.93	143,807	857.42	13,423	3,421.54	108,181	4,316.94	93,877	689.96	9,529
May	6,338.50	132,226	10,850.49	245,820	7,548.86	169,038	7,700.65	172,568	6,568.98	146,250	2,947.74	83,932	4,186.95	90,854	812.53	12,379
Jun	4,455.46	143,610	7,115.94	154,970	6,773.20	149,790	8,071.23	181,186	7,274.31	162,653	3,578.07	79,994	4,749.65	103,940	910.35	14,654
Jul	1,527.66	29,010	6,994.40	156,190	7,087.90	158,318	7,678.81	172,060	7,274.31	162,653	3,719.97	76,694	1,266.74	22,942	974.85	16,154
Aug	7,282.78	162,850	7,524.44	168,470	7,061.50	157,704	5,793.98	127,250	6,871.49	153,285	3,889.31	62,035	790.98	11,878	735.73	10,128
Sep	9,219.93	207,900	13,180.23	300,000	7,739.78	173,478	7,102.95	158,668	5,818.20	128,790	4,932.01	73,077	798.42	12,053	6,619.72	14,743
Oct	7,578.19	169,720	7,183.36	160,588	6,829.82	152,316	7,126.00	159,204	5,264.40	115,911	3,203.03	67,966	786.25	11,768	7,211.83	16,120
Nov	4,541.96	99,110	5,694.10	125,904	7,210.38	161,166	7,168.19	160,185	5,984.70	132,862	3,478.61	72,811	1,037.68	17,615	2,940.64	6,187
Dec	5,579.62	76,730	5,428.19	119,720	7,106.42	158,795	7,202.50	160,983	3,489.45	74,613	3,319.56	66,192	863.96	13,575	4,193.62	9,073
ANNUAL TOTAL																

11-2204-02 SP1 GOLF CLUB	Billed	Consumption	Billed	Consumption	Billed	Consumption	Billed	Consumption	Billed	Consumption	Billed	Consumption
Jan												
Feb												
Mar												
Apr												
May												
Jun												
Jul												
Aug												
Sep												
Oct												
Nov												
Dec												
ANNUAL TOTAL												

11-2204-00 SP1 GOLF CLUB	Billed	Consumption
Jan		
Feb		
Mar		
Apr		
May		
Jun		
Jul		
Aug	3,226.34	7,277
Sep	5,971.19	13,400
Oct	4,755.08	15,225
Nov	2,186.76	4,601
Dec	5,439.71	12,166
ANNUAL TOTAL		

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11-2294-01		2016		2017		2018		2019	
FOURSTONE OILFIELD		Billed	Consumption	Billed	Consumption	Billed	Consumption	Billed	Consumption
Jan		1,867.37	3,858	1,315.58	2,575	2,820.80	4,388	4,136.40	4,858
Feb		1,839.75	3,794	1,384.81	2,738	2,994.00	4,990	7,547.60	9,122
Mar		2,202.67	4,638	1,815.24	3,737	6,859.60	8,262	7,404.40	8,943
Apr		3,287.56	7,163	2,211.08	4,425	6,631.60	7,977	6,049.20	7,249
May		4,915.97	10,548	3,820.76	8,405	6,842.00	8,215	6,758.80	8,136
Jun		4,374.72	9,573	3,402.37	7,428	6,545.20	7,889	6,306.00	7,570
Jul		7,224.88	16,085	5,311.57	11,868	8,356.40	10,133	8,356.40	10,133
Aug		7,486.08	16,925	6,224.03	13,990	4,790.00	5,675	12,616.40	15,458
Sep		6,847.96	15,443	7,735.05	17,504	12,406.80	15,196	13,428.40	16,473
Oct		2,318.34	4,907	7,221.00	12,035	10,407.60	12,897	7,026.80	8,471
Nov		4,288.60	9,489	1,223.20	5,372	10,431.20	12,714	4,337.05	7,431
Dec		1,864.69	3,852	1,320.31	2,586	2,158.80	3,596	5,935.60	7,107
ANNUAL TOTAL		45,723.49	93,149	45,723.49	93,149	84,760.80	105,303	80,234.00	111,036

3731.96
1864.7
1839.75
2202.67
3287.56
4915.97
4374.72
7124.88
7486.08
85100.06
49481.61

