LODI CITY COUNCIL
SHIRTSLEEVE SESSION
CARNEGIE FORUM, 305 WEST PINE STREET
TUESDAY, OCTOBER 15, 2013

A. Roll Call by City Clerk

An Informal Informational Meeting ("Shirtsleeve" Session) of the Lodi City Council was held Tuesday, October 15, 2013, commencing at 7:00 a.m.

Present: Council Member Hansen, Council Member Johnson, Mayor Pro Tempore Katzakian, and Mayor Nakanishi
Absent: Council Member Mounce
Also Present: City Manager Bartlam, City Attorney Schwabauer, and City Clerk Johl-Olson

B. Topic(s)

B-1 Receive Policy and Rate Information Regarding Water, Wastewater, and Solid Waste Rate Schedules Subject to Proposition 218 Public Hearing to be Held December 18, 2013 (PW)

City Manager Bartlam briefly introduced the subject matter of water, wastewater, and solid waste policy and rate information subject to Proposition 218 processes.

Public Works Director Wally Sandelin and Consultant Bob Reed provided a PowerPoint presentation regarding water, wastewater, and solid waste policy and rate information. Specific topics of discussion included the meter charge schedule, vacant residential rates, rate update, models, Engineering News Record (ENR) Index and rate adjustments, previous rate adjustments, rate structure changes, flat rates, Proposition 218, rate structure changes, usage based rates, rate comparison, sample residential and non-residential bills, solid waste rates, and the adoption process.

In response to Council Member Johnson, Mr. Sandelin stated Santa Clara was included in the comparison because it was one of the few cities with a published meter schedule.

In response to Council Member Hansen, Mr. Sandelin stated that, while there was a rate cap on the wastewater side, there was no cap on the water side and the rate was whatever was published for ENR.

In response to Council Member Johnson, City Attorney Schwabauer stated rate increases not included in the original Proposition 218 notice would require a new Proposition 218 process.

In response to Council Member Hansen, Mr. Sandelin stated infrastructure replacement will be completed in 2017-2018 on the water side but not sure about the wastewater side, which includes sewer lining.

In response to Mayor Nakanishi, Mr. Sandelin stated other agencies are just now beginning to make the infrastructure related decisions that the Lodi City Council made in 2004.

In response to Council Member Johnson, Mr. Sandelin stated the bond issue proposed for debt retirement was $30 million.

In response to Council Member Hansen, Mr. Sandelin stated the $11.4 figure in the model includes upgrades for the conveyance facilities and storage ponds and new development is also considered in the model.

In response to Council Member Johnson, Mr. Sandelin stated the City is expecting that the Regional Board is going to require improvements to the conveyance facilities at a cost of $1.4 million and $10 million will be used for storage pond construction so that the City no longer needs to discharge to the Delta thereby resulting in a cost savings.

In response to Mayor Nakanishi, Mr. Sandelin stated the previous rate increase included infrastructure upgrades and new debt service for improvements at the White Slough facility.

In response to Council Member Hansen, Mr. Sandelin stated that, while the old financial model was complex and contained errors which required ongoing consultant work, the current model is simplified and tested quarterly by City staff. Mr. Sandelin stated he is confident that the needs of the City are in line with the charges.

In response to Council Member Hansen, Mr. Sandelin confirmed adjustments include factors such as inflation, material costs, and unfunded mandates. A brief discussion ensued between Mr. Sandelin and Mr. Hansen regarding how other communities compare in infrastructure replacement efforts and rates. Mr. Schwabauer confirmed that the rate structure does not include additional revenue generation but rather a redesign of how payment is made from different rate payers in light of water meter usage.

In response to Council Member Johnson, Mr. Sandelin confirmed that staff will be speaking with the City's larger users regarding proposed rates prior to implementation.

In response to Mayor Pro Tempore Katzakian, Mr. Schwabauer stated fuel would be included in 100% of the Consumer Price Index (CPI) for solid waste purposes but is not necessarily included in 80% of CPI and tipping fees could be considered separately if necessary.

In response to Mayor Nakanishi, Mr. Sandelin stated there will be a mobile home park rate discussion at a Shirtsleeve Session in December.

In response to Mayor Pro Tempore Katzakian, Mr. Bartlam confirmed that the rate structure adjustment will shift costs now mostly born by single-family residential equally amongst all ratepayers. Mr. Schwabauer confirmed a new rate adjustment would be needed for larger unforeseeable circumstances in the future similar to the state mandated White Slough facility improvements. A brief discussion ensued between Mayor Pro Tempore Katzakian and Mr. Schwabauer regarding ongoing PCE/TCE remediation and monitoring efforts.

Larry Haverty spoke in regard to his concerns about the City paying for water for the farmers near the White Slough facility at a detriment to Lodi residents at large. Mr. Sandelin and Mr. Schwabauer explained that farming near White Slough is not a revenue generator per se but rather a necessary part of the treatment process to reduce nitrates to allow current discharge into the Delta. They also confirmed that the farming operations currently being conducted are done at a cost savings because it would cost the City significantly more money to farm land.

Shirley Plath spoke in regard to her concerns about billing for water services at a mobile home park based on a bedroom system and the costs associated with water usage by an individual resident at the mobile home park versus a larger group of residents such as a family.

Thomas Sanchez, representing Waste Management, spoke in support of the proposal to base solid waste rates off of 100% of the CPI thereby eliminating individual charges for fuel and tipping, which are currently charged separately in addition to 80% of CPI. Mr. Sanchez stated there may be some decisions made by the County in the next month that may affect his thoughts on the proposal but he is generally in support of the concept.

John Slaughterback spoke in regard to his concerns about facility improvements and upgrades being completed as a result of new development impacts on the system and developers paying their share of the same. Mr. Slaughterback also spoke in support of the City having various programs to help the less fortunate pay for services in difficult times.

C. Comments by Public on Non-Agenda Items

None.

D. Adjournment

No action was taken by the City Council. The meeting was adjourned at 8:30 a.m.

ATTEST:

Randi Johl-Olson
City Clerk

AGENDA ITEM B-1

CITY OF LODI
COUNCIL COMMUNICATION

TM

AGENDA TITLE: Receive Policy and Rate Information Regarding Water, Wastewater, and Solid Waste Rate Schedules Subject to Proposition 218 Public Hearing to be Held December 18, 2013

MEETING DATE: October 15, 2013 (Shirtsleeve Session)

PREPARED BY: Public Works Director

RECOMMENDED ACTION: Receive policy and rate information regarding water, wastewater and solid waste rate schedules subject to Proposition 218 public hearing to be held December 18, 2013.

BACKGROUND INFORMATION: Rate schedules and rates analysis information is being supplied to the City Council prior to mailing Proposition 218 protest hearing notices preliminary to a public hearing to consider adopting the various rate schedules for the period from January 1, 2014 through December 31, 2018. The various rate schedules set maximum limits on the various rates for the next five years, and each year the City Council will be requested to approve the actual rates to be implemented. At the public hearing scheduled for December 18, 2013, the City Council will be asked to receive public comment, adopt a resolution adjusting water and wastewater rates **with limits** for the period January 1, 2014 through December 31, 2018, adopt a resolution approving property owner meter charge schedule, and adopt a resolution approving vacant residential unit water and wastewater rates.

1. Property Owner Meter Charge Schedule At the March 26, 2012 City Council meeting, various alternative property owner meter charge schedules were presented to the City Council. Prior policy direction from the City Council set the charge for a single-family residential ¾-inch water meter at $300. As the Water Meter Program moves into the multi-family and non-residential properties, larger meters will be required and a meter charge schedule based upon meter size needs to be established. Presented in Exhibit A is the recommended meter charge schedule, along with previously-presented alternatives. The recommended charge schedule is based upon the actual purchase price for the meter assembly (meter, register, and radio transmitted) plus 55 percent, which is identical to the ¾-inch residential meter charge basis. The 55 percent covers a portion of the cost of the meter box, miscellaneous piping, and installation. The capacity-based charge schedule sets the meter cost according to the hydraulic capacity of the meter. The installed cost is based upon contractor bid prices from construction for phases 1 through 3. The Lodi charge schedule is taken from the City's published Fee and Service Charge Schedule. Comparative charges from the City of Santa Clara are listed, and they are fairly consistent with the recommended schedule, particularly considering most of the meters remaining to be installed are ¾ to 1 inch in size. An additional column showing "no charge" is provided upon the request of the mobile home park owners. All options presented in Exhibit A will be included in the Proposition 218 notice and the City Council will be asked to select and approve a single option at the December 18, 2013 public hearing.

APPROVED: _____
Konradt Bartlam, City Manager

2. Vacant Residential Unit Water and Wastewater Rate Staff recommends the vacant residential unit water and wastewater utility charge for customers without a metered service be equal to the monthly base charge for metered customers having the same size of meter in their future service. There would not be a specific vacant unit charge for the following customer classes as explained.
   - Vacant single family detached with meter – customers would pay the monthly base rate and presumably there would be no usage and, therefore, no usage charge.
   - Vacant single family attached (duplex, triplex, fourplex – master meter) – property owners would pay the monthly base rate and usage charges for the occupied units.
   - Vacant single family attached (duplex, triplex, fourplex – individual meter) – customers would pay the monthly base rate and presumably there would be no usage and, therefore, no usage charge.
   - Vacant apartment/condominium (master meter) – property owners would pay the monthly base rate and usage charges for the occupied units.
   - Vacant apartment/condominium (individual meter) – property owners would pay the monthly base rate and presumably there would be no usage and, therefore, no usage charge.
   - Vacant mobile home (master meter) – property owners would pay the monthly base rate and usage charges for the occupied units.

3. Water and Wastewater Rate Update In 2009, the City Council approved a five-year rate program for the wastewater utility and in 2010 for the water utility. Each separate action by the Council complied with the Proposition 218 requirements pertaining to such actions. The last pre-approved rate adjustment under that program will be for the water utility, and a 2.5 percent increase effective January 2014, equal to the ENR index increase, is recommended by staff. A summary of the programmed rate adjustments and the implemented rate adjustments for the past five years is provided in the table in Exhibit B. The purpose of this table is to demonstrate past rate increases have frequently been below the approved programmed adjustment.

   In preparation of the new five-year program, staff engaged the services of The Reed Group to analyze the financial models and current rate structure within both utilities. The final report, Water and Wastewater Rate Update Study, is provided in Exhibit C.

   Staff is recommending a new five-year rate program for the water and wastewater utilities that will also be subject to the Proposition 218 process. As in the past, rate adjustment forecasts are based upon the financial models for each utility. The water and wastewater financial models are provided in Exhibits D and E, respectively. For both the water and wastewater utilities, the programmed adjustments are capped at three percent per year. Important elements of the financial models are presented below.

   Water Financial Model
   1. Financial assumptions presented on the final page were checked and reconfirmed against actual numbers.
   2. Annual adjustments are capped at three percent and are indexed by the Engineering News Record 20-Cities Average Index.
   3. Capital expenditures continue for the next four years of the Water Meter Program and include installation of meters at multi-family and non-residential customer locations.
   4. Debt service payments for the water treatment facilities are approximately $2.3 million per year.

5. New development revenue toward payment of the water plant debt service is assumed minimal to retain the utility's high bond rating.
6. Maintenance is scheduled for all wells in the system amounting to approximately $1.2 million.
7. Residual bond proceeds from the water treatment facilities financing amounting to approximately $2.6 million are not shown in the financial model and will most likely be used to pay debt service in a future year.
8. Net available capital at the end of Fiscal Year 2018/19 could be used to pay off a portion of the water treatment facilities debt at a considerable interest savings to our customers.

Wastewater Financial Model

1. Financial assumptions presented on the final page were checked and reconfirmed against actual numbers.
2. Annual adjustments are capped at three percent and are indexed by the Engineering News Record 20-Cities Average Index.
3. Wastewater main rehabilitation continues at an investment rate of approximately $2.2 million every other year.
4. The 2003 Certificates of Participation debt service is paid off in the first year amounting to approximately $2.3 million.
5. Debt service payments for the improvements at White Slough are approximately $3.5 million per year.
6. New development revenue toward payment of the water plant debt service is assumed minimal to retain the utility's high bond rating.
7. Capital expenditures are planned amounting to approximately $1.4 million to improve the irrigation conveyance and pumping facilities and to expand the secondary/industrial storage at White Slough in the latter two years of the model.
8. Net available capital at the end of Fiscal Year 2018/19 is relatively low.

At the January 6, 2010 City Council meeting to consider setting usage-based rates for water and wastewater, the following information was provided. *"The City has an existing usage-based rate structure for non-residential customers, and it is recommended that rate structure be maintained for those non-residential accounts for the time being. This structure includes a monthly base charge referenced to the meter size and a commodity charge of $0.537 per CCF as presented in Exhibit C. It needs to be noted that the non-residential commodity charge is approximately one-half of the weighted average residential commodity charge ($.537 versus $1.11 per CCF) and that future work will need to be done to amend the non-residential rate structure to make it more comparable to the residential commodity charge rate. Both the base charge and commodity charge are likely to be increased."*

The recommendations within the rate study provided in Exhibit C present a transition plan to implement the abovementioned structural changes to the rates. In addition, the rate study addresses the following issues concerning the City's water and wastewater utilities and user rates.

A. Estimated annual water and wastewater rate revenue requirements for the next five years
B. Current flat and usage-based water and wastewater rate structures
C. Water and wastewater customer account, water usage, and wastewater flow characteristics and influence on rate setting
D. Cost of service and rate design issues related to development of new usage-based water and wastewater rate structures

E. Recommendations for new water and wastewater rate schedules over the next five years
F. Affects of the proposed new water and wastewater rates on various residential and non-residential customers
G. Transition plans to usage-based water and wastewater rates for each customer classification

A summary of each of the above issues is provided in Section I of the rate study. More detailed information and analysis is provided in Sections II and III. A summary of the programmed rates with the three percent adjustment are presented in Exhibit F and will be included in the Proposition 218 notice.

4. Solid Waste Rates The existing agreement with Waste Management for Solid Waste Collection, Recycling and Green Waste Collection and Processing Services (Agreement) in the City of Lodi was adopted in 2008 and extends until December 31, 2023. An amendment to the Agreement was approved in 2010 that give the Contractor the unilateral option to extend the Agreement until December 31, 2030. Section 7 Rates, paragraphs b. and c. of the Agreement establish provisions for annual adjustment to the rates that are repeated below.

b. On April 1, 2009, and on each anniversary thereof during the term of this Agreement, the rates shall be adjusted in a percentage amount equal to eighty percent (80%) of the annual change in the Consumer Price Index for all Urban Consumers for San Francisco-Oakland-San Jose, California area, All Items (1982 – 84 = 100) published by the Bureau of Labor Statistics (the Index) for the twelve (12) month period ending December 31 of the preceding calendar year.
c. In January of each year, Contractor shall send to City a revised rate schedule reflecting the new rates, as adjusted by the Index as provided in Section 7.b. City Council will act on rate adjustments to be effective on April 1 of that year.

FISCAL IMPACT: Not applicable.

FUNDING AVAILABLE: Not applicable.

F. Wally Sandelin
Public Works Director

FWS/pmf

Attachments

Exhibit A

Meter Charge Alternatives

Meter Size	Purchase Price	Recommended Price Based (Cost x 1.55)	Capacity Factor	Capacity Based	Installed Cost (Contract Prices)	Lodi Fee Schedule	Santa Clara Fee Schedule	No Charge
¾	$194	$300	1	$300	$940	$400	$370	$0
1	$226	$350	1.67	$500	$1,420	$480	$365	$0
1 ½	$506	$780	3.33	$1,000	$3,810	$745	$1,565	$0
2	$624	$970	5.33	$1,600	$5,720	$930	$1,730	$0
3	$1,279	$1,980	10	$3,000	$5,950	N/A	$2,065	$0
4	$2,304	$3,570	16.67	$5,000	N/A	N/A	$4,130	$0
6	$4,362	$6,760	33.33	$10,000	N/A	N/A	$6,750	$0
8	$7,432	$11,520	53.33	$16,000	N/A	N/A	$10,670	$0

Exhibit B

Programmed and Implemented Rate Adjustments

Water

Year	Programmed	Implemented
2009	0	0
2010	0	0
2011	2	2
2012	2.53	2.2
2013	2.5	2.5
2014	3.3	2.5

Water rate adjustments were not capped, therefore, programmed adjustments equal the approved adjustments.

Wastewater

2009	25	25
2010	20	12
2011	10	5
2012	5	3
2013	2.8	2.5

Wastewater rate adjustments were capped.

Exhibit C

CITY OF LODI

Water and Wastewater Rate Update Study

Final Report

October 9, 2013

THE REED GROUP, INC.

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SECTION I. SUMMARY

INTRODUCTION

The City of Lodi continues to install water meters on unmetered service connections of single family, multi-family, and non-residential customers. The City expects to complete the meter retrofit program in 2018. At the beginning of each year, the City transitions batches of customers to usage-based water rates using data collected from water meters, and the City is also beginning to transition customers to usage-based wastewater rates as well.

In 2008, the City retained The Reed Group, Inc. to assist in developing financial plans and utility rates for the City's water and wastewater utilities. Various analyses have been performed since that time to help guide the City in dealing with a variety of water and wastewater rate and financial issues, including the transition to usage-based billing. The purpose of this report is to recommend water and wastewater rates that will meet each utility's financial needs and continue the transition towards usage-based billing for all customers.

This report addresses the following issues concerning the City's water and wastewater utilities and user rates:

- Estimated annual water and wastewater rate revenue requirements for the next five years
- Current flat and usage-based water and wastewater rate structures, and the need to continue to develop new usage-based rate structures
- Water and wastewater customer account, water usage, and wastewater flow characteristics and influence on rate setting
- Cost of service and rate design issues related to development of new usage-based water and wastewater rate structures
- Recommendations for new water and wastewater rate schedules, as well as adjustments in the level of the rates during the next five years
- Affect of the proposed new water and wastewater rates on various residential and non-residential customers
- Summary of plans to continue the transition to usage-based water and wastewater rates for each customer classification
- Plans and requirements for adopting new water and wastewater rates.

REVENUE NEEDS OF THE WATER AND WASTEWATER UTILITIES

Several years ago, The Reed Group, Inc. assisted the City by developing multi-year financial plan models for the water and wastewater utilities. These models enabled the City to evaluate the financial implications of the meter retrofit program, the construction and financing of the new surface water treatment plant, and other capital improvements of both utilities, as well as ongoing operation and maintenance costs, debt service obligations,

and other factors affecting the financial condition and needs of the utilities. Since that time, City staff has annually updated the financial plan models. The financial plan models have enabled the City to make near-term financial and rate decisions with a long-term planning horizon in mind, and this has led to the moderation and stabilization of annual rate increases for both utilities.

In recent years, annual water rate increases have been less than 3 percent, and wastewater rate increases have declined from double-digit levels down to 2.5 percent. Current financial plan models estimate annual water and wastewater rate increases can be limited to 3 percent per year through FY 19-20.

Proposed water and wastewater rate schedules presented in this report reflect an overall 2.5 percent increase in the level of water rate revenue in the upcoming year (effective in January 2014) and no more than 3 percent in the level of the wastewater rate revenue (effective in July 2014). Beyond that, it is recommended that the City re-adopt provisions to annually adjust water and wastewater rate increases by changes in the *Engineering News Record's* 20-Cities Construction Cost Index (ENR) for up to five years, subject to a 3 percent cap. These annual rate adjustments would also be subject to annual review by staff to confirm need and concurrence by the City Council.

PROPOSED WATER RATES

Proposed flat (unmetered) water rates are presented in **Exhibit I-1**, and proposed usage-based (metered) water rates are presented in **Exhibit I-2**. Both of these rate schedules reflect a 2.5 percent overall rate increase in January 2014 (based on previously approved indexing using the ENR), and 3.0 percent increases each January from 2015 through 2019 (reflecting the maximum allowed under the proposed indexing criteria). As the City will be phasing out the flat water rates as the meter retrofit program winds down, no changes to the structure of the flat rates are proposed.

Proposed usage-based water rates include a gradual, three-year transition in the structure. At present, the volumetric water rate for multi-family and non-residential accounts is equal to the first tier rate for single family customers. Under the proposed rates the uniform multi-family and non-residential rate will equal the weighted average across the single family tier structure, thereby bringing better balance across the various customer classes. In addition, monthly service charges should be adjusted to better reflect the capacity relationship across meter sizes, and thereby improve equity between large and small customers. Both of these changes are intended to better align the water rates with cost of service principles, as required by Proposition 218.

