

Irrigation Meter Ordinance

City Council

City of Portsmouth

April 4, 2016

Brian Goetz, Deputy Director of Public Works



Current Irrigation Meter Ordinance:

- Single Family Residential Customers may install a separate water service and irrigation meter
 - Sewer charges do not apply to the metered water registered through an irrigation meter
- Commercial properties cannot install similar meters
 - A number of these properties have stated that they may bring legal action forward to object to this policy

Current Irrigation Meter Ordinance

Chapter 11 Section 11.216:B of the City's Ordinance:

- Sewer user charges shall be based upon water use whenever possible. No allowance shall be made for watering lawns, watering gardens or washing cars, except for single residential customers who have installed at their cost a second meter, meeting the specifications determined by the Water Department to measure water use which is reasonably calculated not to be discharged into the sewer system. Where such second meters have been installed, a separate account will be established and no sewer charges will be applied to this usage. (Amended 11/17/1997)

Irrigation Meter Options Explored in 2015:

1. Proposed ordinance - Eliminate all irrigation meters (including existing)
2. Grandfather existing irrigation meters and disallow any future irrigation meters
3. Expand irrigation meters to all City customers

City Council took no action –

(Existing Ordinance remained in place)

Irrigation Meter Policy Benchmarking – Meter Availability in Surrounding Communities

New Hampshire	Residential	Commercial
Concord	Yes	Yes
Conway	Yes	Yes
Derry	Yes	Yes
Dover	Yes	Yes
Durham	Yes	Yes
Exeter	Yes	No
Keene	Yes	Yes
Manchester	Yes	Yes
Newmarket	Yes	Yes
Portsmouth	Yes	No
Rochester	Yes	Yes
Somersworth	Yes	Yes
Wolfeboro	Yes	Yes

Maine	Residential	Commercial
Portland Water District	Yes	Yes
York Sewer District	Yes	No

Massachusetts	Residential	Commercial
Boston	Yes	Yes
Haverhill	Yes	Yes
Newburyport	No	No

Irrigation Meter Policy in Other Communities:

- The availability of irrigation meters varies from community to community around the United States.
- The vast majority of communities that allow irrigation meters offer the meters to all classes of customers.
- Communities that offer meters:
 - Appropriately price irrigation water to reflect true impact it has on a water system during peak summertime use
 - Incorporate detailed ordinances that govern the use of irrigation meters

Irrigation Account Summary – Analysis of 2012 Data

Residential Irrigation Account Summary

1 Unit of
Consumption
= 748 gallons

Community	Accounts	Units of Consumption	Average Annual Units of Consumption per Account
New Castle	38	3,470	91
Newington	0	0	0
Portsmouth	193	12,603	65
Rye	0	0	0
Madbury	0	0	0
Greenland	0	0	0
Durham,	0	0	0
TOTAL	231	16,073	70



City of Portsmouth,
New Hampshire
Water and Sewer Rate Study

Water and Sewer
Consumption Analysis
January 15, 2013

Municipal and Financial Services Group - Tighe&Bond

Expanding Irrigation Meters to All Customers

- This will increase water demand
- Over time, metered water revenue will increase, metered sewer revenue will decrease

Recommendation if Irrigation Meters Are Expanded:

