

**LODI CITY COUNCIL  
SHIRTSLEEVE SESSION  
CARNEGIE FORUM, 305 WEST PINE STREET  
TUESDAY, MARCH 26, 2013**

A. Roll Call by City Clerk

An Informal Informational Meeting ("Shirtsleeve" Session) of the Lodi City Council was held Tuesday, March 26, 2013, commencing at 7:00 a.m.

Present: Council Member Hansen, Council Member Johnson, Council Member Mounce, Mayor Pro Tempore Katzakian, and Mayor Nakanishi

Absent: None

Also Present: City Manager Bartlam, City Attorney Schwabauer, and City Clerk Johl

B. Topic(s)

B-1 Receive Information Regarding Multiple Family and Non-Residential Water Meter Program (PW)

Public Works Director Wally Sandelin provided a PowerPoint presentation regarding the multi-family and non-residential water meter program. Specific topics of discussion included state law, multiple-family meter program, meter charge alternatives, right sizing meters, vacant utility rate, common areas metered service, condominium properties and survey, apartment properties and survey, mobile home park properties and survey, comparison billing examples, specific apartment, duplex and mobile home park address locations, implementation, fire suppression, impact properties, billing methods, California cities survey, and billing recommendation and alternative.

In response to Council Member Hansen, Mr. Sandelin stated the difference between a private main and a public main is that the public main is owned and located in the public right-of-way or in an easement as opposed to being privately-owned.

In response to Council Member Mounce, Mr. Sandelin confirmed that the \$300 cost for water meters previously approved was for single-family residential homes and the meter cost for multi-family residences has not yet been set by the Council.

In response to Council Member Hansen, Mr. Sandelin stated the "purchase price" shown on the slide reflects the cost to the City for meter and accessories and the "installed price" includes the total cost to the City.

In response to Mayor Nakanishi, Mr. Sandelin stated he is not sure if the comparison costs include a profit margin as that level of detail was not provided.

In response to Mayor Nakanishi, Mr. Sandelin stated the price for six inches is not listed because there are no six-inch mains in the City at the current time although there may be in the future.

In response to Council Member Hansen, Mr. Sandelin stated the average life expectancy of a meter for multi-family residential is approximately 15 to 20 years and there are some meters in the City that are currently under reading that require replacement.

In response to Council Member Hansen, Mr. Sandelin stated the vacant base rate is applicable to only those units that are truly vacant and not using any water.

In response to Council Member Johnson, Mr. Sandelin stated the tracking mechanism for vacant units is based on when a new tenant connects service and a departing tenant disconnects service.

In response to Council Member Mounce, Mr. Bartlam stated one of the questions to be considered by the Council is how charges for common areas in multi-family residences, such as laundry and landscaping, will be assessed.

In response to Council Member Hansen, Mr. Sandelin stated some multi-owner condominium complexes have individual service allowing for the installation of individual meters. Mr. Sandelin and Mr. Bartlam confirmed that some homeowners associations are currently assessing the master-metered charge through its homeowners dues for condominiums.

In response to Council Member Mounce, Mr. Bartlam stated the conservation intent may not be realized in larger complexes with multiple owners and tenants without an ability to individually meter each unit.

In response to Council Member Hansen, Mr. Sandelin stated apartments around the country built after 1982 are generally set up with individual metering or sub-metering.

In response to Council Member Hansen, Mr. Sandelin stated eight-inch mains that already exist due to fire hydrants for flow purposes will remain although they may be charged less based on the actual right sizing of the pipe.

In response to Council Member Mounce, Mr. Sandelin confirmed that the price for individual meters for multi-family residential, including mobile home parks, has not yet been decided.

In response to Council Member Mounce, Mr. Sandelin stated the usage charge shown on the Sand Creek example slide reflects actual usage only and does not include a base rate.

In response to Mayor Nakanishi, Mr. Sandelin confirmed that a tenant will see no difference in the charged amount and will continue to pay for actual usage regardless of whether it is billed to the tenant directly or through the property owner.

In response to Council Member Mounce, Mr. Sandelin stated the multi-family residential group is approximately 2,500, or 10% of all users, and will therefore not affect the bottom line greatly. Mr. Sandelin stated there may be excess revenue in 2022, which could be used to pay off debt service, make-up a difference, or reduce rates.

In response to Council Member Johnson, Mr. Sandelin stated staff could work on only charging actual usage on flush and flow test days for privately-owned fire hydrants since it is a standard procedure required by law.

In response to Mayor Nakanishi, Mr. Sandelin stated sub-metering is paid for by the property owner and the approximate cost is \$250.

In response to Council Member Hansen, Mr. Sandelin stated approximately 4% of the total number of apartment buildings and mobile home parks currently have sub-metering.

In response to Mayor Nakanishi, Mr. Sandelin stated Stockton bills the property owners directly with a master meter.

The following individuals spoke in support of the City billing the tenant directly to adequately reflect actual usage and conservation efforts: Catherine Brown, Ray Lunning, Dustin Totten, and

Nancy Watt.

In response to Council Member Hansen, Mr. Sandelin stated existing plumbing for apartment buildings in the City varies and the majority of properties have only one service line that covers everything including common areas.

In response to Council Member Hansen, Mr. Sandelin stated he is unsure of whether Lodi is the only remaining city in the County currently on a flat-rate system and other cities are generally billing the property owner who then bills the tenant separately or includes the cost in the rental amount. Mr. Sandelin confirmed that Casa de Lodi had two 8-inch mains installed and is utilizing the master meter concept. Mr. Bartlam stated apartment complexes and mobile home parks traditionally pay the least amount due to their density levels.

A brief discussion ensued amongst the City Council, Mr. Bartlam, and Mr. Sandelin regarding reviewing additional options for billing tenants directly and the timing for implementing the program.