Exhibit I-2 includes the three years of phased rate structure changes in the rate schedules for 2014, 2015, and 2-16. The 2014 schedule reflects the 2.5 percent overall annual rate revenue increase relative to current rates (with some rate components increasing and others decreasing each year), and the 2015 and 2016 schedules reflect the maximum indexing of 3.0 percent in each of those years. These transitional rate structures would be subject to downward adjustments in both 2015 and 2016 if the City Council determines that smaller increases are needed in those years.

Details of water rate recommendations are presented in Section II of this report.

Exhibit I-1
City of Lodi
Current and Proposed Flat Water Rates

			Future Rate Ceiling				
	Current (Jan. 2013)	**Proposed (Jan. 2014)**	**Proposed (Jan. 2015)**	**Proposed (Jan. 2016)**	**Proposed (Jan. 2017)**	**Proposed (Jan. 2018)**	**Proposed (Jan. 2019)**
Rate Increase -->		**2.5%**	**3.0%**	**3.0%**	**3.0%**	**3.0%**	**3.0%**
FLAT RATES							
Single Family Residential							
1 Bedroom	$ 29.90	$ 30.65	$ 31.57	$ 32.52	$ 33.50	$ 34.51	$ 35.55
2 Bedroom	$ 35.91	$ 36.81	$ 37.91	$ 39.05	$ 40.22	$ 41.43	$ 42.67
3 Bedroom	$ 43.04	$ 44.12	$ 45.44	$ 46.80	$ 48.20	$ 49.65	$ 51.14
4 Bedroom	$ 51.72	$ 53.01	$ 54.60	$ 56.24	$ 57.93	$ 59.67	$ 61.46
5 Bedroom	$ 62.03	$ 63.58	$ 65.49	$ 67.45	$ 69.47	$ 71.55	$ 73.70
6 Bedroom	$ 74.44	$ 76.30	$ 78.59	$ 80.95	$ 83.38	$ 85.88	$ 88.46
Multi-Family (1)							
1 Bedroom	$ 25.67	$ 26.31	$ 27.10	$ 27.91	$ 28.75	$ 29.61	$ 30.50
2 Bedroom	$ 30.79	$ 31.56	$ 32.51	$ 33.49	$ 34.49	$ 35.52	$ 36.59
3 Bedroom	$ 36.94	$ 37.86	$ 39.00	$ 40.17	$ 41.38	$ 42.62	$ 43.90
4 Bedroom	$ 44.32	$ 45.43	$ 46.79	$ 48.19	$ 49.64	$ 51.13	$ 52.66
Non-Residential							
Existing unmetered	Varies	+2.5%	+3.0%	+3.0%	+3.0%	+3.0%	+3.0%

Notes:

(1) Multi-family includes duplexes, triplexes, fourplexes, apartments, condominiums, and mobile home parks.

Exhibit I-2
City of Lodi
Current and Proposed Usage-Based Water Rates

				Future Rate Ceiling				
	Current (Jan. 2013)	**Proposed (Jan. 2014)**	**Proposed (Jan. 2014)**	**Proposed (Jan. 2015)**	**Proposed (Jan. 2016)**	**Proposed (Jan. 2017)**	**Proposed (Jan. 2018)**	**Proposed (Jan. 2019)**
Rate Increase -->		**2.5%** (2)	(3)	**3.0%** (4)	**3.0%** (4)	**3.0%**	**3.0%**	**3.0%**
USAGE-BASED RATES								
Monthly Service Charge								
Single Family								
3/4" meter	$ 23.78	$ 24.37	$ 23.26	$ 22.80	$ 21.65	$ 22.30	$ 22.97	$ 23.66
1" meter	$ 38.60	$ 39.57	$ 37.38	$ 36.26	$ 34.01	$ 35.03	$ 36.08	$ 37.16
1 1/2" meter	$ 75.42	$ 77.31	$ 72.45	$ 69.63	$ 64.62	$ 66.56	$ 68.56	$ 70.62
2" meter	$ 119.79	$ 122.78	$ 114.71	$ 109.84	$ 101.52	$ 104.57	$ 107.71	$ 110.94
Multi-Family and Non-Residential (1)								
3/4" meter	$ 23.78	$ 24.37	$ 23.26	$ 22.80	$ 21.65	$ 22.30	$ 22.97	$ 23.66
1" meter	$ 38.60	$ 39.57	$ 37.38	$ 36.26	$ 34.01	$ 35.03	$ 36.08	$ 37.16
1 1/2" meter	$ 60.24	$ 61.75	$ 62.08	$ 64.28	$ 64.62	$ 66.56	$ 68.56	$ 70.62
2" meter	$ 75.27	$ 77.15	$ 84.29	$ 94.17	$ 101.52	$ 104.57	$ 107.71	$ 110.94
3" meter	$ 105.38	$ 108.01	$ 132.74	$ 162.18	$ 187.65	$ 193.28	$ 199.08	$ 205.05
4" meter	$ 135.51	$ 138.90	$ 193.14	$ 254.80	$ 310.67	$ 319.99	$ 329.59	$ 339.48
6" meter	$ 195.68	$ 200.57	$ 333.69	$ 480.82	$ 617.94	$ 636.48	$ 655.57	$ 675.24
8" meter	$ 255.91	$ 262.31	$ 494.23	$ 747.94	$ 986.82	$ 1,016.42	$ 1,046.91	$ 1,078.32
10" meter	$ 316.01	$ 323.91	$ 674.61	$ 1,056.08	$ 1,417.30	$ 1,459.82	$ 1,503.61	$ 1,548.72
Usage Rates ($/CCF)								
Single Family								
Tier 1 (0-10 CCF)	$ 0.92	$ 0.94	$ 0.94	$ 0.97	$ 0.96	$ 0.99	$ 1.02	$ 1.05
Tier 2 (11-50 CCF)	$ 1.38	$ 1.41	$ 1.35	$ 1.33	$ 1.27	$ 1.31	$ 1.35	$ 1.39
Tier 3 (>50 CCF)	$ 1.82	$ 1.87	$ 1.76	$ 1.70	$ 1.59	$ 1.64	$ 1.69	$ 1.74
Multi-Family and Non-Residential (1)								
All water usage	$ 0.92	$ 0.94	$ 1.00	$ 1.09	$ 1.14	$ 1.17	$ 1.21	$ 1.25

Notes:

(1) Multi-family includes duplexes, triplexes, fourplexes, apartments, condominiums, and mobile home parks.
(2) This schedule includes the proposed indexing of 2.5 percent, with no rate structure changes.
(3) This rate schedule is revenue neutral relative to the proposed newly indexed January 2014 water rates, but includes the beginning of the proposed 3-year phased changes to the rate structure.
(4) These rate schedules reflect the second and third year of the 3-year rate structure phasing, as well as the maximum potential rate adjustment due to ENR indexing.

PROPOSED WASTEWATER RATES

Proposed flat (unmetered) wastewater rates are presented in **Exhibit I-3**, and proposed usage-based (metered) wastewater rates are presented in **Exhibit I-4**. Both of these rate schedules reflect 3.0 percent increases each July from 2014 through 2018 (reflecting the maximum allowed under the proposed indexing criteria). Similar to flat water rates, no changes to the structure of flat wastewater rates are proposed, as they will be phased out in upcoming years.

In 2010, the City developed usage-based wastewater rates for single family customers. In July 2012, the City transitioned about 2,940 single family customers to the usage-based wastewater rates, expects to transition an additional 3,700 in July 2014, and will continue each year with more. However, usage-based wastewater rates for other customer classes are not currently available. The usage-based wastewater rates proposed herein include fixed monthly service charges and volumetric rates for all customer classes. While the rate schedule includes usage-based rates for non-residential uses, the City plans to focus on transitioning single family and multi-family residential customer to usage-based rates, and then transition non-residential customers. Rate structure transition issues are discussed in greater in Section III of this report. Additional refinements to the rate structure will be required as the City gains data and experience with the usage-based rates, as well as categorizes non-residential customers into appropriate strength classifications.

Details of wastewater rate recommendations are presented in Section III of this report.

ANNUAL ADJUSTMENTS TO WATER AND WASTEWATER RATES

Government Code Section 53756 authorizes the City to adopt a mechanism for adjusting water and wastewater rates to offset the affects of inflation for up to five years. Consistent with past practices, it is recommended that, in approving the proposed rates, the City also approve annual adjustments to water rates beginning in January 2015 and to wastewater rates beginning in July 2014 by the annual change in the *Engineering News Record's* 20-Cities Construction Cost Index (ENR), subject to a 3 percent annual cap. These annual rate adjustments would also be subject to annual review by staff to confirm need and concurrence by the City Council. In accordance with Section 53756, customers should be informed of the changes in the rate schedules at least 30 days prior to their implementation. This can be achieved through a bill insert, or other means.

Water and wastewater rate schedules presented in Exhibits I-1 through I-4 reflect the maximum 3.0 percent potential adjustment to the rates each year (January 2015 through January 2019 for water rates and July 2014 through July 2018 for wastewater). These schedules, therefore, reflect the "ceiling" for the rates at any time during this five-year period. Actual annual rate adjustments would be based on the actual change in the ENR index (subject to a 3.0 percent cap), financial need, and concurrence by the City Council.

As the City continues to transition customers from flat water and wastewater rates to usage-based rates there is some uncertainty as to the affect it may have on revenues. Therefore, it is important for the City to continue to monitor water usage characteristics and rate revenues for both utilities on an annual basis.

Exhibit I-3
City of Lodi
Current and Proposed Flat Wastewater Rates

		Future Rate Ceiling				
	Current (Jul. 2013)	Proposed (Jul. 2014)	Proposed (Jul. 2015)	Proposed (Jul. 2016)	Proposed (Jul. 2017)	Proposed (Jul. 2018)
Rate Increase -->		3.0%	3.0%	3.0%	3.0%	3.0%
FLAT RATES						
Single Family Residential						
1 Bedroom	$ 25.83	$ 26.60	$ 27.40	$ 28.22	$ 29.07	$ 29.94
2 Bedroom	$ 34.44	$ 35.47	$ 36.53	$ 37.63	$ 38.76	$ 39.92
3 Bedroom	$ 43.05	$ 44.34	$ 45.67	$ 47.04	$ 48.45	$ 49.90
4 Bedroom	$ 51.66	$ 53.21	$ 54.81	$ 56.45	$ 58.14	$ 59.88
5 Bedroom	$ 60.27	$ 62.08	$ 63.94	$ 65.86	$ 67.84	$ 69.88
6 Bedroom	$ 68.88	$ 70.95	$ 73.08	$ 75.27	$ 77.53	$ 79.86
7 Bedroom	$ 77.49	$ 79.81	$ 82.20	$ 84.67	$ 87.21	$ 89.83
Duplexes, Triplexes, Fourplexes, Apartments, and Condominiums						
1 Bedroom	$ 25.83	$ 26.60	$ 27.40	$ 28.22	$ 29.07	$ 29.94
2 Bedroom	$ 34.44	$ 35.47	$ 36.53	$ 37.63	$ 38.76	$ 39.92
3 Bedroom	$ 43.05	$ 44.34	$ 45.67	$ 47.04	$ 48.45	$ 49.90
4 Bedroom	$ 51.66	$ 53.21	$ 54.81	$ 56.45	$ 58.14	$ 59.88
Mobile Homes						
Any Size	$ 25.83	$ 26.60	$ 27.40	$ 28.22	$ 29.07	$ 29.94
Non-Residential						
Per SSU	$ 34.44	$ 35.47	$ 36.53	$ 37.63	$ 38.76	$ 39.92

Exhibit I-4
City of Lodi
Current and Proposed Usage-Based Wastewater Rates

		Future Rate Ceiling				
	Current (Jul. 2013)	**Proposed (Jul. 2014)**	**Proposed (Jul. 2015)**	**Proposed (Jul. 2016)**	**Proposed (Jul. 2017)**	**Proposed (Jul. 2018)**
Rate Increase -->		**3.0%**	**3.0%**	**3.0%**	**3.0%**	**3.0%**
USAGE-BASED RATES						
Monthly Service Charge						
Single Family (per DU)	$ 23.52	$ 24.23	$ 24.96	$ 25.71	$ 26.48	$ 27.27
Multi-Family and Non-Residential (1)						
3/4" meter		$ 24.23	$ 24.96	$ 25.71	$ 26.48	$ 27.27
1" meter		$ 38.83	$ 39.99	$ 41.19	$ 42.43	$ 43.70
1 1/2" meter		$ 75.03	$ 77.28	$ 79.60	$ 81.99	$ 84.45
2" meter		$ 118.63	$ 122.19	$ 125.86	$ 129.64	$ 133.53
3" meter		$ 220.45	$ 227.06	$ 233.87	$ 240.89	$ 248.12
4" meter		$ 365.88	$ 376.86	$ 388.17	$ 399.82	$ 411.81
6" meter		$ 729.12	$ 750.99	$ 773.52	$ 796.73	$ 820.63
8" meter		$ 1,165.18	$ 1,200.14	$ 1,236.14	$ 1,273.22	$ 1,311.42
Usage Rates ($/CCF)						
Single Family (2)	$ 2.68	$ 2.76	$ 2.84	$ 2.93	$ 3.02	$ 3.11
Multi-Family (2)		$ 2.76	$ 2.84	$ 2.93	$ 3.02	$ 3.11
Non-Residential (2) (3)						
Low Strength		*$ 2.76*	*$ 2.84*	*$ 2.93*	*$ 3.02*	*$ 3.11*
Medium Strength		*$ 3.45*	*$ 3.55*	*$ 3.66*	*$ 3.77*	*$ 3.88*
High Strength		*$ 4.49*	*$ 4.62*	*$ 4.76*	*$ 4.90*	*$ 5.05*
Industrial (4)						
Flow (per MG annually)	$ 3,487.41	$ 3,592.03	$ 3,699.79	$ 3,810.78	$ 3,925.10	$ 4,042.85
BOD (per 1,000 lbs annually)	$ 575.51	$ 592.78	$ 610.56	$ 628.88	$ 647.75	$ 667.18
SS (per 1,000 lbs annually)	$ 359.85	$ 370.65	$ 381.77	$ 393.22	$ 405.02	$ 417.17

Notes:

(1) Multi-family includes duplexes, triplexes, fourplexes, apartments, condominiums, and mobile home parks.
(2) Usage charge based on winter water use determined as the average from the prior December-February period. Adjusted each July for each account.
(3) Placeholder. These rates not yet in use.
(4) Applies to industrial users discharging into the domestic sewer system.

AFFECT OF PROPOSED RATES ON CUSTOMER BILLS

Flat water rates are proposed to increase by 2.5 percent in January 2014 and flat wastewater rates are proposed be adjusted by no more than 3 percent in July 2014 to meet anticipated revenue needs of the utilities. No structural changes are proposed for flat rates. Customers subject to flat rates will therefore see a 2.5 percent change in their monthly water bills, and no more than a 3 percent change in their monthly wastewater bills.

Rate structure changes are proposed for usage-based water rates, which will result in smaller or larger changes in bill amounts for affected customers. In general, single family residential customers will benefit from the change, and non-residential customers will, in most but not all cases, see bill increases in excess of 2.5 percent. The proposed rate structure changes, as described in Section II of this report, are intended to improve the equity between the customer classes in the charges for water service.

Multi-family customers, including mobile homes parks, will soon begin to be transitioned to usage-based rates. While usage-based billing may result in the City shifting billing from tenants to property owners, the total charges for water service within most apartment complexes and mobile home parks, as well as duplexes, triplexes, and fourplexes, are likely to be significantly lower if billed to property owners with usage-based rates compared with cumulative flat rate billing to the tenants.

With the exception of the transitioning single family residential customers from flat wastewater rates to usage-based wastewater rates, other wastewater customers will continue to be billed on flat rates until at least July 2015. Usage-based wastewater rates are based on winter water usage for each account, and non-residential customers will be assigned to low, medium, or high strength categories, depending on the type of business. When the transition does occur, multi-family residential customers will likely benefit from usage-based rates. Additional analysis is required to assess the potential implications of usage-based rates for non-residential customers, and further refinements to wastewater rates will be required in the years ahead as more data and analyses become available.

Exhibit I-5 summarizes the affect of proposed water rates (effective January 2014) and proposed wastewater rates (effective July 2014) on monthly bills for a sampling of residential customers. Both flat rates and usage-based rate examples are presented, as well as changes in combined water and wastewater bills.

Exhibit I-6 summarizes the affect of proposed water rates (effective January 2014) and proposed wastewater rates (effective July 2014) on average monthly bills for a sampling of non-residential customers. In all cases, non-residential customers shown are subject to usage-based water rates and flat wastewater rates during this period.

Bill water amounts under proposed rates in Exhibits I-5 and I-6 reflect both the 2.5 percent overall rate increase, as well as the first step in the rate restructuring for usage based water rates. Additional details on the water and wastewater rates and related analyses are presented in Sections II and III, respectively, of this report.

Exhibit I-5
City of Lodi
Water Bills for Sample of Residential Customers

		Monthly Water Bill		Change	
	Water Use (CCF)	Current Rates (Jan. 2013)	Proposed Rates (Jan. 2014)	$s	%
Single Family Residential					
Flat Rate - 2 Bdrm Home	n/a	$ 35.91	$ 36.81	$ 0.90	2.5%
Flat Rate - 3 Bdrm Home	n/a	$ 43.04	$ 44.12	$ 1.08	2.5%
Mtr'd Rate - Low Usage	9	$ 32.06	$ 31.72	$ (0.34)	-1.1%
Mtr'd Rate - Median Usage	16	$ 41.26	$ 40.76	$ (0.50)	-1.2%
Mtr'd Rate - High Usage	32	$ 63.34	$ 62.36	$ (0.98)	-1.5%
Muti-Family Residential (1)					
Flat Rate - 2 Bdrm Apartment	n/a	$ 30.79	$ 31.56	$ 0.77	2.5%
Duplex w/ 3/4" Mtr.	36	$ 61.58	$ 59.26	$ (2.32)	-3.8%
Fourplex w/ 1" Wtr. Mtr.	60	$ 123.16	$ 97.38	$ (25.78)	-20.9%
12 Unit Apartment w/ 1 1/2" Mtr.	150	$ 369.48	$ 212.08	$ (157.40)	-42.6%
80 Unit Apartment w/ 4" Mtr.	720	$ 2,463.20	$ 913.14	$ (1,550.06)	-62.9%
40 Unit MH Park w/ 2" Mtr.	250	$ 1,231.60	$ 334.29	$ (897.31)	-72.9%

Wastewater Bills for Sample of Residential Customers

		Monthly Wastewater Bill		Change	
	Winter Wtr. Use (CCF)	Current Rates (Jul. 2013)	Proposed Rates (Jul. 2014)	$s	%
Single Family Residential					
Flat Rate - 2 Bdrm Home	n/a	$ 34.44	$ 35.47	$ 1.03	3.0%
Flat Rate - 3 Bdrm Home	n/a	$ 43.05	$ 44.34	$ 1.29	3.0%
Mtr'd Rate - Low Usage	6	$ 39.60	$ 40.79	$ 1.19	3.0%
Mtr'd Rate - Median Usage	9	$ 47.64	$ 49.07	$ 1.43	3.0%
Mtr'd Rate - High Usage	12	$ 55.68	$ 57.35	$ 1.67	3.0%
Muti-Family Residential (1)					
Flat Rate - 2 Bdrm Apartment	n/a	$ 34.44	$ 35.47	$ 1.03	3.0%
Duplex w/ 3/4" Mtr.	16	$ 68.88	$ 68.39	$ (0.49)	-0.7%
Fourplex w/ 1" Wtr. Mtr.	28	$ 137.76	$ 116.11	$ (21.65)	-15.7%
12 Unit Apartment w/ 1 1/2" Mtr.	72	$ 413.28	$ 273.75	$ (139.53)	-33.8%
80 Unit Apartment w/ 4" Mtr.	480	$ 2,755.20	$ 1,690.68	$ (1,064.52)	-38.6%
40 Unit MH Park w/ 2" Mtr.	180	$ 1,033.20	$ 615.43	$ (417.77)	-40.4%

Combined Water and Wastewater Bills for Sample of Residential Customers

	Monthly Wtr/WW Bill		Change	
	Current Rates	Proposed Rates	$s	%
Single Family Residential				
Flat Rate - 2 Bdrm Home	$ 70.35	$ 72.28	$ 1.93	2.7%
Flat Rate - 3 Bdrm Home	$ 86.09	$ 88.46	$ 2.37	2.8%
Mtr'd Rate - Low Usage	$ 71.66	$ 72.51	$ 0.85	1.2%
Mtr'd Rate - Median Usage	$ 88.90	$ 89.83	$ 0.93	1.0%
Mtr'd Rate - High Usage	$ 119.02	$ 119.71	$ 0.69	0.6%
Muti-Family Residential (1)				
Flat Rate - 2 Bdrm Apartment	$ 65.23	$ 67.03	$ 1.80	2.8%
Duplex w/ 3/4" Mtr.	$ 130.46	$ 127.65	$ (2.81)	-2.2%
Fourplex w/ 1" Wtr. Mtr.	$ 260.92	$ 213.49	$ (47.43)	-18.2%
12 Unit Apartment w/ 1 1/2" Mtr.	$ 782.76	$ 485.83	$ (296.93)	-37.9%
80 Unit Apartment w/ 4" Mtr.	$ 5,218.40	$ 2,603.82	$ (2,614.58)	-50.1%
40 Unit MH Park w/ 2" Mtr.	$ 2,264.80	$ 949.72	$ (1,315.08)	-58.1%

Notes:

(1) Current bill amounts for multi-family examples are all based on flat rates, and assume two bedroom dwelling units. Proposed bill amounts are based on metered rates, except where noted.