15-9690-00		2016		2017		2018		2019	
City of Port Isabel		Billed	Consumption	Billed	Consumption	Billed	Consumption	Billed	Consumption
Jan		21.50	36	-	-	-	-	-	-
Feb		0.00	-	-	-	-	-	-	-
Mar		0.00	-	4.38	73	-	-	-	-
Apr	126.6	211	687.60	1,146	19.50	325	-	-	-
May	184.2	307	931.80	1,535	184.62	3,077	142.69	1,372	-
Jun	150.6	251	847.80	1,413	122.34	2,039	171.18	1,546	-
Jul	191.4	319	316.2	527	30.66	511	142.06	1,366	-
Aug	1064.4	1,776	324.00	540	82.56	1,376	150.59	1,448	-
Sep	388.8	648	628.20	1,047	123.00	2,050	-	-	-
Oct	142.2	237	640.20	1,067	2.76	46	-	-	-
Nov	0	-	1.20	2	0.06	1	-	-	-
Dec	32.4	54	-	-	-	-	-	-	-
ANNUAL TOTAL		4,840.50	13,015	4,840.50	13,015	4,840.50	13,015	4,840.50	13,015

25-0102-00		2016		2017		2018		2019	
ESPIRITO SANTO		Billed	Consumption	Billed	Consumption	Billed	Consumption	Billed	Consumption
Jan		-	-	-	-	-	-	-	-
Feb		-	-	-	-	-	-	-	-
Mar		-	-	-	-	-	-	-	-
Apr		-	-	-	-	-	-	-	-
May	559.06	108,240	-	-	-	-	-	-	-
Jun	1,049.82	203,257	-	-	-	-	-	-	-
Jul		-	-	-	-	-	-	-	-
Aug	72.63	14,062	-	-	-	-	-	-	-
Sep		-	-	-	-	-	-	-	-
Oct		-	-	-	-	-	-	-	-
Nov		-	-	-	-	-	-	-	-
Dec		-	-	-	-	-	-	-	-
ANNUAL TOTAL		1,681.51	325,559	-	-	-	-	-	-

	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100	2101	2102	2103	2104	2105	2106	2107	2108	2109	2110	2111	2112	2113	2114	2115	2116	2117	2118	2119	2120	2121	2122	2123	2124	2125	2126	2127	2128	2129	2130	2131	2132	2133	2134	2135	2136	2137	2138	2139	2140	2141	2142	2143	2144	2145	2146	2147	2148	2149	2150	2151	2152	2153	2154	2155	2156	2157	2158	2159	2160	2161	2162	2163	2164	2165	2166	2167	2168	2169	2170	2171	2172	2173	2174	2175	2176	2177	2178	2179	2180	2181	2182	2183	2184	2185	2186	2187	2188	2189	2190	2191	2192	2193	2194	2195	2196	2197	2198	2199	2200	2201	2202	2203	2204	2205	2206	2207	2208	2209	2210	2211	2212	2213	2214	2215	2216	2217	2218	2219	2220	2221	2222	2223	2224	2225	2226	2227	2228	2229	2230	2231	2232	2233	2234	2235	2236	2237	2238	2239	2240	2241	2242	2243	2244	2245	2246	2247	2248	2249	2250	2251	2252	2253	2254	2255	2256	2257	2258	2259	2260	2261	2262	2263	2264	2265	2266	2267	2268	2269	2270	2271	2272	2273	2274	2275	2276	2277	2278	2279	2280	2281	2282	2283	2284	2285	2286	2287	2288	2289	2290	2291	2292	2293	2294	2295	2296	2297	2298	2299	2300	2301	2302	2303	2304	2305	2306	2307	2308	2309	2310	2311	2312	2313	2314	2315	2316	2317	2318	2319	2320	2321	2322	2323	2324	2325	2326	2327	2328	2329	2330	2331	2332	2333	2334	2335	2336	2337	2338	2339	2340	2341	2342	2343	2344	2345	2346	2347	2348	2349	2350	2351	2352	2353	2354	2355	2356	2357	2358	2359	2360	2361	2362	2363	2364	2365	2366	2367	2368	2369	2370	2371	2372	2373	2374	2375	2376	2377	2378	2379	2380	2381	2382	2383	2384	2385	2386	2387	2388	2389	2390	2391	2392	2393	2394	2395	2396	2397	2398	2399	2400	2401	2402	2403	2404	2405	2406	2407	2408	2409	2410	2411	2412	2413	2414	2415	2416	2417	2418	2419	2420	2421	2422	2423	2424	2425	2426	2427	2428	2429	2430	2431	2432	2433	2434	2435	2436	2437	2438	2439	2440	2441	2442	2443	2444	2445	2446	2447	2448	2449	2450	2451	2452	2453	2454	2455	2456	2457	2458	2459	2460	2461	2462	2463	2464	2465	2466	2467	2468	2469	2470	2471	2472	2473	2474	2475	2476	2477	2478	2479	2480	2481	2482	2483	2484	2485	2486	2487	2488	2489	2490	2491	2492	2493	2494	2495	2496	2497	2498	2499	2500																																																																																																																																																												
Jan	1,486.77	1,635.84	1,184.58	1,784.40	1,675.45	3,004.86	1,417.21	2,721.34	2,056.99	3,675.51	5,871.02	7,127.56	3,126.49	2,963.69	854.64	380.23	1,867.37	1,315.54	2,620.80	4,158.00	5,494.90	6,989.54																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												</

