Water, Sewer and Storm Drain Committee

November 17th , 2016
10:30 AM
City Hall

Committee:	Gary Baland – Council Member
	Jason Banks – Chair/Vice-Mayor
Attendees:	Jim Goodwin –City Manager
	Scott Rolls – City Engineer
	Ron Walker – Public Works Facilities Manager/Chief Plant Operator
	Joe Aguilar - Finance Director
	Hope Ithurburn, Executive Assistant to City Manager

----- Agenda Topics -----

1. **Review/Approve Meeting Minutes from April 21, 2016, May 19, 2016, and August 18, 2016**
2. **Review Progress on Water Fee Study**
3. **Project Updates**
4. **Adjournment**

Water, Sewer and Storm Drain Committee
Meeting Minutes

April 21, 2016 – 10:30 am
Live Oak City Hall

COMMITTEE:	**Jason Banks, Vice Mayor** **Gary Baland, Council Member**
STAFF:	**Jim Goodwin, City Manager** **Scott Rolls, City Engineer** **Ron Walker, Public Works Facilities Manager/Chief Plant Operator** **Joe Aguilar, City Finance Director** **Hope Ithurburn, Executive Assistant to the City Manager**

1. **Council Member Baland called the meeting to order at 10:30 am.**

2. **The following staff members were present:**
   Jim Goodwin, City Manager, Ron Walker, Public Works Facilities Manager/Chief Plant Operator, Scott Rolls, City Engineer, and Hope Ithurburn, Executive Assistant to the City Manager.

   The following guests were present:
   Catherine Hansford and Rachel, Hansford Economic Consulting

3. **Roll Call**
   Present: Council Member Baland
   Absent: Vice Mayor Banks

4. **Water/Sewer Fee Study**
   Lengthy discussion regarding the study followed.

5. **Project Updates**
   Scott and Ron updated the committee on projects with discussion following.

6. **Adjournment**
   Council Member Baland adjourned the meeting at 12:32 pm.

Water, Sewer and Storm Drain Committee
Meeting Minutes

May 19, 2016 – 10:30 am
Live Oak City Hall

COMMITTEE:	**Jason Banks, Vice Mayor** **Gary Baland, Council Member**
STAFF:	**Jim Goodwin, City Manager** **Scott Rolls, City Engineer** **Ron Walker, Public Works Facilities Manager/Chief Plant Operator** **Joe Aguilar, City Finance Director** **Hope Ithurburn, Executive Assistant to the City Manager**

1. **Council Member Baland called the meeting to order at 10:32 am.**

2. **The following staff members were present:**
   Jim Goodwin, City Manager, Ron Walker, Public Works Facilities Manager/Chief Plant Operator, Joe Aguilar, City Finance Director, Scott Rolls, City Engineer, and Hope Ithurburn, Executive Assistant to the City Manager.

3. **Roll Call**
   Present: Council Member Baland
   Absent: Vice Mayor Banks

4. **Emergency Drought Regulations**
   Jim presented the proposed regulation changes with discussion following regarding the roll out/communication plan to residents.

5. **Project Updates**
   Jim updated the committee on projects with discussion following.

6. **Adjournment**
   Council Member Baland adjourned the meeting at 11:26 pm.

Water, Sewer and Storm Drain Committee
Meeting Minutes

August 18, 2016 – 10:30 am
Live Oak City Hall

COMMITTEE:	**Jason Banks, Vice Mayor** **Gary Baland, Council Member**
STAFF:	**Jim Goodwin, City Manager** **Scott Rolls, City Engineer** **Ron Walker, Public Works Facilities Manager/Chief Plant Operator** **Joe Aguilar, City Finance Director** **Hope Ithurburn, Executive Assistant to the City Manager**

1. **Council Member Baland called the meeting to order at 10:32 am.**

2. **The following staff members were present:**
   Jim Goodwin, City Manager, Ron Walker, Public Works Facilities Manager/Chief Plant Operator, Scott Rolls, City Engineer, and Hope Ithurburn, Executive Assistant to the City Manager.

3. **Roll Call**
   Present: Vice Mayor Banks and Council Member Baland
   Absent: None

4. **Update on GSA/GSP Process**
   Jim and Scott provided a status update with discussion following.

5. **Water Services to Live Oak Child Care Center**
   Jim and Scott gave an update with discussion following.

6. **Project Updates**
   Scott gave updates on various projects.

7. **Adjournment**
   Council Member Baland adjourned the meeting at 11:49 am.