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  
City Clerk



**CITY OF LODI  
COUNCIL COMMUNICATION**

TM

**AGENDA TITLE:** Receive Information Regarding Multiple Family and Non-Residential Water Meter Program

**MEETING DATE:** March 26, 2013 (Shirtsleeve Session)

**PREPARED BY:** Public Works Director

**RECOMMENDED ACTION:** Receive information regarding multiple family and non-residential Water Meter Program.

**BACKGROUND INFORMATION:** At the October 23, 2012 Shirtsleeve City Council meeting, information was previewed in advance of public meetings to be held with property owners of apartments, condominiums, and mobile home parks. A public meeting was held on March 14, 2013 with property owners of apartments and condominiums and on March 19, 2013 with property owners of mobile home parks. Over 1,500 invitations to the public meetings were sent to property owners, homeowner associations, property management companies, and tenants. The following provides a summary of comments and questions presented at the public meetings. Invitations to this Shirtsleeve meeting have been sent to all attendees.

March 14, 2013 – Apartments and Condominiums

There were approximately 40 persons in attendance. Some of the comments and questions are re-stated below.

1. Why do we need to install meters now?
2. What will be the metered condition at my specific property?
3. It will be a lot of work for me to charge each tenant and collect from each tenant for their water use.
4. The City can continue to issue flat rate water bills to each unit.
5. The homeowner association is unable to raise sufficient funds to pay the property's water bill.
6. Seven comment cards were received from attendees requesting individual follow-up meetings or additional site-specific information. Copies of the comment cards are provided in Exhibit A.

March 19, 2013 – Mobile Home Parks

There were approximately 20 persons in attendance. Some of the comments and questions are re-stated below.

1. The City has always billed the tenants for water, wastewater and refuse. Is this the first step toward assigning to the property owner the obligation to pay for these utilities?
2. What is the staff recommendation for charging the tenants for their water usage that is proposed to be transferred to the property owners?
3. What is the planned implementation schedule for this transition to occur?

APPROVED: \_\_\_\_\_

  
Konrad Bartlam, City Manager

4. The usage at a couple of the mobile home parks appears to be low, and we request that you check the usage numbers.
5. No comment cards were received at this public meeting.

The following topics will be covered during the Shirtsleeve presentation. For each, staff's recommendation is provided. The discussion is intended to apply to apartment, condominium, and mobile home park properties, although most of the same issues will be present for commercial and industrial properties.

- A. **Property owner water meter charges** – The alternatives for charging the property owner for their water meter range from simply the purchase price of the meter assembly up to the full cost for purchase and installation of the meter assembly. Staff recommends setting the charge, similar to the charge for the residential meters, at the purchase price of the meter assembly (meter, register and ERT) plus 55% for the meter box, lid and a portion of the installation cost. The full range of alternative pricings is provided in Exhibit B.
- B. **Right-sizing water meters** – Determining the correct size of the meter required to serve a particular property is part experience, science and confirmation after installation. The automated meter reading system contains a module that will analyze peak hourly, diurnal and daily water use information. Once a meter larger than ¾ inches in size is installed, staff will analyze the meter readings and confirm the proper size meter has been installed. Change out of the meter equipment will be made as necessary during the year when comparative billing information is provided to the property owner. Changing the meter will not materially affect the comparative billing information.
- C. **Monthly base charge for oversized meters** – There are a few apartment and condominium properties that will require oversized meters due to the presence of fire hydrants on the internal distribution pipelines. This may also be the case for some commercial and industrial properties. This is certainly the case for one mobile home park where two 8-inch meters have been installed. Staff recommends, in the case where oversized meters are required, the property owner meter charge and the monthly base charge be based upon the right-sizing analysis discussed in B. above.
- D. **Vacant unit water and wastewater charge** – Staff recommends the vacant unit water and wastewater utility charge for residential 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) – customers 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) – customers would pay the monthly base rate and usage charges for the occupied units.
  - Vacant apartment/condominium (individual meter) – customers would pay the monthly base rate and presumably there would be no usage and, therefore, no usage charge.

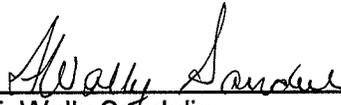
- Vacant mobile home (master meter) – customers would pay the monthly base rate and usage charges for the occupied units.
- E. **Water and Wastewater charges for common area meters** – Within an apartment or condominium property there are common areas with landscape, pool, meeting room, laundry and other facilities. In some cases, a meter may only service landscape areas and, therefore, there should not be a wastewater charge associated with that meter. In other cases, where the meter services facilities that generate wastewater, there should be a wastewater charge associated with that meter. Staff recommends, at the time of meter installation, the common landscape area meters will be coded to reflect their exclusion from paying wastewater charges.
- F. **Comparison billing examples** – A series of billing comparisons for apartment, duplex and mobile home park properties is provided in Exhibit C. In all cases, the total usage based monthly charges are less than the current cumulative total of the flat rate water billing to the individual tenants.
- G. **Implementation of usage based billing to mobile home park properties** – Staff recommends that usage based water billing to mobile home parks begin in January 2014. City of Lodi forces installed water meters in 2012 on all water services to the seven mobile home park properties in Lodi. The comparative billing information was provided to the mobile home park property owners at the recent public meeting and will continue to be provided through the rest of 2013. One missing piece of information important to these property owners is the charge for the water meter purchase and the payment terms. This implementation schedule allows sufficient time to adjust rents by the property owner. State law requires delivery of usage based billing following one year of comparative billing information.
- H. **Implementation of usage based billing to apartments and condominium properties** – Few water meters have been installed on water services to these properties. The installation is scheduled to begin in 2013 and conclude in 2014. Staff recommends that usage based billing to apartment and condominium properties with master metering arrangements begin in January 2016. In the 2015 year, comparative billing information will be provided. Extra transition time to usage based billing is recommended to allow for homeowner associations to adopt and implement new dues structures for these organizations.
- I. **Water conservation plan** – Staff is developing a water conservation incentive program patterned after those by other cities and the Lodi Electric Utility conservation program. A list of water conserving practices has been prepared and is provided in Exhibit D. Copies have been distributed at the public meetings.
- J. **Fire protection water usage charge** – Staff recommends that property owners not be charged for water used to suppress structure fires. This would not include water discharged in the process of flushing or flow testing onsite fire hydrants, which is a maintenance activity.
- K. **Recommended master meter billing solution** – The simplest solution to transition from flat rate billing at the tenant level to a usage based billing at the property-owner/homeowners association level is to include the tenants' water cost in the rent. The simplest approach is to increase the tenant monthly rent by the amount of the current flat water rate charge (1 bedroom = \$25.67 and 2 bedroom = \$30.79). As presented in F. above, this results in a net increase in revenue to the property owner.

