

AGENDA



Workshop Meeting

City Council

December 17, 2015

6:00 PM

City Hall – Council Chambers

665 Country Club Road – Lucas Texas

Notice is hereby given that a Workshop meeting of the City Council will be held on Thursday, December 17, 2015 at 6:00 PM at the City Hall Council Chambers, 665 Country Club Road, Lucas, Texas, at which time the following agenda will be discussed.

Call to Order

Call to Order

Roll Call

Determination of Quorum

Reminder to turn off or silence cell phones

Workshop Agenda

1. Discuss debt financing alternatives for the general and utility funds. **(Mayor Olk and Councilmember Millsap)**
2. Workshop Purpose and Goals. **(Public Works Director/City Engineer Stanton Foerster)**
3. Discuss City growth and build out. **(Development Services Director Joe Hilbourn)**
 - a. 5 year
 - b. 10 year
 - c. 20 year
 - d. Households
 - e. Development of commercial areas
4. Discuss NTMWD Contracts. **(Public Works Director/City Engineer Stanton Foerster)**
 - a. Water
 - b. Wastewater
 - c. Storage
5. Discuss infrastructure. **(Public Works Director/City Engineer Stanton Foerster)**
 - a. Storage and NTMWD
 - b. Mains Replacement
 - c. Pressure Plains
 - d. Two vs three water towers
6. Discuss radio read updates. **(Public Works Crew Chief Jeremy Bogle)**

7. Discuss rate structure and study. **(Finance Director Liz Exum)**

- a. Water Rates
- b. Wastewater Rates
- c. Extreme Water User Rate
- d. Structure and Scale

8. Adjournment

Certification

I hereby certify that the above notice of meeting was posted on the bulletin board at Lucas City Hall by 5:00 p.m. on or before Friday, December 11, 2015, as required in accordance with Government Code §551.041.

Stacy Henderson, City Secretary

This building is wheelchair accessible. Any requests for sign interpretive services or other special requests for assistance of the hearing impaired must be made 48 hours in advance of the meeting. To make such arrangements, please call 972-727-8999 or email shenderson@lucastexas.us



City of Lucas

City Council Workshop Agenda Item

December 17, 2015

Requester: Mayor Jim Olk
Councilmember Wayne Millsap

Agenda Item:

Discuss debt financing alternatives for the general and utility funds.

Background Information:

Mayor Olk, Councilmember Millsap, Finance Director Liz Exum and City Manager Joni Clarke met with Financial Advisor Mark McLiney on December 9, 2015 to discuss financing alternatives for the Neighborhood Connector Project consisting of the reconstruction of Blondy Jhune and Winningkoff Roadways and the replacement of Snider and Stinson Bridges.

Financial Advisor Mark McLiney is preparing the Current Debt Model for Fiscal Year Ending September 30, 2016 and the Tax Rate Impact Study to assist the City Council in their deliberation regarding financing this project. Finance Director Liz Exum will be emailing the supporting documentation separately.

Attachments/Supporting Documentation:

1. Current Debt Model for Fiscal Year Ending September 30, 2016 (*Under separate attachment*).
2. Tax Rate Impact Study (*Under separate attachment*).

Budget/Financial Impact:

Varies depending on a variety of assumptions and debt strategies.

Recommendation:

No recommendation at this time.

Motion:

N/A



City of Lucas

City Council Workshop Agenda Item

December 17, 2015

Requester: Public Works Director/City Engineer Stanton Foerster

Agenda Item:

Workshop Purpose and Goals.

Background Information:

In July of this year, the demand on the Lucas waterworks almost reached capacity. Various ideas were proposed as solutions, and the need for this workshop determined. The purpose of meeting tonight is to continue the planning efforts and funding discussions of how to design, construct, and maintain the city water system.

Our goals tonight are to examine the following operation and functional aspects of the water system to determine the level of service and commitment:

- Requirements
- Maintenance
- Replacement
- Capacity
- Redundancy
- Funding

Attachments/Supporting Documentation:

NA

Budget/Financial Impact:

NA

Recommendation:

NA

Motion:

NA



City of Lucas

City Council Workshop Agenda Item

December 17, 2015

Requester: Development Services Director Joe Hilbourn

Agenda Item:

Discuss City growth and build out.

Background Information:

Staff will give an update on the growth and population estimates through 2030 and estimates on commercial development.

Residential

July 2015	City 6,725	ETJ 2,198
July 2020	City 8,295	ETJ 3,596
July 2025	City 10, 104	ETJ 5,000
July 2030	City 11,965	ETJ 6311

Commercial

Angel Parkway by 2023
Parker Road by 2025

Attachments/Supporting Documentation:

NA

Budget/Financial Impact:

NA

Recommendation:

NA

Motion:

NA



City of Lucas

City Council Workshop Agenda Item

December 17, 2015

Requester: Public Works Director/City Engineer Stanton Foerster

Agenda Item:

Discuss NTMWD Contracts

Background Information:

In April of 2004, the North Texas Municipal Water District and the City of Lucas entered into an agreement with the following requirements:

- 1) The agreements dated October 1969, January 1980, February 1981, and May 1981 were no longer valid
- 2) Maximum rate of delivery was established to be 2.5 times the daily average of the volume of water supplied to the city
- 3) The connection at the old city hall would be disconnected by June 1, 2005 (Point of Delivery No. 1)
- 4) The North Pump Station connection would be an eight-inch tap with an eight-inch meter (Point of Delivery No. 2)
- 5) The new McGarity connection would be an eight-inch tap with an six-inch meter (Point of Delivery No. 3) and in operation by June 1, 2005

Attachments/Supporting Documentation:

NTMWD/City of Lucas Potable Water Supply Contract dated April 22, 2004

Budget/Financial Impact:

NA

Recommendation:

NA

Motion:

NA

NORTH TEXAS MUNICIPAL WATER DISTRICT

CITY OF LUCAS POTABLE WATER SUPPLY CONTRACT

THE STATE OF TEXAS §
 §
THE COUNTY OF COLLIN §

THIS CONTRACT (the "Contract") made and entered into as of this the 22nd day of April, 2004, by and between the North Texas Municipal Water District, hereinafter called "NTMWD", a conservation and reclamation district created under Article 16, Section 59, of the Texas Constitution, and the City of Lucas, hereinafter called "Customer".

W I T N E S S E T H:

WHEREAS, NTMWD and Customer are authorized to enter into this Contract pursuant to Texas Government Code, Chapter 791, the Interlocal Cooperation Act, and other applicable laws; and,

WHEREAS, Customer is desirous of obtaining an adequate and dependable water supply; and

WHEREAS, Customer and NTMWD are parties to a potable water supply contract dated October 3, 1969, amended January 24, 1980, May 28, 1981 and February 6, 1981, under which NTMWD agreed to tender and make available to Customer and Customer agreed to purchase from NTMWD water in accordance with the provisions of said contract; and

WHEREAS, Customer has requested an additional delivery point from the NTMWD Plano-McKinney eighty-four inch (84") pipeline; and

WHEREAS, it is deemed necessary and advisable by the parties hereto that the existing potable water supply contract dated October 3, 1969 amended January 24, 1980, May 28, 1981 and February 6, 1981 be amended and completely replaced with this Contract so that the entire relationship between NTMWD and Customer with respect to potable water service will be set forth in this Contract.

NOW, THEREFORE, in consideration of the mutual covenants and agreements herein contained, NTMWD agrees to furnish and Customer agrees to pay for water upon the terms and conditions and for the consideration hereinafter set forth, to wit:

Section 1. DEFINITION OF TERMS. The following terms and expressions as used in this Contract, unless the context clearly shows otherwise, shall have the following meanings:

- (a) "Annual Payment" means the amount of money to be paid to NTMWD by Customer during each Annual Payment period.
- (b) "Annual Payment Period" means NTMWD's fiscal year, which currently begins on October 1 of each calendar year and ends on September 30 of the next following

calendar year, but which may be any twelve (12) consecutive month period fixed by NTMWD.

- (c) "Customer" means the City of Lucas, the Contracting Party.
- (d) "NTMWD" means the North Texas Municipal Water District as defined in the preamble to this Contract.
- (e) "Member City" means the Cities of Allen, Farmersville, Forney, Frisco, Garland, McKinney, Mesquite, Plano, Princeton, Richardson, Rockwall, Royse City and Wylie.
- (f) "MGD" is an abbreviation for "million gallons of water per day" and means a quantity of water during a period of time expressed for convenience in terms of an average annual daily quantity during an Annual Payment Period.
- (g) "System" means collectively the existing system and the future water of NTMWD for projects, water storage, treatment, transportation, distribution, and supply, including all dams, reservoirs, and other properties or interests therein wherever located. Said terms do not include any of NTMWD's facilities which provide wastewater treatment or disposal services, or solid waste disposal services, of any kind. Said terms do not include any facilities acquired or constructed by NTMWD with the proceeds from the issuance of "Special Facilities Bonds", which are payable from any source, Contract, or revenues whatsoever other than revenues from the System.
- (h) "Water Year" means the period of August 1 of each calendar year through July 31 of the next following calendar year or such other twelve (12) month period designated by NTMWD to all Members and Customers.

Section 2. QUANTITY. NTMWD agrees to sell and to deliver potable water under this Contract to Customer at its Point of Delivery as described in Section 5 hereof, and Customer agrees to take at its Point of Delivery all water required for use by Customer during the term of this Contract, including all potable water for Customer's own use and for distribution to all customers served by Customer's water distribution system, or within the Customer's existing Texas Commission on Environmental Quality's designated service area. It is specifically provided, however, that after the Contract Date, Customer shall not enter into, renew, or amend with regard to volume of water to be supplied, any agreement to supply any such potable water for use outside its boundaries or the area of its statutory extraterritorial jurisdiction unless each such agreement is approved by the Board of Directors of NTMWD (which approval shall not be unreasonably withheld unless the projected additional volume affects NTMWD's ability to provide service to others or conflicts with law or NTMWD Policy). Customer shall not become a party to any contract for the sale of potable water which would violate or be inconsistent with the provisions of this Contract, and all such Contracts shall recognize the priority of potable water use as provided in this Contract. NTMWD will use its best efforts to furnish and remain in position to furnish potable water sufficient for all reasonable potable water requirements of Customer, but its obligation shall be limited to the amount of potable water available to it from the System during routine operation. The maximum rate of delivery shall be 2.5 times the daily average of water supplied to Customer hereunder, which is consistent with the capabilities and abilities of System facilities, and it is understood that the Board of Directors may from time to time adjust the maximum rate of delivery on an equitable and uniform basis to all Customer Cities. If potable water from the System must be rationed, such rationing shall, within the limits

permitted by law, be accomplished by NTMWD on an equal basis of the relative actual total amount of all potable water from the entire System taken by each respective customer or Member City of NTMWD, respectively, during the last preceding Annual Payment Period in which rationing among said customer or Member City of NTMWD was not necessary.

The maximum volume allowed shall be that volume capable of being supplied by the routine operation of NTMWD's System utilizing the meter and meter sizes as described in Section 5, POINT(S) OF DELIVERY, at the defined Point of Delivery.

Section 3. OTHER CONTRACTS. NTMWD reserves the right to supply potable water from the System to Additional or Other Contracting Parties as determined by the Board of Directors of NTMWD.

Section 4. QUALITY. The water to be delivered by NTMWD and received by Customer shall be potable water from the System. Customer has satisfied itself that such water will be suitable for its needs, but NTMWD is obligated to treat such water so as to meet the standards of all State and Federal agencies having jurisdiction over water quality. NTMWD and Customer shall cooperate, each within its legal powers, in preventing, to the extent practicable, the pollution and contamination of the reservoirs and watersheds from which System water is obtained.

Section 5. POINT(S) OF DELIVERY. The Point of Delivery for Customer shall be as follows:

1. Point of Delivery No. 1 – A four-inch (4") meter and six-inch (6") tap located on FM 1378 at Station 409 + 50 on the Wylie-McKinney twenty-inch (20") pipeline. This Point of Delivery shall be abandoned by June 1, 2005.
2. Point of Delivery No. 2 – An eight-inch (8") meter and eight-inch (8") tap located approximately 6,000 feet north of Point of Delivery No. 1 on the McKinney Parallel twenty-inch (20") pipeline.
3. Point of Delivery No. 3 – A six-inch (6") meter and eight-inch (8") tap located near the intersection of FM 2551 and McGarity Ln on the Plano-McKinney eighty-four (84") pipeline.

Customer shall construct, maintain, and operate, at its own cost and expense, all facilities and equipment necessary to receive and take all potable water delivered to it under this Contract. All facilities and equipment must be inspected and approved by NTMWD and any construction from NTMWD's pipeline through the air gap connection must meet standard specifications of NTMWD. No change in the type or size of meters, or size of the tap, shall be allowed unless this contract has been amended as set forth in Section 10, MODIFICATION.

Section 6. MEASURING EQUIPMENT. Customer shall furnish, and install at its own expense at the Point of Delivery the necessary rate of flow equipment of a standard type approved by NTMWD for measuring properly the quantity of potable water delivered under this agreement and such meter and other equipment so installed shall become the property of NTMWD. Customer shall have access to such metering equipment at all reasonable times, but the reading, calibration, and adjustment thereof shall be done only by the employees or agents of NTMWD. For the purpose of this agreement, the original record or reading of the meter shall be the journal or other record book maintained by NTMWD in its office in which the records of the employees or agents of NTMWD who take the reading or may be transcribed. Upon written request of

Customer, NTMWD will send it a copy of such journal or record book, or permit it to have access to the same in the office of NTMWD during reasonable business hours.

Not more than once in any six (6) month time period, NTMWD shall test its meter if requested in writing by Customer to do so, in the presence of a representative of Customer, and the parties shall jointly observe any adjustments which are made to the meter in case any adjustments shall be necessary, and if the check meter hereinafter provided for has been installed, the same shall also be calibrated by Customer in the presence of a representative of NTMWD and the parties shall jointly observe any adjustment if necessary. If Customer shall in writing request NTMWD to calibrate its meter, then NTMWD shall give Customer notice of the time when any such calibration is to be made and if a representative of Customer is not present at the time set, NTMWD may proceed with calibration and adjustment in the absence of any representative of Customer.

If either party at any time observes a variation between the delivery meter and the check meter or meters, if any such check meter or meters shall be installed, such party will promptly notify the other party, and the parties hereto shall then cooperate to procure an immediate calibration test and joint observation of any adjustment and the same meter or meters shall then be adjusted to accuracy. Each party shall give the other party forty-eight (48) hours notice of the time of all tests of meters so that the other party may conveniently have a representative present.