Exhibit I-6
City of Lodi
Water Bills for Sample of Non-Residential Customers

		Monthly Water Bill		Change	
	Water Use (CCF)	Current Rates (Jan. 2013)	Proposed Rates (Jan. 2014)	$s	%
Retail Store (w/ 1" mtr.)	48	$ 82.76	$ 85.38	$ 2.62	3.2%
Small Motel (w/ 1" mtr.)	120	$ 149.00	$ 157.38	$ 8.38	5.6%
Restaurant (w/ 1 1/2" mtr.)	160	$ 207.59	$ 222.25	$ 14.65	7.1%
Small Manufacturer (w/ 2" mtr.)	169	$ 230.75	$ 253.29	$ 22.54	9.8%
Grocery Store (w/ 2 mtrs.)	518	$ 611.76	$ 664.04	$ 52.27	8.5%
Big Box Retail (w/ 2 mtrs.)	541	$ 633.48	$ 687.64	$ 54.16	8.5%
Large Retail Store (w/ 2" mtr.)	739	$ 815.16	$ 931.89	$ 116.73	14.3%
Large Office Bldg. (w/ 4" mtr.)	704	$ 783.11	$ 897.06	$ 113.94	14.6%
High School (w/ 3 mtrs.)	2,268	$ 2,441.57	$ 2,818.13	$ 376.56	15.4%
Hospital (w/ 6 mtrs.)	2,963	$ 3,505.27	$ 4,067.37	$ 562.10	16.0%
Indus. Food Processor (w/ 4 mtrs.)	6,025	$ 5,973.20	$ 6,659.34	$ 686.14	11.5%
Indus. Food Processor (w/ 6 mtrs.)	8,565	$ 8,376.22	$ 9,156.93	$ 780.71	9.3%

Wastewater Bills for Sample of Non-Residential Customers

		Monthly Wastewater Bill		Change	
	WW Use (SSUs)	Current Rates (Jul. 2013)	Proposed Rates (Jul. 2014)	$s	%
Retail Store	3.12	$ 107.45	$ 110.67	$ 3.21	3.0%
Small Motel	4.00	$ 137.76	$ 141.88	$ 4.12	3.0%
Restaurant	14.00	$ 482.16	$ 496.58	$ 14.42	3.0%
Small Manufacturer	22.85	$ 786.95	$ 810.49	$ 23.54	3.0%
Grocery Store	25.00	$ 861.00	$ 886.75	$ 25.75	3.0%
Big Box Retail	36.08	$ 1,242.60	$ 1,279.76	$ 37.16	3.0%
Large Retail Store	13.98	$ 481.47	$ 495.87	$ 14.40	3.0%
Large Office Building	92.63	$ 3,190.18	$ 3,285.59	$ 95.41	3.0%
High School	133.93	$ 4,612.55	$ 4,750.50	$ 137.95	3.0%
Hospital	48.56	$ 1,672.41	$ 1,722.42	$ 50.02	3.0%
Industrial Food Processor	639.67	$ 22,030.23	$ 22,689.09	$ 658.86	3.0%
Industrial Food Processor	1,258.06	$ 43,327.59	$ 44,623.39	$ 1,295.80	3.0%

Combined Water and Wastewater Bills for Sample of Non-Residential Customers

	Monthly Wtr/WW Bill		Change	
	Current Rates	Proposed Rates	$s	%
Retail Store	$ 190.21	$ 196.05	$ 5.83	3.1%
Small Motel	$ 286.76	$ 299.26	$ 12.50	4.4%
Restaurant	$ 689.75	$ 718.83	$ 29.07	4.2%
Small Manufacturer	$ 1,017.70	$ 1,063.78	$ 46.08	4.5%
Grocery Store	$ 1,472.76	$ 1,550.79	$ 78.02	5.3%
Big Box Retail	$ 1,876.07	$ 1,967.39	$ 91.32	4.9%
Large Retail Store	$ 1,296.63	$ 1,427.76	$ 131.13	10.1%
Large Office Building	$ 3,973.29	$ 4,182.64	$ 209.35	5.3%
High School	$ 7,054.12	$ 7,568.63	$ 514.51	7.3%
Hospital	$ 5,177.68	$ 5,789.79	$ 612.11	11.8%
Industrial Food Processor	$ 28,003.44	$ 29,348.44	$ 1,345.00	4.8%
Industrial Food Processor	$ 51,703.80	$ 53,780.32	$ 2,076.52	4.0%

SECTION II. WATER RATES

This section of the report describes water rate recommendations for the City's water utility. The City's multi-year financial plan was used to determine annual water rate revenue requirements, and to develop the strategy for meeting current and future financial obligations. The annual rate revenue requirement is the amount of revenue needed from water rates to cover estimated operating, maintenance, debt service, and capital program costs with consideration of other revenues and financial reserves.

Water rate recommendations are also intended to assist the City in the transition to a fully metered water system and universal usage-based water rates. Rate structure changes are intended to improve equity across customer classes by better reflecting the cost of providing service.

CURRENT WATER RATES

The City's current water rates are summarized in **Exhibit II-1**. Water rates were last adjusted in January 2013 with a 2.5 percent across-the-board increase based on changes in he *Engineering New Record's* 20-Cities Construction Cost Index (ENR). This index is used by the City to annually adjust the level of water and wastewater rates.

Exhibit I-1
City of Lodi
Current Monthly Water Rates

FLAT RATES			USAGE-BASED RATES					
Single Family Residential			***Single Family Residential***					
			Monthly Service Charges			Usage Rates ($/CCF)		
1 Bedroom	$	29.90	3/4" meter	$	23.78	Tier 1 (0-10 CCF)	$	0.92
2 Bedroom	$	35.91	1" meter	$	38.60	Tier 2 (11-50 CCF)	$	1.38
3 Bedroom	$	43.04	1 1/2" meter	$	75.42	Tier 3 (>50 CCF)	$	1.82
4 Bedroom	$	51.72	2" meter	$	119.79			
5 Bedroom	$	62.03						
6 Bedroom	$	74.44						
7 Bedroom	$	89.31	***Multi-Family and Non-Residential (1)***					
Multi-Family (1)			Monthly Service Charges			Usage Rates ($/CCF)		
1 Bedroom	$	25.67	3/4" meter	$	23.78	All water usage	$	0.92
2 Bedroom	$	30.79	1" meter	$	38.60			
3 Bedroom	$	36.94	1 1/2" meter	$	60.24			
4 Bedroom	$	44.32	2" meter	$	75.27			
Non-Residential			3" meter	$	105.38			
Exist. unmetered		Varies	4" meter	$	135.51			
			6" meter	$	195.68			
			8" meter	$	255.91			
			10" meter	$	316.01			

Notes:
(1) Multi-family includes duplexes, triplexes, fourplexes, apartments, condominiums, and mobile home parks.

Residential flat rates are based on the number of bedrooms in each dwelling, and were based on water usage estimates made prior to the availability of water usage data. All flat rates will be phased out as the installation of water meters is completed. Water usage rates include a fixed monthly service charge, based on size of the water meter, and volumetric charges based on a customer's actual water usage. Single family customers are subject to a three-tier rate structure, which includes a lower initial rate intended for non-discretionary uses of water and higher rates for discretionary uses intended to provide an incentive to conserve water. Multi-family and non-residential customers are subject to a uniform water usage rate.

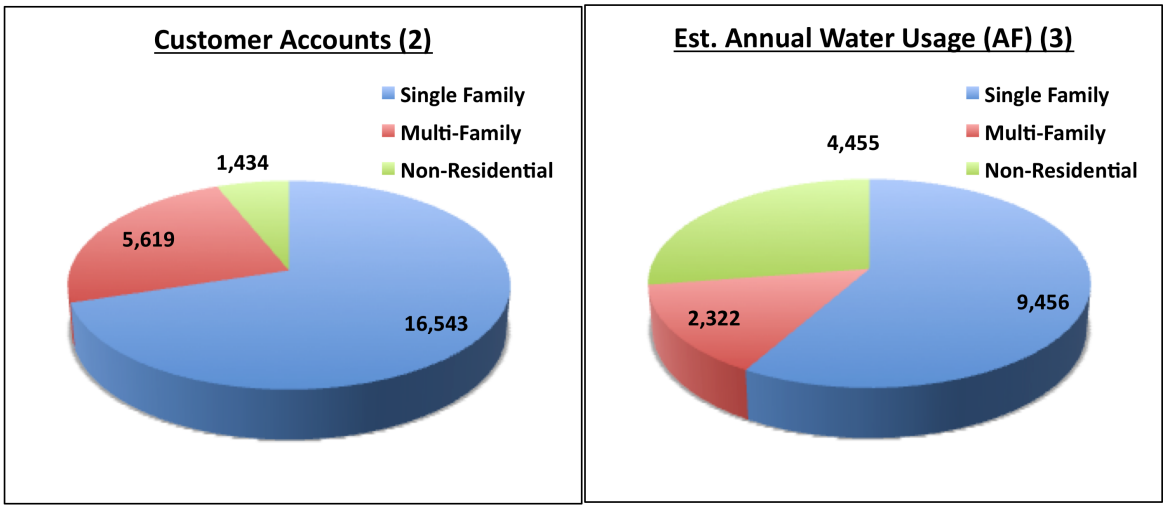
At present, tenants of multi-family apartments and mobile home parks are billed for water and wastewater services. As water meters are installed for apartment complexes and mobile home parks the billing for these services may be transferred from tenants to property owners.

CUSTOMER BASE AND WATER USAGE DATA

The water utility's customer base is predominately comprised of single family and multi-family residential customers, along with commercial, industrial, and municipal customers. Some non-residential customers, including food-processing facilities, use very large quantities of water. Because the City is not entirely metered total water usage must be estimated. **Exhibit II-2** summarizes customer account and water usage estimates derived from the City's utility billing system for 2012. With residential accounts expressed as the number of dwelling units, the water utility customer base is nearly 23,600 accounts and estimated annual water usage is about 16,233 acre-feet (AF). Single family accounts represent 70 percent of the customers and 58 percent of the water usage. Multi-family accounts represent 24 percent of the customers and 14 percent of the water usage. Non-residential accounts comprise about 6 percent of the customer base, and also represent about 27 percent of annual water usage. The City's largest water users include several industrial customers (primarily food-processing), as well as the City of Lodi, and the Lodi Unified School District.

By January 2014, more than one-half of the City's single family residential customers will be on usage-based water rates, with two- to three-thousand single family customers transitioning to usage-based rates each year. All single family customers are expected to be transitioned to usage-based water rates by 2019. The installation of water meters for all customers is expected to be completed by 2018. About 75 percent of non-residential customers are metered and have been on usage-based water rates. The City plans to transition mobile home parks to usage-based rate in 2014, the remaining non-residential accounts by 2017, and multi-family accounts by 2020.

Exhibit II-2
City of Lodi
Summary of Water Utility Customer Accounts and Annual Water Usage (1)



Notes:
(1) Derived from the City's utility billing system from data for 2012.
(2) Total customer accounts equals 23,596. Residential accounts expressed in dwelling units.
(3) Total estimated annual water usage equals 16,233 acre-feet (AF).

ANNUAL WATER REVENUE RATE REQUIREMENT

The City has updated its multi-year financial model with actual revenues and expenses (pre-audit) for FY 12-13 and the approved budget for FY 13-14. Based on that model, the City estimates an annual water rate increase of 2.5 percent in January 2014 followed by annual water rate increases of no more than 3 percent per year thereafter. These rate increases are believed to be sufficient to meet the utility's operating and maintenance costs, debt service obligations, and capital program needs through FY 19-20.

The City adjusts its water rates in January of each year based on the annual change in the ENR, subject to a 3.0 percent cap and concurrence by the City Council. Based on the current ENR and staff's analysis of financial need, the rate analyses presented herein are based on a 2.5 percent increase effective in January 2014. This is consistent with the City's updated financial plan model.

The City anticipates approximately 2,350 additional single family residential customers will be converted to usage-based rates in January 2014. With that shift, and an overall 2.5 percent rate increase, water rate revenues from flat and usage based customers is estimated to be $12,931,000, as summarized below

Flat rate revenue	$5,781,000
Usage-based rate revenue	$7,150,000
Total 2014 water rate revenue	$12,931,000

No changes are proposed to the City's flat water rate structure. Therefore, a 2.5 percent rate increase will mean a 2.5 percent increase to all flat water rates. With a transition of approximately 2,350 additional single family customers to water meters in January 2014

the water utility will be billing nearly 8,400 customer accounts through usage-based water rates. The annual water rate revenue requirement for the City's usage-based water rates will be $7,150,000 for 2014, with this increased portion of the customer base on usage-based rates. This is the revenue requirement used for the calculation of usage-based water rates.

COST OF SERVICE ANALYSIS AND RATE DESIGN

The annual water rate revenue requirement of $12,931,000 for 2014 has been split between flat and usage-based rates based on the number of accounts and water use characteristics of the customer base within each group. The cost of service analysis for each group is separately presented below.

Flat Rate Cost of Service Analysis

As the City will be phasing out the system of flat water rates in the next few years, no changes to the rate structure are proposed. The City's flat rates are based on the number of bedrooms in each single family and multi-family dwelling unit. Non-residential flat rate accounts have each been assigned a unique single family equivalency factor, based on estimated usage characteristics, relative to single family homes.

Exhibit II-3 summarizes the distribution of the 2014 revenue requirement for flat rate accounts of various customer types, and shows the calculation of the monthly flat water rates. Monthly flat water rates are proposed to increase by 2.5 percent in January 2014.

Usage-Based Rate Cost of Service Analysis

A more detailed cost of service analysis was prepared for the City's usage-based water rates. The analysis was based on the number and type of customers that will be subject to these rates in 2014.

Once the 2014 usage-based revenue requirement of $7,150,000 was determined, the next step in the rate setting process is to evaluate the cost of providing service. Water rate calculations contained herein are intended to generate the level of revenue commensurate with the revenue requirement for usage-based customers. The manner in which each customer is responsible for the water utility's costs is the subject of the cost of service analysis.

The water utility incurs certain types of costs associated with making water service available to customers. Other costs are incurred as a direct result of customer water usage. The cost of service analysis is intended to allocate the costs of providing water service to customers in proportion to customers' water demands and service requirements. There are many approaches to cost of service analysis; some are more complex than others. The approach used herein is commensurate with the data available, the distinctions currently made between various types of customers, and the requirement to fairly and to reasonably reflect the differences in service provisions to different customers.

Exhibit II-3
City of Loda
2014 Flat Water Rate Cost of Service Analysis and Rate Calculation

Customer Group	No. of Accts. or DUs (1)	Equivalency Factor (2)	Single Family Equivalents (3)	% of Total	Alloc. of Revenue Rqmt.	Monthly Flat Water Rate
Single Family Residential						
1 Bedroom	549	0.83	458	3.5%	$ 201,900	$ 30.65
2 Bedroom	3,908	1.00	3,908	29.9%	$ 1,726,500	$ 36.81
3 Bedroom	2,787	1.20	3,344	25.5%	$ 1,476,000	$ 44.12
4 Bedroom	288	1.44	415	3.2%	$ 183,200	$ 53.01
5 Bedroom	23	1.73	40	0.3%	$ 17,500	$ 63.58
6 Bedroom	1	2.07	2	0.0%	$ 900	$ 76.30
Multi-Family Residential						
1 Bedroom	2,177	0.71	1,556	11.9%	$ 687,300	$ 26.31
2 Bedroom	3,311	0.86	2,839	21.7%	$ 1,253,900	$ 31.56
3 Bedroom	129	1.03	133	1.0%	$ 58,600	$ 37.86
4 Bedroom	2	1.23	2	0.0%	$ 1,100	$ 45.43
Non-Residential						
Various	271	Varies	394	3.0%	$ 174,100	Varies (4)
Totals	13,446		13,091		$ 5,781,000	

Notes:
(1) Estimate based on transition of about 2,350 additional single family accounts to usage-based billing.
(2) From existing flat water rate structure.
(3) Based on one single family equivalent equal to a 2-bedroom home.
(4) All non-residential flat rates increase by 2.5 percent.

The cost allocation methodology used herein begins by assigning all costs to one of three categories. The cost allocation process considers the level of detail available in the City's financial structure, as well as professional judgment and experience. The three categories include:

- Customer costs, such as meter reading, billing, and customer service, are fixed costs that tend to vary as a function of the number of customer being served. Customer costs are allocated to customers based on the number of accounts. That is, every customer will pay an equal share of customer-related costs.

- Capacity costs are also fixed costs, however, these tend to vary in relation to the capacity of the water system. Customers that place (or can place) a greater or lesser burden on the capacity of the water system should bear greater or lesser shares of these costs. The sizing of the water system is based on the potential demand that each customer could place on the water system. Capacity costs are allocated to customers based on the size (hydraulic capacity) of the water meter. The hydraulic capacity reflects the potential demand that a customer could place on the water system at any given time. A customer with a large meter will be assigned a larger share of fixed capacity-related costs than one with a small meter. Capacity costs include costs associated with the water system's capacity including contributions to the capital program, debt service, maintenance costs, etc.

- Commodity costs are variable costs that vary with the amount of actual water use. Water purchases, energy costs, and chemical costs are primary examples. However, because certain fixed costs are reasonably assigned to customers on the basis of usage (e.g., water treatment staff-related costs), some fixed costs are frequently included in the commodity component. Recovering a portion of fixed costs on the basis of actual water usage has the added benefit for increasing the water conservation incentive reflected in the water rates.

The water conservation best management practice for water rates (BMP 1.4), as promulgated by the California Urban Water Conservation Council (CUWCC) specifies that at least 70 percent of water rate revenue be generated through water usage charges. While the City is not subject to the CUWCC's requirements, such an approach also provides customers with added ability to affect the amount of their water bill by managing water usage. The allocation of costs, as well as the resulting rate calculations, reflects a balanced approach to considering different rate-setting objectives. Based on a review of water system financial information, the cost allocation resulted in a distribution of the costs to customer, capacity, and commodity components of 5 percent, 40 percent, and 55 percent, respectively.

Exhibit II-4 shows how the usage-based revenue requirement is allocated to cost components, as well as the resulting determination of water rates. Usage-based water rates include a fixed monthly service charge, to recover customer and capacity costs, and water usage rates, to recover commodity costs.

The monthly service charges are calculated by allocating customer costs equally across all customer accounts and by allocating capacity related costs in proportion to meter capacity. As a result, monthly service charges increase with increasing meter sizes. While the current monthly service charges also vary with meter size the variation across meter sizes does not fully reflect the capacity relationship across meter sizes. With the correct capacity factors applied monthly service charges for the smaller meter sizes decrease while the charges for larger meters increase. The increase is greatest for the largest meter sizes but is, nevertheless, consistent with cost of service principles and the capacity relationship.

The City's water rate structure includes a uniform water usage rate for multi-family and non-residential customers. The uniform water rate is calculated simply by dividing the commodity costs by the total water sales volume.