City of Live Oak

Water Rate and Fee Study

Preliminary Results & Discussion

Hansford Economic Consulting

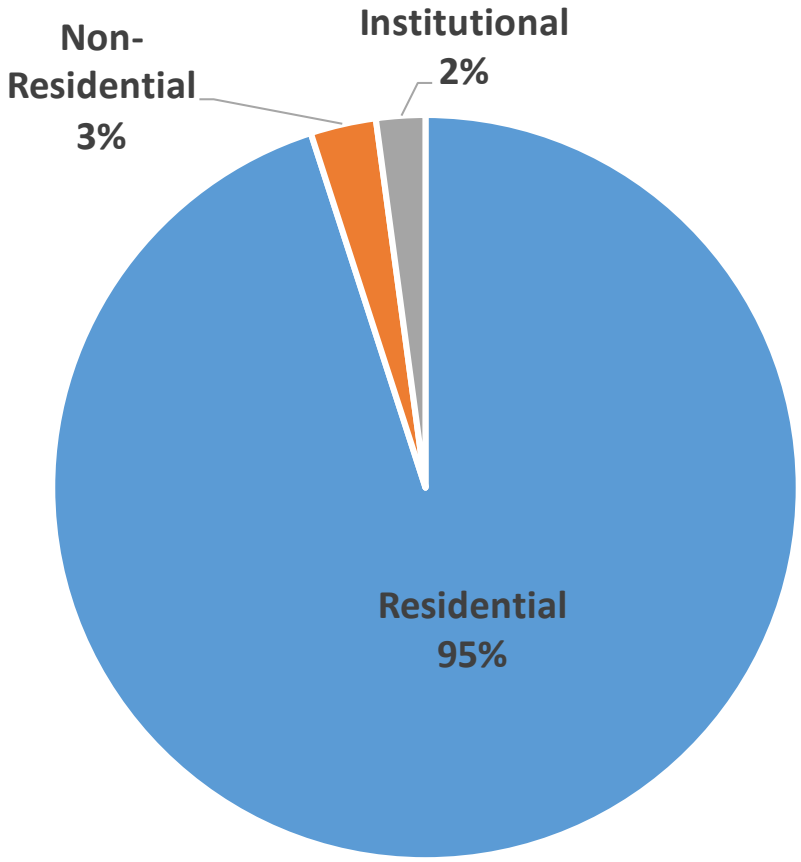
November 17, 2016

NOTE: Until the study is completed and approved by City Council, all information presented is considered DRAFT.