After meter installation, comparative billing information will be provided to the owner of the master meter(s). This could be the property owner or property manager of an apartment property or the homeowners association representing a condominium or townhome property. The information provided will enable an informed decision as to the amount of the rent increase needed to cover the additional cost to the owner of the master meter and the usage based water bill.

- L. **Property owner alternative billing solution** – State law requires the City issue a usage based water bill to the customer with a service connection on which a meter has been installed. It is proposed that the metered customer would not pay the above mentioned water bill and that the City continue to issue flat rate water bills to tenants. At the end of the year, the City would issue either a credit to the tenants (assuming there has been an overcharge as presented in F. above) or issue a true-up bill to the property owner for any underpayment. This represents a substantial amount of work for the City in consideration of the fact there 4,358 apartment units and 1,117 condominium units in Lodi. Every month's bill would need to be processed twice – once for the charge and again to process the rebate. This is further complicated by tenant turnover and service terminations during the year.

**FISCAL IMPACT:** Not applicable.

**FUNDING AVAILABLE:** Not applicable.

  
\_\_\_\_\_  
F. Wally Sendelin  
Public Works Director

FWS/pmf  
Attachments

# Comment Card

Today's Date: 3-14-13

Comments:

Wally, enjoyed the presentation; you did a good job & I'm on the Hook Bd at Rivergate Commons and drew "the short straw" so I attended the meeting. Please look-up 1142 Rivergate Drive and let me know what the City's plans are for Residential Meters for our Condo. Thanks Dennis Duffy 209-366-1241

Name: L. DENNIS DUFFY  
Address: 1142 RIVERGATE DR #19  
Phone #: 209-366-1241  
Email: dingduffy@yahoo.com

Please mail comment card to: **City of Lodi Public Works Department**  
**P. O. Box 3006**  
**Lodi, CA 95241-1910**

# Comment Card

Today's Date: 3/14/13

Comments:

Additional Information  
regarding Town & Country Park  
West Turner & Rutledge

Name: Lori Bunnell  
Address: Katzakian Property mgmt.  
Phone #: 476-4450  
Email: \_\_\_\_\_

Please mail comment card to: **City of Lodi Public Works Department**  
**P. O. Box 3006**  
**Lodi, CA 95241-1910**

# Comment Card

Today's Date: 3/14/13

Comments: More information regarding  
Down & Country Park  
Turner Rd & Butteledge

Name: Linda Fortuna  
Address: 1957 Colombaro Cir  
Phone #: 334-3703  
Email: \_\_\_\_\_

Please mail comment card to: **City of Lodi Public Works Department**  
**P. O. Box 3006**  
**Lodi, CA 95241-1910**

# Comment Card

Today's Date: 3/14/13

Comments: We live in a PUD / Condo's at Beckman  
Estates. I would like to have a better  
understanding on number of mains entering  
these units. What is supplying the common  
interest areas. There is a concern that the  
city is not responsible for Branch lines  
into individual units.

Name: Gary McKenny / Elaine Neal  
Address: 509 Brandywine Dr.  
Phone #: 209-224-8115  
Email: ELAINE90A2@COMCAST.NET

Please mail comment card to: **City of Lodi Public Works Department**  
**P. O. Box 3006**  
**Lodi, CA 95241-1910**

# Comment Card

Today's Date: \_\_\_\_\_

Comments: You did a great job in a very difficult  
situation!! Thank you.

Name: Donna Gedde  
Address: 1712 LeBee Ct.  
Phone #: 369-5590  
Email: \_\_\_\_\_

Please mail comment card to: **City of Lodi Public Works Department**  
**P. O. Box 3006**  
**Lodi, CA 95241-1910**

# Comment Card

Today's Date: 3/14/13

Comments: PLEASE RE CONSIDER BILLING TENNANT RATHER THAN  
PROPERTY OWNER/LANDLORD. FOR OUR OFFICE IT WOULD BE FAR TOO  
HARD TO MANAGE. I WOULD LIKE TO MEET 1 ON 1 TO EXPLAIN ANY CONCERNS  
IF POSSIBLE. THANK YOU.

Name: DUSTIN W. TAUNTON  
Address: 1313 W. LOCKEFORD ST. LODI 95242  
Phone #: (209) 369-3623  
Email: BASSPLYR1@COMCAST.NET

Please mail comment card to: **City of Lodi Public Works Department**  
**P. O. Box 3006**  
**Lodi, CA 95241-1910**

May already

# Comment Card

Today's Date: 3/14/13

**Comments:**

- 1) 185 units, 1, 2 & 3 bedrooms, Condominium complex  
I own one unit, which I rent. Can there be individual  
meters there? 2401 Eilers
- 2) My residence is a condo in a 16-unit complex. It has  
2 buildings. Do we have more than one service there?
- 3) Vacant unit change structure - take condos into account whether  
master or individually metered.