In 2009, the City implemented a three-tier water rate structure for single family customers. The tier structure provides a lower cost for initial water usage, estimated to reflect indoor water needs that tend to be non-discretionary, and higher costs for more discretionary uses of water. It also serves as a water conservation incentive. The City obtains its water supply from both groundwater and surface water purchased from the Woodbridge Irrigation District. The first tier rate generally reflects the cost of groundwater production (as well as other commodity costs recovered through the usage rates), and the third tier rate generally reflects the cost of purchasing and treating surface water (as well as other commodity costs recovered through the usage rates).

Exhibit II-4
City of Loda
2014 Usage-Based Water Rate Cost of Service Analysis and Rate Calculation

	Meter Size									
	3/4"	**1"**	**1 1/2"**	**2"**	**3"**	**4"**	**6"**	**8"**	**10"**	**Total**
No. of Accounts										
Single Family	8,392	1	2							8,395
Multi-Family	14									14
Comm./Industrial	450	133	143	274	51	43	14		1	1,109
Municipal	2	7	7	17	6	10	1			50
Outside City				1		1		2		4
Total	8,858	141	152	292	57	54	15	2	1	9,572
Hydr. Cap. Factor	1.00	1.67	3.33	5.33	10.00	16.67	33.33	53.33	76.67	
No. of 3/4" Equiv. Meters	8,858	235	506	1,556	570	900	500	107	77	13,310
Monthly Service Charges										
Customer Cost	$ 3.11	$ 3.11	$ 3.11	$ 3.11	$ 3.11	$ 3.11	$ 3.11	$ 3.11	$ 3.11	
Capacity Cost	$ 17.91	$ 29.90	$ 59.63	$ 95.44	$ 179.07	$ 298.51	$ 596.83	$ 954.97	$ 1,372.91	
Monthly Service Chrg.	**$ 21.02**	**$ 33.02**	**$ 62.74**	**$ 98.56**	**$ 182.18**	**$ 301.62**	**$ 599.94**	**$ 958.08**	**$ 1,376.02**	
Ann. Rev. ($1,000s)	$ 2,234,301	$ 55,864	$ 114,441	$ 345,338	$ 124,611	$ 195,449	$ 107,990	$ 22,994	$ 16,512	$ 3,217,500

2014 Revenue Requirement		
Customer Cost	$ 357,500	5.0%
Capacity Cost	$ 2,860,000	40.0%
Commodity Cost	$ 3,932,500	55.0%
Total Rev. Reqmt.	**$ 7,150,000**	
	2.5%	

Water Usage Rates

			Usage (CF)	**Rate**	**Ann. Rev.**
				$/CF	
Single Family					
Tier 1	0-1000 CF	45.4%	89,474,939	**$ 0.0093**	$ 828,551
Tier 2	1001-5000 CF	50.0%	98,680,437	**$ 0.0123**	$ 1,215,348
Tier 3	> 5000 CF	4.6%	9,062,070	**$ 0.0154**	$ 139,510
Multi-Family			615,451	**$ 0.0111**	$ 6,814
Comm./Ind.			139,380,294	**$ 0.0111**	$ 1,543,090
Municipal			16,268,150	**$ 0.0111**	$ 180,106
Outside City			1,723,570	**$ 0.0111**	$ 19,082
			355,204,911		$ 3,932,500

At present, the uniform rate for multi-family and non-residential accounts is equal to the first tier rate for single family customers. Equity is improved between the single family, multi-family, and non-residential usage rates with the proposed rates because the weighted average rate across the three single family tiers equals the uniform rate applicable to multi-family and non-residential accounts.

PROPOSED WATER RATE SCHEDULES

Current and proposed water rate schedules for both flat rates and usage-based rates are presented in **Exhibits II-5** and **II-6**, respectively. All rates reflect an overall 2.5 percent revenue increase relative to the current water rates. However, due to the changes in the usage-based rate structure the change in customer water bills will vary, and will be a function of customer class, meter size, and monthly water usage, as previously presented in the section *Usage-Based Rate Cost of Service Analysis* (above). Illustrative examples of customer bill impacts are included in Exhibits I-5 and I-6, earlier in the report.

Exhibit II-5
City of Lodi
Current and Proposed Flat Water Rates

	Current (Jan. 2013)	Proposed (Jan. 2014)
	Rate Increase -->	**2.5%**
FLAT RATES		
Single Family Residential		
1 Bedroom	$ 29.90	$ 30.65
2 Bedroom	$ 35.91	$ 36.81
3 Bedroom	$ 43.04	$ 44.12
4 Bedroom	$ 51.72	$ 53.01
5 Bedroom	$ 62.03	$ 63.58
6 Bedroom	$ 74.44	$ 76.30
Multi-Family (1)		
1 Bedroom	$ 25.67	$ 26.31
2 Bedroom	$ 30.79	$ 31.56
3 Bedroom	$ 36.94	$ 37.86
4 Bedroom	$ 44.32	$ 45.43
Non-Residential		
Existing unmetered	Varies	+2.5%

Notes:

(1) Multi-family includes duplexes, triplexes, fourplexes, apartments, condominiums, and mobile home parks.

Exhibit II-6
City of Lodi
Current and Proposed Usage-Based Water Rates

	Current (Jan. 2013)	Proposed (Jan. 2014)	Proposed (Jan. 2015)	Proposed (Jan. 2016)
Rate Increase -->		**2.5%**	(2)	(2)
USAGE-BASED RATES				
Monthly Service Charge				
Single Family				
3/4" meter	$ 23.78	$ 23.26	$ 22.14	$ 21.02
1" meter	$ 38.60	$ 37.38	$ 35.20	$ 33.02
1 1/2" meter	$ 75.42	$ 72.45	$ 67.60	$ 62.74
2" meter	$ 119.79	$ 114.71	$ 106.64	$ 98.56
Multi-Family and Non-Residential (1)				
3/4" meter	$ 23.78	$ 23.26	$ 22.14	$ 21.02
1" meter	$ 38.60	$ 37.38	$ 35.20	$ 33.02
1 1/2" meter	$ 60.24	$ 62.08	$ 62.41	$ 62.74
2" meter	$ 75.27	$ 84.29	$ 91.43	$ 98.56
3" meter	$ 105.38	$ 132.74	$ 157.46	$ 182.18
4" meter	$ 135.51	$ 193.14	$ 247.38	$ 301.62
6" meter	$ 195.68	$ 333.69	$ 466.82	$ 599.94
8" meter	$ 255.91	$ 494.23	$ 726.16	$ 958.08
10" meter	$ 316.01	$ 674.61	$ 1,025.32	$ 1,376.02
Usage Rates ($/CCF)				
Single Family				
Tier 1 (0-10 CCF)	$ 0.92	$ 0.94	$ 0.94	$ 0.93
Tier 2 (11-50 CCF)	$ 1.38	$ 1.35	$ 1.29	$ 1.23
Tier 3 (>50 CCF)	$ 1.82	$ 1.76	$ 1.65	$ 1.54
Multi-Family and Non-Residential (1)				
All water usage	$ 0.92	$ 1.00	$ 1.06	$ 1.11

Notes:

(1) Multi-family includes duplexes, triplexes, fourplexes, apartments, condominiums, and mobile home parks.

(2) These rate schedules are revenue neutral relative to 2014, and would be subject to annual inflationary adjustments based on changes in the ENR.

Three-Year Transition for Usage-Based Rates

The proposed modifications to the usage-based water rate structure include changes that may impact some non-residential customers (those with large meters and/or high water usage) more dramatically than other customers. This is due to both the increased monthly service charges for larger meter sizes, as well as the necessary increase in the uniform water rate to bring it up from the single family first tier rate to the weighted average across all tiers. (At present, nearly all multi-family accounts still pay for water service under flat rates; therefore they will not directly be affected by the changes in the usage-based rate structure.)

To ease the potential affects of the proposed new water rate structure, it is recommended that the usage-based rate structure be phased in over a three-year period. The rate schedule presented in Exhibit II-6 illustrates the transition. The rate schedules for

all three years are revenue neutral to each other (and reflect an overall 2.5 percent revenue increase over the current rates). Therefore, in both 2015 and 2016 the rate schedules will need to be adjusted to incorporate the inflationary adjustments to the rates, based on changes in the ENR.

The usage-based water rate schedule presented in Exhibit I-2 reflect the proposed rate structure phased implementation, as well as reflecting the maximum potential rate adjustment of 3.0 percent per year, based on ENR indexing criteria.

METER INSTALLATION AND TRANSITION TO USAGE-BASED BILLING

The City continues to install water meters on all unmetered water service connections. Below is a summary of the status of the metering program and plans to transition customers from flat water rates to usage-based water rates. Each January an additional batch of customers is transitioned to usage-based rates.

- ***Single Family*** – More than 50 percent of single family homes now have water meters with two- to three-thousand additional meters installed each year. The transition to usage-based rates is expected to be completed by January 2019.

- ***Mobile Home Parks*** – All mobile home parks have now been provided with master water meters on the connections serving each park. The City plans to convert all mobile home parks to usage-based rates in January 2014. With that transition, billing for water service will also shift from tenant to the park owner.

- ***Multi-Family*** – The City is currently installing water meters for apartment and condominium complexes, and plans to complete these installations by 2018. All multi-family accounts (including duplexes, triplexes, and fourplexes) are expected to transition to usage-based water rates in January 2020. Similar to mobile home parks, at that time, billing may also shift from tenant to property owner.

- ***Non-Residential*** – At present, about 75 percent of non-residential accounts have water meters and are subject to usage-based water rates. Remaining unmetered accounts will be metered in the next few years, and the City expects to implement usage-based rates on these accounts by January 2017. Non-residential accounts include commercial, industrial, institutional, and dedicated irrigation account types.

The transition from flat rates to usage-based rates may affect the total amount of customers' water bills. Monthly bills may be higher in the summer during the irrigation season, and lower in winter months when water demand is lower. For single family customers many will have a decrease in their annual water cost with the transition to usage-based rates, while others will have an overall increase. Multi-family customers will generally benefit from the transition to usage-based water rates. As noted previously non-residential customers may have larger water bills with the proposed rates.

SECTION III: WASTEWATER RATES

This section of the report describes wastewater rate recommendations for the City's wastewater utility. The City's multi-year financial plan was used to determine annual wastewater rate revenue requirements, and to develop the strategy for meeting current and future financial obligations. The annual rate revenue requirement is the amount of revenue needed from wastewater rates to cover estimated operating, maintenance, debt service, and capital program costs with consideration of other revenues and financial reserves.

Wastewater rate recommendations are also intended to assist the City in the transition to a fully metered water system and usage-based wastewater rates. Rate structure changes are intended to improve equity across customer classes by better reflecting the cost of providing service.

CURRENT WASTEWATER RATES

The City's current wastewater rates are summarized in **Exhibit III-1**. Wastewater rates were last adjusted in July 2013 with a 2.5 percent across-the-board increase based on changes in he *Engineering New Record's* 20-Cities Construction Cost Index (ENR). This index is used by the City to annually adjust the level of water and wastewater rates.

Residential flat rates are based on the number of bedrooms in each dwelling, and were based on estimated sewer flows made prior to the availability of water usage data. Non-residential wastewater rates are based on the number of sanitary sewer units (SSUs) for each account, as determined by City staff. One SSU is equivalent to a two-bedroom single family home. All flat wastewater rates will be phased out as the installation of water meters is completed. Wastewater usage-based rates are currently available for single family customers. They include a fixed monthly service charge for each dwelling unit, and a usage charge based on a customer's winter water usage. Winter water usage is used for sewer flow estimation since irrigation usage is minimized during this time period. The City uses the average monthly water usage from December through February for determining the average winter water use, and hence estimated monthly sewer flow.

The City has a small number of large industrial customers (primarily food processing). Each of these customers pays for wastewater service based on actual wastewater flows and loading characteristics. Industrial rates for users discharging into the City's domestic sewer collection system are included in Exhibit III-1. Separate (lower) rates apply to the few industrial users that discharge into the industrial line, which requires less treatment. Those rates are outside of the scope of this study.

At present, tenants of multi-family apartments and mobile home parks are individually billed for water and wastewater services. As water meters are installed for apartment complexes and mobile home parks the billing for these services may be transferred from tenants to property owners.

Exhibit III-1
City of Lodi
Current Monthly Wastewater Rates

FLAT RATES			USAGE-BASED RATES		
Single Family Residential			***Single Family Residential***		
1 Bedroom	$	25.83	Monthly Service Charge	$	23.52
2 Bedroom	$	34.44	Usage Rate ($/CCF) (3)	$	2.68
3 Bedroom	$	43.05			
4 Bedroom	$	51.66	***Multi-Family Residential***		
5 Bedroom	$	60.27	Not Available		
6 Bedroom	$	68.88			
7 Bedroom	$	77.49	***Non-Residential***		
Multi-Family Residential (1)			Not Available		
1 Bedroom	$	25.83			
2 Bedroom	$	34.44	***Industrial (4)***		
3 Bedroom	$	43.05	Flow (per MG)	$	3,487.41
4 Bedroom	$	51.66	BOD (per 1,000 lbs)	$	575.51
Mobile Homes			SS (per 1,000 lbs)	$	359.85
Any Size	$	25.83			
Non-Residential					
Per SSU (2)	$	34.44			

Notes:

(1) Includes duplexes, triplexes, fourplexes, apartments, and condominiums.
(2) The number of sanitary sewer units (SSUs) is determined for each customer based on usage characterstics and factors adopted by the City.
(3) Usage charge based on winter water use determined as the average from the prior December-February period. Adjusted each July for each account.
(4) Annual charges apply to industrial users discharging into the domestic sanitary sewer system. Separate charges apply to discharges to the industrial line.

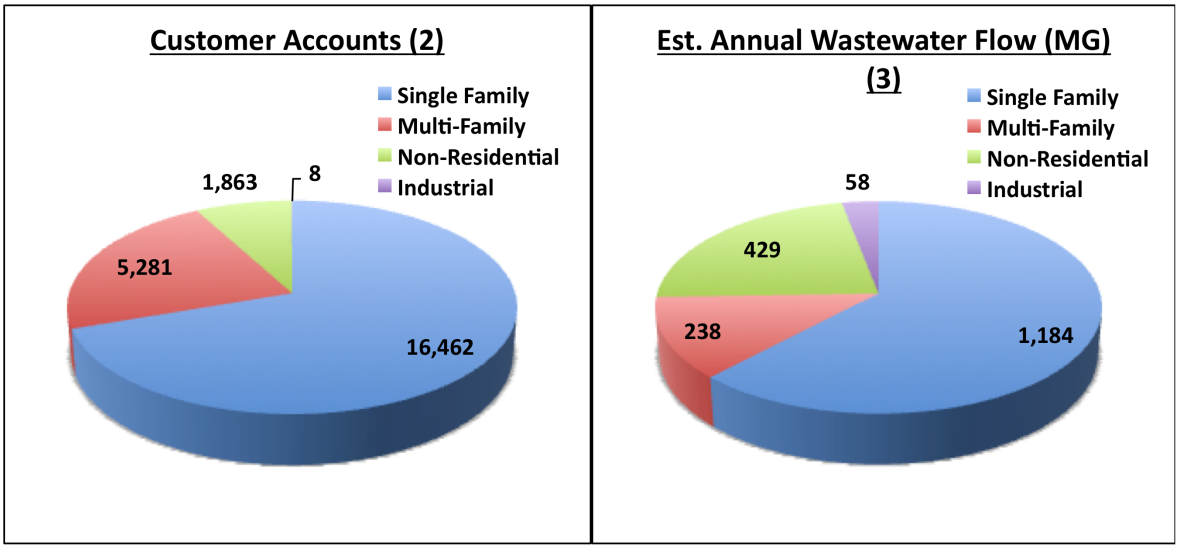
CUSTOMER BASE AND WASTEWATER FLOW ESTIMATES

Like the water utility, the wastewater utility's customer base is predominately comprised of single family and multi-family residential customers, along with commercial, industrial, and municipal customers. Some non-residential customers, including food-processing facilities, generate very large quantities of wastewater. Because the City is not entirely metered water usage and sewer flows must be estimated. It is fairly common to use winter water usage data to estimate wastewater flows. During the winter irrigation water use (which does not enter the wastewater system) is minimized.

Exhibit III-2 summarizes customer account and wastewater flow estimates derived from the City's utility billing system for 2012. With residential accounts expressed as the number of dwelling units, the wastewater utility customer base is about 23,600 accounts and estimated annual wastewater flow is about 1,184 million gallons (MG). Single family accounts represent 70 percent of the customers and 62 percent of the wastewater flow. Multi-family accounts represent 22 percent of the customers and 12 percent of the wastewater flow. Non-residential accounts, including commercial, industrial, and

institutional, comprise about 8 percent of the customer base, and also represent about 23 percent of annual wastewater. There are eight large industrial customers (discharging to the domestic system), and they generate about 3 percent of the annual wastewater flow. The City's largest wastewater users include several of the industrial customers (primarily food-processing), as well as the City of Lodi, and the Lodi Unified School District.

Exhibit III-2
City of Lodi
Summary of Wastewater Utility Customer Accounts and Annual Wastewater Flow (1)



Notes:
(1) Derived from the City's utility billing system from data for 2012.
(2) Total customer accounts equals 23,614. Residential accounts expressed in dwelling units.
(3) Total estimated annual wastewater flow equals 1,908 million gallons (MG).

In July 2012 the City moved an initial batch of single family residential customers (about 2,940) to usage-based wastewater rates, as a pilot test of those wastewater rates. Additional single family customers will be transitioned beginning in July 2014, with an additional batch each July until all have been transitioned. By July 2020, all of the City's single family residential customers will be on usage-based wastewater rates. The transition of multi-family and non-residential wastewater customers to usage-based wastewater rates will lag the transition to usage-based water rates. In the near term, the focus will be on mobile home parks and school accounts. Non-residential customers will need to be categorized into strength classifications (as described later in this section) before the transition can be made.

ANNUAL WASTEWATER REVENUE RATE REQUIREMENT

The City updated its multi-year financial model with actual revenues and expenses (pre-audit) for FY 12-13 and the approved budget for FY 13-14. Based on that model, the City estimates annual wastewater rate increases of up to 3 percent per year may be required. These increases are believed to be sufficient to meet the utility's operating and maintenance costs, debt service obligations, and capital program needs through FY 19-20.

The City adjusts its wastewater rates in July of each year, and the rate analyses presented herein are based on a 3 percent increase effective in July 2014. This is consistent with the City's financial plan model. The actual rate increase will be based on the change in the ENR, but will be no more than 3 percent.

The City anticipates an additional 3,700 single family residential customers will be converted to usage-based rates in July 2014. With that shift, and an overall 3 percent rate increase, water rate revenues from flat and usage based customers is estimated to be $14,570,000, as summarized below

Flat rate revenue	$9,751,000
Usage-based rate revenue	$4,461,000
Industrial line rate revenue	$358,000
Total 2014 water rate revenue	$14,570,000

No changes are proposed to the City's flat wastewater rate structure. Therefore, a 3 percent rate increase will mean a 3 percent increase to all flat wastewater rates. With a transition of approximately 3,700 additional single family customers to usage-based rates in July 2014 the wastewater utility will be billing nearly 6,650 customer accounts through usage-based rates. The annual wastewater rate revenue requirement for the City's usage-based wastewater rates will be $4,461,000 for FY 14-15, with this growing portion of the single family residential customer base on usage-based rates. This $4,461,000 includes $937,000 related to industrial users that discharge into the domestic collection system. Industrial users on the industrial line are subject to a separate treatment process, and different rates (outside of the scope of this study), and represent about $358,000 of the total FY 14-15 wastewater rate revenue requirement.

COST OF SERVICE ANALYSIS AND RATE DESIGN

The annual wastewater rate revenue requirement of $14,570,000 for FY 14-15 has been split between flat rates, usage-based rates, and industrial charges based on the number of accounts and wastewater use characteristics of the customer base within each group. The cost of service analysis for each group is separately presented below.

Flat Rate Cost of Service Analysis

As the City will be phasing out the system of flat wastewater rates in the next several years, no changes to the rate structure are proposed. The City's flat rates are based on the number of bedrooms in each single family and multi-family dwelling unit. Non-residential flat rate accounts have each been assigned a unique sanitary sewer unit (SSU) factor, based on estimated usage characteristics, relative to a 2-bedroom single family home.

Exhibit III-3 summarizes the distribution of the FY 14-15 revenue requirement for flat rate accounts of various customer types, and shows the calculation of the monthly flat wastewater rates with a 3 percent increase. Monthly flat water rates are proposed to increase by no more than 3 percent in July 2014, with the actual adjustment dependent on the annual change in the ENR, with a 3 percent cap.