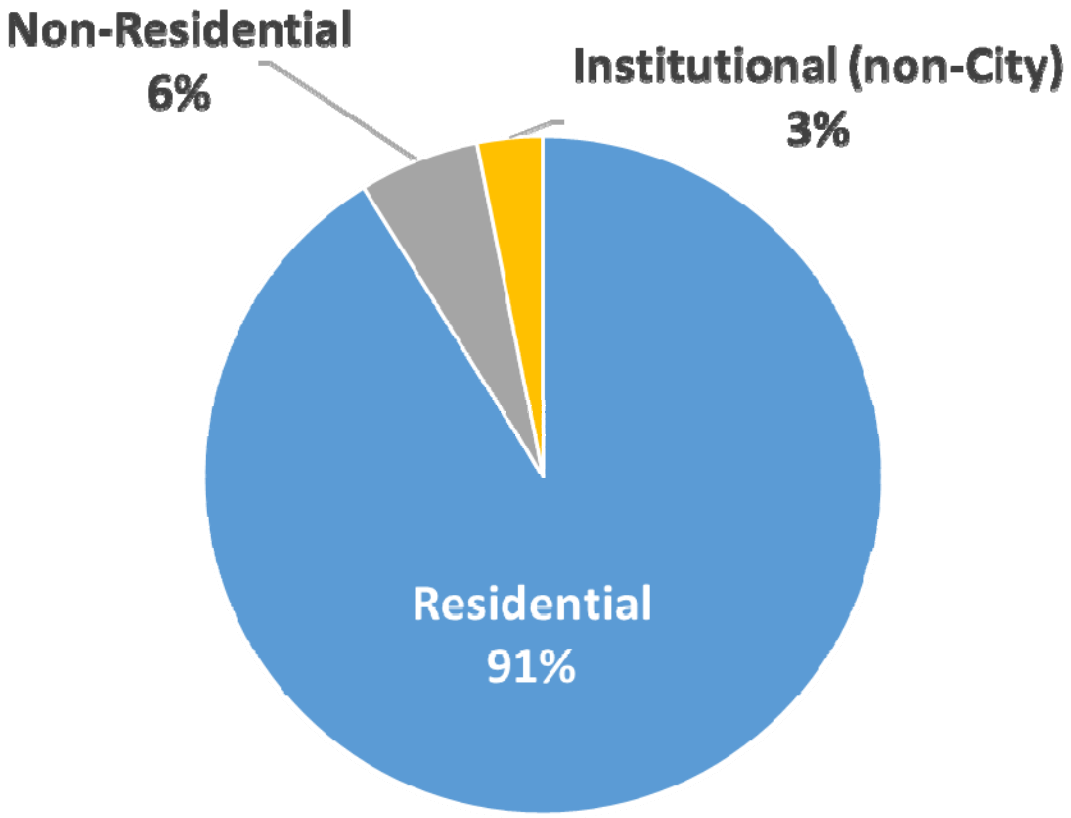
BACKGROUND

Utilities Customer Base

Total Approx. 2,250 Accounts



Customer Use of Facilities



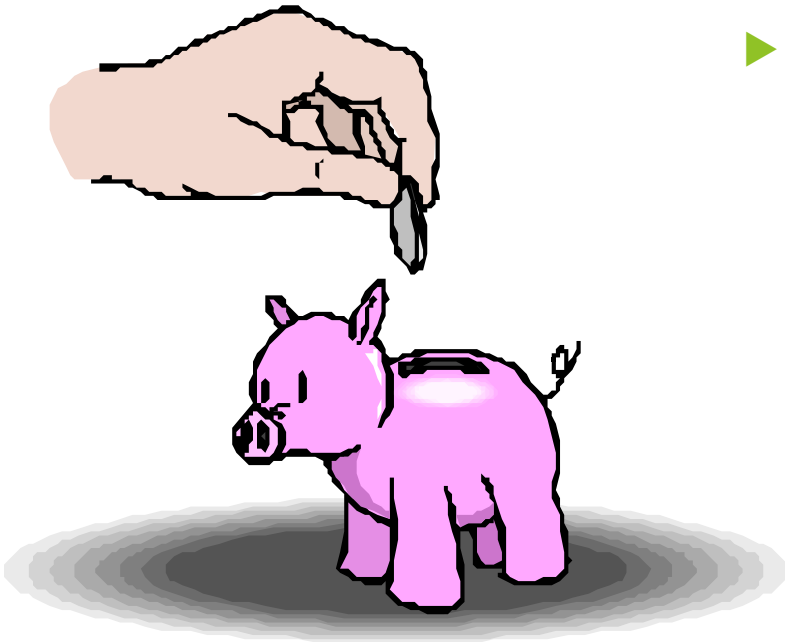
Purpose of the Study

- Determine funding needed over the next 5 years to operate and maintain the utility system responsibly
- Create adequate revenue to fund CIP (capital improvement projects)
- Ensure costs are allocated equitably for all customer classes
- Establish appropriate rate schedules for 5 years
- Meet current bond covenants

Revenue Requirement

- Determine funding needed to meet financial needs
  - Operations & Maintenance
  - Debt Service
  - System Rehabilitation
  - Capital Improvements
  - Fund Reserves

Rate Structure



- How to collect the necessary revenue requirement
  - Service and Use Charges
  - Want to reflect local customer water needs / demands
  - Meet multiple objectives

Balance of Multiple Objectives

Water Rate Structure

- Include Service Charges and Use Charges
- **Service Charges** intended to capture fixed costs of the water system
- **Use Charges** intended to capture variable costs of system

WHY PERFORM A RATE STUDY NOW?

Goals

- Adequately fund water enterprise fund such that other City services are not negatively impacted
  - Don't take away funding from Parks, Streets, Public Safety, and other City services
- Avoid heavy fines for non-compliance with regulations
- Don't kick the can down the road! - Provide for timely system rehabilitation
- Circumvent cost-cutting measures in the short-term, as they typically create greater costs in the long-run
  - If maintenance projects are not addressed they can quickly become replacement projects