Name: Patricia Birkes

Address: \_\_\_\_\_

Phone #: 209 339-8679

Email: \_\_\_\_\_

Please mail comment card to: **City of Lodi Public Works Department**  
**P. O. Box 3006**  
**Lodi, CA 95241-1910**

Exhibit B

Meter Charge Alternatives

Meter Size	Capacity Factor	Purchase Price	Capacity Based	Price Based	Installed Cost	Lodi Fee Schedule	Santa Clara Fee Schedule
¾	1	\$194	\$300	\$300	\$940	400	370
1	1.67	\$226	\$500	\$350	\$1,415	480	365
1 ½	3.33	\$506	\$1,000	\$780	\$3,810	745	1,565
2	5.33	\$624	\$1,600	\$1,105	\$5,715	930	1,730
3	10	\$1,381	\$3,000	\$2,140	\$5,950	N/A	2,065
4	16.67	\$2,488	\$5,000	\$3,860	N/A	N/A	4,130
6	33.33	\$4,711	\$10,000	\$7,300	N/A	N/A	6,750
8	53.33	\$8,027	\$16,000	\$12,440	N/A	N/A	10,670



## Sand Creek Apartments 230 Units

Month	Meter Size	CF Usage	Comparison Charge	Flat Rate Billed Amt	Difference
Feb-13	19 – 2" 2 – 3"	47525	\$2,078.12	\$3,797.90	\$1,719.78
Sep-12	19 – 2" 2 – 3"	117565	\$2,722.49	\$3,797.90	\$1,075.41



## Avenue West Apartments 26 Units

Month	Meter Size	CF Usage	Comparison Charge	Flat Rate Billed Amt	Difference
Mar-13	2	10470	\$171.59	\$795.42	\$623.83
Feb-13	2	10060	\$167.82	\$795.42	\$627.60
Jan-13	2	8880	\$156.97	\$782.50	\$625.53
Dec-12	2	9500	\$158.93	\$776.04	\$617.11
Nov-12	2	10140	\$164.69	\$776.04	\$611.35
Oct-12	2	12652	\$187.30	\$776.04	\$588.74
Sep-12	2	13918	\$198.69	\$776.04	\$577.35
Aug-12	2	11820	\$179.81	\$776.04	\$596.23



## Duplex at 1127 Dover Drive

Month	Meter Size	CF Usage	Comparison Charge	Flat Rate Billed Amt	Difference
Mar-13	2	No data			
Feb-13	2	941	\$32.43	\$71.82	\$39.39
Jan-13	2	1841	\$40.72	\$71.82	\$31.10
Dec-12	2	1475	\$36.48	\$70.06	\$33.58
Nov-12	2	1877	\$40.09	\$70.06	\$29.97
Oct-12	2	2627	\$46.84	\$70.06	\$23.22
Sep-12	2	2437	\$45.13	\$70.06	\$24.93
Aug-12	2	2538	\$46.04	\$70.06	\$24.02



## Casa de Lodi

Month	Meter Size	CF Usage	Comparison Charge	Meter Size	CF Usage	Comparison Charge	Flat Rate Billed Amt	Difference
Mar-13	8			8	34800	\$576.07	\$6,160.80	\$5,584.73
Feb-13	8	130500	\$1,456.51	8	32600	\$555.83	\$6,160.80	\$4,148.46
Jan-13	8	116000	\$1,323.11	8	35900	\$586.19	\$6,160.80	\$4,251.50
Dec-12	8	107500	\$1,217.17	8	34800	\$562.87	\$6,009.60	\$4,229.56
Nov-12	8	129900	\$1,418.77	8	50700	\$705.97	\$6,009.60	\$3,884.86
Oct-12	8	140462	\$1,513.82	8	89700	\$1,056.97	\$6,009.60	\$3,438.81
Sep-12	8	145144	\$1,555.96	8	82300	\$990.37	\$6,009.60	\$3,463.27
Aug-12	8	140462	\$1,513.82	8	90600	\$1,065.07	\$6,009.60	\$3,430.71
Jul-12	8	149826	\$1,598.10	8	99000	\$1,140.67	\$6,009.60	\$3,270.83
Jun-12	8	140462	\$1,513.82	8	89239	\$1,052.82	\$6,009.60	\$3,442.95
May-12	8	191964	\$1,977.35	8	69161	\$872.12	\$6,009.60	\$3,160.14



## The Palms

Month	Meter Size	CF Usage	Comparison Charge	Flat Rate Billed Amt	Difference
Mar-13	2	1672	\$90.65	\$1,052.47	\$961.82
Feb-13	2	1840	\$92.20	\$1,052.47	\$960.27
Jan-13	2	1912	\$92.86	\$1,052.47	\$959.61
Dec-12	2	1998	\$91.41	\$1,026.64	\$935.23
Nov-12	2	2191	\$93.15	\$1,026.64	\$933.49
Oct-12	2	2236	\$93.55	\$1,026.64	\$933.09
Sep-12	2	2396	\$94.99	\$1,026.64	\$931.65
Aug-12	2	13517	\$195.08	\$1,026.64	\$831.56



## Almond Drive Estates

Month	Meter Size	CF Usage	Comparison charge	Flat Rate Billed Amt	Difference
Mar-13	3	51300	\$577.34	\$2,181.95	\$1,604.61
Feb-13	3	41100	\$483.50	\$2,181.95	\$1,698.45
Jan-13	3	44800	\$517.54	\$2,181.95	\$1,664.41
Dec-12	3	43800	\$497.01	\$2,128.40	\$1,631.39
Nov-12	3	56500	\$611.31	\$2,128.40	\$1,517.09
Oct-12	3	77000	\$795.81	\$2,128.40	\$1,332.59
Sep-12	3	84271	\$861.25	\$2,128.40	\$1,267.15
Aug-12	3	102329	\$1,023.77	\$2,128.40	\$1,104.63