Exhibit III-3
City of Loda
FY 14-15 Flat Wastewater Rate Cost of Service Analysis and Rate Calculation

Customer Group	No. of Accts. or DUs (1)	SSU Equivalency Factor (2)	Sanitary Sewer Units (SSUs) (3)	% of Total	Alloc. of Revenue Rqmt.	Monthly Flat WW Rate
Single Family Residential						
1 Bedroom	378	0.75	284	1.2%	$ 120,700	$ 26.60
2 Bedroom	3,073	1.00	3,073	13.4%	$ 1,308,000	$ 35.47
3 Bedroom	5,531	1.25	6,914	30.2%	$ 2,943,000	$ 44.34
4 Bedroom	738	1.50	1,107	4.8%	$ 471,200	$ 53.21
5 Bedroom	89	1.75	156	0.7%	$ 66,300	$ 62.08
6 Bedroom	2	2.00	4	0.0%	$ 1,700	$ 70.95
7 Bedroom	1	2.25	2	0.0%	$ 1,000	$ 79.81
Duplexes, Triplexes, Fourplexes, Apartments, and Condominiums						
1 Bedroom	1,359	0.75	1,019	4.4%	$ 433,800	$ 26.60
2 Bedroom	3,517	1.00	3,517	15.4%	$ 1,496,800	$ 35.47
3 Bedroom	164	1.25	205	0.9%	$ 87,300	$ 44.34
4 Bedroom	3	1.50	5	0.0%	$ 1,900	$ 53.21
Mobile Homes						
Any Size	492	0.75	369	1.6%	$ 157,000	$ 26.60
Non-Residential						
Per SSU	1,853	Varies	6,255	27.3%	$ 2,662,300	$ 35.47
Totals	**17,200**		**22,908**		**$ 9,751,000**	

Notes:
(1) Estimate based on transition of about 3,700 additional single family accounts to usage-based billing.
(2) From existing flat wastewater rate structure.
(3) Based on one sanitary sewer unit (SSU) equivalent to a 2-bedroom home.

Usage-Based Rate Cost of Service Analysis

A more detailed cost of service analysis is warranted for the City's usage-based wastewater rates. However, the City does not yet have sufficient information for the complete development of wastewater rates that consider wastewater flow as well as different strength categories for various types of non-residential customers. The following steps will need to be taken in order for fully develop these wastewater rates:

- All non-residential customers should be assigned to a low, medium, or high strength category based on type of business. City staff and consultant plan to work on this jointly in 2014 using industry guidelines for assigning different types of businesses. It is estimated that about 80 percent of non-residential users will fall into a low strength category, 15 percent into medium strength, and 5 percent into high strength.

- The size of water meters should be identified (or estimated) for all multi-family and non-residential accounts. At present, about 75 percent of non-residential accounts are metered. The City will begin metering multi-family accounts and the remaining non-residential accounts in a few years. Estimates of future meter sizes would be adequate to move forward with rate analyses.

- Estimate wastewater flow from each customer class based on winter water usage data. Data is now becoming available for single family customers, and is available for most non-residential accounts (those with water meters), but not for multi-family customers or about one-quarter of non-residential customers. Once a significant portion of multi-family customers have been metered it may be possible to develop reasonable estimates for this customer class. It may also be possible to extrapolate water usage data from existing metered non-residential accounts to those that are unmetered, though some uncertainty would remain because of the non-homogenous nature of non-residential water use.

- Assign standard biochemical oxygen demand (BOD) and suspended solids (SS) loading factors to residential and low, medium, and high strength non-residential customer categories. This would be accomplished using available industry guidelines, as well as through calculations that seek to balance calculated wastewater flow and loading data from wastewater customers with the actual inflow data at the City's White Slough wastewater treatment plant.

Under current usage-based wastewater rates, all single family customers are subject to the same fixed monthly service charge, even if meters vary in size. This is due to the fact that variation in meter sizes for single family homes is due to either landscape irrigation requirements or fire flow capacity requirements within the home. It is not related to wastewater capacity needs. The independence from meter size does not extend to other customer classes, however, because demand characteristics (for both water and wastewater) are much more varied for each customer connection.

The proposed usage-based wastewater rates for FY 14-15 extend the current usage-based rates applicable for single family customers to include fixed monthly service charges based on meter size that should be applied to multi-family and non-residential accounts. The wastewater usage rate for multi-family customers would be the same as that for single family customers. Placeholder estimates are also provided for non-residential low, medium, and high strength categories. Proposed industrial rates reflect a 3.0 percent overall increase in each rate component.

The development of fixed monthly wastewater service charges for multi-family and non-residential accounts follows the same basic cost allocation methodology as for water rates. In this case, a review of wastewater costs resulted in a recommended allocation of the wastewater rate revenue requirement to customer, capacity, and commodity components. The allocation of costs, as well as the resulting rate calculations, reflects a balanced approach to considering different rate-setting objectives. Based on a review of wastewater system financial information, the cost allocation resulted in a distribution of the costs to customer, capacity, and commodity components of 5 percent, 45 percent, and 50 percent, respectively. Like the water rates, the monthly service charge will recover customer and capacity costs, and usage rates will recover commodity costs.

Exhibit III-4 summarizes the calculation of fixed monthly wastewater service charges based on size of the water meter. The monthly service charges are calculated by allocating customer costs equally across all customer accounts and by allocating capacity related costs in proportion to meter capacity.

Exhibit III-4
City of Loda
FY 14-15 Monthly Wastewater Service Charge Calculation

Customer Group	Customer Costs (1)	Capacity Costs (2)	Hydraulic Capacity Factor (3)	Monthly Service Charge (4)
Single Family Residential				
All Connections	$ 2.42	$ 21.80	1.00	$ 24.23
Multi-Family and Non-Residential				
3/4" meter	$ 2.42	$ 21.80	1.00	$ 24.23
1" meter	$ 2.42	$ 36.41	1.67	$ 38.83
1 1/2" meter	$ 2.42	$ 72.60	3.33	$ 75.03
2" meter	$ 2.42	$ 116.21	5.33	$ 118.63
3" meter	$ 2.42	$ 218.03	10.00	$ 220.45
4" meter	$ 2.42	$ 363.46	16.67	$ 365.88
6" meter	$ 2.42	$ 726.70	33.33	$ 729.12
8" meter	$ 2.42	$ 1,162.76	53.33	$ 1,165.18

Notes:
(1) Based on 5 percent of revenue requirement allocated equally to each customer.
(2) Based on 45 percent of revenue requirement allocated to each customer in in proportion to meter capacity.
(3) Meter capacity in relation to capacity of a 3/4" water meter.
(4) Sum of customer and capacity costs for each meter size.

The City's wastewater rate structure currently includes a uniform wastewater usage rate for single family customers. For FY 14-15, that rate will be increased by up to 3.0 percent. The same rate would also apply to multi-family customers, as the strength characteristics (BOD and SS) for single family and multi-family customers are the same.

Wastewater flows for single family customers are estimated based on the average monthly water use from December through February of each year. This average winter water use is a reasonable estimate of wastewater flow throughout the year, because it generally reflect water usage in the absence of irrigation demands. Each July, the City determines a wastewater usage charge based on the winter water use and the applicable wastewater usage rate. The monthly service charge is then added to the usage charge to arrive at the total wastewater bill. This bill amount then remains fixed until the following July, when the process is repeated with the then most recent winter water use data and current wastewater rates.

Winter water use can be used to determine wastewater usage charges for multi-family and non-residential customers as well. One potential problem, however, could occur with businesses that have a seasonal component where winter water usage did not necessarily provide a reasonable estimate for wastewater flow throughout the year. It is recommended that the Director of Public Works be extended authority to adjust the wastewater flow volume (usage) for individual customers where this is a concern.

Wastewater utilities generally identify different strength-based usage charges for non-residential customers due to the variation in waste discharges. A fairly simple approach to strength-based rates, and one recommended for the City, is to establish low, medium, and high strength categories. All non-residential customers (with the exception of industrial customers) would be assigned to one of these categories, based on the type of business. A higher usage rate would be established for the higher strength categories, commensurate with the costs of removing BOD and SS for wastewater.

Until non-residential customers can be assigned to a strength category, and additional meter size and water use data obtained, it is recommended that the City use "placeholder" estimates for strength-based wastewater rates for non-residential customers. These would give City staff, as well as customers, a sense for what future rates may be like under this rate approach.

PROPOSED WASTEWATER RATE SCHEDULES

Current and proposed wastewater rate schedules for both flat rates and usage-based rates are presented in **Exhibits III-5** and **III-6**, respectively. All rates reflect an overall 3.0 percent revenue increase relative to the current wastewater rates.

Exhibit III-5
City of Lodi
Current and Proposed Flat Wastewater Rates

	Current (Jul. 2013)	Proposed (Jul. 2014)
	Rate Increase (1) -->	**3.0%**
FLAT RATES		
Single Family Residential		
1 Bedroom	$ 25.83	$ 26.60
2 Bedroom	$ 34.44	$ 35.47
3 Bedroom	$ 43.05	$ 44.34
4 Bedroom	$ 51.66	$ 53.21
5 Bedroom	$ 60.27	$ 62.08
6 Bedroom	$ 68.88	$ 70.95
7 Bedroom	$ 77.49	$ 79.81
Duplexes, Triplexes, Fourplexes, Apartments, and Condominiums		
1 Bedroom	$ 25.83	$ 26.60
2 Bedroom	$ 34.44	$ 35.47
3 Bedroom	$ 43.05	$ 44.34
4 Bedroom	$ 51.66	$ 53.21
Mobile Homes		
Any Size	$ 25.83	$ 26.60
Non-Residential		
Per SSU	$ 34.44	$ 35.47

Notes:

(1) Actual rate adjustment will depend on the annual change in the ENR, and will be no more than 3 percent.

Exhibit III-6
City of Lodi
Current and Proposed Usage-Based Wastewater Rates

	Current (Jul. 2013)	Proposed (Jul. 2014)
Rate Increase (1)-->		**3.0%**
USAGE-BASED RATES		
Monthly Service Charge		
Single Family (per DU)	$ 23.52	$ 24.23
Multi-Family and Non-Residential		
3/4" meter		$ 24.23
1" meter		$ 38.83
1 1/2" meter		$ 75.03
2" meter		$ 118.63
3" meter		$ 220.45
4" meter		$ 365.88
6" meter		$ 729.12
8" meter		$ 1,165.18
Usage Rates ($/CCF)		
Single Family (2)	$ 2.68	$ 2.76
Multi-Family (2)		$ 2.76
Non-Residential (2) (3)		
Low Strength		*$ 2.76*
Medium Strength		*$ 3.45*
High Strength		*$ 4.49*
Industrial (4)		
Flow (per MG annually)	$ 3,487.41	$ 3,592.03
BOD (per 1,000 lbs annually)	$ 575.51	$ 592.78
SS (per 1,000 lbs annually)	$ 359.85	$ 370.65

Notes:

(1) Actual rate adjustment will depend on the annual change in the ENR, and will be no more than 3 percent.
(2) Usage charge based on winter water use determined as the average from the prior December-February period. Adjusted each July for each account.
(3) Placeholder. These rates not yet in use.
(4) Applies to industrial users discharging into the domestic sewer system.

Wastewater Rates for Schools

During this study, a separate analysis was performed to examine the water use characteristics and estimate wastewater flows for schools in the Lodi Unified School District (LUSD). At present, schools are charged for wastewater service based on student population. High schools are assessed based on 15 students per SSU, and elementary and middle schools are assessed based on 20 students per SSU. An examination of winter water use data (excluding December due to the winter break), as well as consideration of

the overall level of activity at schools throughout the year (including reduced activity in summer months) resulted in a determination that all schools of the LUSD should be charged for wastewater service based on 18 students per SSU. While this change will affect the wastewater bills of all schools, it will have only a minor affect on the aggregate for all schools.

METER INSTALLATION AND TRANSITION TO USAGE-BASED BILLING

The City continues to install water meters on all unmetered water service connections. Below is a summary of the status of the metering program and plans to transition customers from flat wastewater rates to usage-based wastewater rates. Each July an additional batch of customers is transitioned to usage-based wastewater rates.

- ***Single Family*** – More than 50 percent of single family homes now have water meters with two- to three-thousand additional meters installed each year. The transition to usage-based wastewater rates is lagging the transition to usage-based water rates by about 18 months. In July 2014, a second batch of single family customers will transition to usage-based water rates (about 3,700 accounts). The transition to usage-based wastewater rates for single family customers is expected to be completed by about July 2020.

- ***Mobile Home Parks*** – All mobile home parks have now been provided with master water meters on the connections serving each park. The City plans to convert all mobile home parks to usage-based wastewater rates in July 2015. With that transition billing for wastewater service will also shift from tenant to the park owner.

- ***Multi-Family*** – The City will begin installing water meters for apartment and condominium complexes, and plans to complete these installations by 2018. All multi-family accounts (including duplexes, triplexes, and fourplexes) are expected to transition to usage-based wastewater rates in July 2020. Similar to mobile home parks, at that time billing may shift from tenant to property owner.

- ***Non-Residential*** – At present, about 75 percent of non-residential accounts have water meters and are subject to usage-based water rates. With the exception of industrial users, all non-residential customers currently pay flat wastewater rates. Further analysis will be needed to fully develop a strength and usage-based wastewater rate structure for non-residential accounts. It may be several years before these customers are fully transitioned to usage-based rates.

The transition from flat rates to usage-based rates may affect the total amount of customers' wastewater bills. For single family customers many will have a decrease in their monthly wastewater bill with that transition, while others may have an increase. Multi-family customers will generally benefit from the transition to usage-based wastewater rates. It is too early to tell how individual non-residential customers may be affected by the transition.

	A	F	G	H	I	J	K	L
1				**Exhibit D**				
2								
3				**City of Lodi -- Water Utility**				
4				**Financial Plan Summary**				
5		**FY 12-13**	**FY 13-14**	**FY 14-15**	**FY 15-16**	**FY 16-17**	**FY 17-18**	**FY 18-19**
6		**2.5%**	**2.5%**	**3.0%**	**3.0%**	**3.0%**	**3.0%**	**3.0%**
7		Jan. 2013	Jan. 2014	Jan. 2015	Jan. 2016	Jan. 2017	Jan. 2018	Jan. 2019
9	**WATER OPERATING FUND (180)**							
10	***Beginning Balance***	10,289,917	8,537,099	6,989,213	5,224,402	3,721,841	3,453,780	3,473,169
11	***Revenues***							
12	Water Sales	12,441,040	12,745,000	13,080,000	13,492,000	13,921,000	14,425,000	14,887,000
13	Interest Earnings	51,400	77,000	61,000	110,000	123,000	119,000	194,000
14	Other Revenues	855,303	77,000	80,000	83,000	86,000	89,000	92,000
15	Transfer from Fund 182 for Debt Service	-	-	109,000	109,000	109,000	109,000	109,000
16	Total Revenues	13,347,743	12,899,000	13,330,000	13,794,000	14,239,000	14,742,000	15,282,000
17	***Expenditures***							
18	Transfer Out to General Fund (Cost of Services)	1,060,000	780,000	780,000	780,000	780,000	780,000	780,000
19	Transfer Out to Capital Fund 181 for projects	6,300,000	5,500,000	6,000,000	6,000,000	5,000,000	5,000,000	1,000,000
20	To Capital Fund 181 (Depreciation)	-	-	-	-	-	-	-
22	Personnel Services	2,172,000	2,093,000	2,165,000	2,239,000	2,315,000	2,395,000	2,475,000
23	Utilities	670,000	755,000	788,000	822,000	857,000	895,000	934,000
24	Supplies, Mat'ls., Services & Other	2,592,000	2,963,000	3,054,000	3,149,000	3,247,000	3,347,000	3,449,000
26	Debt Service							
27	1991 CSDW Loan Payments	-	-	-	-	-	-	-
28	Net 2010 Rev. Bond Payments	2,306,561	2,355,886	2,307,811	2,306,561	2,308,061	2,305,611	2,307,111
29	Total Expenditures	15,100,561	14,446,886	15,094,811	15,296,561	14,507,061	14,722,611	10,945,111
30								
31	***Ending Balance***	**8,537,099**	**6,989,213**	**5,224,402**	**3,721,841**	**3,453,780**	**3,473,169**	**7,810,058**
32	Operating Reserve (25%)	1,624,000	1,648,000	1,697,000	1,748,000	1,800,000	1,854,000	1,910,000
33	Available Balance	6,913,099	5,341,213	3,527,402	1,973,841	1,653,780	1,619,169	5,900,058
34	Debt Service Coverage (min. 1.25)	2.98	3.13	2.85	2.98	3.08	3.22	3.38
35								
36	**WATER CAPITAL OUTLAY (181)**							
37	***Beginning Balance***	3,509,150	2,390,460	2,140,215	2,194,215	2,511,215	1,813,215	4,454,215
38	***Revenues***							
39	Operating Transfers In	6,300,000	5,549,755	6,000,000	6,000,000	5,000,000	5,000,000	1,000,000
40	Interest Earnings	16,222	22,000	22,000	58,000	74,000	108,000	151,000
41	Retrofit Meter Install. Charge	-	926,000	-	-	-	-	-
42	Debt Proceeds	5,340,088	-	-	-	-	-	-
43	Total Revenues	11,656,310	6,497,755	6,022,000	6,058,000	5,074,000	5,108,000	1,151,000
44	***Expenditures***							
47	Water Meter/Main Install. Project	6,511,000	5,831,000	5,027,000	5,177,000	5,333,000	2,197,000	1,067,000
48	Water Taps	66,000	77,000	80,000	82,000	84,000	87,000	90,000
49	Miscellaneous Water Mains	-	52,000	53,000	55,000	56,000	58,000	60,000
50	Commercial Meter Replacements	-	5,000	5,000	5,000	6,000	6,000	6,000
51	Valve Exercising Program	-	21,000	21,000	22,000	23,000	23,000	24,000
52	Utility Frame & Cover Replacement	110,000	-	-	-	-	-	-
53	Surface WTP Design	-	-	-	-	-	-	-
56	Surface WTP Construction	5,340,000	-	-	-	-	-	-
57	Financial System Replacement	-	258,000	265,000	-	-	-	-
58	UWMP Update	-	-	-	55,000	-	-	-
60	Meter Fixed Network	-	-	-	-	-	-	-
61	MSC/Kofu Parking Lot	75,000	-	-	-	-	-	-
62	Well 2 -Replace Motor	-	21,000	-	-	-	-	-
63	Well 6R -Pump Rehab/Repl	543,000	93,000	-	-	51,000	-	-