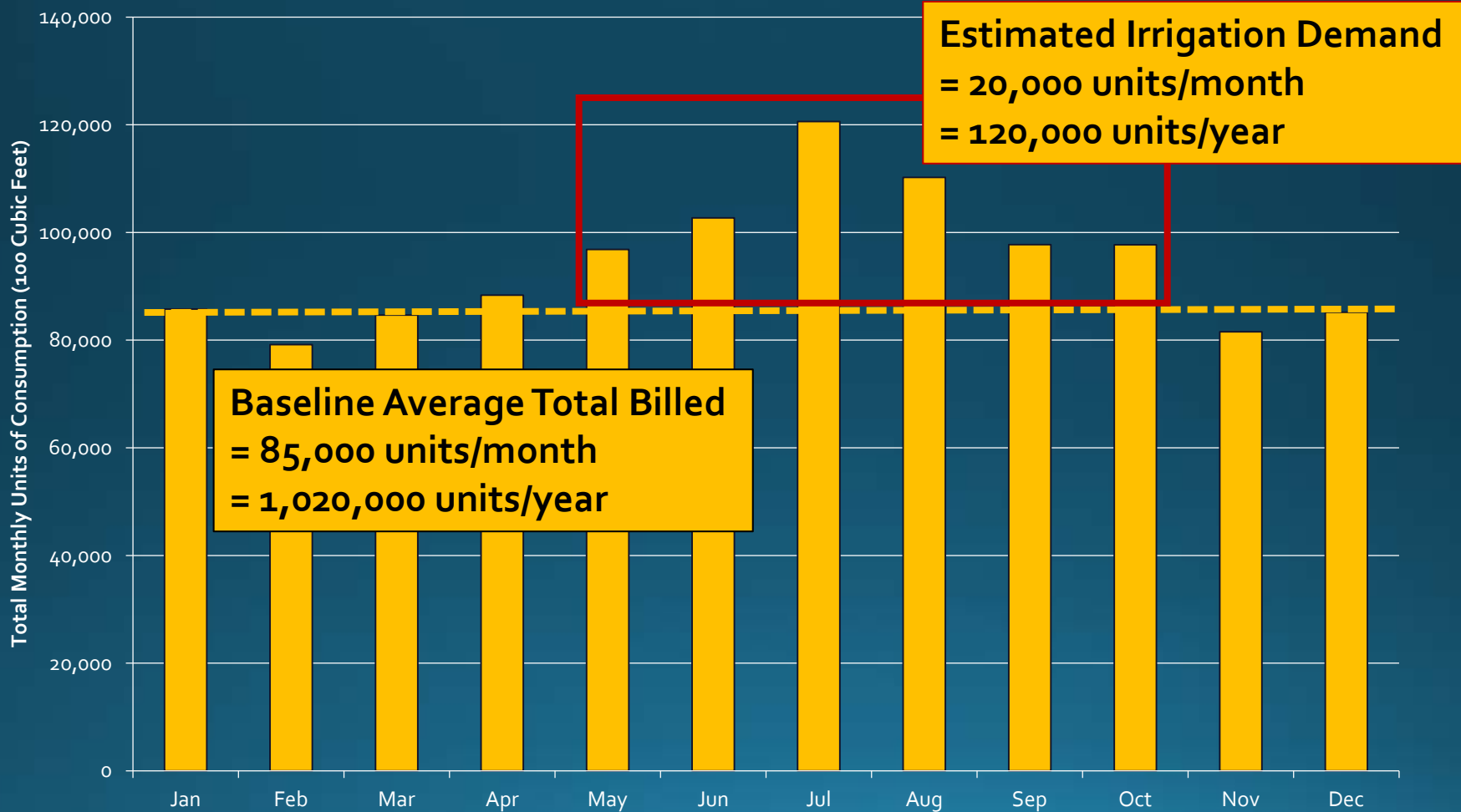
- Increase the Irrigation Rate to pay for additional system capacity necessary to meet peak demands
- Customer with irrigation meter does not pay capital fee (Capacity Use Surcharge) for use of capacity
- Capacity use charge per CCF reflects use of capacity not purchased when connecting to the City water system (Current Capacity charge for water is \$1,300 per Equivalent Dwelling Unit, or 250 gallons per day)

Irrigation Rate Structure	O&M and Capital Rate per CCF	Capacity Use Charge per CCF	Total Irrigation Rate per CCF
0 to 5 Units ⁽¹⁾	\$5.00	-	\$5.00
5 to 15 Units	\$5.00	\$4.70	\$9.70
Over 15 Units	\$5.00	\$7.05	\$12.05