Best Practices

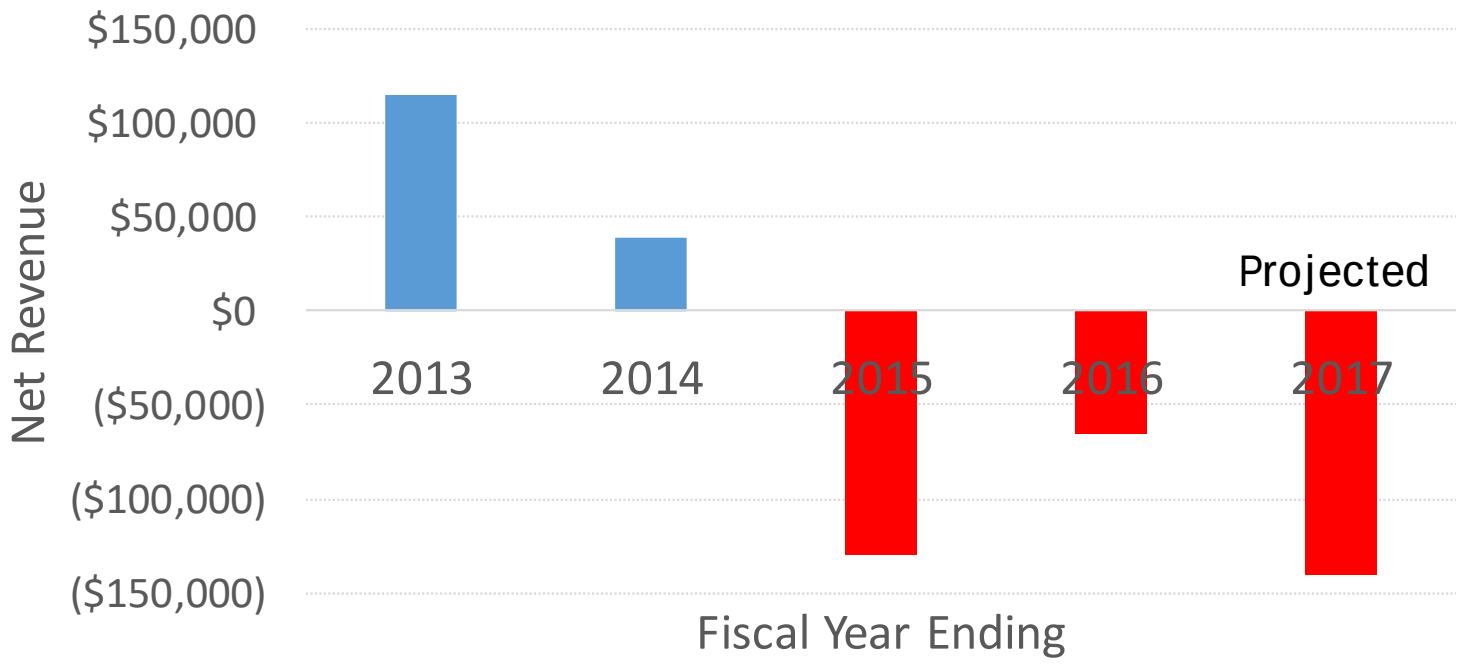
- Rates should be reviewed every 3-5 years
- Planning for future improvements is critical
- Financial standards drive a “self-sustaining” utility
- Equitable cost recovery
- Ensure ability to meet regulatory requirements

