

# City of Lemoore Water Enterprise Workshop #2

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# Water Enterprise Fund

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The Water ***Enterprise Fund*** includes revenue, expenses, assets, water rates, water loans, and the cost of all needed improvements for the water system in Lemoore.

Other enterprise (or proprietary) funds are Wastewater, Solid Waste, and Golf Course.

These are *business operations* within City Operations.

The ***General Fund*** and all other Governmental Funds are separate, funded primarily by tax revenue.

# Cost of Service Study (Prop. 218)

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## Rules:

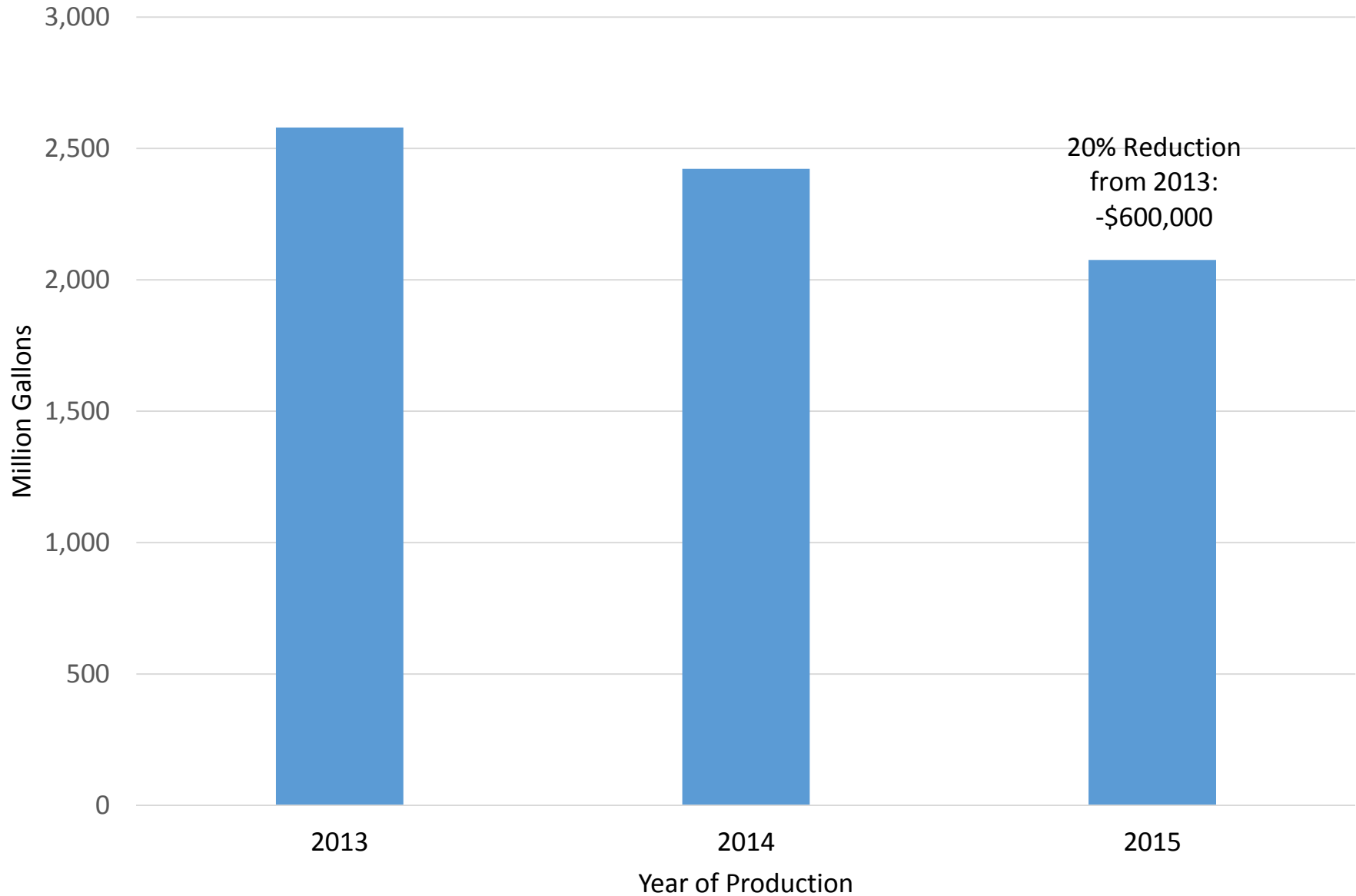
1. May not charge a customer class more than it costs to serve them.
2. May not transfer revenue from an enterprise fund to another fund, unless there is a justified benefit to the enterprise fund.
3. May not charge tiered rates, unless you can justify costs associated with the higher tiered rates.

# The Work

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1. Evaluate existing rates, revenue, expense, and metering efficiency
2. Determine added cost for water system improvements
3. Determine customer classes
4. Community education and involvement
5. *Today:*
  - *Allocate operating costs to each customer class*
  - *Present proposed new rates*

# Annual Water Production and the Drought Factor



# *Less Costs More*

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The numerous costs to operate the water system are mostly fixed regardless of how much water is sold.

This means when ***less*** water is sold, each unit of water must ***costs more*** in order to cover the fixed costs.

This effect is magnified when fixed costs are increasing at the same time volumes are decreasing.