## Lake Park

Month	Meter Size	CF Usage	Comparison Charge	Flat Rate Billed Amt	Difference
Mar-13	2	1607	\$90.05	\$872.78	\$782.73
Feb-13	2	1738	\$91.26	\$872.78	\$781.52
Jan-13	2	1568	\$89.70	\$872.78	\$783.08
Dec-12	2	1515	\$87.07	\$851.36	\$764.30
Nov-12	2	1590	\$87.74	\$851.36	\$763.62
Oct-12	2	1834	\$89.94	\$851.36	\$761.42
Sep-12	2	18210	\$237.32	\$851.36	\$614.04
Aug-12	2	14630	\$205.10	\$851.36	\$646.26
Jul-12	2	16160	\$218.87	\$851.36	\$632.49
Jun-12	2	14710	\$205.82	\$851.36	\$645.54
May-12	2	6770	\$134.36	\$851.36	\$717.00



## Shady Acres

Month	Meter Size	CF Usage	Comparison Charge	Flat Rate Billed Amt	Difference
Mar-13	2	1491	\$88.99	\$1,103.81	\$1,014.82
Feb-13	2	1508	\$89.14	\$1,103.81	\$1,014.67
Jan-13	2	1597	\$89.96	\$1,103.81	\$1,013.85
Dec-12	2	1616	\$87.97	\$1,076.72	\$988.75
Nov-12	2	1805	\$89.68	\$1,076.72	\$987.05
Oct-12	2	3228	\$102.48	\$1,076.72	\$974.24
Sep-12	2	4412	\$113.14	\$1,076.72	\$963.58
Aug-12	2	3172	\$101.98	\$1,076.72	\$974.74
Jul-12	2	3219	\$102.40	\$1,076.72	\$974.32
Jun-12	2	2766	\$98.32	\$1,076.72	\$978.40
May-12	2	1894	\$90.48	\$1,076.72	\$986.24
Apr-12	2	1560	\$87.47	\$1,076.72	\$989.25
Mar-12	2	1742	\$89.11	\$1,076.72	\$987.61
Feb-12	2	1880	\$90.35	\$1,076.72	\$986.37



## Cherokee Park

Month	Meter Size	CF Usage	Comparison Charge	Meter Size	CF Usage	Comparison charge	Flat Rate Billed Amt	Difference
Mar-13	2	8200	\$150.71	1 1/2	217	\$62.24	\$1,103.81	\$890.86
Feb-13	2	8280	\$151.45	1 1/2	239	\$62.44	\$1,103.81	\$889.93
Jan-13	2	8210	\$150.80	1 1/2	194	\$62.02	\$1,103.81	\$890.98
Dec-12	2	9520	\$159.11	1 1/2	198	\$60.55	\$1,076.72	\$857.06
Nov-12	2	11800	\$179.63	1 1/2	279	\$61.28	\$1,076.72	\$835.81
Oct-12	2	13310	\$193.22	1 1/2	405	\$62.42	\$1,076.72	\$821.09
Sep-12	2	12220	\$183.41	1 1/2	528	\$63.52	\$1,076.72	\$829.79
Aug-12	2	13890	\$198.44	1 1/2	574	\$63.94	\$1,076.72	\$814.34



# Easy Ways to Reduce Water Use

## Indoors – Year Round Savings

- 💧 Find and fix all leaks, especially toilet leaks, replace their flappers.
- 💧 Install water-saving devices like low-flow showerheads and faucet aerators.
- 💧 Consider buying a frontloading clothes washer to save water and energy.
- 💧 Consider buying a High Efficiency Toilet (HET), which uses 1.28 gallons or less per flush.
- 💧 Take advantage of Lodi's rebates on new High Efficiency Toilets, shower heads, etc.
- 💧 Take shorter showers, cut your shower to 4 minutes to save around 2,700 gallons per year.
- 💧 Don't leave the water running when brushing your teeth, washing your hands, shaving, or doing the dishes.
- 💧 Run dishwashers and clothes washers with full loads only, or adjust the water level to match the size of the load.
- 💧 Use the garbage disposal only if you must.
- 💧 Use the wastebasket, not the toilet to dispose of trash.



## Outdoors – Watering & Gardening

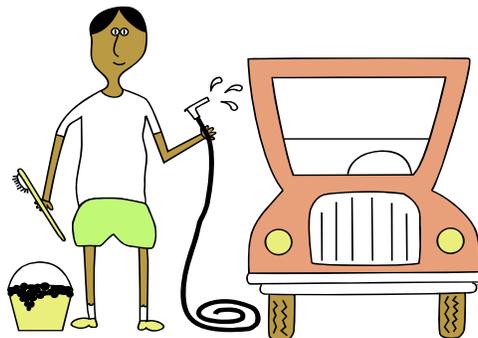
- 💧 Attach a nozzle with a shutoff valve to the end of your hose.
- 💧 Apply water only as fast as the soil can absorb it. If you notice runoff, divide the watering time into two cycles to allow the water time to soak in.
- 💧 Consider installing drip irrigation to apply water slowly and directly to the roots of the plants.
- 💧 Water your garden in the morning to give the water time to soak into the ground before wind and the heat of the sun cause it to evaporate.
- 💧 Water to the depth of the plant roots (about 6 inches for lawns, 9 inches for ground cover, 12 inches for shrubs, and 18-24 inches for trees).