(1) First five units provides an allowance for discretionary use

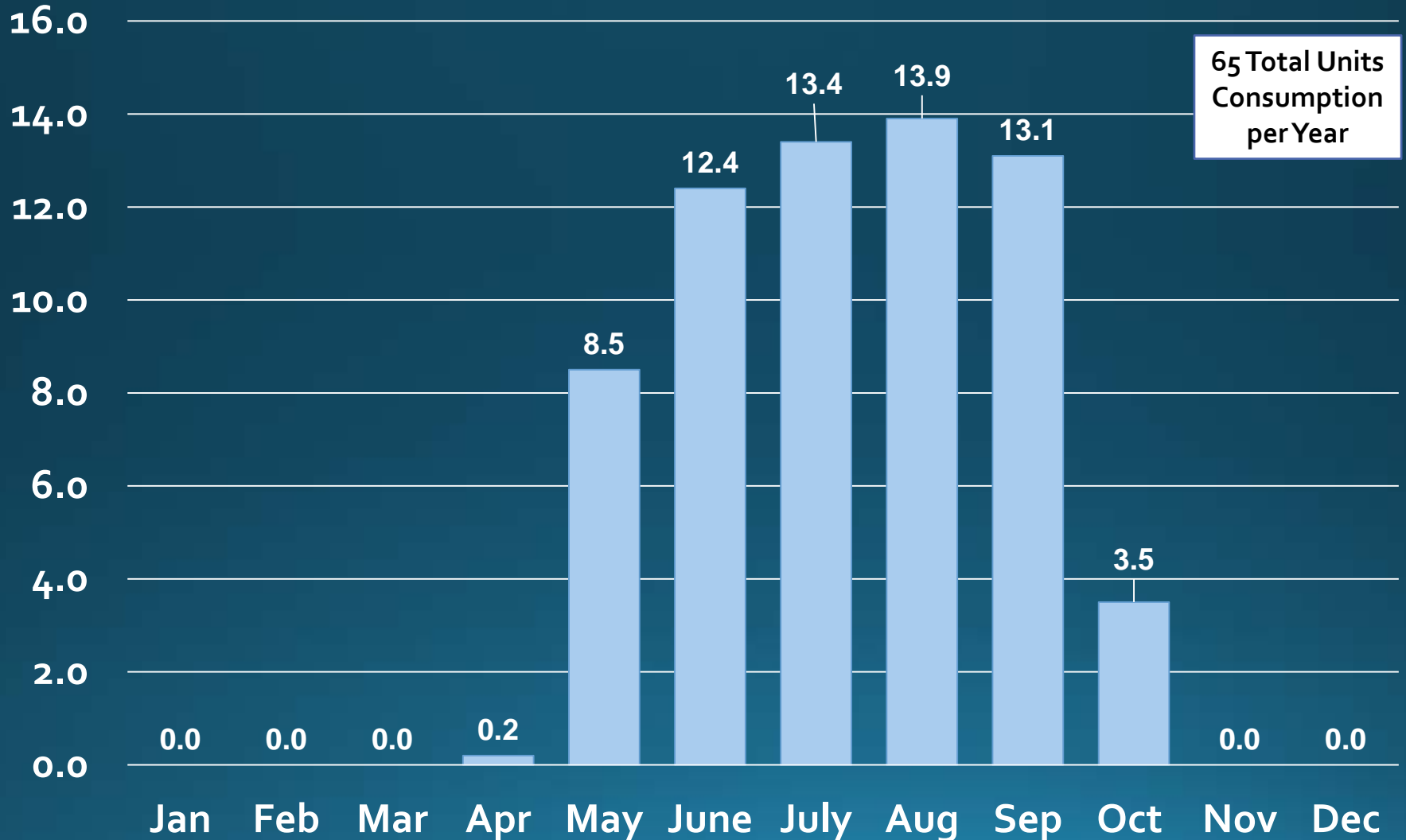
Sewer Consumption Trend (2012 Billed Sewer Analysis)

Portsmouth Sewer System - Monthly Billed Consumption



Portsmouth - Residential Irrigation Meters Average Monthly Consumption (Units)