	A	F	G	H	I	J	K	L
1				**Exhibit D**				
2								
3				**City of Lodi -- Water Utility**				
4				**Financial Plan Summary**				
5		**FY 12-13**	**FY 13-14**	**FY 14-15**	**FY 15-16**	**FY 16-17**	**FY 17-18**	**FY 18-19**
65	Well 5 -Pump Rehab/Repl	-	46,000	-	-	-	-	-
66	Well 7 -Pump Rehab/Repl	-	-	-	49,000	-	-	-
67	Well 8 -Repairs/Pump Repl	-	62,000	-	-	-	-	-
68	Well 12 -Pump Rehab/Repl	-	-	48,000	-	-	-	-
69	Well 13 -Pump Rehab/Repl & Replace Emerg Gen	-	98,000	-	-	-	-	-
70	Well 14 -Pump Rehab/Repl	-	-	48,000	-	-	-	-
71	Well 15 -Pump Rehab/Repl	-	-	48,000	-	-	-	-
72	Well 16 -Pump Rehab/Electrical Upgrade	-	-	-	55,000	-	-	-
73	Well 17 -Pump Rehab/Electrical Upgrade	-	-	-	55,000	-	-	-
74	Well 18 -Pumpb Rehab/Electrical Upgrade	-	-	-	55,000	-	-	-
75	Well 19 -Pump Replacement	94,000	4,000	-	-	-	-	-
76	Well 20 -Pump Rehab/Electrical Upgrade	-	-	-	-	56,000	-	-
77	Well 21 -Pump Rehab/Electrical Upgrade	-	-	-	-	56,000	-	-
78	Well 22 -Replace Motor	-	15,000	-	-	-	-	-
79	Well 23 -Replace Motor	-	15,000	-	-	-	-	-
80	Well 25 -Add Emergency Generator	-	-	133,000	-	-	-	-
81	Well 28 -Add Emergency Generator	-	-	133,000	-	-	-	-
82	Well Electrical Panel Upgrades/Repl	-	31,000	-	-	-	-	-
83	Well Site Improvements	-	26,000	27,000	27,000	28,000	29,000	-
84	MSC Paving	-	-	-	-	-	-	-
85	MSC Shop Decommission	-	-	-	-	-	-	-
87	Vehicles/Equipment	36,000	93,000	80,000	104,000	79,000	67,000	48,000
90	Total Expenditures	12,775,000	6,748,000	5,968,000	5,741,000	5,772,000	2,467,000	1,295,000
91								
92	***Ending Balance***	**2,390,460**	**2,140,215**	**2,194,215**	**2,511,215**	**1,813,215**	**4,454,215**	**4,310,215**
93								
94	**IMF WATER FACILITIES (182)**							
95	***Beginning Balance***	(9,454)	(6,846)	52,399	53,399	54,399	56,399	58,399
96	***Revenues***							
97	Water Impact Mitigation Fees	2,529	109,000	109,000	109,000	109,000	109,000	109,000
98	Transfer in from Capital Fund 181 (plant design)	-	-	-	-	-	-	-
99	Transfer in from Capital Fund 181 (Well #27)	-	-	-	-	-	-	-
100	Interest Earnings	323	-	1,000	1,000	2,000	2,000	2,000
101	Total Revenues	2,853	109,000	110,000	110,000	111,000	111,000	111,000
102	***Expenditures***							
103	Previous projects	-	-	-	-	-	-	-
104	Surface Water-Design	-	-	-	-	-	-	-
105	GPS Control Grid	-	-	-	-	-	-	-
106	Well #27 - Pump, Motor & Site Impr.	245	-	-	-	-	-	-
107	Well #28	-	-	-	-	-	-	-
108	IMF Update	-	-	-	-	-	-	-
109	Transfer out to 1218 for General Plan	-	-	-	-	-	-	-
110	Transfer to Fund 181 for past projects	-	-	-	-	-	-	-
111	Transfer to Fund 181 for Well 27	-	49,755	-	-	-	-	-
112	Transfer to Operations Fund 180 for Debt Service	-	-	109,000	109,000	109,000	109,000	109,000
114	Total Expenditures	245	49,755	109,000	109,000	109,000	109,000	109,000
115								
116	***Ending Balance***	**(6,846)**	**52,399**	**53,399**	**54,399**	**56,399**	**58,399**	**60,399**
117	Owed Fund 180 for Debt Service	3,774,000	5,345,000	6,775,000	8,204,000	9,634,000	11,062,000	12,491,000
165								

	A	F	G	H	I	J	K	L
1				**Exhibit D**				
2								
3				**City of Lodi -- Water Utility**				
4				**Financial Plan Summary**				
5		**FY 12-13**	**FY 13-14**	**FY 14-15**	**FY 15-16**	**FY 16-17**	**FY 17-18**	**FY 18-19**
166								
167								
168	**Aggregate End-of-Year Balance ***	**13,277,000**	**11,538,000**	**9,828,000**	**8,643,000**	**7,679,000**	**10,342,000**	**14,537,000**
169	Operating Reserve (25%)	1,624,000	1,648,000	1,697,000	1,748,000	1,800,000	1,854,000	1,910,000
170	Restricted DS Reserve	2,356,000	2,356,000	2,356,000	2,356,000	2,356,000	2,356,000	2,356,000
171	2010 COP Proceeds	-	-	-	-	-	-	-
172	Rate Stabilization Fund	-	-	-	-	-	-	-
173	Net Available for Capital Projects	9,297,000	7,534,000	5,775,000	4,539,000	3,523,000	6,132,000	10,271,000
177								
178				**City of Lodi -- Water Utility**				
179				**Financial Plan Assumptions**				
180								
181	***Financial Assumptions***							
182	General Inflation	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
183	Labor Inflation	3.4%	3.4%	3.4%	3.4%	3.4%	3.4%	3.4%
184	Material/Energy Inflation	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%
185	Construction Inflation	2.5%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
186	Interest Earnings	1.0%	1.0%	1.0%	2.5%	3.5%	3.5%	3.5%
187	***Customer Account Assumptions***							
188	No. of DUs/Accounts	23,456	23,506	23,556	23,606	23,656	23,706	23,756
189	No. of 3/4" Eq. Mtrs.	25,504	25,554	25,604	25,654	25,704	25,754	25,804
190	No. of New Connections	50	50	50	50	50	50	50
191	Customer Growth Rate	0.20%	0.20%	0.20%	0.19%	0.19%	0.19%	0.19%
192	Water Mitigation Impact Fee	$ 1,290	$ 1,330	$ 1,370	$ 1,410	$ 1,450	$ 1,490	$ 1,530

	A	F	G	H	I	J	K	L
1				**Exhibit E**				
2								
3				**City of Lodi -- Wastewater Utility**				
4				**Financial Plan Summary**				
5		**FY 12-13**	**FY 13-14**	**FY 14-15**	**FY 15-16**	**FY 16-17**	**FY 17-18**	**FY 18-19**
6		**3%**	**3%**	**3%**	**3%**	**3%**	**3%**	**3%**
7	**WASTEWATER OPERATING FUND (170)**							
8	***Beginning Balance***	2,892,538	6,302,078	6,256,598	7,085,998	8,378,598	10,247,498	7,105,120
9	***Revenues***							
10	Wastewater Sales	13,747,216	14,187,000	14,641,000	15,110,000	15,594,000	16,093,000	16,608,000
12	Interest Earnings	20,625	68,000	68,000	266,000	311,000	376,000	266,000
13	Other Revenues	227,531	234,400	241,200	248,000	255,900	263,800	271,800
14	Transfer In for Debt Service (172)	31,000	31,000	31,000	110,000	110,000	110,000	110,000
15	Transfer In for Debt Service (173)	700,000	16,000	149,000	150,000	154,000	154,000	154,000
16	Transfer From/(To) Rate Stabilization Fund (174)	-	-	-	-	-	-	-
17								
18	Total Revenues	14,726,372	14,536,400	15,130,200	15,884,000	16,424,900	16,996,800	17,409,800
19	***Expenditures***							
20	Operating Transfers Out (to GF)	67,500	-	-	-	-	-	-
21	Transfer Out to Gen'l Fund (Cost of Services)	1,451,478	1,068,000	1,068,000	1,068,000	1,068,000	1,451,478	1,451,478
22	Transfer Out to WW Capital Outlay (171)	-	500,000	3,200,000	3,250,000	2,975,000	7,900,000	7,870,000
23	Transfer Out To WW Cap. Rsrv. (172)	-	-	-	-	-	-	-
24	Administration & Other	1,103,921	1,124,330	1,166,800	1,209,400	1,254,000	1,300,700	1,349,400
25	Plant Maintenance	3,377,841	3,948,650	4,104,000	4,265,000	4,432,000	4,606,000	4,787,000
26	Sanitary System Maintenance	492,917	611,260	633,000	656,000	679,000	703,000	729,000
27	Storm Drainage Maintenance	393,225	415,710	433,000	451,000	470,000	489,000	509,000
28	Industrial System Maintenance	4,450	23,930	25,000	26,000	27,000	28,000	29,000
29	2003 Wastewater COP Debt Service	381,000	3,266,000	-	-	-	-	-
30	2004 Wastewater COP Debt Service	2,138,000	98,000	98,000	98,000	98,000	98,000	98,000
31	2007 Wastewater COP Debt Service	1,599,000	1,604,000	1,603,000	1,607,000	1,606,000	1,614,000	1,617,000
32	2012 Wastewater Refinancing	375,000	1,922,000	1,970,000	1,961,000	1,947,000	1,949,000	1,949,000
33	Total Expenditures	11,316,832	14,581,880	14,300,800	14,591,400	14,556,000	20,139,178	20,388,878
34								
35	***Ending Balance***	**6,302,078**	**6,256,598**	**7,085,998**	**8,378,598**	**10,247,498**	**7,105,120**	**4,126,042**
36	Operating Reserve (25%)	2,735,000	3,040,000	2,283,000	2,345,000	2,409,000	2,573,000	2,642,000
37	Available Balance	3,567,078	3,216,598	4,802,998	6,033,598	7,838,498	4,532,120	1,484,042
38	Debt Service Coverage (min. = 1.20)	**1.61**	**1.09**	**2.10**	**2.24**	**2.33**	**2.30**	**2.33**
39	without COST	1.93	2.36	2.39	2.53	2.62	2.70	2.73
40	**WASTEWATER CAPITAL OUTLAY (171)**							
41	***Beginning Balance***	7,394,480	5,925,257	4,706,686	421,115	692,543	716,972	694,400
42	***Revenues***							
43	Transfer In (from 170)	-	-	2,700,000	2,750,000	2,475,000	7,400,000	7,370,000
44	Transfer In (from 170-Deprec.)	-	500,000	500,000	500,000	500,000	500,000	500,000
45	Other Revenue	96,429	96,429	96,429	96,429	96,429	96,429	96,429
46	Investment Earnings	1,772	-	-	-	-	-	-
47								

	A	F	G	H	I	J	K	L
1				**Exhibit E**				
2								
3				**City of Lodi -- Wastewater Utility**				
4				**Financial Plan Summary**				
5		**FY 12-13**	**FY 13-14**	**FY 14-15**	**FY 15-16**	**FY 16-17**	**FY 17-18**	**FY 18-19**
48	Total Revenues	98,200	596,429	3,296,429	3,346,429	3,071,429	7,996,429	7,966,429
49	***Expenditures***							
51	Interfund Loan to Parks (Grape Bowl)	675,000						
52	Financial System Replacement	-	250,000	260,000	-	-	-	-
53	Financial Planning	-	-	-	-	-	-	-
61	Elm to Pine Alley Sewer/Laurel Storm Project		55,000	-	-	-	-	-
62	Misc. System Relocations	-	35,000	36,000	38,000	39,000	41,000	43,000
63	Misc. Wastewater Taps	8,000	40,000	42,000	43,000	45,000	47,000	49,000
64	Collect. System Capac. Enhanc. Projects	-	-	21,000	216,000	22,000	234,000	24,000
65	Wastewater Main Replac./Lining Proj.	589,000	-	2,080,000	108,000	2,250,000	117,000	2,433,000
66	Storm Drain Trash Handling System	10,000	400,000	312,000	1,622,000	-	-	-
67	Lift Sta. Remote Term. Unit Replac.	-	-	-	-	-	-	-
68	Utility Frame & Cover Replacement	116,225	-	-	-	-	-	-
69	Hutchins Street Reconstruction	81,198						
70	MSC/Kofu Parking Lot	-	75,000	-	-	-	-	-
71	Replace 04-95 Vacuum Truck	-	-	-	-	-	-	-
72	Decommission Fleet Service Shop	-	-	-	-	-	-	-
73	Munic. Service Center PBX Replac.	-	-	-	-	-	-	-
74	Munic. Service Center Parking Reconstr.	-	-	-	-	-	-	-
75	Lift Station Generator Replacements	-	-	260,000	-	-	-	-
76	Vehicles /Equipment	36,000	75,000	62,000	70,000	79,000	877,000	182,000
77	White Slough Compliance Studies & Rpts	20,000	-	-	-	-	-	-
78	Plant Maint. & Land Applic. Area Improv.	32,000	-	-	-	-	-	-
80	Influent Screening Replacement		-	2,080,000	-	-	-	-
81	UV Disinfection Upgrade		-	312,000	-	-	-	-
82	Aeration Diffuser Replacement		-	-	-	500,000	-	-
83	Cloth Filter Media Replacement		30,000	-	32,000	-	35,000	-
84	Digested Sludge Line to Presses		30,000	-	-	-	-	-
85	Electrical Upgrades		-	52,000	-	-	-	-
86	Admin/Ops Building Improvements		-	780,000	-	-	-	-
87	Rotary Press Maintenance Crane & air compressor		30,000	-	-	-	-	-
88	Pond Gates		35,000	-	-	-	-	-
89	Shop Rollup Door		8,000	-	-	-	-	-
90	Emergency Generator Maintenance		20,000	-	-	-	-	-
91	Road to Outfall Repair		10,000	-	-	-	-	-
92	Secondary Scum Trough Drives		12,000	-	-	-	-	-
93	Misc Paving		10,000	-	-	-	-	-
94	SCADA Upgrades/PLC Replacement		-	78,000	-	-	-	-
95	Primary Chain & Flights	-	80,000	42,000	-	-	-	-
96	Boiler Retube	-	-	21,000	-	-	-	-
97	Chain Hoist	-	-	-	-	-	-	-
98	Gas compressor (WSWPCF)	-	-	-	-	-	-	-
99	Design Effluent Irrigation Improvements	-	-	-	811,000	-	-	-
100	Irrigation Conveyance & Pumping Construction	-	-	-	-	-	1,872,000	-

	A	F	G	H	I	J	K	L
1				**Exhibit E**				
2								
3				**City of Lodi -- Wastewater Utility**				
4				**Financial Plan Summary**				
5		**FY 12-13**	**FY 13-14**	**FY 14-15**	**FY 15-16**	**FY 16-17**	**FY 17-18**	**FY 18-19**
101	Effluent Storage Reservoir Construction	-	-	-	-	-	4,679,000	-
102	Effluent Storage Reservoir Construction	-	-	-	-	-	-	4,867,000
103	Micro Turbine	-	-	1,040,000	-	-	-	-
104	Dissolved Air Floatation Tank Rebuild	-	-	-	-	-	-	-
105	Tailwater Pump (WSWPCF)	-	-	-	-	-	-	-
106	UV Bypass System Improvements	-	-	-	-	-	-	-
107	Fence Repairs/Upgrades	-	-	-	27,000	-	-	30,000
108	Anaerobic Digester Painting	-	90,000	-	-	-	-	-
109	Digester Cleaning & Gas Scrubber Relining	-	-	-	-	-	-	-
110	Pond Lining Project	-	-	-	-	-	-	-
111	WSWPCF Building/Restroom Expansion	-	300,000	-	-	-	-	-
112	Plant Security Enhancements	-	130,000	-	-	-	-	-
113	Miscellaneous Future Projects	-	100,000	104,000	108,000	112,000	117,000	122,000
114								
115	Total Expenditures	1,567,423	1,815,000	7,582,000	3,075,000	3,047,000	8,019,000	7,750,000
116								
117	***Ending Balance***	**5,925,257**	**4,706,686**	**421,115**	**692,543**	**716,972**	**694,400**	**910,829**
118								
119								
120	**WASTEWATER CAPITAL RESERVE (172)**							
121	***Beginning Balance***	3,135,539	3,135,539	3,135,539	3,135,539	3,135,539	3,135,539	3,135,539
122	***Revenues***							
124	Transfer In from 170	-	-	-	-	-	-	-
125	Interest Earnings	31,000	31,000	31,000	110,000	110,000	110,000	110,000
126	Total Revenues	31,000	31,000	31,000	110,000	110,000	110,000	110,000
127	***Expenditures***							
129	White Slough Solids Handling Facility	-	-	-	-	-	-	-
130	White Slough Sludge Thickening	-	-	-	-	-	-	-
131	Transfer Out to 170 (for Debt Service)	31,000	31,000	31,000	110,000	110,000	110,000	110,000
132								
133	Total Expenditures	31,000	31,000	31,000	110,000	110,000	110,000	110,000
134								
135	***Ending Balance***	**3,135,539**	**3,135,539**	**3,135,539**	**3,135,539**	**3,135,539**	**3,135,539**	**3,135,539**
136	Restricted Debt Service Reserve	2,379,536	2,379,536	2,379,536	2,379,536	2,379,536	2,379,536	2,379,536
137	2007 COP Proceeds (w/ fiscal agent)	756,003	756,003	756,003	756,003	756,003	756,003	756,003
138	Cash Deficit (amt. owed for past DS)	-	-	-	-	-	-	-
139								
140								
141	**IMF WASTEWATER FACILITIES (173)**							
142	***Beginning Balance***	678,302	15,775	148,775	149,775	153,775	153,775	153,775
143	***Revenues***							
144	Wastewater IMF	25,681	149,000	149,000	149,000	149,000	149,000	149,000
146	Interest Earnings	11,792	-	1,000	5,000	5,000	5,000	5,000

	A	F	G	H	I	J	K	L
1				**Exhibit E**				
2								
3				**City of Lodi -- Wastewater Utility**				
4				**Financial Plan Summary**				
5		**FY 12-13**	**FY 13-14**	**FY 14-15**	**FY 15-16**	**FY 16-17**	**FY 17-18**	**FY 18-19**
147	Total Revenues	37,473	149,000	150,000	154,000	154,000	154,000	154,000
148	***Expenditures***							
149	Transfer Out (to 170 for Debt Service)	700,000	16,000	149,000	150,000	154,000	154,000	154,000
151	Transfer Out (refund PCE/TCE)	-	-	-	-	-	-	-
154	City-Wide IMF Program Update	-	-	-	-	-	-	-
156	Total Expenditures	700,000	16,000	149,000	150,000	154,000	154,000	154,000
158	***Ending Balance***	**15,775**	**148,775**	**149,775**	**153,775**	**153,775**	**153,775**	**153,775**
159	Owed to Fund 170 for Debt Service	849,000	2,643,000	3,454,000	4,267,000	5,075,000	5,888,000	6,703,000
160								
161	**WW Rate Stabilization Fund (174)**							
162	***Beginning Balance***	500,000	500,000	500,000	500,000	500,000	500,000	500,000
163	***Revenues***							
164	Transfer In from 170	-	-	-	-	-	-	-
166	Total Revenues	-	-	-	-	-	-	-
167	***Expenditures***							
168	Transfer Out to 170	-	-	-	-	-	-	-
170	Total Expenditures	-	-	-	-	-	-	-
172	***Ending Balance***	**500,000**	**500,000**	**500,000**	**500,000**	**500,000**	**500,000**	**500,000**
173								
174								
175	**Aggregate End-of-Year Balance**	**15,879,000**	**14,748,000**	**11,292,000**	**12,860,000**	**14,754,000**	**11,589,000**	**8,826,000**
176	Operating Reserve (25%)	2,735,000	3,040,000	2,283,000	2,345,000	2,409,000	2,573,000	2,642,000
177	Restricted DS Reserve	2,379,536	2,379,536	2,379,536	2,379,536	2,379,536	2,379,536	2,379,536
178	2007 COP Proceeds	756,003	756,003	756,003	756,003	756,003	756,003	756,003
179	Rate Stabilization Fund	500,000	500,000	500,000	500,000	500,000	500,000	500,000
180	Net Available for Capital Projects	9,508,461	8,072,461	5,373,461	6,879,461	8,709,461	5,380,461	2,548,461
181								
182								
183								
194	**City of Lodi -- Wastewater Utility**							
195	**Financial Plan Assumptions**							
196		**FY 12-13**	**FY 13-14**	**FY 14-15**	**FY 15-16**	**FY 16-17**	**FY 17-18**	**FY 18-19**
197	***Financial Assumptions***							
198	General Inflation	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
199	Labor Inflation	3.4%	3.4%	3.4%	3.4%	3.4%	3.4%	3.4%
200	Material/Energy Inflation	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%
201	Construction Inflation	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
202	Interest Earnings	2.0%	2.5%	3.0%	3.5%	3.5%	3.5%	3.5%
203								
204	***Cust. Growth (SSUs)***	-	50	51	52	53	54	55

	A	F	G	H	I	J	K	L
1				**Exhibit E**				
2								
3				**City of Lodi -- Wastewater Utility**				
4				**Financial Plan Summary**				
5		**FY 12-13**	**FY 13-14**	**FY 14-15**	**FY 15-16**	**FY 16-17**	**FY 17-18**	**FY 18-19**
205	Wastewater Mitigation Impact Fee	$ 6,390	$ 6,650	$ 6,920	$ 7,200	$ 7,490	$ 7,790	$ 8,100
206								

Cell: A13
Comment: Septic Dumping Charges, Tap Fees.

Cell: A14
Comment: Transfer amount based on estimated interest earning in Fund 172.

Cell: A15
Comment: Future growth's share of debt service.

Cell: A23
Comment: Transfer for past debt service.

Cell: A43
Comment: Transfer in from Operation Fund 170 for capital projects.

Cell: A44
Comment: Transfer in from Operations Fund 170 for depreciation of assests.