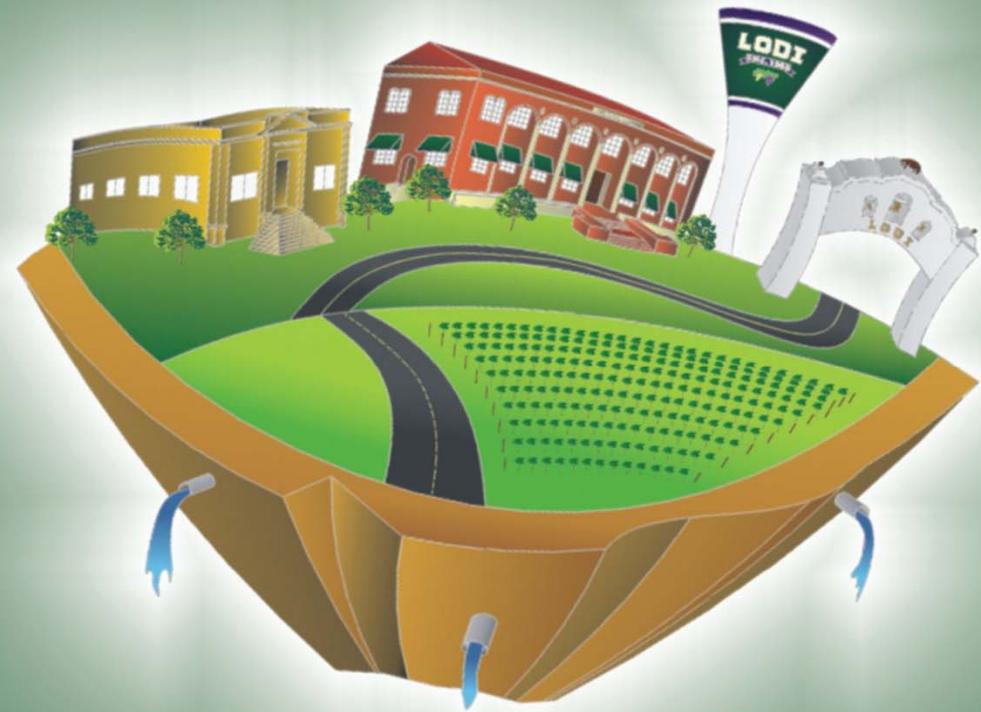
- 💧 Use a soil probe (or dig down in the plant's root area using a trowel) to determine if you are watering properly.
- 💧 Water your garden only when it needs it. It is time to water the lawn when it doesn't spring back when walked on.
- 💧 Aim your sprinklers to water your garden, not the sidewalk or other paved areas and check your sprinkler system for problems regularly.
- 💧 Adjust your watering schedule with the weather and the season. If you have an automatic system, remember to turn it off in the winter.
- 💧 Plant water-conserving plants.
- 💧 Group thirsty plants together, away from un-thirsty ones and adjust your watering schedule as your garden matures. Newly planted landscapes need water more frequently than mature ones.
- 💧 Improve your soil by incorporating organic matter. This aerates your soil, and improves its ability to hold water.
- 💧 Prevent weeds from stealing water from your garden by pulling them promptly and applying mulch regularly.
- 💧 Mow grasses higher, between 3 to 4 inches, to reduce water loss.
- 💧 Fertilize less often, only in the spring and fall. Fertilizing encourages rapid plant growth and thirsty plants. California native plants don't need fertilizing.
- 💧 Aerate the lawn by punching holes in the soil. This improves the movement of water into the root area and reduces wasteful runoff.

## **Outdoors – Other Activities**

- 💧 Use a broom, not a hose, to clean driveways and sidewalks.
- 💧 Cover pools and spas, and cut water loss by 90%.
- 💧 Don't let the hose run while you wash your car; use a bucket and nozzle with a shut off valve on your outside hose.



The City of Lodi  
**Public Works  
Engineering**



# Multi-Family and Non-Residential Water Meter Program

Shirtsleeve Meeting  
March 26, 2013



# State Law

*525. (a) Notwithstanding any other provision of the law, every water purveyor who sells, leases, rents, furnishes, or delivers water service to any person shall require, as a condition of new water service on and after **January 1, 1992**, that a suitable water meter to measure the water service shall be installed on the water service facilities in accordance with this chapter. The cost of installation of the meter shall be paid by the user of the water, and any water purveyor may impose and collect charges for those costs.*



# State Law

- (1) Install water meters on all municipal and industrial service connections located within its service area on or before **January 1, 2025***
- (2) (A) **Charge each customer** that has a service connection for which a water meter has been installed, **based on the actual volume** of deliveries, as measured by the water meter, beginning on or before January 1, 2010.*



# State Law

*(B) Notwithstanding subparagraph (A), in order to provide customers with experience in volume-based water service charges, an **urban water supplier** that is subject to this subdivision **may delay, for one annual season** cycle of water use, the use of meter-based charges for service connections that are being **converted from non-volume-based billing to volume-based billing***



# Multiple Family Meter Program

- Apartments/Condos/Mobile Homes
- One meter per parcel
- Multiple meters if multiple services
- Individual meters where fiscally feasible
  - Individual services from public main
- Meter charge based upon size of meter
- Installations completed end of 2014



# Meter Charge Alternatives



Recommended

Size	Capacity Factor	Purchase Price	Capacity Based	Price Based	Installed Cost	Lodi Fee Schedule	Santa Clara Fee Schedule
¾	1	\$194	\$300	\$300	\$940	\$400	\$370
1	1.67	\$226	\$500	\$350	\$1,415	\$480	\$365
1 ½	3.33	\$506	\$1,000	\$780	\$3,810	\$745	\$1,565
2	5.33	\$624	\$1,600	\$1,105	\$5,715	\$930	\$1,730
3	10	\$1,381	\$3,000	\$2,140	\$5,950	n/a	\$2,065
4	16.67	\$2,488	\$5,000	\$3,860	n/a	n/a	\$4,130
6	33.33	\$4,711	\$10,000	\$7,300	n/a	n/a	\$6,750
8	53.33	\$3,027	\$16,000	\$12,440	\$30,500	n/a	\$10,670



# Right-Sizing Meters

- Following installation
- Analysis of usage
- Change out meter (if required)
- Credit meter charge (if required)



# Vacant Utility Rate

## Proposed policy

- Flat rate residential customers – monthly service charge based upon  $\frac{3}{4}$  inch meter size
- Metered rate single family residential customers – no vacant utility rate
- Master metered multi-family – no vacant utility rate
- Individual metered multi-family – no vacant utility rate
- Monthly service charge will reduce with conservation pricing



# Common Areas Metered Service

## Proposed policy

- Landscape areas – water charge but no wastewater
- Facilities – water and wastewater