If upon any test, the percentage of inaccuracy of any metering equipment is found to be in excess of two percent (2%), registration thereof shall be corrected for a period extending back to the time when such inaccuracy began, if such time is ascertainable, and if such time is not ascertainable, then for a period extending back one-half (1/2) of the time elapsed since the last date of calibration, but in no event further back than a period of six (6) months. If for any reason any meters are out of repair so that the amount of water delivered cannot be ascertained or computed from the reading thereof, the water delivered through the period such meters are out of service or out of repair shall be estimated and agreed upon by the parties hereto upon the basis of the best data available. For such purpose, the best data available shall be deemed to be the registration of any check meter or meters if the same have been installed and are accurately registering. Otherwise, the amount of water delivered during such period may be estimated (i) by correcting the error if the percentage of the error is ascertainable by calibration tests or mathematical calculation, or (ii) estimating the quantity of delivery by deliveries during the preceding periods under similar conditions when the meter or meters were registering accurately.

Customer may, at its option and its own expense, install and operate a check meter to check each meter installed by NTMWD, the measurement of water for the purpose of this agreement shall be solely by NTMWD's meters, except in the cases hereinabove specifically provided to the contrary. All such check meters shall be of standard make and shall be subject at all reasonable times to inspection and examination by any employee or agent of NTMWD, but the reading, calibration and adjustment thereof shall be made only by Customer except during any period when a check meter may be used under the provisions hereof for measuring the amount of water delivered, in which case the reading, calibration, and adjustment thereof shall be made by NTMWD with like effect as if such check meter or meters had been furnished or installed by NTMWD.

Section 7. UNIT OF MEASUREMENT. The unit of measurement for potable water delivered under this Contract shall be 1,000 gallons of water, U.S. Standard Liquid Measure.

Section 8. PRICE AND TERMS. The service to be performed under this Contract by NTMWD consists of the readiness of NTMWD to deliver to Customer upon its demand, water in accordance with the conditions, limitations and provisions of this Contract.

In return for such service Customer agrees to compensate NTMWD by payment of certain minimum annual sums of money, for each of which said sums NTMWD agrees, if required by Customer, to deliver all, or so much thereof as Customer may desire, of a certain corresponding volume of water as follows:

(a) For the First Annual Payment Period beginning with the next first day of October after the first delivery of water to Customer, Customer will take or pay for 337,693,000 gallons of water (925,186 gallons per day) at a rate of five cents (5¢) per 1,000 gallons above the rate established for the Member Cities of NTMWD, but in no event less than fifty cents (50¢) per 1,000 gallons. Any water delivered in excess of the amount allowed for the annual minimum will be purchased at a rate of five cents (5¢) per 1,000 gallons above the amount charged NTMWD Member Cities for excess water. Customer will be entitled to a maximum rate of delivery, which shall not be more than 2.5 times Customer's annual daily average. The minimum amount of water Customer will be required to purchase at the above rate, or such other rate, as may be from time to time determined by NTMWD, shall be calculated annually for each ensuing year and such amount shall be determined in the same manner as said amount is determined for the Member Cities. The annual minimum to be purchased during any ensuing year shall not be less than the highest total amount withdrawn from NTMWD's system by Customer during any previous year or 337,693,000 gallons, whichever is greater.

(b) The quantities and rates set out in Section 2 and Section 8 hereof shall be reviewed at the end of the first full Annual Payment Period of service after the first delivery of water to Customer, and each year thereafter, and the minimum amount of water to be purchased, rate per 1,000 gallons and the maximum rate of delivery shall be re-determined by the Board of Directors of NTMWD at that time in the same manner as applied to NTMWD Member Cities.

Payment of the minimum annual service charge listed above shall be made each year by Customer to NTMWD in twelve (12) equal monthly installments, each of which shall be due and payable on or before the 10th day of the month following the service. Payment of water delivered in any year in excess of the volume allowed for the minimum annual payment effective for that year, shall be made by Customer to NTMWD at the rates specified herein when in accordance with the following method:

When Customer exceeds 100 percent of the annual minimum amount during any Water Year, excess water will be billed, on the first month following the month in which the 100 percent level was reached, for the excess water delivered in the month prior to the month being billed, and this procedure will continue to the end of the Annual Payment Period with Customer making payment for all excess not previously paid for on or before the 10th day of the month following the end of such year.

Liability for making payments, as herein set forth, shall commence on the date of the first tender of delivery of water to Customer by NTMWD at the Point of Delivery.

(c) In the event that Customer shall fail to make any such monthly payment or annual payment within the time herein in this section specified, interest on such amount shall accrue at the rate of ten percent (10%) per annum from the date such payment becomes due until paid in full with the interest as herein specified. In the event such payment is not made within thirty (30) days from the date such payment becomes due, NTMWD may at its option discontinue delivery of water to Customer until the amount due NTMWD is paid in full with interest as herein specified.

Section 9. TERM OF CONTRACT. This Contract shall continue in force and effect for a period of thirty (30) years from the date of this Contract. This Contract shall be considered null and void if not executed by Customer by June 1, 2004.

Section 10. MODIFICATION. This Contract may be changed or modified only by written agreement of the parties and only after having obtained approval from the governing bodies of both NTMWD and Customer. No change or modification shall be made to this agreement which will affect adversely the prompt payment when due of all moneys required to be paid by Customer under the terms of this Contract.

Section 11. FORCE MAJEURE. If by reason of force majeure any party hereto shall be rendered unable wholly or in part to carry out its obligations under this Contract, other than the obligation of Customer to make the payments required under Section 8 of this Contract, then if such party shall give notice and full particulars of such force majeure in writing to the other party within a reasonable time after occurrence of the event or cause relied on, the obligation of the party giving such notice, so far as it is affected by such force majeure, shall be suspended during the continuance of the inability then claimed, but for no longer period, and any such party shall endeavor to remove or overcome such inability with all reasonable dispatch. The term "Force Majeure" as employed herein shall mean acts of God, strikes, lockouts, or other industrial disturbances, acts of public enemy, orders of any kind of the Government of the United States or the State of Texas, or any civil or military authority, insurrection, riots, epidemics, landslides, lightning, earthquake, fires, hurricanes, storms, floods, washouts, droughts, arrests, restraint of government and people, civil disturbances, explosions, breakage or accidents to machinery, pipelines or canals, partial or entire failure of water supply, or on account of any other causes not reasonably within the control of the party claiming such inability.

Section 12. INSURANCE. NTMWD agrees to carry and arrange for fire, casualty, public liability, and/or other insurance, including self insurance, on the System for purposes and in amounts which, as determined by NTMWD, ordinarily would be carried by a privately owned utility company owning and operating such facilities, except that NTMWD shall not be required to provide liability insurance except to insure itself against risk of loss due to claims for which it can, in the opinion of NTMWD's legal counsel, be liable under the Texas Tort Claims Act or any similar law or judicial decision. Such insurance will provide, to the extent feasible and practicable, for the restoration of damaged or destroyed properties and equipment, to minimize the interruption of the services of such facilities. All premiums for such insurance shall constitute an Operation and Maintenance Expense of the System. The insurance coverage does not extend to any facility owned by Customer.

Section 13. REGULATORY BODIES AND LAWS. This Contract is subject to all applicable Federal and State Laws and any applicable permits, ordinances, rules, orders, and regulations of any local, state or federal governmental authority having or asserting jurisdiction, but nothing contained herein shall be construed as a waiver of any right to question or contest any such law, ordinance, order, rule, or regulation in any forum, having jurisdiction.

Section 14. NOTICES. Unless otherwise provided herein, any notice, communication, request, reply, or advice (herein severally and collectively, for convenience, called "Notice") herein provided or permitted to be given, made, or accepted by any party to any other party must be in writing and may be given or be served by depositing the same in the United States mail postpaid and registered or certified and addressed to the party to be notified, with return receipt requested, or by delivering the same to an officer of such party, or by prepaid telegram when appropriate, addressed to the party to be notified. Notice deposited in the mail in the manner hereinabove described shall be conclusively deemed to be effective, unless otherwise stated herein, from and after the expiration of three (3) days after it is so deposited. Notice given in any

other manner shall be effective only if and when received by the party to be notified. For the purposes of notice, the addresses of the parties shall, until changed as hereinafter provided, be as follows:

If to NTMWD, to:

Executive Director
North Texas Municipal Water District
P.O. Box 2408
Wylie, Texas 75098

If to Customer, as follows:

City Administrator
City of Lucas
151 Country Club Road
Lucas, TX 75002

The parties hereto shall have the right from time to time and at any time to change their respective addresses and each shall have the right to specify as its address any other address by at least fifteen (15) days written notice to the other parties hereto.

Section 15. SEVERABILITY. The parties hereto specifically agree that in case any one or more of the sections, subsections, provisions, clauses, or words of this Contract or the application of such sections, subsections, provisions, clauses, or words to any situation or circumstance should be, or should be held to be, for any reason, invalid or unconstitutional, under the laws or constitutions of the State of Texas or the United States of America, or in contravention of any such laws or constitutions, such invalidity, unconstitutionality, or contravention shall not affect any other sections, subsections, provisions, clauses, or words of this Contract or the application of such sections, subsections, provisions, clauses, or words to any other situation or circumstance, and it is intended that this Contract shall be severable and shall be construed and applied as if any such invalid or unconstitutional section, subsection, provision, clause, or word had not been included herein, and the rights and obligations of the parties hereto shall be construed and remain in force accordingly.

Section 16. VENUE. Exclusive venue for any action arising under this Contract shall be in the courts of appropriate jurisdiction in Collin County, Texas. It is specifically agreed among the parties to this Contract that Collin County, Texas, is a principal place of performance of this Contract.

Section 17. OTHER CONDITIONS AND PROVISIONS.

(a) Operation and Maintenance of System. NTMWD will continuously operate and maintain the System in an efficient manner and in accordance with good business and engineering practices, and at reasonable cost and expense.

(b) Title to Water: Indemnification. Title to all water supplied to Customer shall be in NTMWD up to the Point of Delivery, at which point title shall pass to Customer, except that NTMWD reserves the right of reuse of treated effluent resulting from the use of water by NTMWD, its customers or Customer, to the extent authorized by the State of Texas. NTMWD and Customer shall save and hold each other harmless from all claims, demands, and causes of action, which may be asserted by anyone on account of the transportation and delivery of said water while title remains in such party. Notwithstanding anything contained herein to the

contrary, the parties hereto do not waive and hereby expressly retain any and all immunities and defenses, sovereign, legislative, official and otherwise, that each may now or hereafter possess. Nothing contained in this Contract shall be interpreted as conferring any rights to any person not a party to this Contract.

(c) Operating Expenses of Customer. Customer represents and covenants that all payments to be made by it under this Contract shall constitute reasonable and necessary "operating expenses" of its system, as defined in Section 1502.056, Texas Government Code, and that all such payments will be made from the revenues of its system. Customer represents and has determined that the potable water supply to be obtained from the System, including the Projects and other System facilities, is absolutely necessary and essential to the present and future operation of its water system and is the only available and adequate source of supply of potable water. Accordingly, all payments required by this Contract to be made by Customer shall constitute reasonable and necessary operating expense of its respective system as described above, with the effect that the obligation to make such payments from revenues of such systems shall have priority over any obligation to make any payments from such revenues (whether of principal, interest, or otherwise) with respect to all bonds or other obligations heretofore or hereafter issued by Customer.

(d) Customer's Rate for Waterworks System. Customer agrees throughout the term of this Contract to continuously operate and maintain its waterworks system, and to fix and collect such rates and charges for water services to be supplied by its waterworks system as aforesaid as will produce revenues in an amount equal to at least (i) all of its payments under this Contract and (ii) all other amounts required to be paid from said revenues by the provisions of the ordinances or resolutions authorizing its revenue bonds or other obligations now or hereafter outstanding and to file appropriate financial reports related to the Customer's system including annual audits.

Section 18. WATER CONSERVATION. Customer agrees to adopt and enforce any and all ordinances generally related to water conservation as may be required by the rules of the Texas Commission on Environmental Quality and/or may be adopted or recommended by the Board of Directors of NTMWD.

Section 19. SPECIAL CONDITIONS.

(a) The parties hereto acknowledge that they have entered into this Contract to set forth the terms and conditions under which NTMWD will continue to sell potable water to Customer and that upon execution, this Contract shall supercede and replace any prior contracts or agreements between the parties.

(b) The meter size, location and any quantity set forth in this contract are intended to meet the water needs of Customer. The needs of Customer are independently determined by Customer, and NTMWD has conducted no independent evaluation of the Customer's water system.

(c) Customer agrees to use its best efforts to complete construction of metering facilities and control equipment necessary to utilize the new Point of Delivery No. 3 by June 1, 2005.

(d) Customer and NTMWD mutually agree to the following conditions in accordance with NTMWD's standard policy for "Additional Delivery Points and Transmission Line Extensions," designated as District Policy No. 8 for the new Point of Delivery No. 3:

I. Lucas Responsibilities

- a. Customer agrees to furnish the site and to construct adequate water storage and pump station facilities not to exceed 2.5 times daily average delivery at the new Point of Delivery No. 3.
- b. Customer shall construct the metering station and pipeline connection to the District's existing Plano-McKinney eighty-four inch (84") pipeline in accordance with NTMWD specifications with NTMWD having the right of plan review from the tap through the air gap connection at the receiving storage tank with full construction inspection authority.
- c. Customer shall agree to accept a new annual minimum on Point of Delivery No. 3 established as follows:

- 1. The capital component of the Member City rate shall be calculated for the then current fiscal year which is to be divided into the actual total cost of the project, including replacement cost for pipeline capacity, pump station, engineering, right-of-way, and construction, to determine the annual sixth year minimum necessary to provide for the annual debt service cost for the project.
- 2. For that fractional part of the fiscal year in which the first tender of water at Point of Delivery No. 3 shall be made available to Customer, the amount of the minimum shall be determined as the fractional part of the fiscal year remaining is to the first year's annual minimum.
- 3. The following shall be the actual six year minimums applicable to each year:

Tau K 10

	<u>GALLONS</u>		<u>GALLONS</u>
First	63,969,500	Fourth	179,114,600
Second	102,351,200	Fifth	217,496,300
Third	140,732,900	Sixth	255,878,000

\$150,000

- 4. After the sixth year minimum has been reached, the minimum shall be increased in accordance with the then policy of the Board for all minimums so long as the minimum shall never be lower than the sixth year minimum.
- 5. The cost of replacement capacity in the pipeline is calculated to be \$1,792,000.
- d. Customer agrees to pay the full Customer City rate applicable each year for all water purchased through Point of Delivery No. 3 until the sixth year annual minimum is achieved without the benefit of excess water sales, through the new delivery point, until the consumption at the new delivery point is in excess of the sixth year minimum. The minimum for each year during the six-year period shall be in accordance with the schedule provided above, except that in any year that Customer exceeds the next projected year's minimum, the higher of the two shall be the new minimum.