City of Live Oak Practices

LIVE OAK
CALIFORNIA

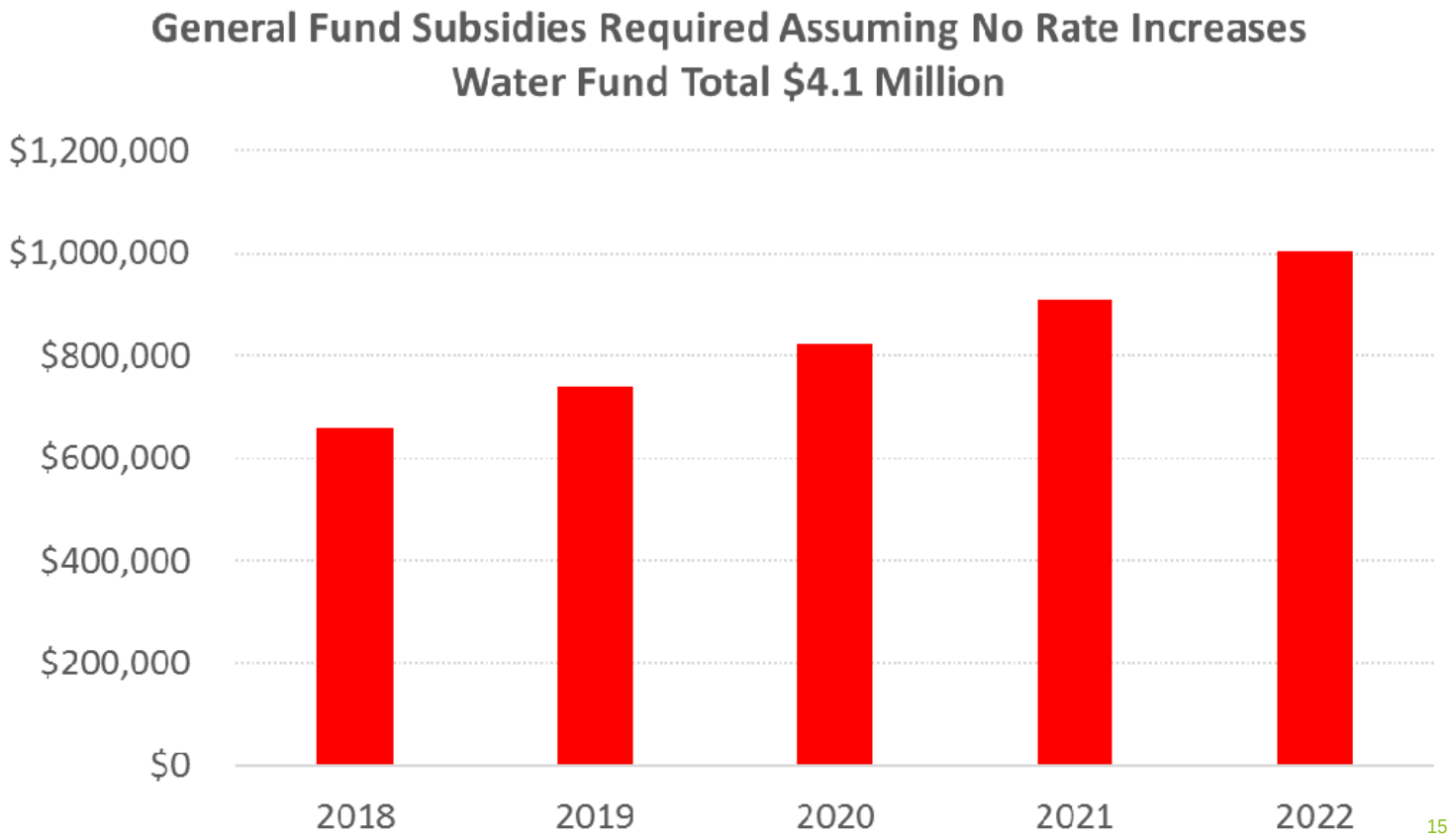
- City has not completed a water rate study in the last 10 years
- Water enterprise fund has been operating at a net loss the last 2 years, depleting reserves
- Water enterprise fund is projected to operate at a net loss this fiscal year
- Water enterprise fund will end this fiscal year with less than 6 months operating cash
- City has not performed systematic rehabilitation in the past; the water system has large capital improvement projects to be completed over the next 5 years