*7.48 gallons = 1 Cubic Foot*

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Lemoore Billing Units:

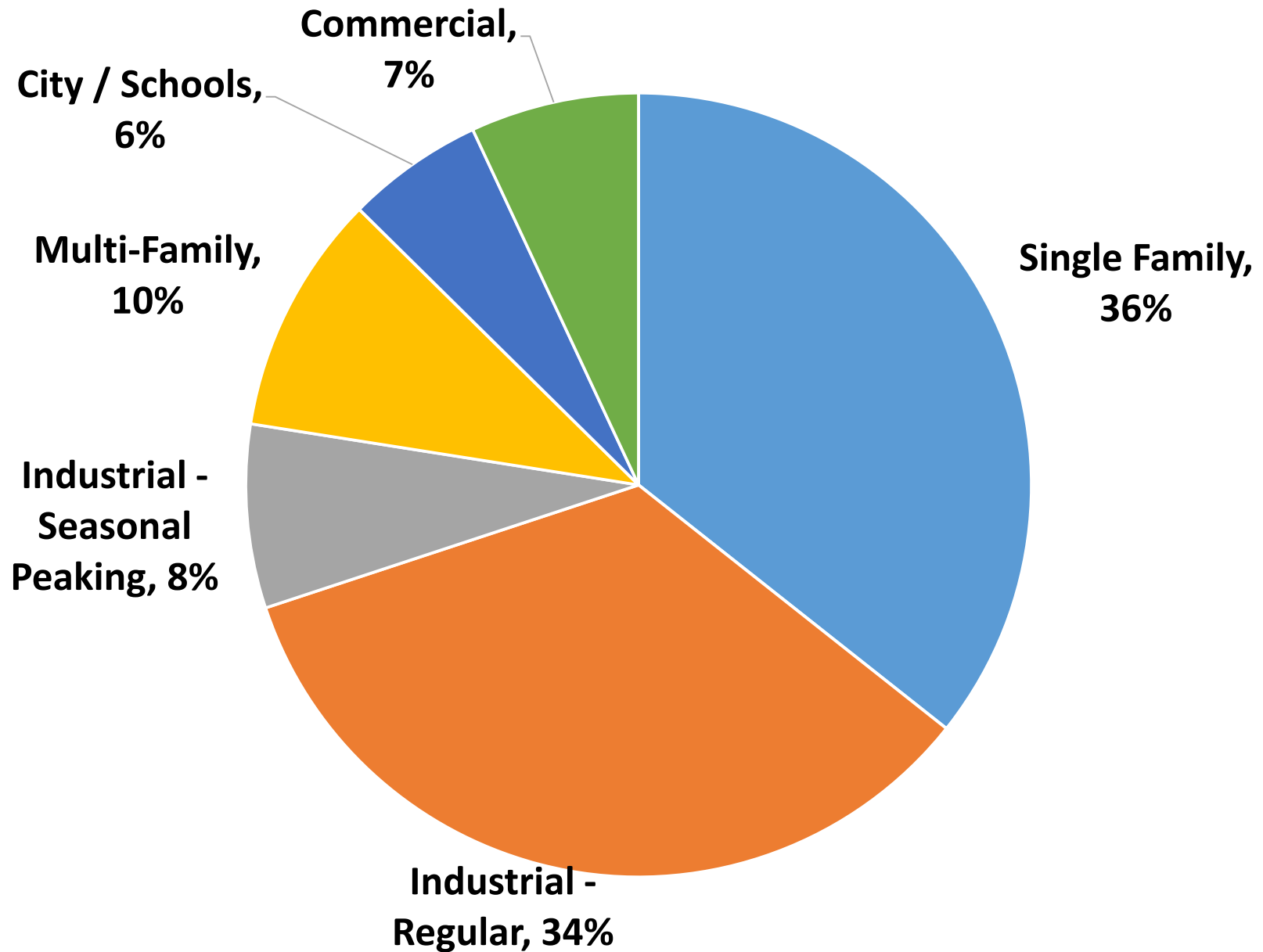
1 CCF “centum cubic feet”

100 cubic feet

1 HCF (Hundred Cubic Feet)

748 gallons

## 2015 ALLOCATION OF WATER VOLUMES





# Existing Rate: Single Family

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1. Minimum Charge: \$13.20 per month

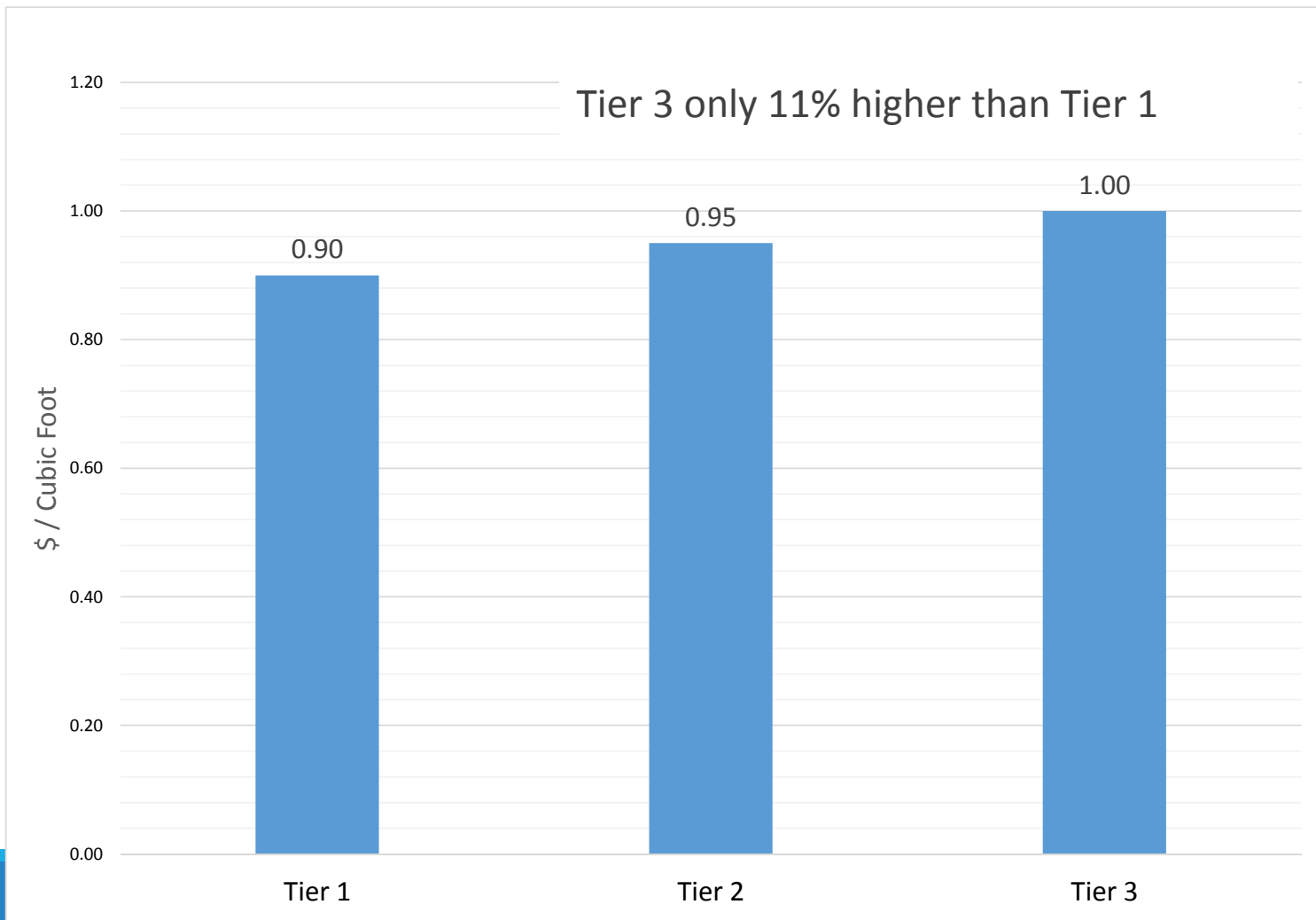
*Includes 700 cubic feet (5,236 gallons)*