Cell: D45
Comment: $300K received from NCPA for the purchase of a vacuum truck.

Cell: A124
Comment: Transfer in from Operations Fund 170 for past debt service.

Cell: A145
Comment: Capacity fees for the PCE/TCE and Water Treatment Plant projects.

Cell: A151
Comment: Refund anticipates approval from the State Health Department for potable use of the groundwater.

Cell: C205
Comment: Bob Reed:
From City's "Fee and Service Charge Schedule" as of 7/16/09.

Exhibit F

City of Lodi
Current and Proposed Flat Water Rates

			Future Rate Ceiling				
	Current (Jan. 2013)	**Proposed (Jan. 2014)**	**Proposed (Jan. 2015)**	**Proposed (Jan. 2016)**	**Proposed (Jan. 2017)**	**Proposed (Jan. 2018)**	**Proposed (Jan. 2019)**
Rate Increase -->		**2.5%**	**3.0%**	**3.0%**	**3.0%**	**3.0%**	**3.0%**
FLAT RATES							
Single Family Residential							
1 Bedroom	$ 29.90	$ 30.65	$ 31.57	$ 32.52	$ 33.50	$ 34.51	$ 35.55
2 Bedroom	$ 35.91	$ 36.81	$ 37.91	$ 39.05	$ 40.22	$ 41.43	$ 42.67
3 Bedroom	$ 43.04	$ 44.12	$ 45.44	$ 46.80	$ 48.20	$ 49.65	$ 51.14
4 Bedroom	$ 51.72	$ 53.01	$ 54.60	$ 56.24	$ 57.93	$ 59.67	$ 61.46
5 Bedroom	$ 62.03	$ 63.58	$ 65.49	$ 67.45	$ 69.47	$ 71.55	$ 73.70
6 Bedroom	$ 74.44	$ 76.30	$ 78.59	$ 80.95	$ 83.38	$ 85.88	$ 88.46
Multi-Family (1)							
1 Bedroom	$ 25.67	$ 26.31	$ 27.10	$ 27.91	$ 28.75	$ 29.61	$ 30.50
2 Bedroom	$ 30.79	$ 31.56	$ 32.51	$ 33.49	$ 34.49	$ 35.52	$ 36.59
3 Bedroom	$ 36.94	$ 37.86	$ 39.00	$ 40.17	$ 41.38	$ 42.62	$ 43.90
4 Bedroom	$ 44.32	$ 45.43	$ 46.79	$ 48.19	$ 49.64	$ 51.13	$ 52.66
Non-Residential							
Existing unmetered	Varies	+2.5%	+3.0%	+3.0%	+3.0%	+3.0%	+3.0%

Notes:

(1) Multi-family includes duplexes, triplexes, fourplexes, apartments, condominiums, and mobile home parks.

City of Lodi
Current and Proposed Usage-Based Water Rates

				Future Rate Ceiling				
	Current (Jan. 2013)	**Proposed (Jan. 2014)**	**Proposed (Jan. 2014)**	**Proposed (Jan. 2015)**	**Proposed (Jan. 2016)**	**Proposed (Jan. 2017)**	**Proposed (Jan. 2018)**	**Proposed (Jan. 2019)**
Rate Increase -->		**2.5%** (2)	(3)	**3.0%** (4)	**3.0%** (4)	**3.0%**	**3.0%**	**3.0%**
USAGE-BASED RATES								
Monthly Service Charge								
Single Family								
3/4" meter	$ 23.78	$ 24.37	$ 23.26	$ 22.80	$ 21.65	$ 22.30	$ 22.97	$ 23.66
1" meter	$ 38.60	$ 39.57	$ 37.38	$ 36.26	$ 34.01	$ 35.03	$ 36.08	$ 37.16
1 1/2" meter	$ 75.42	$ 77.31	$ 72.45	$ 69.63	$ 64.62	$ 66.56	$ 68.56	$ 70.62
2" meter	$ 119.79	$ 122.78	$ 114.71	$ 109.84	$ 101.52	$ 104.57	$ 107.71	$ 110.94
Multi-Family and Non-Residential (1)								
3/4" meter	$ 23.78	$ 24.37	$ 23.26	$ 22.80	$ 21.65	$ 22.30	$ 22.97	$ 23.66
1" meter	$ 38.60	$ 39.57	$ 37.38	$ 36.26	$ 34.01	$ 35.03	$ 36.08	$ 37.16
1 1/2" meter	$ 60.24	$ 61.75	$ 62.08	$ 64.28	$ 64.62	$ 66.56	$ 68.56	$ 70.62
2" meter	$ 75.27	$ 77.15	$ 84.29	$ 94.17	$ 101.52	$ 104.57	$ 107.71	$ 110.94
3" meter	$ 105.38	$ 108.01	$ 132.74	$ 162.18	$ 187.65	$ 193.28	$ 199.08	$ 205.05
4" meter	$ 135.51	$ 138.90	$ 193.14	$ 254.80	$ 310.67	$ 319.99	$ 329.59	$ 339.48
6" meter	$ 195.68	$ 200.57	$ 333.69	$ 480.82	$ 617.94	$ 636.48	$ 655.57	$ 675.24
8" meter	$ 255.91	$ 262.31	$ 494.23	$ 747.94	$ 986.82	$ 1,016.42	$ 1,046.91	$ 1,078.32
10" meter	$ 316.01	$ 323.91	$ 674.61	$ 1,056.08	$ 1,417.30	$ 1,459.82	$ 1,503.61	$ 1,548.72
Usage Rates ($/CCF)								
Single Family								
Tier 1 (0-10 CCF)	$ 0.92	$ 0.94	$ 0.94	$ 0.97	$ 0.96	$ 0.99	$ 1.02	$ 1.05
Tier 2 (11-50 CCF)	$ 1.38	$ 1.41	$ 1.35	$ 1.33	$ 1.27	$ 1.31	$ 1.35	$ 1.39
Tier 3 (>50 CCF)	$ 1.82	$ 1.87	$ 1.76	$ 1.70	$ 1.59	$ 1.64	$ 1.69	$ 1.74
Multi-Family and Non-Residential (1)								
All water usage	$ 0.92	$ 0.94	$ 1.00	$ 1.09	$ 1.14	$ 1.17	$ 1.21	$ 1.25

Notes:

(1) Multi-family includes duplexes, triplexes, fourplexes, apartments, condominiums, and mobile home parks.
(2) This schedule includes the proposed indexing of 2.5 percent, with no rate structure changes.
(3) This rate schedule is revenue neutral relative to the proposed newly indexed January 2014 water rates, but includes the beginning of the proposed 3-year phased changes to the rate structure.
(4) These rate schedules reflect the second and third year of the 3-year rate structure phasing, as well as the maximum potential rate adjustment due to ENR indexing.

City of Lodi
Current and Proposed Flat Wastewater Rates

		Future Rate Ceiling				
	Current (Jul. 2013)	**Proposed (Jul. 2014)**	**Proposed (Jul. 2015)**	**Proposed (Jul. 2016)**	**Proposed (Jul. 2017)**	**Proposed (Jul. 2018)**
Rate Increase -->		**3.0%**	**3.0%**	**3.0%**	**3.0%**	**3.0%**
FLAT RATES						
Single Family Residential						
1 Bedroom	$ 25.83	$ 26.60	$ 27.40	$ 28.22	$ 29.07	$ 29.94
2 Bedroom	$ 34.44	$ 35.47	$ 36.53	$ 37.63	$ 38.76	$ 39.92
3 Bedroom	$ 43.05	$ 44.34	$ 45.67	$ 47.04	$ 48.45	$ 49.90
4 Bedroom	$ 51.66	$ 53.21	$ 54.81	$ 56.45	$ 58.14	$ 59.88
5 Bedroom	$ 60.27	$ 62.08	$ 63.94	$ 65.86	$ 67.84	$ 69.88
6 Bedroom	$ 68.88	$ 70.95	$ 73.08	$ 75.27	$ 77.53	$ 79.86
7 Bedroom	$ 77.49	$ 79.81	$ 82.20	$ 84.67	$ 87.21	$ 89.83
Duplexes, Triplexes, Fourplexes, Apartments, and Condominiums						
1 Bedroom	$ 25.83	$ 26.60	$ 27.40	$ 28.22	$ 29.07	$ 29.94
2 Bedroom	$ 34.44	$ 35.47	$ 36.53	$ 37.63	$ 38.76	$ 39.92
3 Bedroom	$ 43.05	$ 44.34	$ 45.67	$ 47.04	$ 48.45	$ 49.90
4 Bedroom	$ 51.66	$ 53.21	$ 54.81	$ 56.45	$ 58.14	$ 59.88
Mobile Homes						
Any Size	$ 25.83	$ 26.60	$ 27.40	$ 28.22	$ 29.07	$ 29.94
Non-Residential						
Per SSU	$ 34.44	$ 35.47	$ 36.53	$ 37.63	$ 38.76	$ 39.92

City of Lodi
Current and Proposed Usage-Based Wastewater Rates

		Future Rate Ceiling				
	Current (Jul. 2013)	**Proposed (Jul. 2014)**	**Proposed (Jul. 2015)**	**Proposed (Jul. 2016)**	**Proposed (Jul. 2017)**	**Proposed (Jul. 2018)**
Rate Increase -->		**3.0%**	**3.0%**	**3.0%**	**3.0%**	**3.0%**
USAGE-BASED RATES						
Monthly Service Charge						
Single Family (per DU)	$ 23.52	$ 24.23	$ 24.96	$ 25.71	$ 26.48	$ 27.27
Multi-Family and Non-Residential (1)						
3/4" meter		$ 24.23	$ 24.96	$ 25.71	$ 26.48	$ 27.27
1" meter		$ 38.83	$ 39.99	$ 41.19	$ 42.43	$ 43.70
1 1/2" meter		$ 75.03	$ 77.28	$ 79.60	$ 81.99	$ 84.45
2" meter		$ 118.63	$ 122.19	$ 125.86	$ 129.64	$ 133.53
3" meter		$ 220.45	$ 227.06	$ 233.87	$ 240.89	$ 248.12
4" meter		$ 365.88	$ 376.86	$ 388.17	$ 399.82	$ 411.81
6" meter		$ 729.12	$ 750.99	$ 773.52	$ 796.73	$ 820.63
8" meter		$ 1,165.18	$ 1,200.14	$ 1,236.14	$ 1,273.22	$ 1,311.42
Usage Rates ($/CCF)						
Single Family (2)	$ 2.68	$ 2.76	$ 2.84	$ 2.93	$ 3.02	$ 3.11
Multi-Family (2)		$ 2.76	$ 2.84	$ 2.93	$ 3.02	$ 3.11
Non-Residential (2) (3)						
Low Strength		*$ 2.76*	*$ 2.84*	*$ 2.93*	*$ 3.02*	*$ 3.11*
Medium Strength		*$ 3.45*	*$ 3.55*	*$ 3.66*	*$ 3.77*	*$ 3.88*
High Strength		*$ 4.49*	*$ 4.62*	*$ 4.76*	*$ 4.90*	*$ 5.05*
Industrial (4)						
Flow (per MG annually)	$ 3,487.41	$ 3,592.03	$ 3,699.79	$ 3,810.78	$ 3,925.10	$ 4,042.85
BOD (per 1,000 lbs annually)	$ 575.51	$ 592.78	$ 610.56	$ 628.88	$ 647.75	$ 667.18
SS (per 1,000 lbs annually)	$ 359.85	$ 370.65	$ 381.77	$ 393.22	$ 405.02	$ 417.17

Notes:

(1) Multi-family includes duplexes, triplexes, fourplexes, apartments, condominiums, and mobile home parks.
(2) Usage charge based on winter water use determined as the average from the prior December-February period. Adjusted each July for each account.
(3) Placeholder. These rates not yet in use.
(4) Applies to industrial users discharging into the domestic sewer system.

The City of Lodi

Public Works Engineering

Water and Wastewater Rates

Shirtsleeve Meeting

October 15, 2013

- Meter charge schedule
- Vacant residential water and wastewater rate
- Water and wastewater financial models
- Water and wastewater rate update
- Solid waste rates
- Proposition 218 process

Meter Charge Schedule

Meter Size	Purchase Price	**Recommended Price Based (Cost x 1.55)**	Capacity Factor	Capacity Based	Installed Cost (Contractor Prices)	Lodi Fee Schedule	Santa Clara Fee Schedule	No Charge
¾	$194	**$300**	1	$300	$940	$400	$370	$0
1	$226	**$350**	1.67	$500	$1,420	$480	$365	$0
1 ½	$506	**$780**	3.33	$1,000	$3,810	$745	$1,565	$0
2	$624	**$970**	5.33	$1,600	$5,720	$930	$1,730	$0
3	$1,279	**$1,980**	10	$3,000	$5,950	N/A	$2,065	$0
4	$2,304	**$3,570**	16.67	$5,000	N/A	N/A	$4,130	$0
6	$4,362	**$6,760**	33.33	$10,000	N/A	N/A	$6,750	$0
8	$7,432	**$11,520**	53.33	$16,000	N/A	N/A	$10,670	$0

Vacant Residential Rates

- Flat rate residential customers – monthly service charge for a ¾ inch meter
- Metered residential customers – no vacant utility rate
- Master metered multi-family – no vacant utility rate
- Metered multi-family unit – no vacant utility rate
- Monthly service charge will reduce with conservation pricing

Water & Wastewater Rate Update

- Continue the migration from flat water and wastewater rates to usage-based rates for all customer classes
- Update financial models to determine revenue needs through FY 18/19
- Refine usage-based rate structures to better meet cost of service requirement using water use data becoming available with new water meters
- Continue annual rate adjustments based on changes in the ENR, subject to a 3% annual cap

Water & Wastewater Models

- Water and wastewater financial models have been updated to reflect actual (pre-audit) numbers for FY 12/13, the FY 13/14 budget, and 5-year capital improvement plans
- Financial models assume annual rate increases of no more than 3% per year
- Revenues appear sufficient for both utilities through FY 18/19

Water Financial Model

1. Financial assumptions reconfirmed
2. Capital expenditures include meter program, infrastructure replacement and comprehensive well maintenance
3. New development assumed minimal
4. $2.3 million annual debt service for water plant
5. $10 million net available capital at end of FY 18/19 could be used for debt retirement ($ millions in interest savings)

Wastewater Financial Model

1. $3.2 million to pay off 2003 COPs
2. $2.2 million infrastructure replacement every 2 years
3. $11.4 million for White Slough irrigation conveyance and pond storage improvements
4. New development assumed minimal
5. $3.5 million annual debt service for White Slough
6. $2.5 million net available capital at end of FY 18/19 is relatively low

ENR Index and Rate Adjustments

- In recent years, the City has adjusted water and wastewater rates by the annual change in the *Engineering News Record's* 20-Cities Construction Cost Index (ENR), subject to a 3% cap. The ENR is tracking at a 3.3% annual change (Oct. 2012 - Oct. 2013).
- Water rates for January 2014 are proposed to increase by 2.5% (ENR = 3.3%)
- Wastewater rates for July 2014 have been assumed to increase by 3.0%, but the actual adjustment will depend on the change in the ENR at that time, and may be less than 3.0%.

Previous Rate Adjustments

Water		
Year	**Programmed**	**Approved**
2009	0	0
2010	0	0
2011	2	2
2012	2.53	2.2
2013	2.5	2.5
2014	3.3	2.5
Wastewater		
2009	25	25
2010	20	12
2011	10	5
2012	5	3
2013	2.8	2.5

Rate Structure Changes

- ***Water Rates***
  - ✓Flat rates – No rate structure changes proposed
  - ✓Usage-based rates – Rate structure changes proposed

- ***Wastewater Rates***
  - ✓Flat rates – No rate structure changes proposed
  - ✓Usage-based rates – Rate structure changes proposed

Flat Water Rates

			Future Rate Ceiling				
	Current (Jan. 2013)	Proposed (Jan. 2014)	Proposed (Jan. 2015)	Proposed (Jan. 2016)	Proposed (Jan. 2017)	Proposed (Jan. 2018)	Proposed (Jan. 2019)
Rate Increase -->		2.5%	3.0%	3.0%	3.0%	3.0%	3.0%
FLAT RATES							
Single Family Residential							
1 Bedroom	$ 29.90	$ 30.65	$ 31.57	$ 32.52	$ 33.50	$ 34.51	$ 35.55
2 Bedroom	$ 35.91	$ 36.81	$ 37.91	$ 39.05	$ 40.22	$ 41.43	$ 42.67
3 Bedroom	$ 43.04	$ 44.12	$ 45.44	$ 46.80	$ 48.20	$ 49.65	$ 51.14
4 Bedroom	$ 51.72	$ 53.01	$ 54.60	$ 56.24	$ 57.93	$ 59.67	$ 61.46
5 Bedroom	$ 62.03	$ 63.58	$ 65.49	$ 67.45	$ 69.47	$ 71.55	$ 73.70
6 Bedroom	$ 74.44	$ 76.30	$ 78.59	$ 80.95	$ 83.38	$ 85.88	$ 88.46
Multi-Family (1)							
1 Bedroom	$ 25.67	$ 26.31	$ 27.10	$ 27.91	$ 28.75	$ 29.61	$ 30.50
2 Bedroom	$ 30.79	$ 31.56	$ 32.51	$ 33.49	$ 34.49	$ 35.52	$ 36.59
3 Bedroom	$ 36.94	$ 37.86	$ 39.00	$ 40.17	$ 41.38	$ 42.62	$ 43.90
4 Bedroom	$ 44.32	$ 45.43	$ 46.79	$ 48.19	$ 49.64	$ 51.13	$ 52.66
Mobile Homes							
Any Size	$ 25.67	$ 26.31	$ 27.10	$ 27.91	$ 28.75	$ 29.61	$ 30.50
Non-Residential							
Existing unmetered	Varies	+2.5%	+3.0%	+3.0%	+3.0%	+3.0%	+3.0%

Notes:

(1) Multi-family includes duplexes, triplexes, fourplexes, apartments, and condominiums.

Flat Wastewater Rates

		Future Rate Ceiling				
	Current (Jul. 2013)	Proposed (Jul. 2014)	Proposed (Jul. 2015)	Proposed (Jul. 2016)	Proposed (Jul. 2017)	Proposed (Jul. 2018)
Rate Increase -->		3.0%	3.0%	3.0%	3.0%	3.0%
FLAT RATES						
Single Family Residential						
1 Bedroom	$ 25.83	$ 26.60	$ 27.40	$ 28.22	$ 29.07	$ 29.94
2 Bedroom	$ 34.44	$ 35.47	$ 36.53	$ 37.63	$ 38.76	$ 39.92
3 Bedroom	$ 43.05	$ 44.34	$ 45.67	$ 47.04	$ 48.45	$ 49.90
4 Bedroom	$ 51.66	$ 53.21	$ 54.81	$ 56.45	$ 58.14	$ 59.88
5 Bedroom	$ 60.27	$ 62.08	$ 63.94	$ 65.86	$ 67.84	$ 69.88
6 Bedroom	$ 68.88	$ 70.95	$ 73.08	$ 75.27	$ 77.53	$ 79.86
7 Bedroom	$ 77.49	$ 79.81	$ 82.20	$ 84.67	$ 87.21	$ 89.83
Duplexes, Triplexes, Fourplexes, Apartments, and Condominiums						
1 Bedroom	$ 25.83	$ 26.60	$ 27.40	$ 28.22	$ 29.07	$ 29.94
2 Bedroom	$ 34.44	$ 35.47	$ 36.53	$ 37.63	$ 38.76	$ 39.92
3 Bedroom	$ 43.05	$ 44.34	$ 45.67	$ 47.04	$ 48.45	$ 49.90
4 Bedroom	$ 51.66	$ 53.21	$ 54.81	$ 56.45	$ 58.14	$ 59.88
Mobile Homes						
Any Size	$ 25.83	$ 26.60	$ 27.40	$ 28.22	$ 29.07	$ 29.94
Non-Residential						
Per SSU	$ 34.44	$ 35.47	$ 36.53	$ 37.63	$ 38.76	$ 39.92

Calif. Constitution (Prop. 218)

Article XIIID, Section 6(b)(3) – The amount of a fee or charge imposed upon any parcel or person as an incident of property ownership *shall not exceed the proportional cost of the service* attributable to the parcel.

Water Rate Structure Changes

- Gradually adjust both the single family tiered rates and the uniform usage rate applicable to multi-family and non-residential accounts consistent with proportionality standards.
- Gradually adjust the monthly service charges to better reflect the capacity relationship across meter sizes
- Recommend both of these changes be phased-in over a three-year period.