Financial Picture - Water



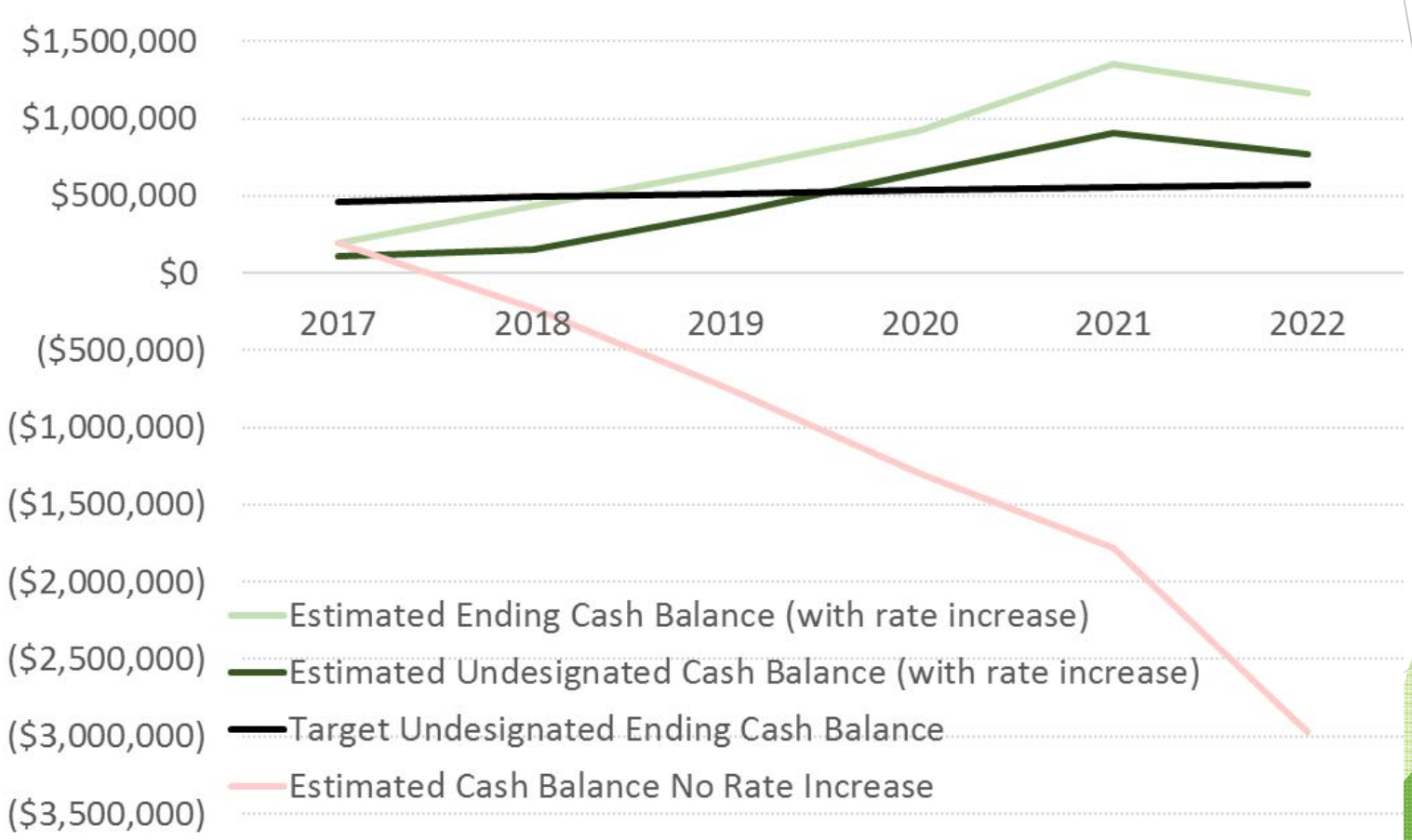
What if Water Rates are not Increased?

Assumes $1.0 Million Collected for System Rehabilitation



Projected Water Enterprise Fund Cash Balance

Assumes all CIP projects are funded in the next 5 years and
$1.0 Million Collected for System Rehabilitation



San Juan Capistrano

2015: Ruling in the San Juan Capistrano case created stricter standards on how tiered rates should be set under Prop 218

"…the City failed to demonstrate that the tiers correspond to the actual cost of providing service at a given level of usage…"