II. NTMWD Responsibilities

- a. NTMWD shall review and has the right of approval or disapproval of plans and specifications for the construction of the metering station and pipeline connection. NTMWD must approve plans and specifications through the air gap connection at the receiving storage tank, before any construction contract is awarded.
- b. NTMWD will use every effort to provide the required volume at the new delivery point but this agreement in no way binds NTMWD to provide volumes at Point of Delivery No. 3 in excess of the available capacity of the Plano-McKinney eighty-four inch (84") pipeline system as it relates to each community contractually.
- c. All regulations and provisions for restrictions on usage of water applicable to any other delivery points in this system would also be applicable to Point of Delivery No. 3.

IN WITNESS WHEREOF, the parties hereto acting under authority of their respective governing bodies have caused this Contract to be duly executed in several counterparts, each of which shall constitute an original, all as of the day and year first above written, which is the date of this Contract.

NORTH TEXAS MUNICIPAL WATER DISTRICT

By: Marvin Fuller
Marvin Fuller, President

ATTEST:

Jerry E. Yancey
Jerry Yancey, Secretary

(SEAL)

CITY OF LUCAS

By: T. Ferguson
Mayor (63834)

ATTEST:

Natha Wilkinson
Secretary

(SEAL)





City of Lucas City Council Workshop Agenda Item December 17, 2015

Requester: Public Works Director/City Engineer Stanton Foerster

Agenda Item:

Discuss Infrastructure:

1. Storage and North Texas Municipal Water District
2. Mains Replacement
3. Pressure Plains
4. Two vs three water towers

Background Information:

NTMWD does not participate in non-NTMWD system storage used by its member and customer cities. The NTMWD Capital Improvement Plan contemplates only NTMWD system storage, but none is located within the City of Lucas.

Attachments/Supporting Documentation:

The following two maps will be at the workshop: Water System Map and Dead End Map

Budget/Financial Impact:

FY 15-16 (21-8210-490)

111 Osage Waterline	\$60,638.40
117 Abandoned 8" AC Waterline	\$10,000
121 White Rock Creek Bridge Waterline ROW	\$15,000
122 Parker Road 12-In West Part 1 – Lewis Ln to Santa Fe Trl	\$500,000
123 Dead End Connections	\$100,000
124 Pressure Plain Design and Altitude Valve	\$100,000

Unfunded Projects

Rock Ridge Road Phase II

Rock Ridge Road Phase III

Parker Road 12-Inch

 East Part 1 – Stinson Rd to Enchanted Way, 3,000 LF

 East Part 2 – Enchanted Way to Southview Dr, 3,500 LF

 Parker Road 12-In West Part 2 – Santa Fe Trl to Stinson Rd, 3,500 LF

McGarity Ground Storage

North Pump Station Ground Storage



City of Lucas

City Council Workshop Agenda Item

December 17, 2015

Requester: Public Works Director/City Engineer Stanton Foerster

Winningkoff Ground Storage
North Pump Station to Wiltshire Ct Connection, 1,500 LF
Additional Dead End Connections
AC and Thin-Walled to C900 PVC Replacement
Additional Elevated Storage

Recommendation:

NA

Motion:

NA



City of Lucas
City Council Workshop Agenda Item
December 17, 2015

Requester: Development Services Director Joe Hilbourn

Agenda Item:

Discuss Radio Read Updates.

Background Information:

The current contract is for a pilot to do a portion of the city for \$30,000 to see if that was what the city was looking for. Staff is recommending going with a newer tech base that is going to cost the city \$133,445 for the entire project.

The initial pilot program was to make it so the city could read a register from city hall without sending someone out to read the register. The new program will do the same thing with less towers and instead of using internet technology it uses cell phone technology meaning less towers, at lower heights and at a lesser cost. The total initial project cost for the older technology for the entire city was going to be \$212,288. With the newer technology the total cost will be \$133,445.

Attachments/Supporting Documentation:

1. Current contract
2. Proposed contract
3. Tower locations.

Budget/Financial Impact:

\$133,445

Recommendation:

Direct staff to bring back an agenda item in January to approve the new proposed RG3 contract.

Motion:

NA



RG3 Meter Company
 2912 S Access Road
 Longview, TX 75602

Date

12/7/2015

Quote

Quote #

11713

Customer

City of Lucas
 665 Country Club Rd
 Lucas, TX 75002

Rep

RBH

Project

Lucas

Qty	Item	Description	Cost	Total
5	FNC	Fixed Network collector & Communication Service (2 year warranty) Does not include installation, towers, 110v or 220v electricity	14,500.00	72,500.00
5	FNCI	Fixed Network Collector Installation Does Not Include Tower or 110v 220v Electricity	4,166.665	20,833.33
14	FNR	Fixed Network Repeater (2 year warranty) Does not include installation or mounting poles	1,964.2865	27,500.01
14	FNRI	Fixed Network Repeater Installation	750.00	10,500.00
2,313	TANT	Tesla Antenna	15.00	34,695.00
2,313	Install	Tesla Antenna install (plastic lid)	6.00	13,878.00
2,313	AMISSAM	Meter Data Management System Hosting, Software updates, Technical Support Annual Fee	1.50	3,469.50
1	Install	TeslaCare for 2313 accounts in Zip 75002 ** annual cost**	28,912.50	28,912.50

Quote good for 60 days

903-753-3456

orders@rg3meter.com

Total

\$212,288.34



RG3 Meter Company
 2912 S Access Road
 Longview, TX 75602

Date

12/4/2015

Quote

Quote #

11712

Customer

City of Lucas
 665 Country Club Rd
 Lucas, TX 75002

Rep

RBH

Project

AMI Upgrade

Qty	Item	Description	Cost	Total
1	Install	Total install of infrastructure to upgrade to AMI. All Materials and Labor included	98,750.00	98,750.00
2,313	Install	Total install of extended range antennas labor and materials included (Plastic box lid only)	15.00	34,695.00
0	Install	Total install of extended range antennas labor and materials included (Cast Iron box lid only)	0.00	0.00
0	Install	TeslaCare Visits and Maintenance for 12 years(First annual fee due upon project completion)	9,420.00	0.00
0	Install	AMI Software maintenance fee for 2313 meters annually(first annual fee due upon project completion)	5,204.25	0.00

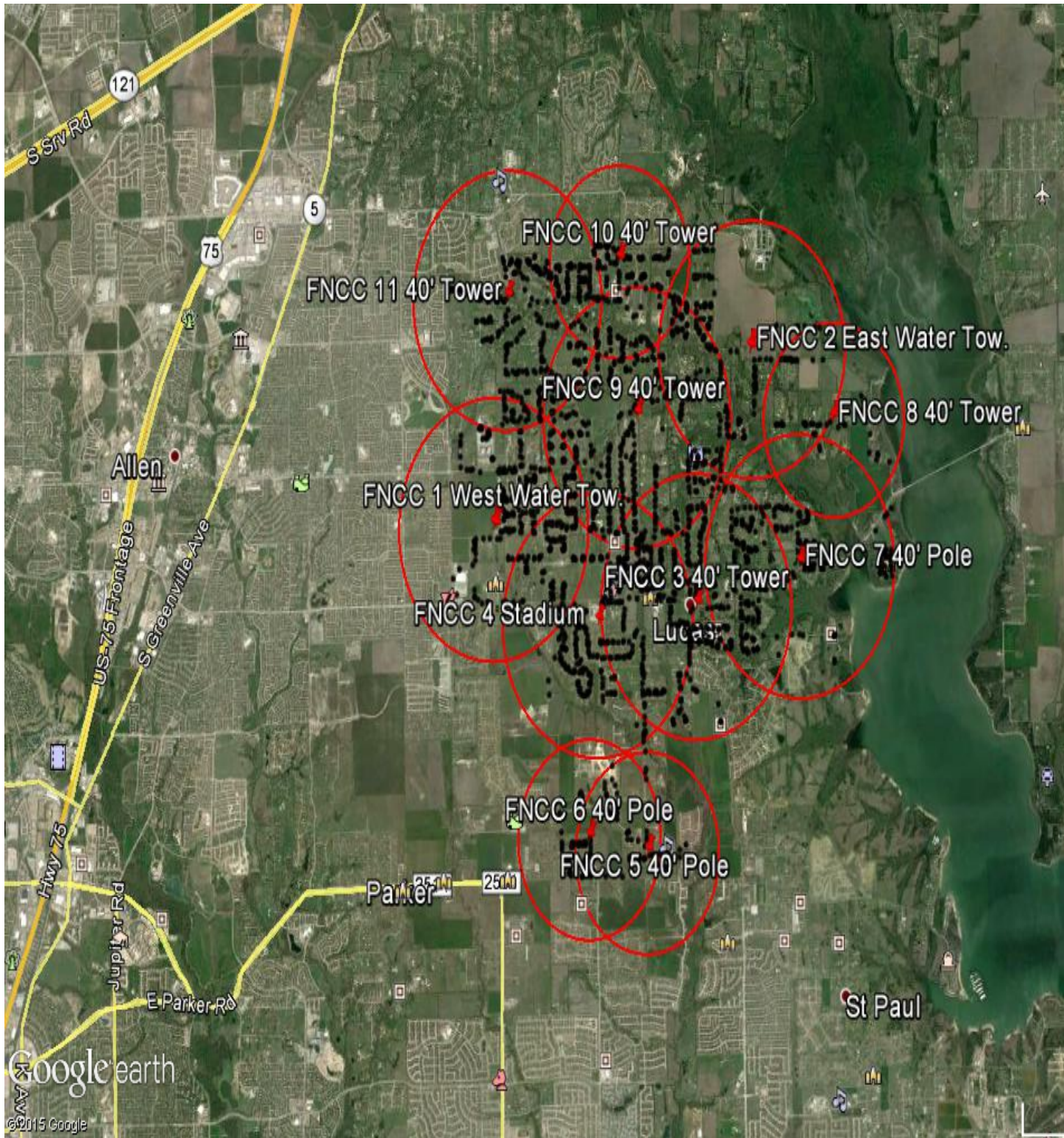
Quote good for 60 days

903-753-3456

orders@rg3meter.com

Total

\$133,445.00





City of Lucas
City Council Workshop Agenda Item
December 17, 2015

Requester: Finance Director – Liz Exum

Agenda Item:

Discuss rate structure and study.

Background Information:

City Council approved a water and wastewater study on August 16, 2012. The company CAPEX Consulting Group was chosen to conduct the study. Ordinance 2013-01-00747 was brought before council to adjust the in-city and out-of-city residential water rates, add a non-residential customer class, and increase the minimum base charge and volumetric rates over a 5 year period. Ordinance 2013-01-00747 was approved to establish a wastewater rate structure for the city. Fiscal year 2016-2017 is the last year of the approved water rate increase.

Attachments/Supporting Documentation:

1. Existing Water Rate Structure
2. Existing Wastewater Rate Structure
3. Extreme Water User Rate
4. Structure and Scale
 - a. Existing Debt Model – Water Fund
 - b. NTMWD Projected Costs
 - c. Previous Water/Wastewater Study conducted by CAPEX

Budget/Financial Impact:

The cost of the water rate study in 2012 was \$13,000. Consultant Jeff Snowden from CAPEX Consulting Group was contacted on June 5, 2015 to obtain an estimate on the costs to update the water rate study that was completed in 2012. The costs to complete an updated study would be \$13,000. The \$13,000 is included in the FY 2015-2016 water fund budget; pending further discussion and approval.

Recommendation:

N/A

Motion:

N/A

Existing Water Rate Structure

In City - Residential - Base Rate

Meter Size	FY 14-15	FY 15-16	FY 16-17
5/8" and 3/4"	\$ 20.51	\$ 21.34	\$ 22.18
1"	\$ 28.01	\$ 31.35	\$ 34.69
1 1/2 "	\$ 32.94	\$ 37.92	\$ 42.90
2"	\$ 52.77	\$ 64.36	\$ 75.95

Water Consumption per Thousand Gallons

Gallons		FY 14-15	FY 15-16	FY 16-17
0	-			
2,001	-	\$ 4.90	\$ 5.07	\$ 5.25
5,001	-	\$ 5.21	\$ 5.40	\$ 5.59
10,001	-	\$ 5.46	\$ 5.65	\$ 5.85
30,001	-	\$ 5.70	\$ 5.90	\$ 6.11
50,001	-	\$ 6.13	\$ 6.34	\$ 6.56

Out of City - Residential - Base Rate

Meter Size	FY 14-15	FY 15-16	FY 16-17
5/8" and 3/4"	\$ 30.77	\$ 32.01	\$ 33.27
1"	\$ 42.02	\$ 47.03	\$ 52.04
1 1/2 "	\$ 49.41	\$ 56.88	\$ 64.35
2"	\$ 79.16	\$ 96.54	\$ 113.93

Water Consumption per Thousand Gallons

Gallons		FY 14-15	FY 15-16	FY 16-17
0	-			
2,001	-	\$ 8.02	\$ 8.29	\$ 8.59
5,001	-	\$ 8.52	\$ 8.83	\$ 9.15
10,001	-	\$ 8.93	\$ 9.24	\$ 9.57
30,001	-	\$ 9.33	\$ 9.65	\$ 10.00
50,001	-	\$ 10.03	\$ 10.37	\$ 10.73

Existing Water Rate Structure -

In City - Commercial Base Rate

Meter Size	FY 14-15	FY 15-16	FY 16-17
5/8" and 3/4"	\$ 22.10	\$ 23.47	\$ 24.83
1"	\$ 29.35	\$ 33.13	\$ 36.91
1 1/2 "	\$ 41.31	\$ 49.08	\$ 56.85
2"	\$ 78.25	\$ 98.34	\$ 118.42
3"	\$ 119.46	\$ 153.28	\$ 187.10
4"	\$ 224.44	\$ 293.26	\$ 362.07
6"	\$ 329.15	\$ 432.86	\$ 536.58
8"	\$ 642.86	\$ 851.14	\$ 1,059.43

Water Consumption per Thousand Gallons

Gallons		FY 14-15	FY 15-16	FY 16-17
0	-			
2,001	-	\$ 4.94	\$ 5.09	\$ 5.24
5,001	-	\$ 5.24	\$ 5.40	\$ 5.56
10,001	-	\$ 5.49	\$ 5.65	\$ 5.82
30,001	-	\$ 5.73	\$ 5.90	\$ 6.08
50,001	-	\$ 6.01	\$ 6.19	\$ 6.38

Out of City - Commercial Base Rate

Meter Size	FY 14-15	FY 15-16	FY 16-17
5/8" and 3/4"	\$ 33.15	\$ 35.21	\$ 37.25
1"	\$ 44.03	\$ 49.70	\$ 55.37
1 1/2 "	\$ 61.97	\$ 73.62	\$ 85.28
2"	\$ 117.38	\$ 147.51	\$ 177.63
3"	\$ 179.19	\$ 229.92	\$ 280.65
4"	\$ 336.66	\$ 439.89	\$ 543.11
6"	\$ 493.73	\$ 649.29	\$ 804.87
8"	\$ 964.29	\$ 1,276.71	\$ 1,589.15