2. Next 2,800 cu ft. (20,944 gal): \$0.90 per hundred cu ft.
3. Up to 5,600 cu ft. (20,944 gal): \$0.95 per HCF
4. Above 5,600 cu ft. (47,124 gal): \$1.00 per HCF

*(City of Lemoore Resolution 2007-51)*

*Lemoore's August 2015 Single Family Average was 16,200 gallons*

# Existing Price Tiers



# Single Family Summer Month: 15,000 gallons (Typical)

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Minimum Monthly	\$13.20
Usage above 700 cu ft.	<u>\$11.74</u>
Total	\$24.94

*Cost for 15,000 gallons:*

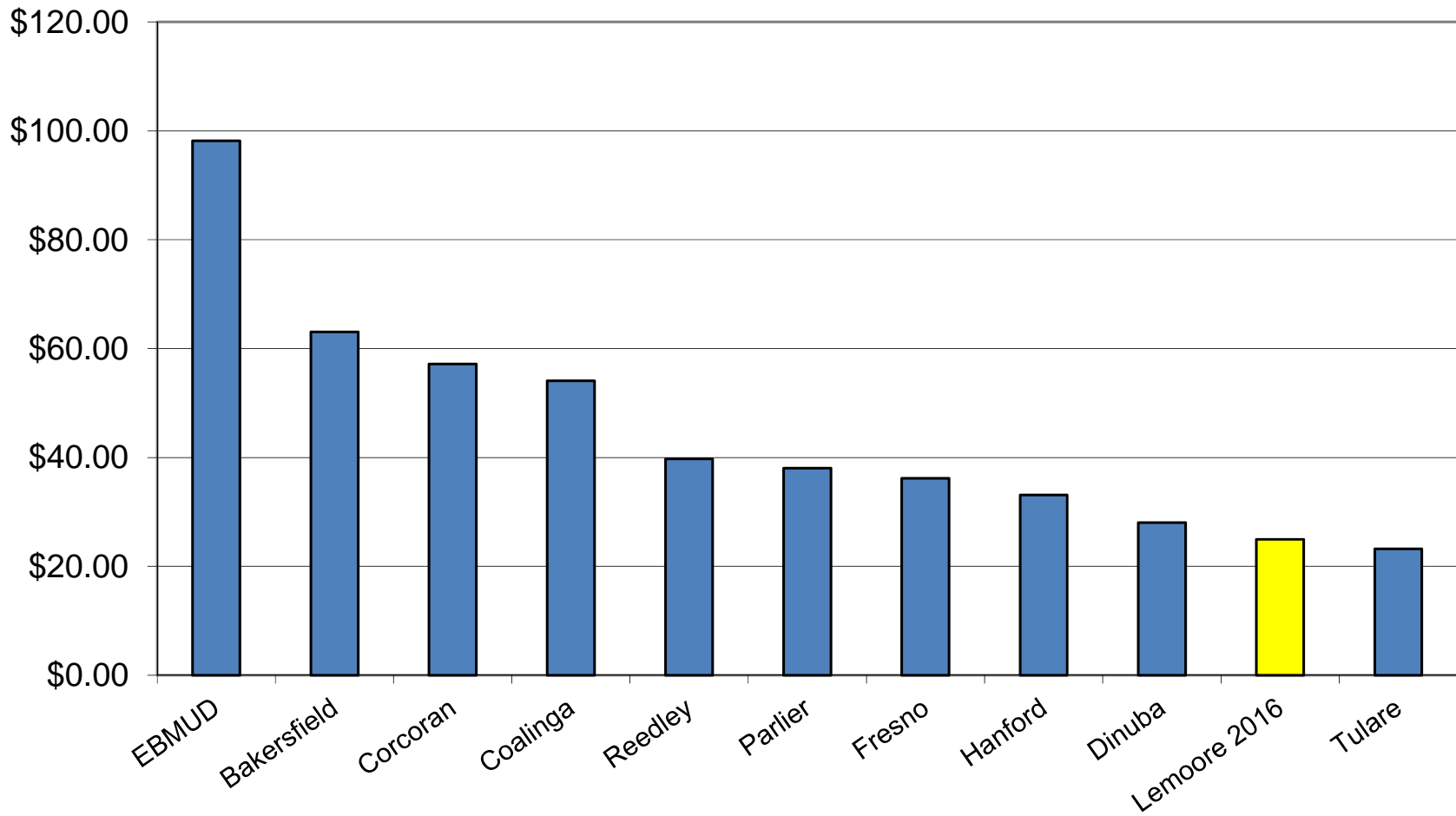
$$15,000 / 7.48 = 2,005 \text{ cu ft.}$$

$$2005 - 700 = 1,305 \text{ cu ft.}$$

$$13.05 \text{ HCF} \times \$0.90 \text{ per HCF} = \$11.74$$

# Single Family Water Cost Comparison

Summer Typical: 15,000 gallons



*Lemoore's 2015 August Average was 16,200 gallons*

# Existing Rates: Apartments and Mobile Home Parks

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1. Fixed monthly cost per dwelling unit: \$6.55