Usage-Based Water Rates

				Future Rate Ceiling				
	Current (Jan. 2013)	Proposed (Jan. 2014)	Proposed (Jan. 2014)	Proposed (Jan. 2015)	Proposed (Jan. 2016)	Proposed (Jan. 2017)	Proposed (Jan. 2018)	Proposed (Jan. 2019)
Rate Increase -->		2.5% (2)	(3)	3.0% (4)	3.0% (4)	3.0%	3.0%	3.0%
USAGE-BASED RATES								
Monthly Service Charge								
Single Family								
3/4" meter	$ 23.78	$ 24.37	$ 23.26	$ 22.80	$ 21.65	$ 22.30	$ 22.97	$ 23.66
1" meter	$ 38.60	$ 39.57	$ 37.38	$ 36.26	$ 34.01	$ 35.03	$ 36.08	$ 37.16
1 1/2" meter	$ 75.42	$ 77.31	$ 72.45	$ 69.63	$ 64.62	$ 66.56	$ 68.56	$ 70.62
2" meter	$ 119.79	$ 122.78	$ 114.71	$ 109.84	$ 101.52	$ 104.57	$ 107.71	$ 110.94
Multi-Family and Non-Residential (1)								
3/4" meter	$ 23.78	$ 24.37	$ 23.26	$ 22.80	$ 21.65	$ 22.30	$ 22.97	$ 23.66
1" meter	$ 38.60	$ 39.57	$ 37.38	$ 36.26	$ 34.01	$ 35.03	$ 36.08	$ 37.16
1 1/2" meter	$ 60.24	$ 61.75	$ 62.08	$ 64.28	$ 64.62	$ 66.56	$ 68.56	$ 70.62
2" meter	$ 75.27	$ 77.15	$ 84.29	$ 94.17	$ 101.52	$ 104.57	$ 107.71	$ 110.94
3" meter	$ 105.38	$ 108.01	$ 132.74	$ 162.18	$ 187.65	$ 193.28	$ 199.08	$ 205.05
4" meter	$ 135.51	$ 138.90	$ 193.14	$ 254.80	$ 310.67	$ 319.99	$ 329.59	$ 339.48
6" meter	$ 195.68	$ 200.57	$ 333.69	$ 480.82	$ 617.94	$ 636.48	$ 655.57	$ 675.24
8" meter	$ 255.91	$ 262.31	$ 494.23	$ 747.94	$ 986.82	$ 1,016.42	$ 1,046.91	$ 1,078.32
10" meter	$ 316.01	$ 323.91	$ 674.61	$ 1,056.08	$ 1,417.30	$ 1,459.82	$ 1,503.61	$ 1,548.72
Usage Rates ($/CCF)								
Single Family								
Tier 1 (0-10 CCF)	$ 0.92	$ 0.94	$ 0.94	$ 0.97	$ 0.96	$ 0.99	$ 1.02	$ 1.05
Tier 2 (11-50 CCF)	$ 1.38	$ 1.41	$ 1.35	$ 1.33	$ 1.27	$ 1.31	$ 1.35	$ 1.39
Tier 3 (>50 CCF)	$ 1.82	$ 1.87	$ 1.76	$ 1.70	$ 1.59	$ 1.64	$ 1.69	$ 1.74
Multi-Family and Non-Residential (1)								
All water usage	$ 0.92	$ 0.94	$ 1.00	$ 1.09	$ 1.14	$ 1.17	$ 1.21	$ 1.25

Notes:

(1) Multi-family includes duplexes, triplexes, fourplexes, apartments, condominiums, and mobile home parks.

(2) This schedule includes the proposed indexing of 2.5 percent, with no rate structure changes.

(3) This rate schedule is revenue neutral relative to the proposed newly indexed January 2014 water rates, but includes the beginning of the proposed 3-year phased changes to the rate structure.

(4) These rate schedules reflect the second and third year of the 3-year rate structure phasing, as well as the maximum potential rate adjustment due to ENR indexing.

Water Rate Comparison

Agency	Service Charge	Usage Charge	Average Bill*
City of Galt	2.89	1.19	24.31
City of Tracy	11.70	1.00	29.70
City of Sacramento	22.18	0.91	38.48
City of Modesto	15.03	1.40	40.23
City of Manteca	18.90	1.43	44.64
City of Lodi	**24.37**	**0.94**	**45.05**
City of Stockton	21.15	1.60	49.95
City of Brentwood	19.08	2.99	61.32
City of Lathrop	16.50	2.63	65.56
City of Oakland	17.17	2.66	65.05
City of San Mateo	10.50	4.26	99.60
City of Burlingame	35.97	7.26	121.04

* Based upon 1,800 cubic feet per month

Wastewater Rate Structure Changes

- Establish monthly service charges, based on meter size, for multi-family and non-residential accounts, similar to water rate structure
- Adopt wastewater usage-based rates for multi-family and non-residential accounts for future transition to usage-based wastewater rates

Usage-Based Wastewater Rates

	Current (Jul. 2013)	Future Rate Ceiling: Proposed (Jul. 2014)	Proposed (Jul. 2015)	Proposed (Jul. 2016)	Proposed (Jul. 2017)	Proposed (Jul. 2018)
Rate Increase -->		3.0%	3.0%	3.0%	3.0%	3.0%
USAGE-BASED RATES						
Monthly Service Charge						
Single Family (per DU)	$ 23.52	$ 24.23	$ 24.96	$ 25.71	$ 26.48	$ 27.27
Multi-Family and Non-Residential (1)						
3/4" meter		$ 24.23	$ 24.96	$ 25.71	$ 26.48	$ 27.27
1" meter		$ 38.83	$ 39.99	$ 41.19	$ 42.43	$ 43.70
1 1/2" meter		$ 75.03	$ 77.28	$ 79.60	$ 81.99	$ 84.45
2" meter		$ 118.63	$ 122.19	$ 125.86	$ 129.64	$ 133.53
3" meter		$ 220.45	$ 227.06	$ 233.87	$ 240.89	$ 248.12
4" meter		$ 365.88	$ 376.86	$ 388.17	$ 399.82	$ 411.81
6" meter		$ 729.12	$ 750.99	$ 773.52	$ 796.73	$ 820.63
8" meter		$ 1,165.18	$ 1,200.14	$ 1,236.14	$ 1,273.22	$ 1,311.42
Usage Rates ($/CCF)						
Single Family (2)	$ 2.68	$ 2.76	$ 2.84	$ 2.93	$ 3.02	$ 3.11
Multi-Family (2)		$ 2.76	$ 2.84	$ 2.93	$ 3.02	$ 3.11
Non-Residential (2) (3)						
Low Strength		*$ 2.76*	*$ 2.84*	*$ 2.93*	*$ 3.02*	*$ 3.11*
Medium Strength		*$ 3.45*	*$ 3.55*	*$ 3.66*	*$ 3.77*	*$ 3.88*
High Strength		*$ 4.49*	*$ 4.62*	*$ 4.76*	*$ 4.90*	*$ 5.05*
Industrial (4)						
Flow (per MG annually)	$ 3,487.41	$ 3,592.03	$ 3,699.79	$ 3,810.78	$ 3,925.10	$ 4,042.85
BOD (per 1,000 lbs annually)	$ 575.51	$ 592.78	$ 610.56	$ 628.88	$ 647.75	$ 667.18
SS (per 1,000 lbs annually)	$ 359.85	$ 370.65	$ 381.77	$ 393.22	$ 405.02	$ 417.17

Notes:

(1) Multi-family includes duplexes, triplexes, fourplexes, apartments, condominiums, and mobile home parks.

(2) Usage charge based on winter water use determined as the average from the prior December-February period. Adjusted each July for each account.

(3) Placeholder. These rates not yet in use.

(4) Applies to industrial users discharging into the domestic sewer system.

Wastewater Rate Comparison

Agency	Service Charge	Usage Charge	Average Bill*	Flat Rate Charge
City of Sacramento	39.68	0.8049	46.92	38.89
City of Modesto	n/a	n/a		30.40
City of Tracy	n/a	n/a		31.00
City of Stockton	n/a	n/a		37.31
City of San Mateo	n/a	6.81	40.86	
City of Lodi	**23.52**	**2.68**	**47.64**	**43.05**
City of Galt	n/a	n/a		45.75
City of Brentwood	15.48	4.80	47.79	
City of Manteca	n/a	n/a		51.25
City of Lathrop	n/a	n/a		59.40
City of Oakland	13.38	7.35	79.53	
City of Burlingame	n/a	12.25	82.47	

* Based upon 900 cubic feet per month

Sample Residential Water Bills

		Monthly Water Bill		Change	
	Water Use (CCF)	Current Rates (Jan. 2013)	Proposed Rates (Jan. 2014)	$s	%
Single Family Residential					
Flat Rate - 2 Bdrm Home	n/a	$ 35.91	$ 36.81	$ 0.90	2.5%
Flat Rate - 3 Bdrm Home	n/a	$ 43.04	$ 44.12	$ 1.08	2.5%
Mtr'd Rate - Low Usage	9	$ 32.06	$ 31.72	$ (0.34)	-1.1%
Mtr'd Rate - Median Usage	16	$ 41.26	$ 40.76	$ (0.50)	-1.2%
Mtr'd Rate - High Usage	32	$ 63.34	$ 62.36	$ (0.98)	-1.5%
Muti-Family Residential (1)					
Flat Rate - 2 Bdrm Apartment	n/a	$ 30.79	$ 31.56	$ 0.77	2.5%
Duplex w/ 3/4" Mtr.	36	$ 61.58	$ 59.26	$ (2.32)	-3.8%
Fourplex w/ 1" Wtr. Mtr.	60	$ 123.16	$ 97.38	$ (25.78)	-20.9%
12 Unit Apartment w/ 1 1/2" Mtr.	150	$ 369.48	$ 212.08	$ (157.40)	-42.6%
80 Unit Apartment w/ 4" Mtr.	720	$ 2,463.20	$ 913.14	$ (1,550.06)	-62.9%
40 Unit MH Park w/ 2" Mtr.	250	$ 1,026.80	$ 334.29	$ (692.51)	-67.4%

(1) Current bill amounts for multi-family examples are all based on flat rates, and assume two bedroom dwelling units. Proposed bill amounts are based on metered rates, except where noted.

Sample Residential Wastewater Bills

		Monthly Wastewater Bill		Change	
	Winter Wtr. Use (CCF)	Current Rates (Jul. 2013)	Proposed Rates (Jul. 2014)	$s	%
Single Family Residential					
Flat Rate - 2 Bdrm Home	n/a	$ 34.44	$ 35.47	$ 1.03	3.0%
Flat Rate - 3 Bdrm Home	n/a	$ 43.05	$ 44.34	$ 1.29	3.0%
Mtr'd Rate - Low Usage	6	$ 39.60	$ 40.79	$ 1.19	3.0%
Mtr'd Rate - Median Usage	9	$ 47.64	$ 49.07	$ 1.43	3.0%
Mtr'd Rate - High Usage	12	$ 55.68	$ 57.35	$ 1.67	3.0%
Muti-Family Residential (1)					
Flat Rate - 2 Bdrm Apartment	n/a	$ 34.44	$ 35.47	$ 1.03	3.0%
Duplex w/ 3/4" Mtr.	16	$ 68.88	$ 68.39	$ (0.49)	-0.7%
Fourplex w/ 1" Wtr. Mtr.	28	$ 137.76	$ 116.11	$ (21.65)	-15.7%
12 Unit Apartment w/ 1 1/2" Mtr.	72	$ 413.28	$ 273.75	$ (139.53)	-33.8%
80 Unit Apartment w/ 4" Mtr.	480	$ 2,755.20	$ 1,690.68	$ (1,064.52)	-38.6%
40 Unit MH Park w/ 2" Mtr.	180	$ 1,033.20	$ 615.43	$ (417.77)	-40.4%

Notes:

(1) Current bill amounts for multi-family examples are all based on flat rates, and assume two bedroom dwelling units. Proposed bill amounts are based on metered rates, except where noted.

Sample Combined Residential Bills

	Monthly Wtr/WW Bill		Change	
	Current Rates	Proposed Rates	$s	%
Single Family Residential				
Flat Rate - 2 Bdrm Home	$ 70.35	$ 72.28	$ 1.93	2.7%
Flat Rate - 3 Bdrm Home	$ 86.09	$ 88.46	$ 2.37	2.8%
Mtr'd Rate - Low Usage	$ 71.66	$ 72.51	$ 0.85	1.2%
Mtr'd Rate - Median Usage	$ 88.90	$ 89.83	$ 0.93	1.0%
Mtr'd Rate - High Usage	$ 119.02	$ 119.71	$ 0.69	0.6%
Muti-Family Residential (1)				
Flat Rate - 2 Bdrm Apartment	$ 65.23	$ 67.03	$ 1.80	2.8%
Duplex w/ 3/4" Mtr.	$ 130.46	$ 127.65	$ (2.81)	-2.2%
Fourplex w/ 1" Wtr. Mtr.	$ 260.92	$ 213.49	$ (47.43)	-18.2%
12 Unit Apartment w/ 1 1/2" Mtr.	$ 782.76	$ 485.83	$ (296.93)	-37.9%
80 Unit Apartment w/ 4" Mtr.	$ 5,218.40	$ 2,603.82	$ (2,614.58)	-50.1%
40 Unit MH Park w/ 2" Mtr.	$ 2,060.00	$ 949.72	$ (1,110.28)	-53.9%

Notes:

(1) Current bill amounts for multi-family examples are all based on flat rates, and assume two bedroom dwelling units. Proposed bill amounts are based on metered rates, except where noted.

Sample Non-Resid. Water Bills

		Monthly Water Bill		Change	
	Water Use (CCF)	Current Rates (Jan. 2013)	Proposed Rates (Jan. 2014)	$s	%
Retail Store (w/ 1" mtr.)	48	$ 82.76	$ 85.38	$ 2.62	3.2%
Small Motel (w/ 1" mtr.)	120	$ 149.00	$ 157.38	$ 8.38	5.6%
Restaurant (w/ 1 1/2" mtr.)	160	$ 207.59	$ 222.25	$ 14.65	7.1%
Small Manufacturer (w/ 2" mtr.)	169	$ 230.75	$ 253.29	$ 22.54	9.8%
Grocery Store (w/ 2 mtrs.)	518	$ 611.76	$ 664.04	$ 52.27	8.5%
Big Box Retail (w/ 2 mtrs.)	541	$ 633.48	$ 687.64	$ 54.16	8.5%
Large Retail Store (w/ 2" mtr.)	739	$ 815.16	$ 931.89	$ 116.73	14.3%
Large Office Bldg. (w/ 4" mtr.)	704	$ 783.11	$ 897.06	$ 113.94	14.6%
High School (w/ 3 mtrs.)	2,268	$ 2,441.57	$ 2,818.13	$ 376.56	15.4%
Hospital (w/ 6 mtrs.)	2,963	$ 3,505.27	$ 4,067.37	$ 562.10	16.0%
Indus. Food Processor (w/ 4 mtrs.)	6,025	$ 5,973.20	$ 6,659.34	$ 686.14	11.5%
Indus. Food Processor (w/ 6 mtrs.)	8,565	$ 8,376.22	$ 9,156.93	$ 780.71	9.3%

Sample Non-Res. Wastewater Bills

		Monthly Wastewater Bill		Change	
	WW Use (SSUs)	Current Rates (Jul. 2013)	Proposed Rates (Jul. 2014)	$s	%
Retail Store	3.12	$ 107.45	$ 110.67	$ 3.21	3.0%
Small Motel	4.00	$ 137.76	$ 141.88	$ 4.12	3.0%
Restaurant	14.00	$ 482.16	$ 496.58	$ 14.42	3.0%
Small Manufacturer	22.85	$ 786.95	$ 810.49	$ 23.54	3.0%
Grocery Store	25.00	$ 861.00	$ 886.75	$ 25.75	3.0%
Big Box Retail	36.08	$ 1,242.60	$ 1,279.76	$ 37.16	3.0%
Large Retail Store	13.98	$ 481.47	$ 495.87	$ 14.40	3.0%
Large Office Building	92.63	$ 3,190.18	$ 3,285.59	$ 95.41	3.0%
High School	133.93	$ 4,612.55	$ 4,750.50	$ 137.95	3.0%
Hospital	48.56	$ 1,672.41	$ 1,722.42	$ 50.02	3.0%
Industrial Food Processor	639.67	$ 22,030.23	$ 22,689.09	$ 658.86	3.0%
Industrial Food Processor	1,258.06	$ 43,327.59	$ 44,623.39	$ 1,295.80	3.0%

Sample Combined Non-Resid. Bills

	Monthly Wtr/WW Bill		Change	
	Current Rates	Proposed Rates	$s	%
Retail Store	$ 190.21	$ 196.05	$ 5.83	3.1%
Small Motel	$ 286.76	$ 299.26	$ 12.50	4.4%
Restaurant	$ 689.75	$ 718.83	$ 29.07	4.2%
Small Manufacturer	$ 1,017.70	$ 1,063.78	$ 46.08	4.5%
Grocery Store	$ 1,472.76	$ 1,550.79	$ 78.02	5.3%
Big Box Retail	$ 1,876.07	$ 1,967.39	$ 91.32	4.9%
Large Retail Store	$ 1,296.63	$ 1,427.76	$ 131.13	10.1%
Large Office Building	$ 3,973.29	$ 4,182.64	$ 209.35	5.3%
High School	$ 7,054.12	$ 7,568.63	$ 514.51	7.3%
Hospital	$ 5,177.68	$ 5,789.79	$ 612.11	11.8%
Industrial Food Processor	$ 28,003.44	$ 29,348.44	$ 1,345.00	4.8%
Industrial Food Processor	$ 51,703.80	$ 53,780.32	$ 2,076.52	4.0%

Summary of Key Points

- Rates must meet Prop. 218 cost of service requirements
- Rate structure changes should be adopted prior to further migration from flat to usage-based rates
- New rate structures will improve equity for all customers
- Three-year phasing of usage-based water rates will ease the transition for larger customers
- Further refinement in non-residential wastewater rates will be required as more data are available

Solid Waste Rates

b. On April 1, 2009, and on each anniversary thereof during the term of this Agreement, the rates shall be adjusted in a percentage amount equal to eighty percent (80%) of the annual change in the Consumer Price Index for all Urban Consumers for San Francisco-Oakland-San Jose, California area, All Items (1982 – 84 = 100) published by the Bureau of Labor Statistics (the Index) for the twelve (12) month period ending December 31 of the preceding calendar year.

c. In January of each year, Contractor shall send to City a revised rate schedule reflecting the new rates, as adjusted by the Index as provided in Section 7.b. City Council will act on rate adjustments to be effective on April 1 of that year.

Solid Waste Rates

CITY OF LODI

COMMERCIAL COMPACTOR RATES

EFFECTIVE JANUARY 1, 2014 TO APRIL 1, 2014

Service	1X Week	2X Week	3X Week	4X Week	5X Week
2 Cubic Yard Compactor	$ 284.78	$ 569.56	$ 854.34	$ 1,139.12	$ 1,423.90
3 Cubic Yard Compactor	$ 351.88	$ 703.76	$ 1,055.64	$ 1,407.52	$ 1,759.40
4 Cubic Yard Compactor	$ 419.52	$ 839.04	$ 1,258.56	$ 1,678.08	$ 2,097.60

The city authorized a five year price index bases adjustments for solid waste in 2009 pursuant to a standalone proposition 218 notice. At that time the notice allowed increases based on eighty percent of the CPI as well possible increases for fuel costs and tipping fees. Although the five years on that approval has not yet run, the City and Waste Management would like to get water, wastewater, and solid waste increases on the same schedule to make adjustments more cost efficient. Staff recommends that Council authorize up to 100 percent CPI adjustment for solid waste in place of the prior 80% plus tipping and fuel price.

Rate Adoption Process

- Approve 2.5% ENR adjustment to water rates effective January 2014 under previous authorized indexing
- Follow required Proposition 218 process for other rate updates:
  - Mail *Notice of Public Hearing* to all customers/property owners at least 45 days prior to public hearing on rates
  - Conduct water and wastewater rate hearing on December 18
  - Adopt new water rate schedules to be effective January 2014
  - Adopt new wastewater rate schedules to be effective July 2014
  - Re-adopt ENR indexing mechanism for next five years

Questions?