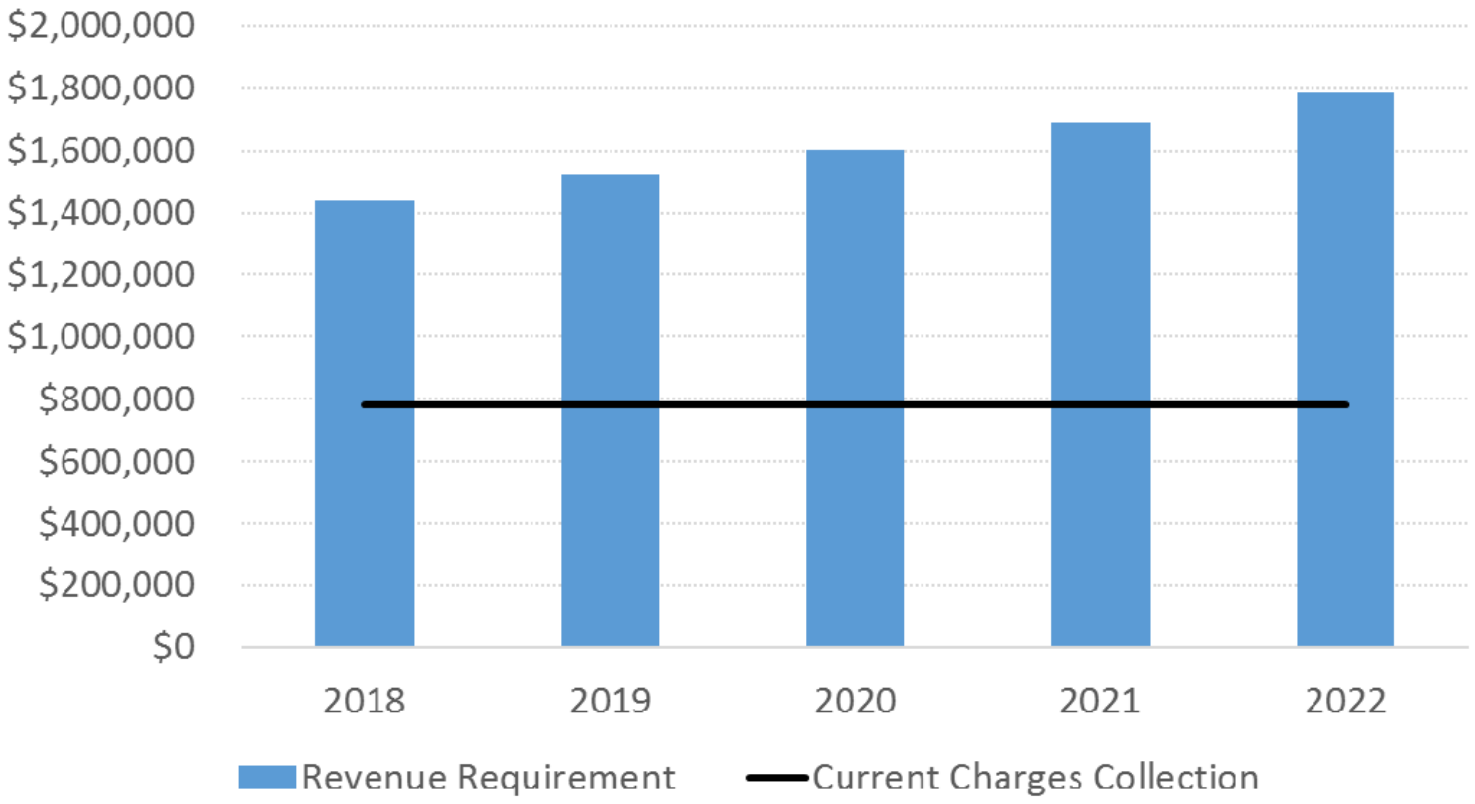
"…rates were not proportional to the cost of service…"

As a result of the San Juan Capistrano case, many agencies have either eliminated their tiered rates in favor of a uniform rate, or revised their tiered rates to better comply with the standards set by the San Juan Capistrano case.

Information provided by Kelly Salt of Best & Krieger one of the lead attorneys for the defendant (City of San Juan Capistrano).

WATER RATE STUDY

Water Fund – How Much More is Needed?



Capital Improvement Costs WATER (Next 5 Fiscal Years) – 2016 $'s in Millions

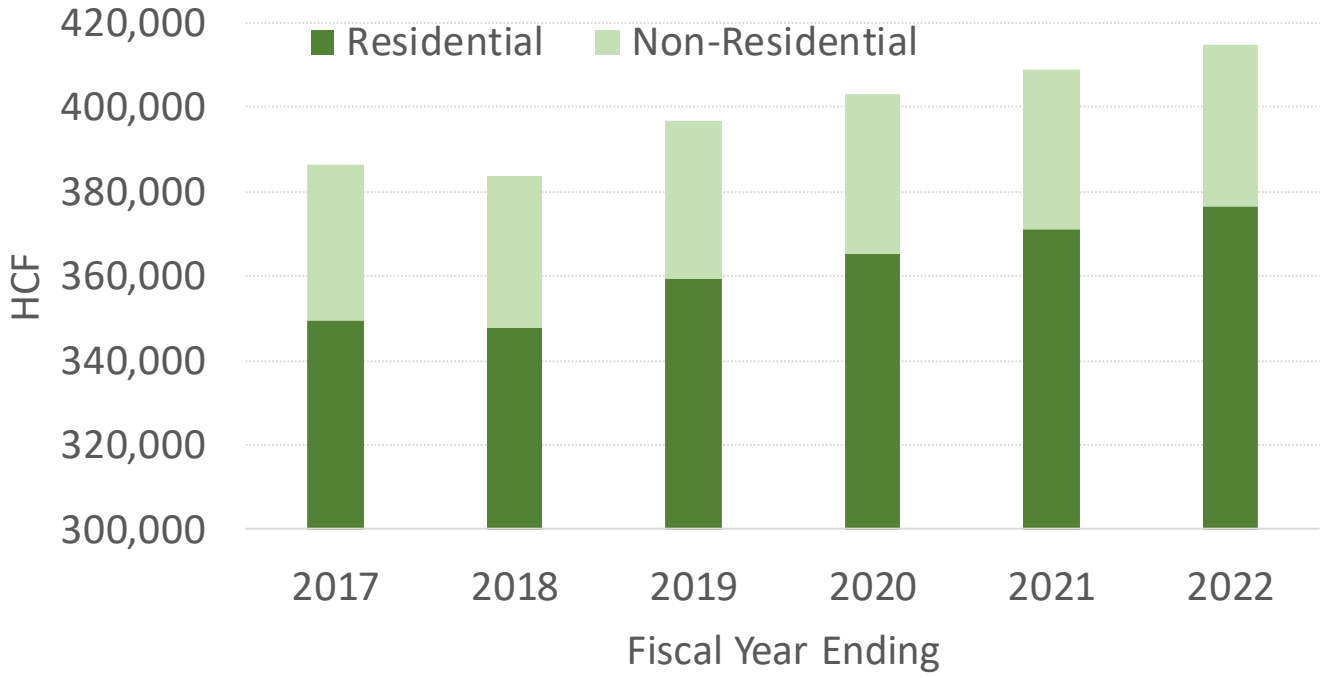
Item	Total Project Costs	Project Costs Paid with Rates
Pennington Rd Main	$0.66	$0.00
Pennington Rd E. Main	$0.20	$0.00
Well 7A	$2.50	$0.00
Meter Replacements	$0.85	$0.85
Valve Replacements	$0.34	$0.34
Fire Hydrant Replacements	$0.34	$0.34
Well 7B	$2.70	$2.00
Tank (Wells 7A&7B)	$0.80	$0.08
Booster St. (Wells 7A&7B)	$1.50	$0.15
TOTAL	**$9.89**	**$3.76**