**OUTLINE OF RESPONSES
TO ADDITIONAL ISSUES TO BE ADDRESSED**

1. Was the petition filed in accordance with rwc 12.013 and 16 TAC 24.107?

This is a legal issue to be addressed by District's attorneys.

2. Are the raw water rates charged by Laguna Madre just and reasonable? If not, what is the just and reasonable rate Laguna Madre should charge SPI? TWC 12.013; 16 TAC 24.107(a)(6).

The rates are just and reasonable, as demonstrated in the prefiled testimony of Dan V. Jackson.

3. If the Commission determines that it should fix Laguna Madre's raw water rates, what basis should the Commission use for fixing reasonable rates? TWC 12.013(c).

The Commission should use the Utility Basis, for reasons outlined in detail in the prefiled testimony of Dan V. Jackson.

4. Are the raw water rates charged by Laguna Madre discriminatory? 16 TAC 24.107(a)(6).

No. The rates are fair, just and reasonable under internationally-recognized ratemaking standards, as outlined in the prefiled testimony of Dan V. Jackson.

5. Has Laguna Madre failed or refused to supply raw water to SPI? 16 TAC 24.107(a)(6).

No.

6. Should the Commission compel continuing service and establish interim rates under TWC § 12.013(e) to remain in effect until a final decision is made in this appeal? If so, what are the appropriate interim rates?

No. The current rate should remain in effect, even though it recovers less than the District's cost of service.

7. **If the Commission fixes different rates than what Laguna Madre actually charged since the filing of the second amended petition, should the Commission order a refund or assess additional charges of the difference between the rate actually charged and the rate fixed by the Commission, plus interest? TWC S 12.013(f).**

No. There should be no refunds, since the rates are fair, just and reasonable.

8. **Does Laguna Madre charge rates to SPI pursuant to a written agreement?**

- a. **What is the effective date of the agreement?**
- b. **If applicable, what is the date of any amendments to the agreement?**
- c. **Has the written agreement been produced in this proceeding?**

The rates were based on a letter agreement that outlined the methodology used to set the rates. A letter dated August 9, 2000 with accompanying Utility Basis calculation schedule is included in the prefiled testimony of Dan V. Jackson.

9. **What is Laguna Madre's cost of debt? TWC 12.013(c).**

- a. **What series or issues of bonds of Laguna Madre are outstanding?**
- b. **For each series or issues of outstanding bonds, what are the annual servicing costs?**
- c. **What debt service coverage, if any, is required for each series or issues of outstanding bonds?**
- d. **For each series or issues of outstanding bonds, has revenue from raw water service been pledged?**
- e. **For each series or issues of outstanding bonds, what contract or contracts have been pledged as security?**
- f. **For each such contract, who are the parties to the contract, and what rate, formula, or methodology is specified in each such contract related to the amount paid for raw water service and the amount pledged to the bond?**
- g. **Are any of the outstanding bonds of Laguna Madre payable from or secured by ad valorem taxes in whole or in part?**

All debt data should be supplied by LMWD personnel. The debt is itemized in the 2018 rate study and is addressed in the prefiled testimony of Dan V. Jackson. Detailed debt schedules and accompanying schedules can be provided by District staff. Raw water sales represent less than 1% of the District's revenue and are not relevant with regards to the pledging or securing of the District's long-term debt.