Water Consumption per Thousand Gallons

Gallons		FY 14-15	FY 15-16	FY 16-17
0	-			
2001	-	\$ 8.08	\$ 8.33	8.57
5001	-	\$ 8.57	\$ 8.83	9.10
10001	-	\$ 8.98	\$ 9.24	9.52
30001	-	\$ 9.37	\$ 9.65	9.95
50001	-	\$ 9.83	\$ 10.13	10.44

Existing Wastewater Rate Structure

Minimum Charge for 1st 2,000 gallons

Meter Size	Current Rates	
5/8" and 3/4"	\$	20.22
1"	\$	38.68
1 1/2 "	\$	73.06
2"	\$	116.48
3"	\$	141.94
4"	\$	328.93
6"	\$	400.42
8"	\$	744.13
10"	\$	1,436.50

Consumption Charge for 2,000 gallons and greater

2,000	-	\$	4.00
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Extreme Water User Rate

Consider Charging either a surcharge or establishing a higher rate for large volume water users

Section 20.500 of Ordinance 2014-12-00804 Drought Contingency Surcharge established the following:

A \$3.50 surcharge per 1,000 gallons of water used in excess of 25,000 gallons per month during stage 3 or stage 4 drought

Consumption usage from October 2014 - September 2015:

Month	Up to 50,000 gallons	Over 50,000 gallons	Over 75,000 gallons	Over 100,000 gallons	Total
Oct-14	2126	67	16	25	2234
Nov-14	2145	60	12	16	2233
Dec-14	2208	20	7	4	2239
Jan-15	2225	13	1	7	2246
Feb-15	2253	10	2	4	2269
Mar-15	2267	6		2	2275
Apr-15	2254	8	1	3	2266
May-15	2270	15	11	3	2299
Jun-15	2267	27	7	5	2306
Jul-15	2149	101	20	30	2300
Aug-15	1827	244	123	110	2304
Sep-15	1589	298	180	242	2309

City of Lucas, Texas
Debt Model
For Fiscal Year Ending September 30, 2016

Utility System Debt Service - Current Portion			
Series	Principal	Interest	Total General Fund Debt Service
2007 CO	110,000	59,713	169,713
2007 GO Refunding	170,000	29,328	199,328
2011 CO	85,000	68,475	153,475
Totals	\$ -	\$ 365,000	\$ 157,516

Utility System Debt Service - Total Outstanding					
FY Ending 30-Sep	CO's Series 2002	CO's Series 2007	GO Refunding Bonds Series 2007	CO's Series 2011	Total Revenue Debt Service
2016	-	169,713	199,328	153,475	522,516
2017	-	169,931	192,936	156,500	519,367
2018	-	169,938	117,860	158,950	446,748
2019	-	164,838	119,006	161,025	444,869
2020	-	159,738	119,964	162,950	442,652
2021	-	159,531	110,922	169,650	440,103
2022	-	154,219	106,974	161,275	422,468
2023	-	148,906	-	162,613	311,519
2024	-	143,594	-	163,200	306,794
2025	-	138,281	-	163,300	301,581
2026	-	132,969	-	168,100	301,069
2027	-	127,656	-	167,600	295,256
2028	-	-	-	166,900	166,900
2029	-	-	-	166,000	166,000
2030	-	-	-	169,800	169,800
2031	-	-	-	168,300	168,300
Totals	\$ -	\$ 1,839,313	\$ 966,990	\$ 2,619,638	\$ 5,425,940

NTMWD Projected Costs

Fiscal Year	Rate	Annual Requirement	Total Paid	% Increase
FY 2014-2015	2.11	628,590	\$ 1,326,324.90	
FY 2015-2016	2.34	628,590	\$ 1,470,900.60	10.90%
*FY 2016-2017	2.57	628,590	\$ 1,615,476.30	9.83%
*FY 2017-2018	2.81	628,590	\$ 1,766,337.90	9.34%
*FY 2018-2019	3.05	628,590	\$ 1,917,199.50	8.54%
*FY 2019-2020	3.27	628,590	\$ 2,055,489.30	7.21%
*FY 2020-2021	3.44	628,590	\$ 2,162,349.60	5.20%
*FY 2021-2022	3.55	628,590	\$ 2,231,494.50	3.20%

* PROJECTED RATE FROM NTMWD

City of Lucas, Texas

Water and Wastewater Rate Study Update and Long-Term Financial Plan

Presentation and Workshop

November 1, 2012

Capex Consulting Group

Email: jsnowden@capexconsulting.com

Web site: www.capexconsulting.com



Study Objectives

- ◆ Compare Lucas' rates to surrounding communities for the purpose of assessing the potential to implement rate adjustments that will be acceptable to the community
- ◆ Evaluate current and forecast operations and maintenance costs and debt service
- ◆ Develop fair and equitable wastewater rate structure
- ◆ Provide a just and reasonable rate design for each defined customer class, to be implemented in a manner that minimizes ratepayer opposition by phasing-in rate increases over time.

System Flow Data over 8 Years

LUCAS, TEXAS WATER SYSTEM FLOWS			
	NTMWD Treated Water Deliveries - MG	Metered Water Consumption - MG	Percent of Treated Water Sold
FY 2004-05	317.7	287.0	90%
FY 2005-06	426.8	411.2	96%
FY 2006-07	325.4	223.6	69%
FY 2007-08	408.7	454.3	111%
FY 2008-09	420.1	369.0	88%
FY 2009-10	420.7	335.4	80%
FY 2010-11	587.8	492.4	84%
FY 2011-12	518.0	406.1	78%
AVERAGE	428.2	372.4	84%
MODEL ASSUMPTION			84%
AVG. ANNUAL GROWTH RATE	7.2%	5.1%	

9 Year History of Water and Wastewater Account Growth

LUCAS, TEXAS											
ACCOUNTS BY CUSTOMER CLASS											
	ANNUAL AVERAGE									Average Annual Rate of Growth	Average No. of New Accts per Annum
	FY 2003-04	FY 2004-05	FY 2005-06	FY 2006-07	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12		
WATER											
Residential Inside	1,197	1,249	1,349	1,407	1,464	1,518	1,553	1,618	1,684	4.4%	54
Residential Outside	61	57	64	86	115	117	124	148	167	13.4%	12
Residential Inside - Senior	193	176	186	179	176	172	166	158	150	-3.1%	-5
Residential Outside - Senior	21	20	19	19	19	20	20	19	17	-2.7%	0
Firefighter - Inside	0	0	6	18	17	13	10	9	13		1
Firefighter - Outside	0	0	0	0	0	1	1	0	1		0
Fire Hydrant billed at Outside Rate	0	0	1	3	2	2	1	1	0		0
Firefighter Inside Credit	0	0	0	17	16	12	10	9	13		1
Firefighter Outside Credit	0	0	0	0	0	0	1	0	0		
Total Water	1,472	1,502	1,625	1,728	1,809	1,854	1,884	1,962	2,044	4.2%	64
Annual Rate of Increase		2.1%	8.2%	6.3%	4.7%	2.5%	1.6%	4.1%	4.1%		

LUCAS, TEXAS

2012 COST OF SERVICE AND RATE DESIGN STUDY

KEY METRICS BY CUSTOMER CLASS

Customer Class	ALL CUSTOMER CLASSES					
	Ttl Consumpt	Billed Revenue	Avg. No. of Accts	Avg Cons/Acct	Avg Revenue per Account	Avg Revenue per K Gallons
FY 2003-04	205,980,200	\$1,247,824	1,472	11,664	\$71	\$6.06
FY 2004-05	287,035,200	\$1,536,345	1,502	15,923	\$85	\$5.35
FY 2005-06	411,187,900	\$2,075,622	1,625	21,091	\$106	\$5.05
FY 2006-07	223,605,900	\$1,144,819	1,728	10,786	\$55	\$5.12
FY 2007-08	454,315,600	\$2,508,082	1,809	20,926	\$116	\$5.52
FY 2008-09	369,033,200	\$2,043,849	1,854	16,584	\$92	\$5.54
FY 2009-10	335,410,100	\$1,921,196	1,884	14,834	\$85	\$5.73
FY 2010-11	492,403,500	\$2,800,866	1,962	20,911	\$119	\$5.69
FY 2011-12	406,124,000	\$2,342,463	2,044	16,562	\$96	\$5.77
Avg Grth Rate	9%	8%	4.2%	4%	4%	-1%
Avg Cons/Acct				16,587		

LUCAS, TEXAS

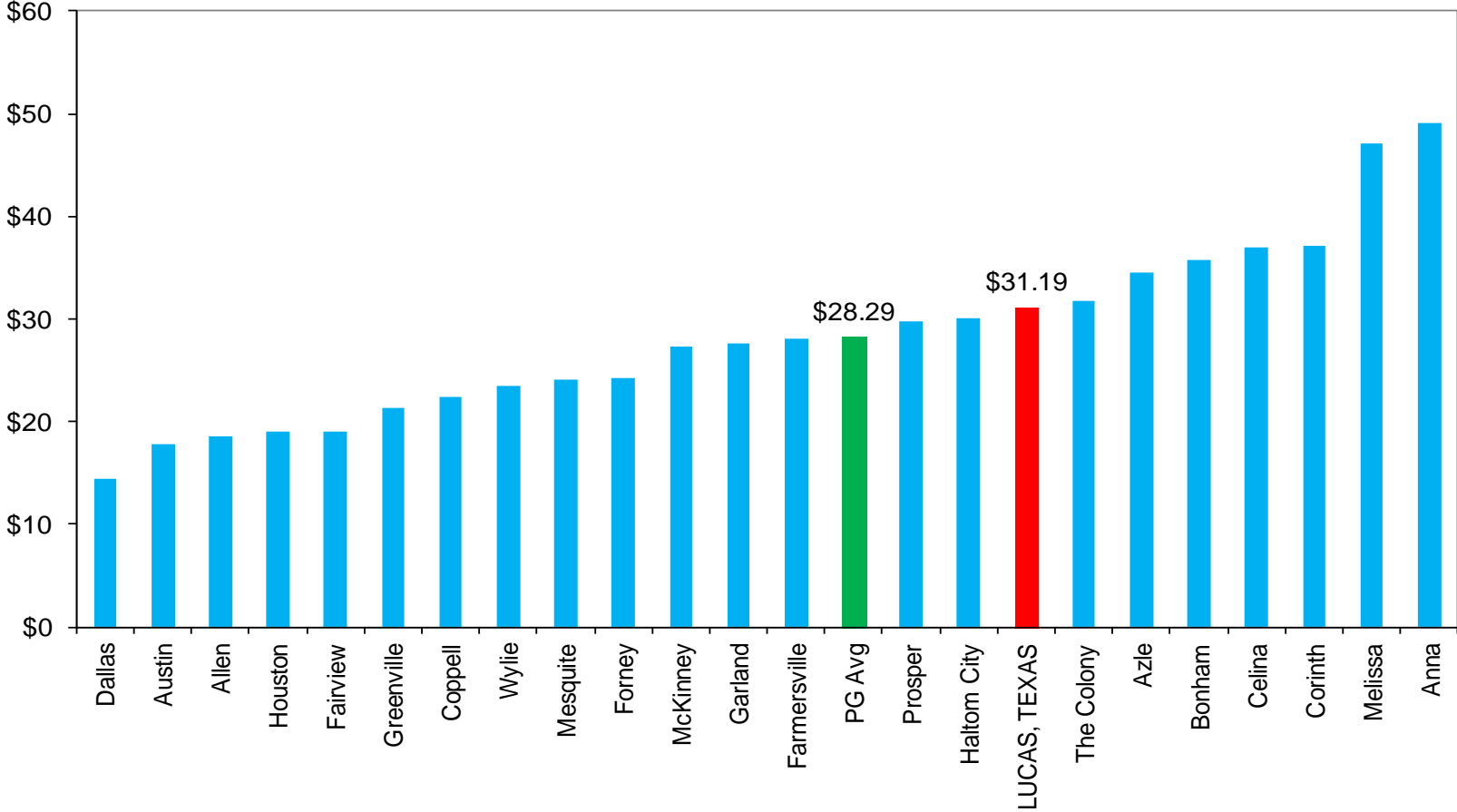
**COMPARISON OF AVERAGE RESIDENTIAL
METERED CONSUMPTION**

SYSTEM	AVG MONTHLY CONSUMPT	% LUCAS CONSUMPT
Fairview	1,767	10.7%
Bonham	4,488	27.1%
Anna	5,946	35.8%
Forney	5,996	36.1%
Greenville	6,273	37.8%
Celina	6,500	39.2%
Houston	6,750	40.7%
Farmersville	7,000	42.2%
Wylie	7,347	44.3%
Haltom City	7,500	45.2%
Allen	7,900	47.6%
Azle	7,995	48.2%
Mesquite	8,000	48.2%
Corinth	8,299	50.0%
Dallas	8,300	50.0%
Austin	8,500	51.2%
The Colony	9,000	54.3%
Melissa	9,270	55.9%
Garland	9,700	58.5%
McKinney	11,288	68.1%
Prosper	14,308	86.3%
Coppell	15,323	92.4%
LUCAS, TEXAS	16,587	100.0%
Peer Group Average	8,436	
Lucas Gallons Over/(Under) Av:	8,151	