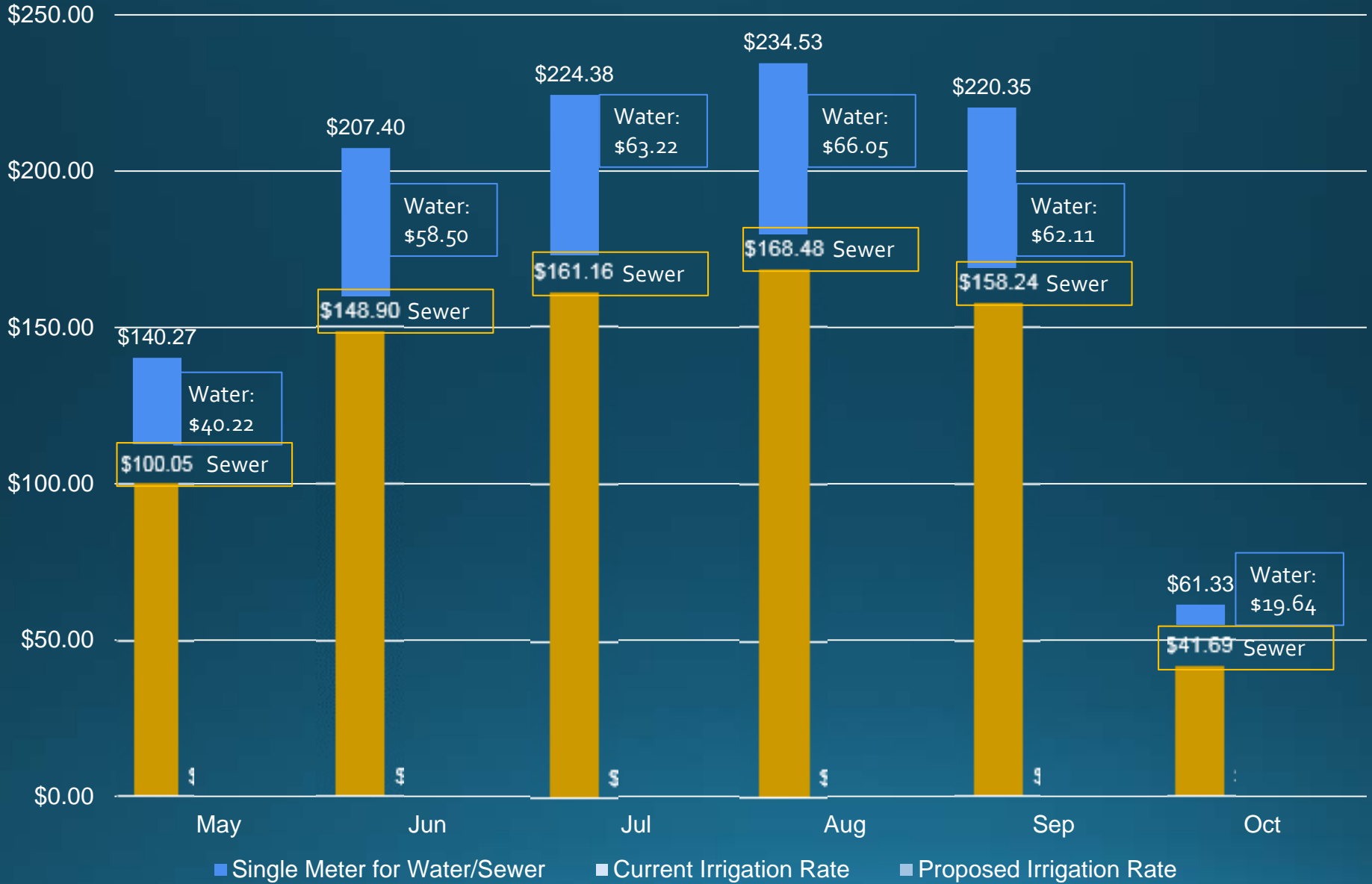
Based on 2012 Water Use Analysis - Water/