# Condominium Properties

	<b>Properties (#)</b>	<b>Units (#)</b>	<b>Master Meter</b>	<b>Individual Meter</b>
Phase 2	28	28		28
Existing Meters	5	105		105
Meter Ready	6	308		308
Converted Apartments	3	186	146	40
Smaller Properties	6	74	74	
Larger Properties	5	416	416	
<b>TOTAL</b>	<b>53</b>	<b>1,117</b>	<b>733</b>	<b>388</b>



# Condominium Survey

Properties	Location	Units (#)	Master Meter	Individual Meter
1	Tracy	38	1	0
4	Stockton	507	4	0
1	Vacaville	31	1	0
5	Sacramento	1,212	4	1
11	TOTAL	1,718	10	1



# Apartment Properties

Properties	Unit Range	Total Units
154	5 – 10	1,103
36	11 – 20	519
22	21 – 40	581
13	41 – 80	754
13	81 – 160	1,401
238	TOTAL	4,358



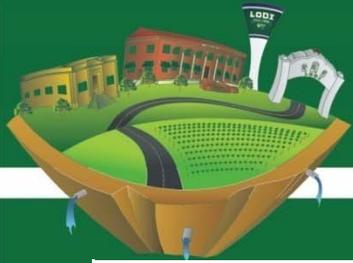
# Apartment Survey

Properties	Location	Units (#)	Master Meter	Individual Meter
5	Tracy	719	5	2
5	Manteca	655	5	3
2	Ripon	251	0	2
2	Galt	88	2	0
5	Stockton	1,012	4	2
19	TOTAL	2,725	16	9



# Mobile Home Park Properties

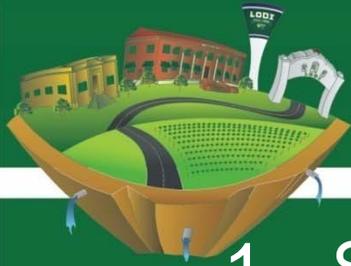
Property	Units (#)	Meter Size (inches)
845 S. Cherokee	40	2
621 E. Lockeford	43	2
1390 W. Lockeford	35	2
817 E. Turner	48	8
812 E. Turner	192	8
471 Almond	85	3
1651 S. Cherokee	43	2 & 1 1/2
TOTAL	486	



# Mobile Home Park Survey

Properties	Location	Units (#)	Master Meter	Individual Meter
2	Tracy	312	2	1
2	Manteca	335	2	1
2	Stockton	456	2	2
2	Lathrop	242	1	1
2	Galt	175	1	1
10	TOTAL	1,520	8	6

In all cases, the park owner pays for the water bill.



# Comparison Billing Examples

1. Sand Creek Apartments
2. Avenue West Apartments
3. Duplex
4. Casa de Lodi MHP
5. Palms MHP
6. Almond Drive Estates MHP
7. Lake Park MHP
8. Shady Acres MHP
9. Cherokee Park MHP



# Sand Creek Apartments 230 Units

Month	Meter Size	CF Usage	Comparison Charge	Flat Rate Billed Amt	Difference
Feb-13	19 – 2” 2 – 3”	47525	\$2,078.12	\$3,797.90	\$1,719.78
Sep-12	19 – 2” 2 – 3”	117565	\$2,722.49	\$3,797.90	\$1,075.41



# Avenue West Apartments 26 Units

Month	Meter Size	CF Usage	Comparison Charge	Flat Rate Billed Amt	Difference
Mar-13	2	10470	\$171.59	\$795.42	\$623.83
Feb-13	2	10060	\$167.82	\$795.42	\$627.60
Jan-13	2	8880	\$156.97	\$782.50	\$625.53
Dec-12	2	9500	\$158.93	\$776.04	\$617.11
Nov-12	2	10140	\$164.69	\$776.04	\$611.35
Oct-12	2	12652	\$187.30	\$776.04	\$588.74
Sep-12	2	13918	\$198.69	\$776.04	\$577.35
Aug-12	2	11820	\$179.81	\$776.04	\$596.23



# Duplex at 1127 Dover Drive

Month	Meter Size	CF Usage	Comparison Charge	Flat Rate Billed Amt	Difference
Feb-13	2	941	\$32.43	\$71.82	\$39.39
Jan-13	2	1841	\$40.72	\$71.82	\$31.10
Dec-12	2	1475	\$36.48	\$70.06	\$33.58
Nov-12	2	1877	\$40.09	\$70.06	\$29.97
Oct-12	2	2627	\$46.84	\$70.06	\$23.22
Sep-12	2	2437	\$45.13	\$70.06	\$24.93
Aug-12	2	2538	\$46.04	\$70.06	\$24.02



# Casa de Lodi MHP

Month	Meter Size	CF Usage	Comparison Charge	Meter Size	CF Usage	Comparison Charge	Flat Rate Billed Amt	Difference
Feb-13	8	130500	\$1,456.51	8	32600	\$555.83	\$6,160.80	\$4,148.46
Jan-13	8	116000	\$1,323.11	8	35900	\$586.19	\$6,160.80	\$4,251.50
Dec-12	8	107500	\$1,217.17	8	34800	\$562.87	\$6,009.60	\$4,229.56
Nov-12	8	129900	\$1,418.77	8	50700	\$705.97	\$6,009.60	\$3,884.86
Oct-12	8	140462	\$1,513.82	8	89700	\$1,056.97	\$6,009.60	\$3,438.81
Sep-12	8	145144	\$1,555.96	8	82300	\$990.37	\$6,009.60	\$3,463.27
Aug-12	8	140462	\$1,513.82	8	90600	\$1,065.07	\$6,009.60	\$3,430.71
Jul-12	8	149826	\$1,598.10	8	99000	\$1,140.67	\$6,009.60	\$3,270.83
Jun-12	8	140462	\$1,513.82	8	89239	\$1,052.82	\$6,009.60	\$3,442.95
May-12	8	191964	\$1,977.35	8	69161	\$872.12	\$6,009.60	\$3,160.14