*Includes 300 cubic feet per unit*

2. *Next 1,200 cubic feet per unit: \$0.90*

3. *Next 1,200 cubic feet per unit: \$0.95*

4. *Above 2,400 cubic feet per unit: \$1.00*

# Existing Rates: Other Customers

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Minimum monthly charge of \$13.20 including a fixed quantity of base water

Usage charge associated with three tiered rates

- Tier 1: \$0.90
- Tier 2: \$0.95
- Tier 3: \$1.00

(Approximately 60 customers left on flat rates)

## LEMOORE WATER ENTERPRISE FUND

### HISTORICAL REVENUE AND EXPENDITURES

	HISTORICAL			IN PROGRESS
	<u>FY2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>
<b>Operating Revenues:</b>				
Rate-Based Revenues	\$3,952,379	\$4,100,305	\$3,503,000	\$3,500,000
Late Fees, Svc Charges, Collections	\$75,197	\$75,568	\$71,666	\$75,000
Installation Charges	\$6,962	\$6,349	\$27,923	\$10,000
Interest Income	5,300	11,887	26,965	12,000
<b>Total Revenues</b>	<b>4,039,838</b>	<b>4,194,109</b>	<b>3,629,554</b>	<b>3,597,000</b>
<b>Operation &amp; Maintenance Expenses:</b>				
Electricity - Pumping	\$998,000	\$958,824	\$720,754	\$550,000
Personnel	\$650,000	\$655,957	\$634,467	\$730,000
Contract Services	\$279,177	\$227,046	\$214,603	\$232,000
Chemicals	\$361,984	\$435,376	\$346,317	\$400,000
Parts and Supplies	\$127,774	\$120,132	\$179,910	\$300,000
Repair, Maint, and Other	\$162,000	\$218,062	\$323,656	\$330,000
New O&M for Pretreatment and Filtering	\$0	\$0	\$0	\$0
Customer Services and Billing	\$269,528	\$275,143	\$270,000	\$270,000
Gen Government Overhead	\$742,000	\$406,268	\$530,000	\$530,000
Annual Debt Service Solar	\$0	\$163,339	\$573,630	\$430,000
<b>Total Adjusted Expenses*</b>	<b>\$3,590,463</b>	<b>\$3,460,147</b>	<b>\$3,793,337</b>	<b>\$3,772,000</b>
<b>Net Revenue From Water Operations</b>	<b>\$449,375</b>	<b>\$733,962</b>	<b>(\$163,783)</b>	<b>(\$175,000)</b>
* Excludes depreciation				

# Existing Debt and Available Cash

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- One loan outstanding to Pinnacle Public Finance in the amount of \$7,068,000 associated with Solar Power installations
- Water Enterprise owes Sewer Enterprise \$1.9 million inter-fund loan
- Payments are \$430,000 per year (Water's 75% share), which is offset by electricity savings for water
- Current Assets are about \$4 million. Adequate.



# Nathan Olson

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Public Works Director

City of Lemoore

# North Well Line Replacement

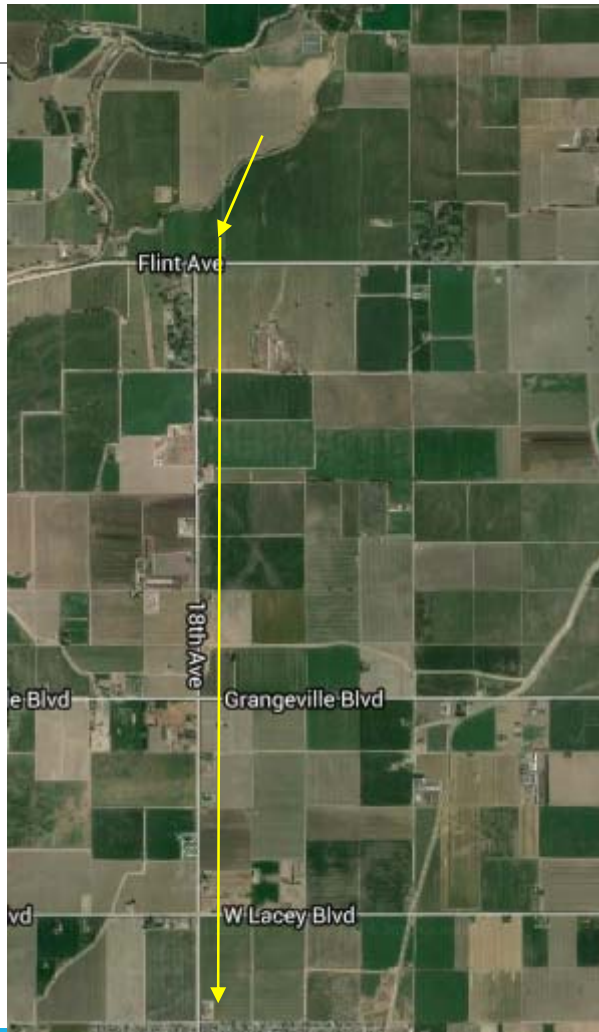


36-inch PVC pipes installed at treatment plant



# North Well Line

\$5,950,000 CIP



# TTHM Compliance Project



\$18,379,500 CIP

# TTHM Compliance Project Treatment Areas

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## Current Locations recommended

- 40 G Street (treats North Well Field)
- Well Site 7 (treats wells 7, 13, and 14)
- Well Site 10
- Well Site 11
- Well Site 12

## Future Sites

- New South Well

# New South Side Well

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- Provides additional water capacity
- Assists in correcting low pressure situation to the south of 198.
- New well will replace Well 8 that collapsed in 2015.