Cost Comparison for Irrigation

Current Cost - One Meter	Units	Cost/Unit	Cost	Savings
One Meter - Water Fee	65		\$280.75	
One Meter - Sewer Fee	65		\$780.48	
Monthly Meter Charge	12	\$4.95	\$59.40	
			\$1,120.63	N/A
Current Irrigation Meter Cost	Units	Cost/Unit	Cost	Savings
Irrigation meter - Water Fee	65		\$325.10	
Irrigation meter - Sewer Fee	65		\$0.00	
Monthly Meter Charge	12	\$4.95	\$59.40	
			\$384.50	\$736.13
Proposed Irrigation Meter Cost	Units	Cost/Unit	Cost	Savings
Irrigation meter - Water Fee	65		\$495.59	
Irrigation meter - Sewer Fee	65		\$0.00	
Monthly Meter Charge	12	\$4.95	\$59.40	
			\$554.99	\$565.64

Cost Comparisons - Irrigation Consumption – Residential Customer Using 65 Units/Year



Recommendation if Irrigation Meters Are expanded:

- **Encourage water efficiency through specific policies that govern how irrigation water can be used within the community. These policies would include such items as:**
 - City approves only landscape irrigation systems designed and installed an EPA WaterSense Certified professional
 - Require in-ground irrigation systems include moisture sensors
 - Restrict irrigation usage to specific days or periods of time
 - April 1 to September 30, landscape irrigation utilizing water, in whole or in part, obtained from the City water system, is prohibited except during the times between 6:00 p.m. and 10:00 a.m.
 - Enable the City to restrict the use of irrigation meters during periods of drought

Expanding Irrigation Meters to all customers will likely reduce sewer revenues over time:

	FY 2016	FY 2017	FY 2018
Current Projected Sewer Revenues ⁽¹⁾	\$14,117,217	\$14,874,178	\$15,740,616
Expanded Irrigation Sewer Revenues	\$12,889,019	\$13,580,125	\$14,371,182
Sewer System Revenue Reduction	(\$1,228,198)	(\$1,294,053)	(\$1,369,434)
% Revenue Reduction	8.70%	8.70%	8.70%

(1) Based on long-term financial projections for sewer fund.

Potential Sewer Rate Impact if Irrigation Meters Are expanded:

- Increase sewer rates
 - Based on our financial analysis the sewer fund will not be able to remain financially viable with an 8.7% reduction in sewer revenues without a commensurate increase in sewer rates. The current recommended FY17 rate increase is 4%, this would correspond to a 13.7% increase if all irrigation usage were through irrigation meters.

Sewer Rates	Current Rates	Break-Even Rates ⁽¹⁾
First Tier Rate (10 Units or less per month)	\$11.77	\$12.59
Second Tier Rate per CCF (over 10 units per month)	\$12.95	\$14.25
Sample Bill		
Average Annual Residential Sewer Bill (5 units per month)	\$706.20	\$755.63

(1) Rates to generate lost revenues from irrigation meter expansion

Expanding Irrigation Meters to all customers will likely increase water revenues over time:

	FY 2016	FY 2017	FY 2018
Current Projected Water Revenues ⁽¹⁾	\$8,326,659	\$8,316,699	\$8,534,853
Expanded Irrigation Water Revenues	\$336,000	\$336,000	\$345,000
Water System Revenue Increase	\$8,662,659	\$8,652,699	\$8,879,853
% Revenue Increase	4%	4%	4%

(1) Based on long-term financial projections for water fund.

Potential Water Rate Impact if Irrigation Meters Are expanded:

- Maintain current rates and minimize future rate increases
- Decrease water rates
 - Irrigation customers will pay more for their water use.

Water Rates	Current Rates	Projected Break-Even Rates ⁽¹⁾
First Tier Rate (10 Units or less per month)	\$4.15	\$3.98
Second Tier Rate per CCF (over 10 units per month)	\$5.00	\$4.80
Sample Bill		
Average Annual Residential Water Bill (5 units per month)	\$308.40	\$298.20

(1) Projected Rates reduced based on additional irrigation revenues

Questions?