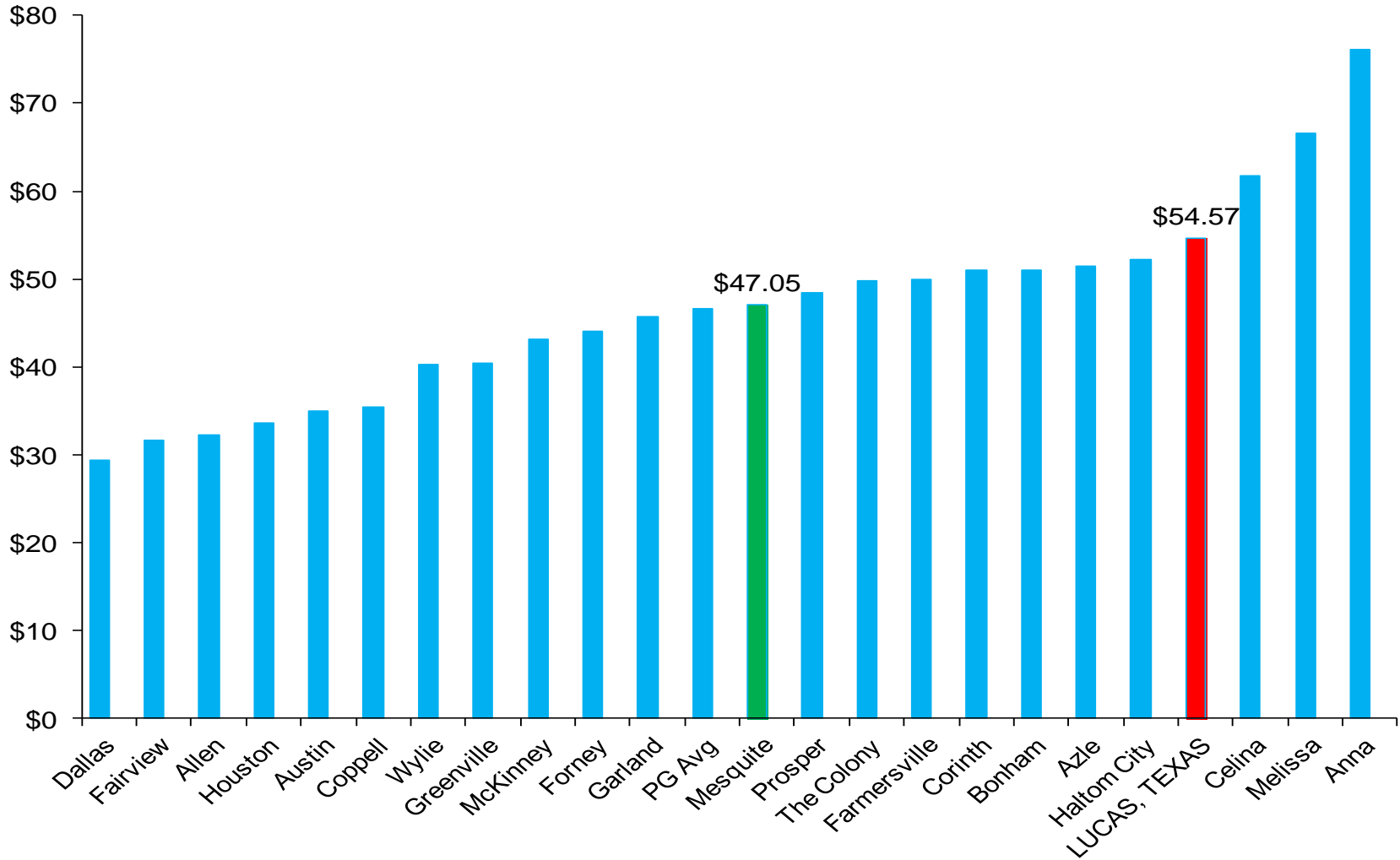
Water Rate and Non-Rate Revenues

CITY OF LUCAS, TEXAS							
UTILITY COST OF SERVICE AND RATE DESIGN STUDY							
WATER							
RATE & NON RATE REVENUES							
	2005-06 Adopted Budget	2008-09 Adopted Budget	2009-10 Adopted Budget	2010-11 Adopted Budget	2011-12 Adopted Budget	2012-13 Adopted Budget	AVG. ANNUAL GROWTH
Water Sales	\$1,089,840	\$2,035,758	\$1,898,670	\$2,772,807	\$2,150,000	\$2,300,500	11.26%
WATER TAPS & BORES	\$8,600	\$2,500	\$500	\$3,750	\$2,000	\$2,000	-18.81%
PENALTY & INTEREST	\$21,000	\$20,799	\$20,320	\$19,540	\$19,000	\$18,000	-2.18%
WATER METER	\$50,000	\$77,345	\$104,150	\$172,900	\$144,600	\$130,000	14.63%
WATER METER REPAIRS		\$4,450	\$1,800	\$2,400	\$760	\$700	
WASTEWATER FEES		\$20,350	\$24,302	\$11,207	\$25,630	\$26,000	
DISCONNECT CHGS		\$40	\$0		-\$240		
TRASH SERVICE				\$346,990	\$362,770	\$392,500	
MISC. FEE AND CHARGES		\$150	\$0	\$1,000	\$150	\$500	
IMPACT FEE REVENUE		\$43,090	\$32,274				
Non-Operating Revenues							
INTEREST INCOME		\$29,359	\$4,555	\$3,498	\$7,700	\$8,400	
RETURN CHECK CHARGE		\$275	\$300	\$400	\$385	\$330	
NTMWD REFUND	\$10,000	\$102,678	\$104,364	\$37,321	\$50,000	\$50,000	25.85%
REIMBURSEMENTS		\$852	\$3,142		\$18,431		
TRANSFER IN							
Total Utility	\$1,179,440	\$2,337,647	\$2,194,377	\$3,371,812	\$2,781,186	\$2,928,930	13.9%

Residential Water Bill @ 5,000 Gallons



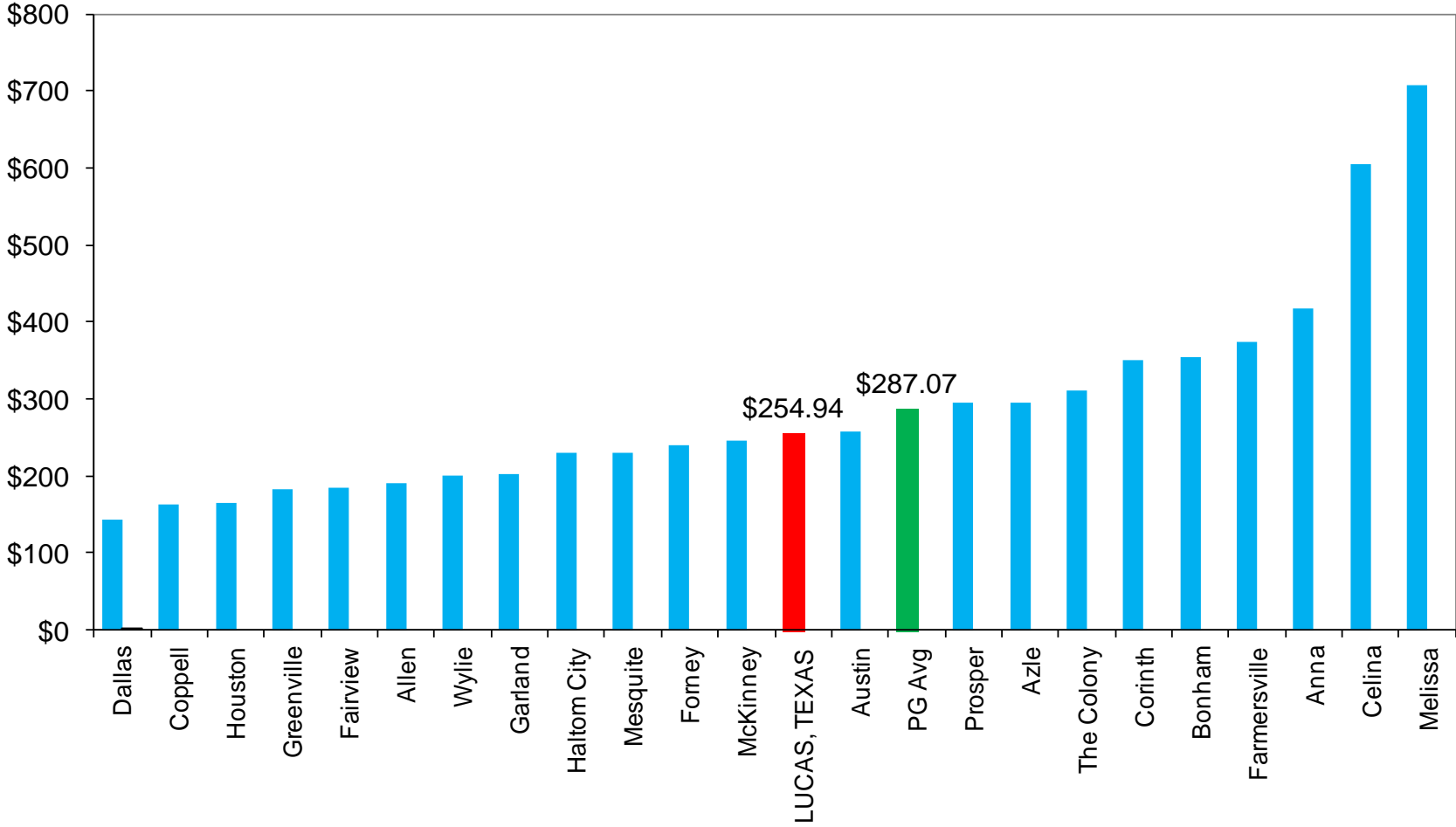
Residential Water Bill @ 10,000 Gallons



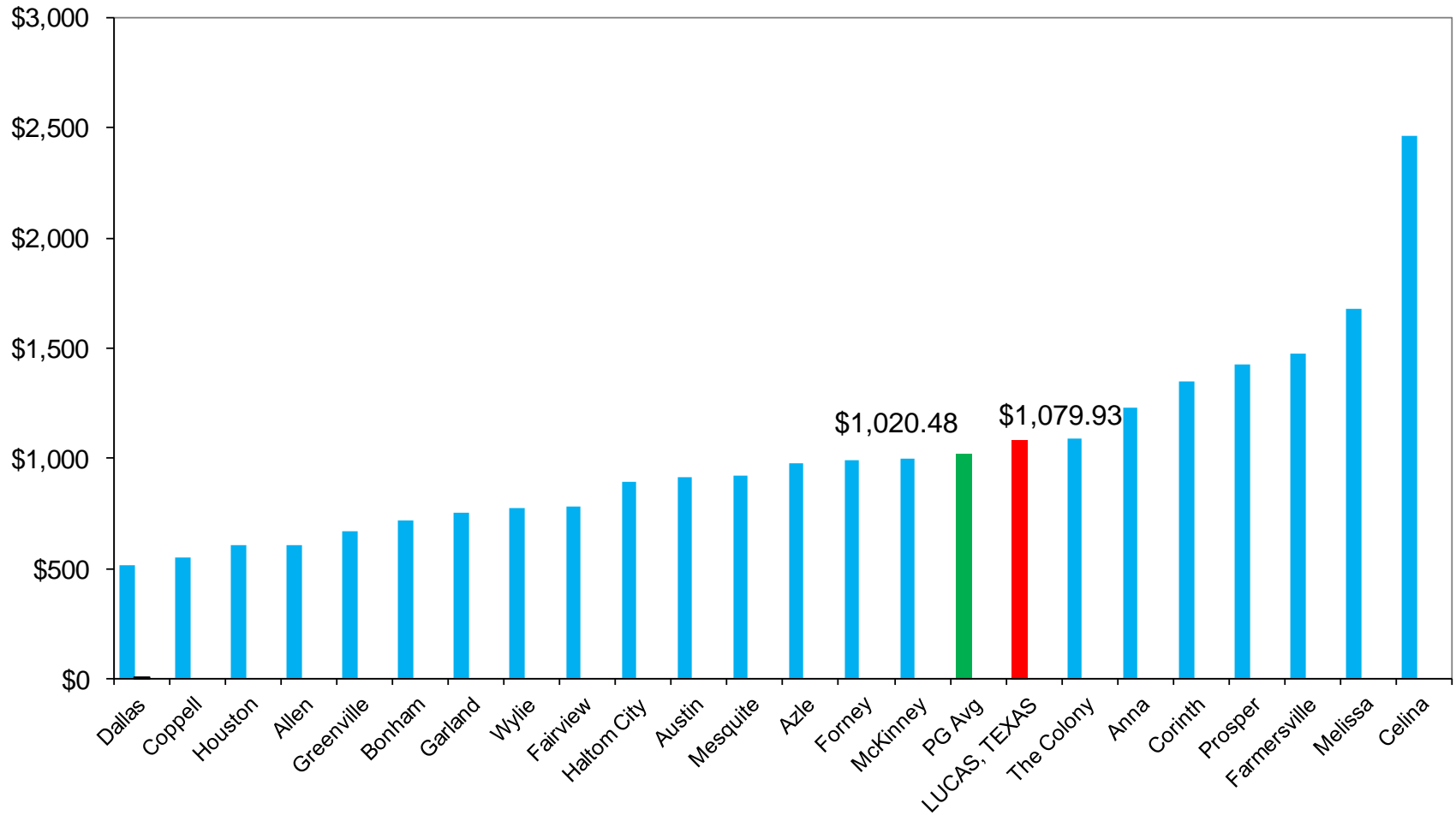
Comparing Monthly Charge for 10,000 gallons of Water Service as a % of Median Household Income

LUCAS, TEXAS WATER RATE TO MHI COMPARISON				
	MEDIAN HOUSEHOLD INCOME	RESIDENTIAL		
SYSTEM	2012	Water Rate @ 10,000 gallons		2012
		Monthly	Annual	
Fairview	\$108,147	\$31.71	\$380.52	0.35%
Coppell	\$110,564	\$35.40	\$424.80	0.38%
Allen	\$96,267	\$32.27	\$387.24	0.40%
LUCAS, TEXAS	\$130,496	\$54.57	\$654.87	0.50%
Prosper	\$115,372	\$48.52	\$582.24	0.50%
McKinney	\$80,621	\$43.20	\$518.40	0.64%
Wylie	\$74,401	\$40.24	\$482.88	0.65%
Forney	\$79,852	\$44.09	\$529.08	0.66%
Corinth	\$89,378	\$50.97	\$611.64	0.68%
The Colony	\$78,809	\$49.76	\$597.12	0.76%
Farmersville	\$77,782	\$49.98	\$599.76	0.77%
Austin	\$52,047	\$34.96	\$419.52	0.81%
Dallas	\$42,942	\$29.41	\$352.92	0.82%
Houston	\$44,261	\$33.65	\$403.80	0.91%
Celina	\$77,782	\$61.69	\$740.28	0.95%
Garland	\$53,972	\$45.79	\$549.48	1.02%
Melissa	\$77,782	\$66.53	\$798.36	1.03%
Mesquite	\$52,921	\$47.05	\$564.60	1.07%
Azle	\$53,303	\$51.47	\$617.64	1.16%
Greenville	\$37,319	\$40.37	\$484.44	1.30%
Haltom City	\$42,461	\$52.21	\$626.52	1.48%
Anna	\$60,505	\$76.10	\$913.20	1.51%
Bonham	\$28,101	\$51.01	\$612.12	2.18%
Peer Group Average	\$72,395	\$46.56	\$558.76	0.89%

Water Bill @ 50,000 Gallons Commercial 5/8" & 3/4" Meter



Water Bill @ 200,000 Gallons Commercial 5/8" & 3/4" Meter



Meter Sizes

LUCAS, TEXAS					
AWWA - EQUIVALENT METER RATIOS & FLOW RATES					
Water Meter Size	AWWA Meter Ratio	Demand Flow Rates - gpm		Max Cont. Demand - gpm	Active Meters in Lucas, 10/22/2012
		Minimum	Maximum		
5/8"	1.0	0.25	25	10	
3/4"	1.1	0.50	30	15	1,264
1"	2.5	0.75	50	25	596
1 1/2"	8.0	1.50	100	50	186
2"	10.0	4	200	100	58
3"	22.5	8	350	240	4
4"	60.0	15	630	420	2
6"	125.0	30	1,400	920	
8"	200.0	140	1,600	900	
10"	325.0	225	2,500	1,450	