**\$3,525,000 CIP**

# New North Side Well



- Additional water capacity and helps support peak demand

**\$4,056,000 CIP**

# Additional Tank Well 7

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- Provides additional water capacity and helps support peak demand.
- Provides additional 1 million gallon storage needed for continued growth of west side.

**\$1,100,000 CIP**



# Summary Water CIP Costs

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<b>CIP Project</b>	<b>Cost</b>
North Well Transmission Line	\$5,950,000
TTHM Compliance	\$18,379,500
New South Side Well	\$3,525,000
New North Side Well	\$4,056,000
Additional Tank Well 7	\$1,100,000
<b>Total</b>	<b>\$33,010,500</b>

Misc. projects (20) total additional \$3,539,300 to 5 year CIP

# Major Projects and Repair

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- Most significant cost is filtering of ALL water
- Next is pipeline replacement, well and tank additions
- This level of water system expenditure in Lemoore is unprecedented

# Annualized Cost for Improvements, “Ballpark”?

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Annual payments for bond finance:	\$1.9 million
Maintenance and operations for filters:	<u>\$2.5 million</u>
Total, per year	\$4.4 million
Compare to existing total expenses:	\$4.0 million

*The added costs may exceed the total of existing expenses!*

## LEMOORE WATER ENTERPRISE FUND

**PRELIMINARY AS OF APRIL 18, 2016: HISTORICAL AND PROJECTED REVENUE AND EXPENDITURES**

			PROJECTED			
			1	2	3	4
		<u>FY 2016</u>	<u>FY2017</u>	<u>FY2018</u>	<u>FY2019</u>	<u>FY2020</u>
<b>Operating Revenues:</b>			30%	30%	30%	30%
Rate-Based Revenues	\$3,500,000	\$4,550,000	\$5,915,000	\$7,689,500	\$9,996,350	
Late Fees, Svc Charges, Collections	75,000	75,000	75,000	75,000	75,000	
Installation Charges	10,000	10,000	10,000	10,000	10,000	
<b>Total Operating Revenues</b>	<b>\$3,585,000</b>	<b>\$4,635,000</b>	<b>\$6,000,000</b>	<b>\$7,774,500</b>	<b>\$10,081,350</b>	
<b>Non-Operating Revenues</b>						
Interest Income	12,000	12,000	12,000	12,000	12,000	
<b>Total Revenues</b>	<b>\$3,597,000</b>	<b>\$4,647,000</b>	<b>\$6,012,000</b>	<b>\$7,786,500</b>	<b>\$10,093,350</b>	

Preliminary

## LEMOORE WATER ENTERPRISE FUND

**PRELIMINARY AS OF APRIL 18, 2016: HISTORICAL AND PROJECTED REVENUE AND EXPENDITURES**

		PROJECTED			
		1	2	3	4
	FY 2016	FY2017	FY2018	FY2019	FY2020
<b>Operation &amp; Maintenance Expenses:</b>					
Electricity - Pumping	\$550,000	\$569,000	\$589,000	\$610,000	\$631,000
Personnel	730,000	900,000	918,000	936,000	955,000
Contract Services	232,000	237,000	242,000	247,000	252,000
Chemicals	400,000	408,000	416,000	424,000	432,000
Parts and Supplies	300,000	306,000	312,000	318,000	324,000
Repair, Maint, and Other	330,000	337,000	344,000	351,000	358,000
<i>New O&amp;M for Pretreatment and Filtering</i>			500,000	1,000,000	2,500,000
Customer Services and Billing	270,000	270,000	270,000	<del>270,000</del>	270,000
Gen Government Overhead	530,000	530,000	530,000	530,000	530,000
<b>Total Adjusted Expenses</b>	<b>\$3,342,000</b>	<b>\$3,557,000</b>	<b>\$4,121,000</b>	<b>\$4,686,000</b>	<b>\$6,252,000</b>
<b>Net Revenue From Water Operations</b>	<b>\$255,000</b>	<b>\$1,090,000</b>	<b>\$1,891,000</b>	<b>\$3,100,500</b>	<b>\$3,841,350</b>
Annual Debt Service Solar	\$430,000	\$430,000	\$430,000	\$430,000	\$430,000
Annual Debt Service (\$30 M)			941,952	1,826,800	1,986,150
<b>Total Debt Service</b>	<b>\$430,000</b>	<b>\$430,000</b>	<b>\$1,371,952</b>	<b>\$2,256,800</b>	<b>\$2,416,150</b>
<b>Debt Service Coverage Ratio</b>			<b>1.38</b>	<b>1.37</b>	<b>1.59</b>
<b>Net Revenues after Debt Service</b>	<b>(\$175,000)</b>	<b>\$660,000</b>	<b>\$519,048</b>	<b>\$843,700</b>	<b>\$1,425,200</b>
<i>Pay-as-go available for Capital Projects</i>		(700,000)	(700,000)	(700,000)	(700,000)
<b>Fund Balance</b>	<b>\$5,261,217</b>	<b>\$5,221,217</b>	<b>\$5,040,265</b>	<b>\$5,183,965</b>	<b>\$5,909,165</b>