10. What are Laguna Madre's costs to procure the raw water it supplies to SPI?

This topic is addressed in detail in the prefiled testimony of Dan V. Jackson. Data is contained in the testimony and accompanying appendixes.

11. What are Laguna Madre's costs to operate and maintain its facilities and systems?

This topic is addressed in detail in the 2018 Rate Study and the prefiled testimony of Dan V. Jackson. Data is contained in the testimony and accompanying appendixes.

12. What is the total cost to run Laguna Madre's systems?

This topic is addressed in detail in the 2018 Rate Study and the prefiled testimony of Dan V. Jackson. Data is contained in the testimony and accompanying appendixes.

13. What are Laguna Madre's annual gross revenues?

This topic is addressed in detail in the 2018 Rate Study and the prefiled testimony of Dan V. Jackson. Data is contained in the testimony and accompanying appendixes.

14. What are Laguna Madre's net revenues?

This topic is addressed in detail in the 2018 Rate Study and the prefiled testimony of Dan V. Jackson. Data is contained in the testimony and accompanying appendixes.

15. What is the maximum amount of raw water Laguna Madre is capable of delivering?

This answer is to be provided by District staff.

16. What is the maximum amount of raw water Laguna Madre is capable of delivering to SPI?

This answer is to be provided by District staff.

17. Is SPI the ultimate consumer of all raw water purchased from Laguna Madre?

No.

18. What entities, if any, other than SPI, purchase raw water from Laguna Madre?

Other customers, including the City of Port Isabel and Espiritu Santu, have purchased raw water.

a. Under what terms, including the rate, do any such entities take raw water from Laguna Madre?

All raw water customers pay the same rate of \$1.04 per 1,000 gallons.

b. What is the gross amount of revenues, if any, received from such entities by Laguna Madre on an annual basis?

These totals are detailed in the prefiled testimony of Dan V. Jackson. Total revenue is less than \$100,000 per year from all raw water sales, which represents less than 1% of the District's revenue base.

1. Is any of such revenue pledged to support any bonds issued by Laguna Madre? If so, how much is pledged and for which series or issues of bonds?

The revenue is not specifically pledged to bonds, and is not material in meeting the District's overall revenue requirement.

ii. How is this revenue accounted for in determining Laguna Madre's rates for raw water service?

It is characterized as a "non-rate revenue" and offsets the overall revenue requirement.

iii. Is any such revenue used to offset SPI's annual payment?

The revenue is not specifically pledged to bonds, and is not material in meeting the District's overall revenue requirement.

19. Does SPI have a minimum-take requirement for raw water supplied by Laguna Madre? If so,

a. What is SPI's minimum-take requirement?

b. What is each of Laguna Madre's other customers', if any, minimum requirement to take raw water?

c. How and when is the minimum established?

d. Are there restrictions on SPI's use of the unused portion, if any, of the minimum take requirements?

e. If so, are there restrictions on re-use of effluent, if applicable?

f. Does Laguna Madre sell or pre-sell SPI's unused portion, if any, of the minimum-take requirements?

g. If Laguna Madre sells or re-sells SPI's unused portion of the minimum-take requirements, is SPI credited for these sales?

There is no minimum take or pay requirement for raw water sales.

20. What is the total demand for raw water sold by Laguna Madre for the following:

- a. On an average yearly basis for the previous five years?**
- b. For the time period for which the challenged rates were set?**
- c. Under the contracts currently in place, if a minimum requirement exists and each customer were to take its minimum requirement of water?**

This data is contained in the prefiled testimony of Dan V. Jackson.

21. Does SPI have a first right to Laguna Madre's raw water? If not, do any other customers have a higher priority for raw water?

No.

22. Is there any penalty or rate adjustment if Laguna Madre cannot deliver all the raw water requested by SPI?

No.

23. What is the annual revenue obligation of each of Laguna Madre's raw water customers?

These totals are detailed in the prefiled testimony of Dan V. Jackson. Total revenue is less than \$100,000 per year from all raw water sales, which represents less than 1% of the District's revenue base.

24. How is the cost responsibility to run, operate, and maintain Laguna Madre's raw water system allocated, if at all, between SPI and any other entities that purchase raw water from Laguna Madre?

An overall raw water rate is established for all customers. The rate is not customer specific. The methodology is described in detail in the testimony of Dan V. Jackson.

25. What facilities and systems, if any, are dedicated exclusively to the provision of raw water service to SPI?

This data is detailed in the prefiled testimony of Dan V. Jackson.