Comparing Residential Minimum Charges Based on Meter Size

LUCAS, TEXAS

COMPARISON OF RESIDENTIAL ICL MIN. CHARGE ESCALATOR BY METER SIZE - \$

Meter Size	Melissa	Farmers ville	Lucas	Anna	Parker	Celina	Allen	Frisco	Fairview	Lavon	Prosper	Mckinney	AVERAGE
5/8"	\$18.61	\$10.47	\$18.00	\$22.00	\$34.00	\$22.25	\$6.67	\$14.00	\$11.55	\$20.00	\$11.12	\$11.79	\$16.70
3/4"	\$26.78	\$10.47	\$18.00	\$22.00	\$34.00	\$22.25	\$11.12	\$14.00	\$11.55	\$20.00	\$11.12	\$11.79	\$17.76
1"	\$46.59	\$17.44	\$18.00	\$49.00	\$34.00	\$38.93	\$17.79	\$14.00	\$11.55	\$40.00	\$18.54	\$11.79	\$26.47
1.5"	\$92.32	\$34.89	\$18.00	\$94.00	\$34.00	\$77.87	\$0.00	\$0.00	\$0.00	\$0.00	\$37.07	\$11.79	\$33.33
2"	\$147.19	\$55.82	\$18.00	\$148.00	\$34.00	\$124.59	\$0.00	\$0.00	\$0.00	\$80.00	\$59.32	\$11.79	\$56.56

Comparing Commercial Minimum Charges Based on Meter Size

LUCAS, TEXAS

COMPARISON OF COMMERCIAL ICL MIN. CHARGE ESCALATOR BY METER SIZE - \$

Meter Size	Melissa	Farmersville	Lucas	Anna	Frisco	Lavon	Prosper	Mckinney	AVERAGE
5/8"	\$18.61	\$10.47	\$18.00	\$22.00	\$15.27	\$20.00	\$8.53	\$11.79	\$15.58
3/4"	\$26.78	\$10.47	\$18.00	\$22.00	\$15.27	\$20.00	\$8.53	\$11.79	\$16.61
1"	\$46.59	\$17.44	\$18.00	\$49.00	\$22.68	\$40.00	\$14.22	\$20.64	\$28.57
1.5"	\$92.32	\$34.89	\$18.00	\$94.00	\$45.39	\$0.00	\$28.44	\$35.38	\$43.55
2"	\$147.19	\$55.82	\$18.00	\$148.00	\$72.19	\$80.00	\$45.50	\$49.54	\$77.03
3"	\$275.23	\$62.79	\$18.00	\$274.00	\$134.08	\$160.00	\$85.31	\$87.29	\$137.09
4"	\$446.47	\$174.43	\$18.00	\$454.00	\$206.28	\$320.00	\$142.18	\$129.74	\$236.39
6"	\$648.00	\$348.86	\$18.00	\$904.00	\$433.20	\$640.00	\$284.40	\$241.82	\$439.79
8"	\$1,036.80	\$0.00	\$0.00	\$1,804.00	\$0.00	\$0.00	\$0.00	\$477.72	\$1,106.17
10"	\$1,490.40	\$0.00	\$0.00	\$4,504.00	\$0.00	\$0.00	\$0.00	\$0.00	\$2,997.20

2" Commercial Meter Rate Comparison to 5 Million Gallons

2" Meter		Gallons									
Min Charge		10,000		50,000		500,000		1,000,000		5,000,000	
Lucas	\$18.00	Lucas	\$54.58	Allen	\$171.21	Allen	\$1,408.70	Allen	\$2,783.69	Allen	\$13,783.67
Allen	\$39.22	Allen	\$61.23	Mckinney	\$212.00	Frisco	\$1,601.00	Frisco	\$3,135.99	Frisco	\$15,415.96
Prosper	\$45.50	Mckinney	\$82.02	Frisco	\$219.52	Mckinney	\$1,674.48	Mckinney	\$3,299.47	Mckinney	\$16,299.44
Mckinney	\$49.54	Prosper	\$85.77	Parker	\$237.49	Parker	\$2,124.97	Lucas	\$5,479.90	Lucas	\$27,479.85
Farmersville	\$55.82	Farmersville	\$90.92	Lucas	\$254.95	Lucas	\$2,729.91	Parker	\$5,699.95	PG Avg.	\$30,459.30
Frisco	\$72.19	Frisco	\$96.73	Prosper	\$299.84	PG Avg.	\$2,949.37	PG Avg.	\$6,006.01	Lavon	\$32,533.58
Lavon	\$80.00	PG Avg.	\$110.30	PG Avg.	\$312.65	Lavon	\$3,283.65	Lavon	\$6,533.63	Parker	\$34,299.89
PG Avg.	\$81.77	Lavon	\$116.23	Lavon	\$358.69	Melissa	\$3,593.91	Melissa	\$7,093.89	Melissa	\$35,093.83
Melissa	\$147.19	Parker	\$170.00	Farmersville	\$370.18	Farmersville	\$3,677.63	Farmersville	\$7,352.61	Farmersville	\$36,752.55
Anna	\$148.00	Melissa	\$180.69	Melissa	\$445.45	Prosper	\$3,801.79	Prosper	\$7,736.77	Prosper	\$39,216.71
Celina	\$155.74	Anna	\$190.05	Anna	\$577.95	Anna	\$5,311.88	Anna	\$10,571.85	Anna	\$52,651.77
Parker	\$170.00	Celina	\$195.40	Celina	\$604.54	Celina	\$6,184.46	Celina	\$12,384.43	Celina	\$61,984.33

Evaluating Personnel Costs

CITY OF LUCAS, TEXAS							
UTILITY COST OF SERVICE AND RATE DESIGN STUDY							
WATER							
	2005-06 Adopted Budget	2008-09 Adopted Budget	2009-10 Adopted Budget	2010-11 Adopted Budget	2011-12 Adopted Budget	2012-13 Adopted Budget	AVG. ANNUAL GROWTH
Personnel							
SALARIES - EXEMPT	\$32,500	\$97,922	\$116,537	\$120,615	\$117,592	\$168,835	26.5%
SALARIES - NON-EXEMPT	\$79,040	\$132,072	\$143,243	\$142,362	\$140,379	\$102,735	3.8%
CERTIFICATION FEES	\$0	\$4,500	\$4,500	\$4,900	\$4,900	\$6,000	
PERFORMANCE/INCENTIVE P	\$0	\$0	\$0	\$0	\$18,675	\$9,410	
OVERTIME	\$10,000	\$12,573	\$12,653	\$30,000	\$30,000	\$20,000	10.4%
WORKERS' COMPENSATION	\$0	\$5,643	\$6,078	\$4,882	\$5,000	\$5,160	
LONGEVITY PAY	\$500	\$0	\$954	\$1,218	\$1,582	\$1,640	18.5%
TMRS	\$10,513	\$16,735	\$19,800	\$23,188	\$16,897	\$19,800	9.5%
GROUP INSURANCE	\$19,427	\$34,164	\$35,579	\$32,954	\$34,800	\$37,370	9.8%
AFLAC	\$1,105	\$1,527	\$1,598	\$1,598	\$1,650	\$1,650	5.9%
MEDICARE	\$0	\$3,473	\$4,046	\$4,361	\$3,741	\$4,230	
ST DISABILITY	\$0	\$0	\$878	\$1,308	\$1,322	\$1,325	
CAR ALLOWANCE	\$0	\$1,200	\$3,900	\$2,875	\$3,600	\$3,600	
Total	\$153,085	\$309,809	\$349,764	\$370,262	\$380,138	\$381,755	13.9%

CITY OF LUCAS, TEXAS							
UTILITY COST OF SERVICE AND RATE DESIGN STUDY							
WATER							
	2005-06 Adopted Budget	2008-09 Adopted Budget	2009-10 Adopted Budget	2010-11 Adopted Budget	2011-12 Adopted Budget	2012-13 Adopted Budget	AVG. ANNUAL GROWTH
Operations & Maintenance							
FUEL & LUBRICANTS	\$9,000	\$6,415	\$4,403	\$5,000	\$5,000	\$18,000	10.4%
FUEL - PROPANE	\$1,000	\$2,156	\$2,695	\$2,000	\$2,000	\$2,000	10.4%
MINOR APPARATUS	\$3,000	\$1,281	\$0	\$1,000	\$1,000	\$1,000	-14.5%
ASPHALT/FLEXBASE/CONCRETE	\$1,100	\$0	\$0	\$1,500	\$1,500	\$1,500	4.5%
FACILITY MAINTENANCE	\$900	\$25	\$1,022	\$1,500	\$1,500	\$1,000	1.5%
TRASH SERVICES/RECYCLE	\$0	\$0	\$0	\$316,000	\$316,000	\$362,400	
UB PROCESSING	\$0	\$16,387	\$16,643	\$18,000	\$19,800	\$19,800	
SOFTWARE SUPPORT/MAINT	\$0	\$7,022	\$7,435	\$7,992	\$8,370	\$8,800	
TRAINING & TRAVEL	\$2,000	\$3,284	\$3,232	\$5,500	\$5,500	\$5,500	15.5%
PROFESSIONAL SERVICES	\$0	\$27,194	\$36,153	\$126,000	\$20,000	\$53,000	
ENGINEERING FEES	\$0	\$2,500	\$4,000	\$4,000	\$4,000	\$4,000	
MAINTENANCE AGREEMENTS	\$3,000	\$4,015	\$4,365	\$3,500	\$3,500	\$5,500	9.0%
WATER - NTMWD	\$380,000	\$773,166	\$817,167	\$892,598	\$974,315	\$1,106,320	16.5%
WASTEWATER NTMWD	\$0	\$17,937	\$25,052	\$13,350	\$17,800	\$28,100	11.9%
LIABILITY INSURANCE	\$0	\$10,550	\$11,067	\$12,000	\$12,000	\$12,395	
ELECTRICITY	\$35,000	\$65,234	\$46,209	\$50,055	\$50,000	\$65,000	9.2%
TRANSFER OUT PILOT	\$0	\$0	\$0	\$0	\$145,980	\$161,194	
METER READ SYSTEM	\$0	\$0	\$25,520	\$20,000	\$25,000	\$20,000	
EQUIPMENT - WATER	\$0	\$0	\$0	\$0	\$0	\$5,000	
EQUIPMENT - SEWER	\$0	\$0	\$0	\$0	\$0	\$50,000	
IMPLEMENTS & APPARATUS - SEWER	\$0	\$0	\$0	\$0	\$0	\$25,000	
Total	\$521,798	\$988,394	\$1,077,626	\$1,545,540	\$1,697,440	\$2,025,764	21.4%
GRAND TOTAL	\$674,883	\$1,298,203	\$1,427,390	\$1,915,802	\$2,077,578	\$2,407,519	19.9%

NTMWD - Water

	NTMWD Water Rate	% Increase	NTMWD Excess Water Rate	% Increase	NTMWD Annual Req - MG	Total Paid to NTMWD before Rebate	Actual Water Delivered [Aug. through July]	Unused Requirement - MG	Rate of Rebate / 1,000	Amt of Rebate	Actual Cost of Water per Kgal
FY 2007-08	\$1.13		\$0.47		628,590	\$710,307	388,962	239,628	\$0.42	\$100,643.76	\$1.57
FY 2008-09	\$1.23	8.8%	\$0.58	23.4%	628,590	\$773,166	434,857	193,733	\$0.53	\$102,678.49	\$1.54
FY 2009-10	\$1.30	5.7%	\$0.49	-15.5%	628,590	\$817,167	391,398	237,192	\$0.44	\$104,364.48	\$1.82
FY 2010-11	\$1.42	9.2%	\$0.43	-12.2%	628,590	\$892,598	530,378	98,212	\$0.38	\$37,320.56	\$1.61
FY 2011-12	\$1.54	8.5%	\$0.44	2.3%	628,590	\$968,029	556,437	72,153	\$0.39	\$28,139.67	\$1.69
FY 2012-13	\$1.75	13.6%	\$0.40	-9.1%	628,590	\$1,100,033					
Avg. Annual % Change		9.2%		-2.2%			9.4%				

NTMWD - Wastewater

	Total Lucas WWT Costs	WW Transported through Upper East Fork Interceptor Syst. - Rate	% Increase	WW Treated in the Regional WW System - Rate	% Increase	Est. WW Flow	Monthly Cost [double in October, none in Sept]	Total WW Rate	% Increase	WW Flow as reported by NTMWD
FY 2008-09	\$17,780.00	\$2.43570				7,300,000	\$1,481.67	\$2.43570		0
FY 2009-10	\$21,140.00	\$1.15230	-52.7%	\$1.74450		7,300,000	\$1,761.67	\$2.89680	18.9%	0
FY 2010-11	\$17,770.00	\$0.90250	-21.7%	\$1.53170	-12.2%	7,300,000	\$1,480.83	\$2.43420	-16.0%	4,437,000
FY 2011-12	\$19,900.00	\$1.02670	13.8%	\$1.69870	10.9%	7,300,000	\$1,658.33	\$2.72540	12.0%	6,878,000
FY 2012-13	\$20,510.00	\$0.98850	-3.7%	\$1.76680	4.0%	7,444,000	\$1,709.17	\$2.75530	1.1%	
Avg. Annual %	Avg. Annual % Change		-16.1%		0.9%				4.0%	

Water Debt Obligations

LUCAS, TEXAS							
EXISTING WATER DEBT SUMMARY & FORECAST							
ISSUE	TIC	Total Outstanding FYE					
		2012	2013	2014	2015	2016	
Certificates of Obligation, Series 2002	4.60%	\$200,000	\$100,000	\$0	\$0	\$0	
Certificates of Obligation, Series 2007	4.25%	\$1,740,000	\$1,660,000	\$1,560,000	\$1,460,000	\$1,350,000	
General Obligation Refunding Bonds, Series 2007	3.76%	\$1,175,000	\$1,110,000	\$1,040,000	\$865,000	\$695,000	
Certificates of Obligation, Series 2011	4.00%	\$2,195,000	\$2,120,000	\$2,040,000	\$1,955,000	\$1,870,000	
Total Water Debt		\$5,310,000	\$4,990,000	\$4,640,000	\$4,280,000	\$3,915,000	
Total Debt Service		\$519,815	\$515,583	\$533,020	\$530,164	\$522,516	
FYE	Begin Period Debt	Plus Additions	Principal	Interest	Total Debt Service	Ending Principal	
2012	\$5,610,000	\$0	\$300,000	\$219,815	\$519,815	\$5,310,000	
2018	\$3,540,000	\$0	\$315,000	\$131,748	\$446,748	\$3,225,000	
2023	\$1,880,000	\$0	\$240,000	\$71,519	\$311,519	\$1,640,000	
2028	\$620,000	\$0	\$145,000	\$21,900	\$166,900	\$475,000	
2029	\$475,000	\$0	\$150,000	\$9,500	\$159,500	\$325,000	
2030	\$325,000	\$0	\$160,000	\$15,100	\$175,100	\$165,000	
2031	\$165,000	\$0	\$165,000	\$5,100	\$170,100	\$0	