## Water Enterprise Revenue Requirement Allocation Table FOR JANUARY 1, 2017 **Preliminary**

Cost Component (\$/yr)	Total	Single-Family	Multi-Family	Gov/Schools	Commercial	Industrial - Regular	Industrial - Seasonal
Volumetric	\$2,114,867	\$754,312	\$209,733	\$119,491	\$146,725	\$724,428	\$160,177
Capacity	\$723,617	360,056	60,160	83,696	40,251	128,017	51,436
Distribution	\$585,867	208,962	58,101	33,102	40,646	200,683	44,373
Fire Protection	\$68,650	24,485	6,808	3,879	4,763	23,515	5,199
Customer Services & Billing	\$277,000	202,479	35,249	9,335	18,349	6,438	5,150
Administrative Overhead	\$530,000	247,371	68,780	39,186	48,117	95,028	31,517
<b>Total Revenue Requirement</b>	<b>4,300,000</b>	<b>1,797,665</b>	<b>438,831</b>	<b>288,690</b>	<b>298,851</b>	<b>1,178,110</b>	<b>297,853</b>
Revenues at Present Rates	3,369,000	1,471,000	402,000	163,000	231,000	905,000	197,000
Balance/(Deficiency) of Funds	(931,000)	(326,665)	(36,831)	(125,690)	(67,851)	(273,110)	(100,853)
<b>Summary Statistics</b>							
Treated Water Sales (TG)	2,160,000	770,000	214,000	122,000	150,000	740,000	164,000
<b>Cost of Service (\$/TG)</b>	<b>1.99</b>	<b>2.33</b>	<b>2.05</b>	<b>2.37</b>	<b>1.99</b>	<b>1.59</b>	<b>1.82</b>
Present Average Rate (\$/TG)	1.56	1.91	1.88	1.34	1.54	1.22	1.20
<i>Present Average Rate (\$/HCF)</i>	<i>1.17</i>	<i>1.43</i>	<i>1.41</i>	<i>1.00</i>	<i>1.15</i>	<i>0.91</i>	<i>0.90</i>
Change (%)	28%	22%	9%	77%	29%	30%	51%

# New Rates: Variables

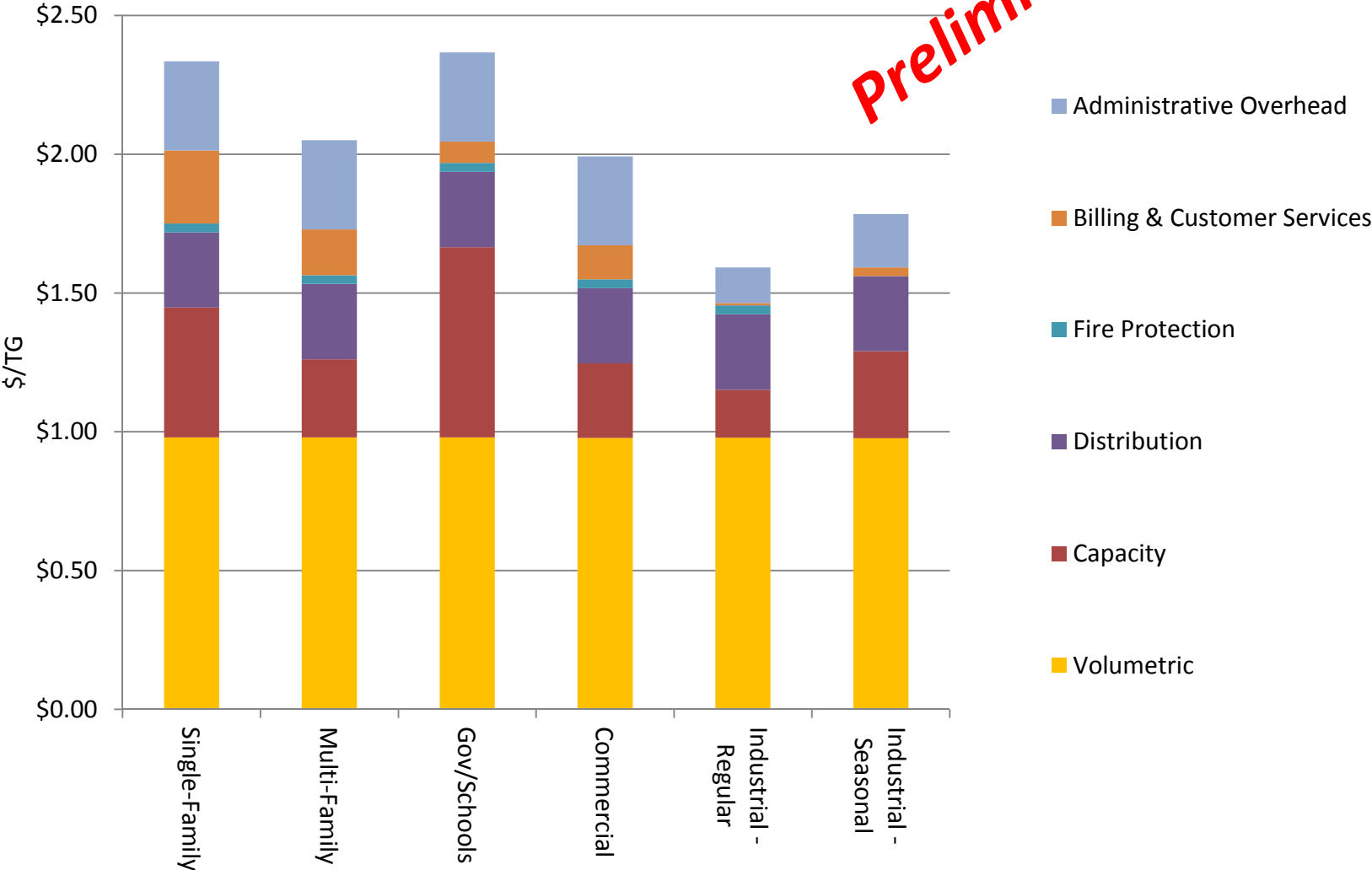
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Largest variables between customer classes:

1. Billing & Customer services (residential)
2. Peaking cost (residential, schools, seasonal)

# Cost of Service Detail by Customer Sector

**Preliminary**



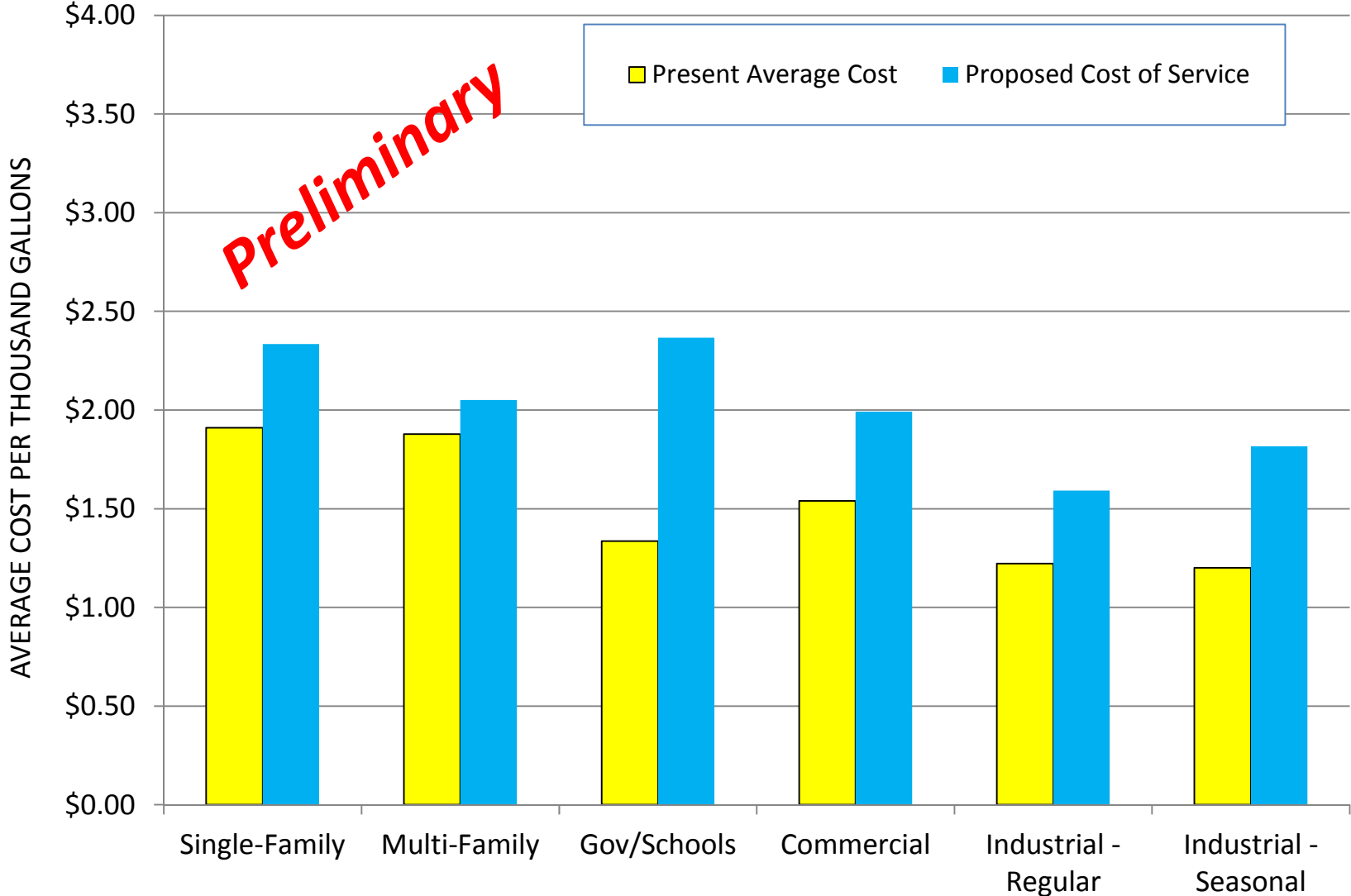


# New Rate Structure

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1. Volumetric component adjusted to customer class
2. Fixed monthly dependent on meter size
3. Combination of volumetric and fixed monthly approximates customer class cost of service

Effect of Rate Modifications by Customer Class **January 1, 2017**



## ***FOR EVALUATION* City of Lemoore Water Rates and Charges**

<i>Average Increase all classes</i>	<b>28%</b>	<b>30%</b>	<b>30%</b>	<b>30%</b>
	<b>Jan 1, 2017</b>	<b>Jan 1, 2018</b>	<b>Jan 1, 2019</b>	<b>Jan 1, 2019</b>
<b>Volumetric Rate For All Water</b>				
	<b>\$/HCF</b>	<b>\$/HCF</b>	<b>\$/HCF</b>	<b>\$/HCF</b>
Residential Single Family	\$0.79	\$1.00	\$1.30	\$1.64
Multi Family	\$0.87	\$1.09	\$1.39	\$1.77
Government & Schools	\$1.19	\$1.62	\$2.19	\$2.92
Commercial	\$1.20	\$1.53	\$1.96	\$2.52
Industrial - Regular	\$1.15	\$1.52	\$2.00	\$2.62
Industrial - Seasonal Peak	\$1.19	\$1.59	\$2.10	\$2.76