# The Palms MHP

Month	Meter Size	CF Usage	Comparison Charge	Flat Rate Billed Amt	Difference
Mar-13	2	1672	\$90.65	\$1,052.47	\$961.82
Feb-13	2	1840	\$92.20	\$1,052.47	\$960.27
Jan-13	2	1912	\$92.86	\$1,052.47	\$959.61
Dec-12	2	1998	\$91.41	\$1,026.64	\$935.23
Nov-12	2	2191	\$93.15	\$1,026.64	\$933.49
Oct-12	2	2236	\$93.55	\$1,026.64	\$933.09
Sep-12	2	2396	\$94.99	\$1,026.64	\$931.65
Aug-12	2	13517	\$195.08	\$1,026.64	\$831.56



# Almond Drive Estates MHP

Month	Meter Size	CF Usage	Comparison charge	Flat Rate Billed Amt	Difference
Mar-13	3	51300	\$577.34	\$2,181.95	\$1,604.61
Feb-13	3	41100	\$483.50	\$2,181.95	\$1,698.45
Jan-13	3	44800	\$517.54	\$2,181.95	\$1,664.41
Dec-12	3	43800	\$497.01	\$2,128.40	\$1,631.39
Nov-12	3	56500	\$611.31	\$2,128.40	\$1,517.09
Oct-12	3	77000	\$795.81	\$2,128.40	\$1,332.59
Sep-12	3	84271	\$861.25	\$2,128.40	\$1,267.15
Aug-12	3	102329	\$1,023.77	\$2,128.40	\$1,104.63



# Lake Park MHP

Month	Meter Size	CF Usage	Comparison Charge	Flat Rate Billed Amt	Difference
Mar-13	2	1607	\$90.05	\$872.78	\$782.73
Feb-13	2	1738	\$91.26	\$872.78	\$781.52
Jan-13	2	1568	\$89.70	\$872.78	\$783.08
Dec-12	2	1515	\$87.07	\$851.36	\$764.30
Nov-12	2	1590	\$87.74	\$851.36	\$763.62
Oct-12	2	1834	\$89.94	\$851.36	\$761.42
Sep-12	2	18210	\$237.32	\$851.36	\$614.04
Aug-12	2	14630	\$205.10	\$851.36	\$646.26
Jul-12	2	16160	\$218.87	\$851.36	\$632.49
Jun-12	2	14710	\$205.82	\$851.36	\$645.54
May-12	2	6770	\$134.36	\$851.36	\$717.00



# Cherokee Park MHP

Month	Meter Size	CF Usage	Comparison Charge		Meter Size	CF Usage	Comparison charge	Flat Rate Billed Amt	Difference
Mar-13	2	8200	\$150.71		1 1/2	217	\$62.24	\$1,103.81	\$890.86
Feb-13	2	8280	\$151.45		1 1/2	239	\$62.44	\$1,103.81	\$889.93
Jan-13	2	8210	\$150.80		1 1/2	194	\$62.02	\$1,103.81	\$890.98
Dec-12	2	9520	\$159.11		1 1/2	198	\$60.55	\$1,076.72	\$857.06
Nov-12	2	11800	\$179.63		1 1/2	279	\$61.28	\$1,076.72	\$835.81
Oct-12	2	13310	\$193.22		1 1/2	405	\$62.42	\$1,076.72	\$821.09
Sep-12	2	12220	\$183.41		1 1/2	528	\$63.52	\$1,076.72	\$829.79
Aug-12	2	13890	\$198.44		1 1/2	574	\$63.94	\$1,076.72	\$814.34



# Mobile Home Park Implementation

- 2012 Meters installed
- 2013 Comparative billing information provided to park owners
- 2013 Property owners billed for meter installation (same terms and conditions as single family residential)
- 2014 Billing begins January



# Apartment/Condo Implementation

- 2013/14 Meters installed
- 2015 Comparative billing information provided to owners and homeowner associations
- 2013 Property owners billed for meter installation (same terms and conditions as single family residential)
- 2016 Billing begins January



# Fire Suppression

- No charge for fire suppression
- Does not include flushing and flow testing usage



13 Cities weighted toward western and southwestern region of U.S.

Surveyed 7,972 multiple family properties

Tenant billing based upon sub-meters or other billing system



**In-Rent Properties** – properties where the owner does not separately bill tenants for water and wastewater

**Impact Properties** – properties that bill tenants separately for water and wastewater by sub-metering, ratio utility billing systems or a hybrid of the two



# Impact Properties

Sub-metering – full capture metering that occurs downstream of a water utility master meter

Ratio Utility Billing System (RUBS) – use an allocation formula to estimate water consumption for each unit (such as square footage, number of occupants or number of fixtures)

Hybrid – combination of the two above



# Breakdown of Billing Methods

	<b>In-Rent</b>	<b>Sub-meter</b>	<b>RUBS</b>	<b>Other</b>	<b>Total</b>
Properties	6,760	311	717	184	7,972
	84.8%	3.9%	9.0%	2.3%	100%
Units	286,355	47,547	112,049	14,312	460,263
	62.2%	10.3%	24.3%	3.2%	100%



# California Cities Survey

City	Master Meter Billed to Property Owner	Issue Sub-bills to Individual Tenants
Clovis	Yes	No
Lemoore	Yes	No
Madera	Yes	No
Mendota	Yes	No
Redding	Yes	No
Redlands	Yes	No
Santa Maria	Yes	No
Tulare	Yes	No
Woodland	Yes	No



# Billing Recommendation

- In-rent is the simplest and most common method
- Increase rent by the amount paid by the tenant for water (and later wastewater)
- Comparisons show positive impact to cash flow
- Convert all apartment/condominium properties at the same time



# Billing Alternative

- Continue sending flat rate bills
- Allocate usage based water cost to each of 5,475 units at the end of the year
- Rebate a credit or collect additional from 5,475 units
- Complicated by tenant turnover



Questions?