Pro Forma Cash Flow – Average Consumption Scenario

LUCAS, TEXAS

CASH FLOW SUMMARY-WATER

	FYE			FYE		
	2012	2013	2014	2015	2016	2017
WATER CONSUMPT. SCEN.	Average	Average	Average	Average	Average	Average
Rate Revenues	\$2,342,463	\$2,294,231	\$2,362,752	\$2,433,605	\$2,506,787	\$2,582,399
Non-Rate Revenues	\$266,430	\$216,430	\$224,005	\$231,285	\$238,224	\$245,370
TOTAL REVENUES	\$2,608,893	\$2,510,661	\$2,586,757	\$2,664,890	\$2,745,011	\$2,827,769
O&M, Net of Depr.	\$1,931,519	\$1,931,519	\$1,999,122	\$2,064,093	\$2,126,016	\$2,189,796
Net Rev. Avail. For Debt Svc.	\$677,375	\$579,143	\$587,635	\$600,797	\$618,995	\$637,973
DS- GEN. OBLIGATION						
TOTAL ALL DEBT SERVICE	\$519,815	\$515,583	\$533,020	\$530,164	\$522,516	\$519,367
Coverage Ratio on All Debt: Current	1.30	1.12	1.10	1.13	1.18	1.23
CASH FOR CAPITAL OUTLAYS	\$157,560	\$63,560	\$54,615	\$70,633	\$96,480	\$118,606
Total Capital Outlays	\$108,600	\$108,690	\$111,951	\$115,309	\$118,768	\$122,332
FY END BALANCE	\$48,960	-\$45,130	-\$57,336	-\$44,676	-\$22,289	-\$3,726

History of Consumption Fluctuations per Account

LUCAS, TEXAS				
117 MONTH CONSUMPTION HISTORY				
	TOTAL			
	Min.	Avg.	Max	Max - Min
October	10,327	19,259	27,450	17,123
November	7,218	13,211	19,527	12,309
December	6,461	10,420	17,375	10,913
January	6,504	8,676	13,987	7,484
February	6,620	13,283	34,886	28,266
March	4,843	12,539	34,788	29,945
April	7,656	11,581	15,558	7,903
May	9,746	13,209	16,665	6,919
June	6,695	20,266	33,089	26,394
July	8,750	26,521	43,131	34,381
August	15,681	31,749	47,557	31,876
September	20,078	28,984	44,702	24,625
Average	9,215	17,475	29,060	19,845
% (Below) / Above Avg.	-47%		66%	

Pro Forma Cash Flow – Minimum Consumption Scenario

LUCAS, TEXAS

CASH FLOW SUMMARY-WATER

	FYE		FYE		FYE	
	2012	2013	2014	2015	2016	2017
WATER CONSUMPT. SCEN.	Average	Min	Average	Min	Average	Average
Rate Revenues	\$2,342,463	\$1,445,800	\$2,362,752	\$1,533,653	\$2,506,787	\$2,582,399
Non-Rate Revenues	\$266,430	\$216,430	\$224,005	\$231,285	\$238,224	\$245,370
TOTAL REVENUES	\$2,608,893	\$1,662,230	\$2,586,757	\$1,764,938	\$2,745,011	\$2,827,769
O&M, Net of Depr.	\$1,931,519	\$1,931,519	\$1,999,122	\$2,064,093	\$2,126,016	\$2,189,796
Net Rev. Avail. For Debt Svc.	\$677,375	-\$269,289	\$587,635	-\$299,155	\$618,995	\$637,973
DS- GEN. OBLIGATION						
TOTAL ALL DEBT SERVICE	\$519,815	\$515,583	\$533,020	\$530,164	\$522,516	\$519,367
Coverage Ratio on All Debt: Current	1.30	-0.52	1.10	-0.56	1.18	1.23
CASH FOR CAPITAL OUTLAYS	\$157,560	-\$784,872	\$54,615	-\$829,319	\$96,480	\$118,606
Total Capital Outlays	\$108,600	\$108,690	\$111,951	\$115,309	\$118,768	\$122,332
FY END BALANCE	\$48,960	-\$893,562	-\$57,336	-\$944,628	-\$22,289	-\$3,726

LUCAS, TEXAS

PROPOSED WATER RATES:

Residential Inside

NO. ACCOUNTS

1,684

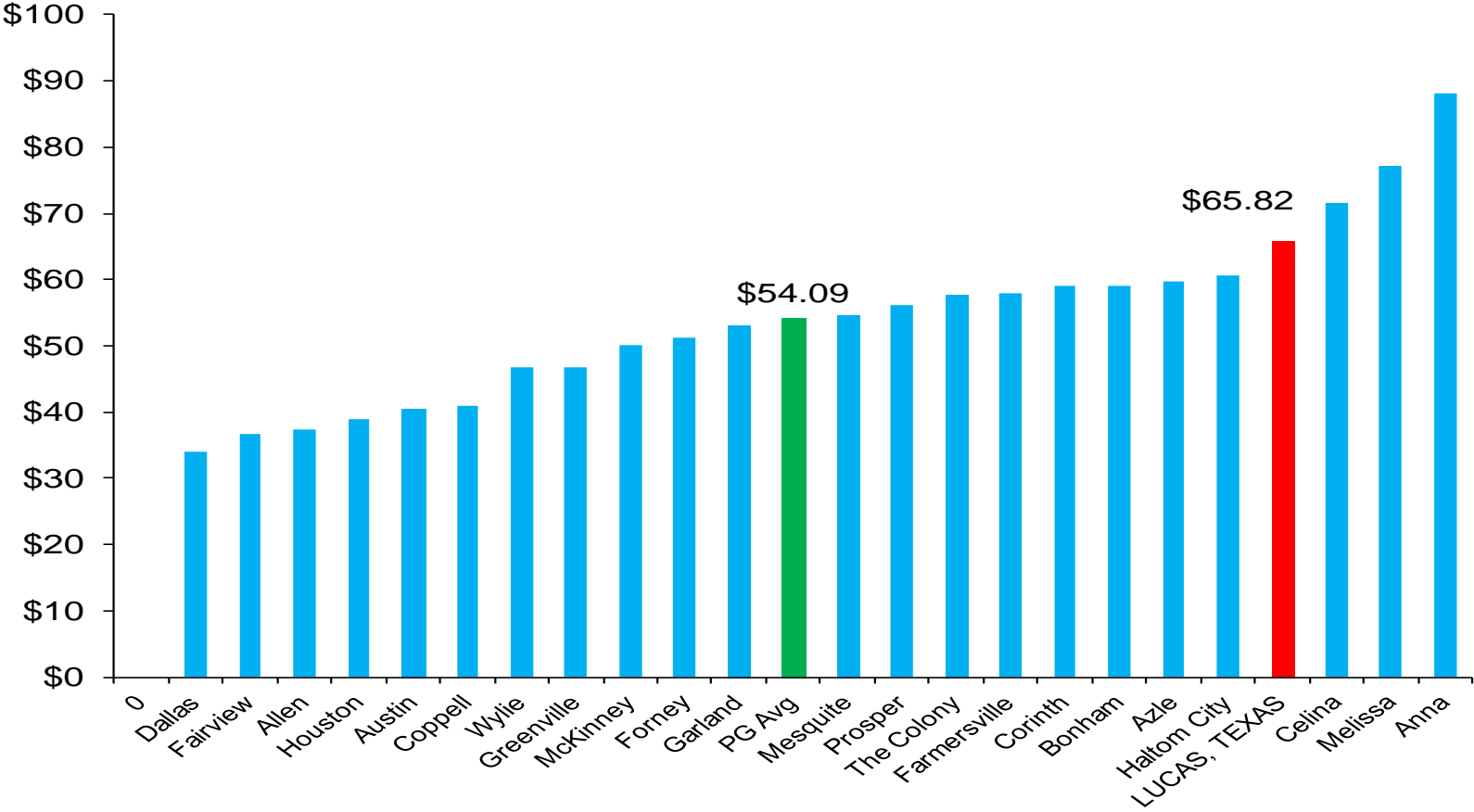
AVERAGE CONSUMPTION

17,734

Minimum Charge		Current	12/01/12	12/01/13	12/01/14	12/01/15	12/01/16	Avg Annual Increase
5/8" Meter		\$18.00	\$18.84	\$19.67	\$20.51	\$21.34	\$22.18	4.3%
1" Meter		\$18.00	\$21.34	\$24.68	\$28.01	\$31.35	\$34.69	14.1%
1 1/2" Meter		\$18.00	\$22.98	\$27.96	\$32.94	\$37.92	\$42.90	19.1%
2" Meter		\$18.00	\$29.59	\$41.18	\$52.77	\$64.36	\$75.95	34.3%
Consumption Charge								
2,001	3,000	\$4.40	\$4.55	\$4.71	\$4.90	\$5.07	\$5.25	3.6%
3,001	4,000	\$4.40	\$4.55	\$4.71	\$4.90	\$5.07	\$5.25	3.6%
4,001	5,000	\$4.40	\$4.55	\$4.71	\$4.90	\$5.07	\$5.25	3.6%
5,001	6,000	\$4.68	\$4.84	\$5.01	\$5.21	\$5.40	\$5.59	3.6%
6,001	7,000	\$4.68	\$4.84	\$5.01	\$5.21	\$5.40	\$5.59	3.6%
7,001	10,000	\$4.68	\$4.84	\$5.01	\$5.21	\$5.40	\$5.59	3.6%
10,001	11,000	\$4.90	\$5.07	\$5.25	\$5.46	\$5.65	\$5.85	3.6%
11,001	16,000	\$4.90	\$5.07	\$5.25	\$5.46	\$5.65	\$5.85	3.6%
16,001	20,000	\$4.90	\$5.07	\$5.25	\$5.46	\$5.65	\$5.85	3.6%
20,001	21,000	\$4.90	\$5.07	\$5.25	\$5.46	\$5.65	\$5.85	3.6%
21,001	25,000	\$4.90	\$5.07	\$5.25	\$5.46	\$5.65	\$5.85	3.6%
25,001	30,000	\$4.90	\$5.07	\$5.25	\$5.46	\$5.65	\$5.85	3.6%
30,001	50,000	\$5.12	\$5.30	\$5.48	\$5.70	\$5.90	\$6.11	3.6%
50,001	Greater	\$5.50	\$5.69	\$5.89	\$6.13	\$6.34	\$6.56	3.6%
Impact on Monthly Bill			\$ Incr.	\$ Incr.	\$ Incr.	\$ Incr.	\$ Incr.	
Usage	5,000	\$31.19	\$32.48	\$33.80	\$35.20	\$36.55	\$37.91	4.0%
Cost Increase								\$1.35
Usage	10,000	\$54.57	\$56.69	\$58.85	\$61.25	\$63.51	\$65.82	3.8%
Cost Increase								\$2.25
Usage	16,000	\$83.96	\$87.11	\$90.33	\$93.99	\$97.40	\$100.90	3.7%
Cost Increase								\$3.39
Usage	25,000	\$128.05	\$132.74	\$137.56	\$143.11	\$148.23	\$153.51	3.7%
Cost Increase								\$5.09