Preliminary

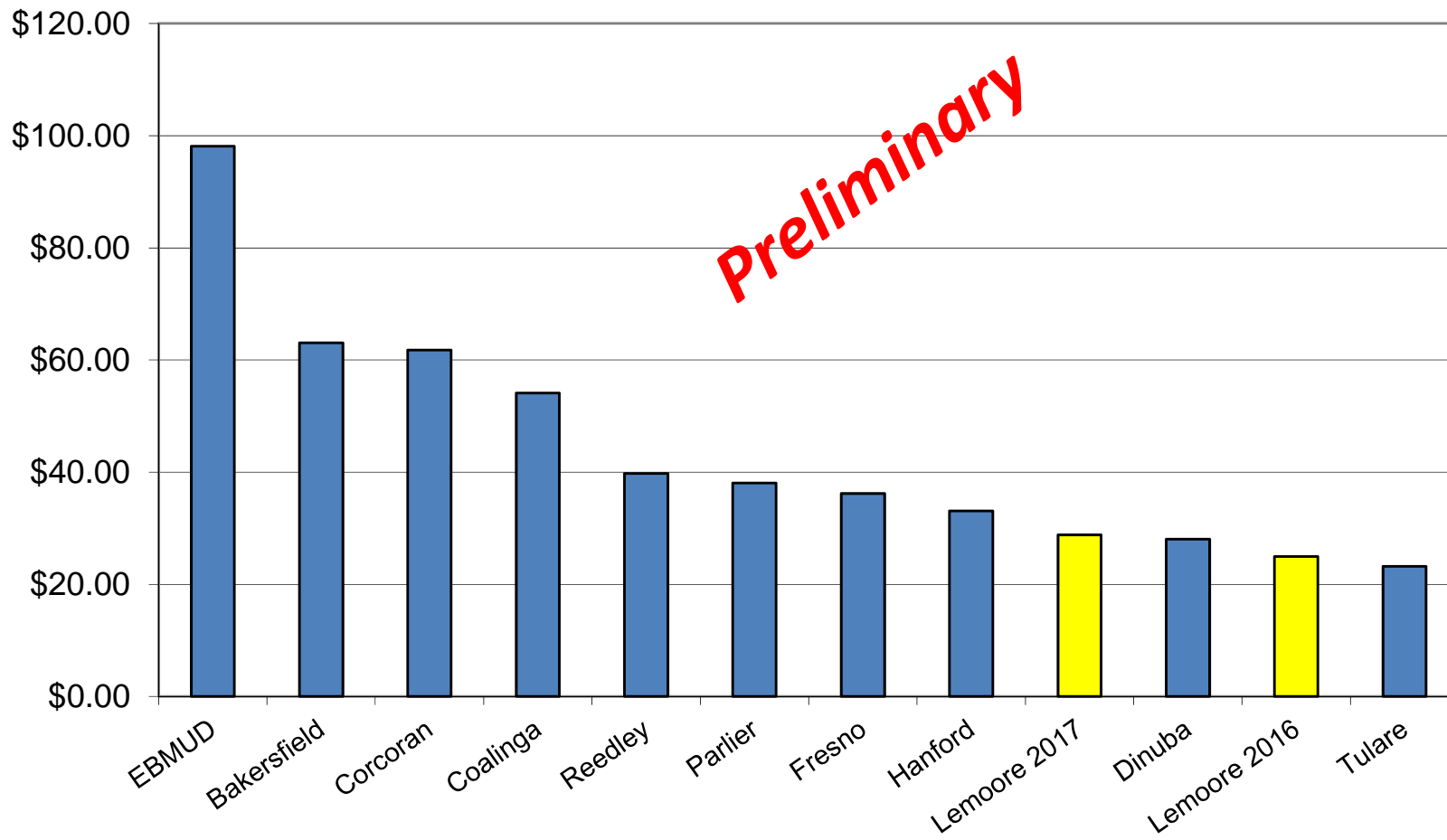
## ***FOR EVALUATION* City of Lemoore Water Rates and Charges**

<i>Average Increase all classes</i>	<b>28%</b>	<b>30%</b>	<b>30%</b>	<b>30%</b>
<b>Fixed Monthly Charges Based on Meter Size (\$/Mo)</b>				
All Residential Single Family	\$13	\$17	\$22	\$29
All other up to 1.5"	\$23	\$30	\$39	\$51
2" up to 2.5"	\$74	\$96	\$125	\$163
3"	\$138	\$179	\$233	\$303
4"	\$230	\$299	\$389	\$506
6"	\$460	\$598	\$777	\$1,010
8"	\$736	\$957	\$1,244	\$1,617
10"	\$1,058	\$1,375	\$1,788	\$2,324
12"	\$1,978	\$2,571	\$3,342	\$4,345
<b>Flat Rates for Non Metered Customers (\$/Mo)</b>				
Multi Family, Per Unit	\$23	\$30	\$39	\$51
Business and Retail	\$26	\$34	\$44	\$57

Preliminary

# Single Family Water Cost Comparison

Summer Typical: 15,000 gallons (2,005 cubic feet)



## Lemoore Single Family Homes: Water Cost Increases (Potential)

### Cost Detail for 15,000 gallons (2,005 cubic feet)

	<b>Fixed Monthly</b>	<b>Usage</b>	<b>Total</b>	<b>Increase</b>
<b>2016</b>	\$13	\$12	\$25	
<b>2017</b>	\$13	\$16	\$29	16%
<b>2018</b>	\$17	\$20	\$37	28%
<b>2019</b>	\$22	\$26	\$48	30%
<b>2020</b>	\$29	\$33	\$62	29%

**Preliminary**

# Review

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1. Conservation has reduced revenue
2. Metering successful, almost done
3. Existing rates nearly lowest in the valley
4. Water enterprise debt is small and fund balance adequate
5. SIGNIFICANT costs coming for system improvements
6. Recommend gradual rate increases over several years

# Proposed Schedule

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March 15	Workshop #1: Introduction. (Done)
April 19	Workshop #2: Present new rates and update
<b>June 7</b>	City Council: Approve issuance of Prop 218 Notice
<b>August 16</b>	City Council: Rate Hearing
<b>Jan 1, 2017</b>	New Rates in effect



# Next Steps

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- City Council Feedback
- Information and coordination with our customers
- Pilot testing of filtering approach
- Fine tune economic model
- Approve 218 notice at June City Council meeting
- Bond funding first steps

# Community Involvement

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Those interested in participating in a citizen advisor group or if folks simply have questions:

Janie Venegas  
City Clerk  
(559) 924-6705  
Email: [cityclerk@lemoore.com](mailto:cityclerk@lemoore.com)