**FY 2016-17 Forecast
 Monthly Residential
 Water Bill @ 10,000 Gallons
 Assumed Peer Group Annual Increases of 3%**



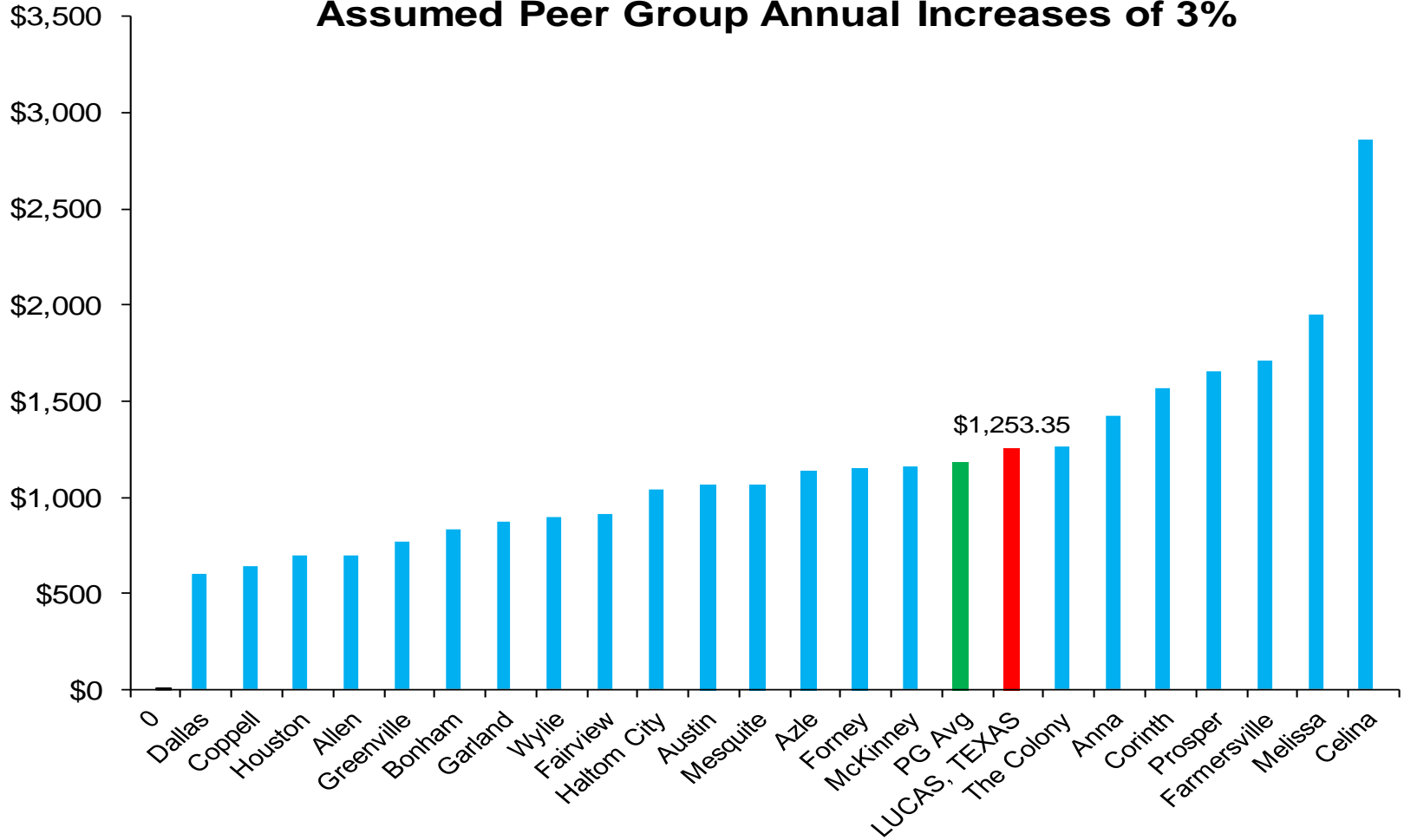
LUCAS, TEXAS

PROPOSED WATER RATES: Commercial Inside

Minimum Charge		Current	12/01/12	12/01/13	12/01/14	12/01/15	12/01/16	Avg Annual Increase
5/8" Meter		\$18.00	\$19.37	\$20.73	\$22.10	\$23.47	\$24.83	6.6%
1" Meter		\$18.00	\$21.78	\$25.56	\$29.35	\$33.13	\$36.91	15.5%
1 1/2" Meter		\$18.00	\$25.77	\$33.54	\$41.31	\$49.08	\$56.85	26.2%
2" Meter		\$18.00	\$38.08	\$58.17	\$78.25	\$98.34	\$118.42	49.0%
3" Meter		\$18.00	\$51.82	\$85.64	\$119.46	\$153.28	\$187.10	68.6%
4" Meter		\$18.00	\$86.81	\$155.63	\$224.44	\$293.26	\$362.07	112.0%
6" Meter		\$18.00	\$121.72	\$225.43	\$329.15	\$432.86	\$536.58	152.6%
8" Meter		\$18.00	\$226.29	\$434.57	\$642.86	\$851.14	\$1,059.43	270.8%
Consumption Charge								
2,001	3,000	\$4.40	\$4.65	\$4.79	\$4.94	\$5.09	\$5.24	3.6%
3,001	4,000	\$4.40	\$4.65	\$4.79	\$4.94	\$5.09	\$5.24	3.6%
4,001	5,000	\$4.40	\$4.65	\$4.79	\$4.94	\$5.09	\$5.24	3.6%
5,001	6,000	\$4.68	\$4.94	\$5.09	\$5.24	\$5.40	\$5.56	3.5%
6,001	7,000	\$4.68	\$4.94	\$5.09	\$5.24	\$5.40	\$5.56	3.5%
7,001	10,000	\$4.68	\$4.94	\$5.09	\$5.24	\$5.40	\$5.56	3.5%
10,001	11,000	\$4.90	\$5.17	\$5.33	\$5.49	\$5.65	\$5.82	3.5%
11,001	16,000	\$4.90	\$5.17	\$5.33	\$5.49	\$5.65	\$5.82	3.5%
16,001	20,000	\$4.90	\$5.17	\$5.33	\$5.49	\$5.65	\$5.82	3.5%
20,001	21,000	\$4.90	\$5.17	\$5.33	\$5.49	\$5.65	\$5.82	3.5%
21,001	25,000	\$4.90	\$5.17	\$5.33	\$5.49	\$5.65	\$5.82	3.5%
25,001	30,000	\$4.90	\$5.17	\$5.33	\$5.49	\$5.65	\$5.82	3.5%
30,001	50,000	\$5.12	\$5.40	\$5.56	\$5.73	\$5.90	\$6.08	3.5%
50,001	100,000	\$5.50	\$5.50	\$5.67	\$5.83	\$6.01	\$6.19	2.4%
100,001	Greater	\$5.50	\$5.67	\$5.83	\$6.01	\$6.19	\$6.38	3.0%
Impact on Monthly Bill			\$ Incr.	\$ Incr.	\$ Incr.	\$ Incr.	\$ Incr.	
Usage	10,000	\$54.57	\$58.02	\$60.54	\$63.11	\$65.70	\$68.34	4.6%
Cost Increase								\$2.75
Usage	50,000	\$254.94	\$269.40	\$278.26	\$287.36	\$296.68	\$306.24	3.7%
Cost Increase								\$10.26
Usage	200,000	\$1,079.93	\$1,110.89	\$1,145.00	\$1,180.09	\$1,216.20	\$1,253.35	3.0%
Cost Increase								\$34.68



**FY 2016-17 Forecast
Commercial
Meter Size = Weighted Average
Monthly Water Bill @ 200,000 Gallons
Assumed Peer Group Annual Increases of 3%**



Estimating Wal Mart's Wastewater Cost of Service

Wal Mart Estimated WW Flow - GPD			4,584
Wal Mart Estimated WW Flow - Gallons per Month, Net			139,430
Margin for Infiltration & Inflow			15%
Wal Mart Estimated WW Flow - Gallons per Month, Gross			160,345
NTMWD Unit Cost per Kgal			\$2.76
Monthly Charge for Collection & Treatment			\$442
Field, Administrative, & Customer Billing Charges			\$200
Total Charge			\$642

Evaluating Wastewater Rate Structures

LUCAS, TEXAS

COMPARISON OF COMMERCIAL WW MIN. CHARGE ESCALATOR BY METER SIZE - \$

Equiv. Water Meter Size	Melissa	Farmersville	Anna	Celina	Allen	Frisco	Fairview	Prosper	Mckinney	AVERAGE
5/8"	\$15.25	\$22.08	\$22.00	\$25.75	\$19.36	\$27.42	\$25.94	\$25.94	\$11.79	\$18.70
3/4"	\$21.34	\$22.08	\$22.00	\$25.75	\$19.36	\$27.42	\$25.94	\$25.94	\$11.79	\$20.22
1"	\$38.10	\$22.08	\$49.00	\$48.29	\$19.36	\$27.42	\$25.94	\$25.94	\$19.33	\$38.68
1.5"	\$76.22	\$22.08	\$94.00	\$90.13	\$19.36	\$27.42	\$25.94	\$25.94	\$31.89	\$73.06
2"	\$121.93	\$22.08	\$148.00	\$154.50	\$19.36	\$27.42	\$25.94	\$25.94	\$41.48	\$116.48
3"	\$228.64	\$22.08	\$274.00	\$0.00	\$19.36	\$27.42	\$25.94	\$25.94	\$65.10	\$141.94
4"	\$383.23	\$22.08	\$454.00	\$386.25	\$19.36	\$27.42	\$25.94	\$25.94	\$92.25	\$328.93
6"	\$540.00	\$22.08	\$904.00	\$0.00	\$19.36	\$27.42	\$25.94	\$25.94	\$157.66	\$400.42
8"	\$864.00	\$22.08	\$1,804.00	\$0.00	\$19.36	\$27.42	\$25.94	\$25.94	\$308.51	\$744.13
10"	\$1,242.00	\$22.08	\$4,504.00	\$0.00	\$19.36	\$27.42	\$25.94	\$25.94	\$0.00	\$1,436.50

Wastewater Charge Comparison - 2 Inch Meter Equivalent

Cust. Class		Meter Size 2"		Gallons					
Min Charge		Min Charge - CPTG		50,000		200,000		1,000,000	
Allen	\$19.36	Allen	\$9.68	Allen	\$137.18	Allen	\$501.68	Allen	\$2,445.66
Farmersville	\$22.08	Farmersville	\$11.04	Frisco	\$176.67	Frisco	\$643.16	Frisco	\$3,131.14
Fairview	\$25.94	Fairview	\$12.97	PG Avg.	\$204.53	PG Avg.	\$682.52	PG Avg.	\$3,231.84
Prosper	\$25.94	Prosper	\$12.97	Mckinney	\$207.44	Mckinney	\$705.43	Mckinney	\$3,361.41
Frisco	\$27.42	Frisco	\$13.71	Fairview	\$238.38	Fairview	\$875.87	Melissa	\$4,041.84
Mckinney	\$41.48	Mckinney	\$20.74	Prosper	\$238.38	Prosper	\$875.87	Fairview	\$4,275.85
PG Avg.	\$48.89	PG Avg.	\$24.44	Melissa	\$317.88	Melissa	\$905.87	Prosper	\$4,275.85
Melissa	\$121.93	Melissa	\$60.97	Farmersville	\$352.24	Anna	\$1,009.24	Anna	\$4,489.21
Anna	\$148.00	Anna	\$74.00	Anna	\$356.75	Celina	\$1,288.96	Celina	\$5,872.93
Celina	\$154.50	Celina	\$77.25	Celina	\$429.48	Farmersville	\$1,384.22	Farmersville	\$6,888.18

Proposed Wastewater Rate Structure

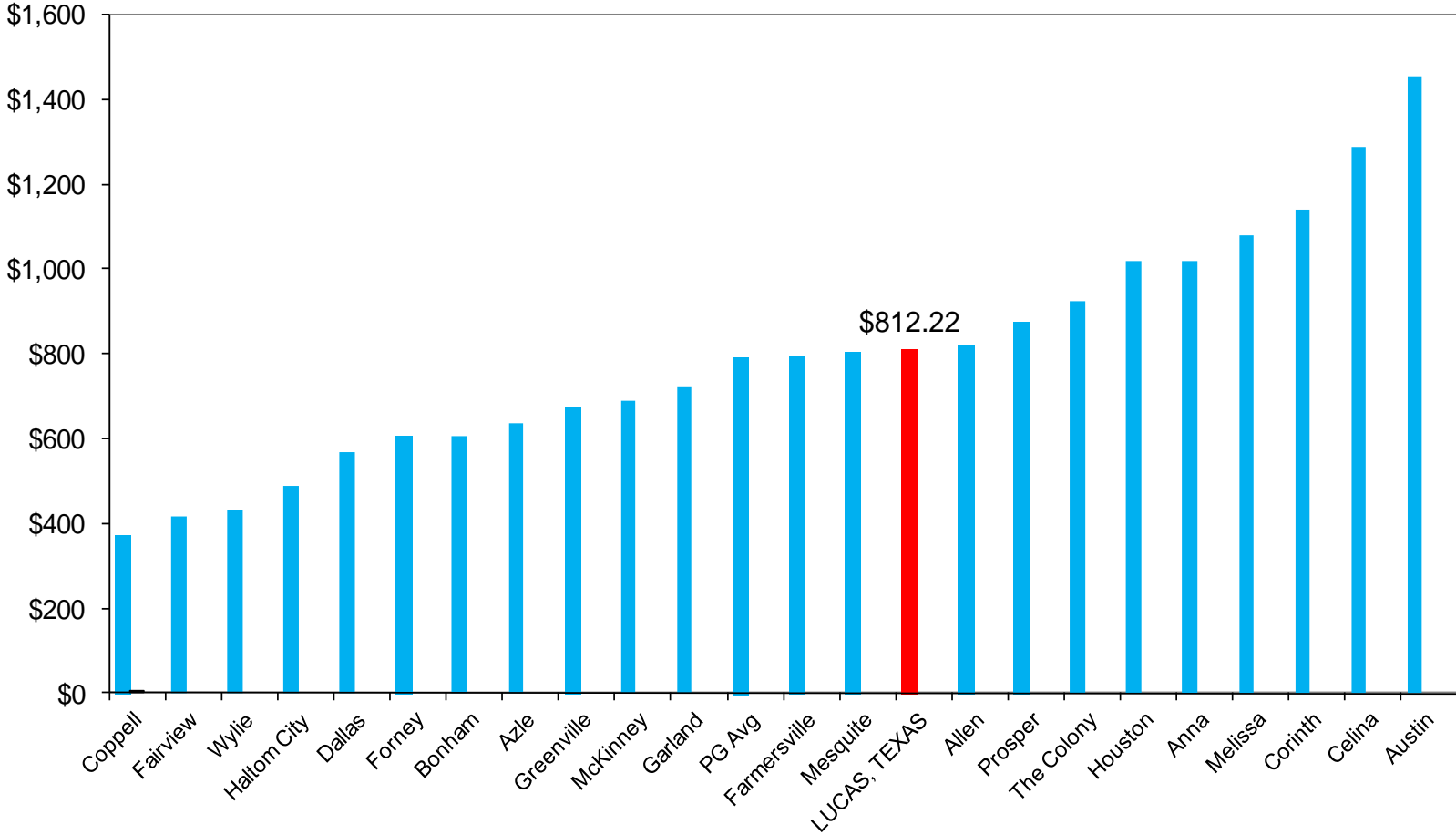
LUCAS, TEXAS

PROPOSED WW RATES:

Commercial Inside

Minimum Charge	12/01/12
5/8" & 3/4" Meter	\$20.22
1" Meter	\$38.68
1 1/2" Meter	\$73.06
2" Meter	\$116.48
3" Meter	\$141.94
4" Meter	\$328.93
6" Meter	\$400.42
8" Meter	\$744.13
10" Meter	\$1,436.50
Consumption Charge 2,000 Greater	\$4.00

Wastewater Bill @ 200,000 Gallons Commercial 5/8" & 3/4" Meter



Cash Flow Pro Forma under Proposed Rates

LUCAS, TEXAS

CASH FLOW SUMMARY-WATER

	2012	FYE 2013	2014	2015	FYE 2016	2017
WATER CONSUMPT. SCEN.	Average	Average	Average	Average	Average	Average
Rate Revenues	\$2,342,463	\$2,373,339	\$2,554,522	\$2,754,782	\$2,962,370	\$3,180,121
Non-Rate Revenues	\$266,430	\$216,430	\$224,005	\$231,285	\$238,224	\$245,370
TOTAL REVENUES	\$2,608,893	\$2,589,769	\$2,778,527	\$2,986,067	\$3,200,594	\$3,425,491
O&M, Net of Depr.	\$1,931,519	\$1,931,519	\$1,999,122	\$2,064,093	\$2,126,016	\$2,189,796
Net Rev. Avail. For Debt Svc.	\$677,375	\$658,251	\$779,405	\$921,974	\$1,074,578	\$1,235,695
DS- GEN. OBLIGATION						
TOTAL ALL DEBT SERVICE	\$519,815	\$515,583	\$533,020	\$530,164	\$522,516	\$519,367
Coverage Ratio on All Debt:	1.30	1.28	1.46	1.74	2.06	2.38
CASH FOR CAPITAL OUTLAYS	\$157,560	\$142,668	\$246,385	\$391,810	\$552,062	\$716,328
Total Capital Outlays	\$108,600	\$108,690	\$111,951	\$115,309	\$118,768	\$122,332
FY END BALANCE	\$48,960	\$33,978	\$134,434	\$276,501	\$433,294	\$593,996