Major Assumptions of the Rate Study

- Growth – 35 to 50 single family residential units / year
- Operations Costs Annual Increase – 3.5% / year based on historical increases
- New Rates Coincide with fiscal year – first increase in effect July 1, 2017; thereafter the next 4 fiscal years
- Rate Structure is modified

Projected Water Demand

Increases approx. 7% over 5 years



OPTIONS

OPTION 1:
Revenue Collection in Service versus Use Charges

- Cost of Service – Approx. 45% costs fixed and 55% variable
  - Currently – Approx. 80% costs collected in service charges
- Options:
  - Service charges calculated using cost of service *recommended*
    - *Decreases the impact of rates to small households (seniors in particular) but could make the City more vulnerable to decreased revenue in droughts*
  - Service charges calculated using current revenue split
    - *Service charges increase for all meter sizes increase*
  - Keep ¾" and smaller meter service charge at current service charge
    - *Holds service charges, could make the City more vulnerable to decreased revenue in droughts*

Service Charge / Use Charge Split

Assumes AWWA Meter Ratios

Meter Size	Cost of Service	Keep 3/4" Charge	Current Allocation
3/4" or smaller	$22.41	$23.97	$35.99
1"	$36.99	$39.61	$59.62
1 1/2"	$73.20	$78.42	$118.45
1 3/4"	$73.20	$78.42	$118.45
2"	$116.16	$124.52	$188.57
3"	$253.94	$272.22	$412.34
4"	$439.18	$470.51	$710.72
6"	$902.68	$967.95	$1,468.39

OPTION 2:
Meter Ratios Used in Study

- Move to AWWA standards *recommended*
  - Brings City to industry standards
    - Greater service charge increase to larger sized meters & smaller service charge increase to smaller sized meters
- Keep current meter ratios
  - Unknown basis
    - Smaller service charge increase to larger sized meters & greater service charge increase to smaller sized meters

Meter Ratio Differences

Meter Size	Current Ratios	AWWA Ratios
Less than 1"	1.1	1.0
1"	1.3	1.7
1.5"	1.3	3.3
2"	2.1	5.3
3"	5.3	11.7
4"	9.1	20.0
6"	19.4	41.7

Meter Ratio Impact to Service Charges

Assumes COS base/use split

Meter Size	City Ratios	AWWA Ratios
3/4" or smaller	$24.17	$22.41
1"	$26.04	$36.99
1 1/2"	$32.24	$73.20
1 3/4"	$32.24	$73.20
2"	$52.70	$116.16
3"	$129.31	$253.94
4"	$225.88	$439.18
6"	$467.31	$902.68

OPTION 3:
Keep a Monthly Water Allowance in Service Charges or Remove

- Keep current allowance (not presented because the basis for the allowances by meter size are unknown)
- Remove all allowances so that customers pay for every unit of water consumed (best meets intent of proportionality) *recommended*
- Change allowances so that water use included in the service charges equals minimum monthly water use (54% to 62% of water use)

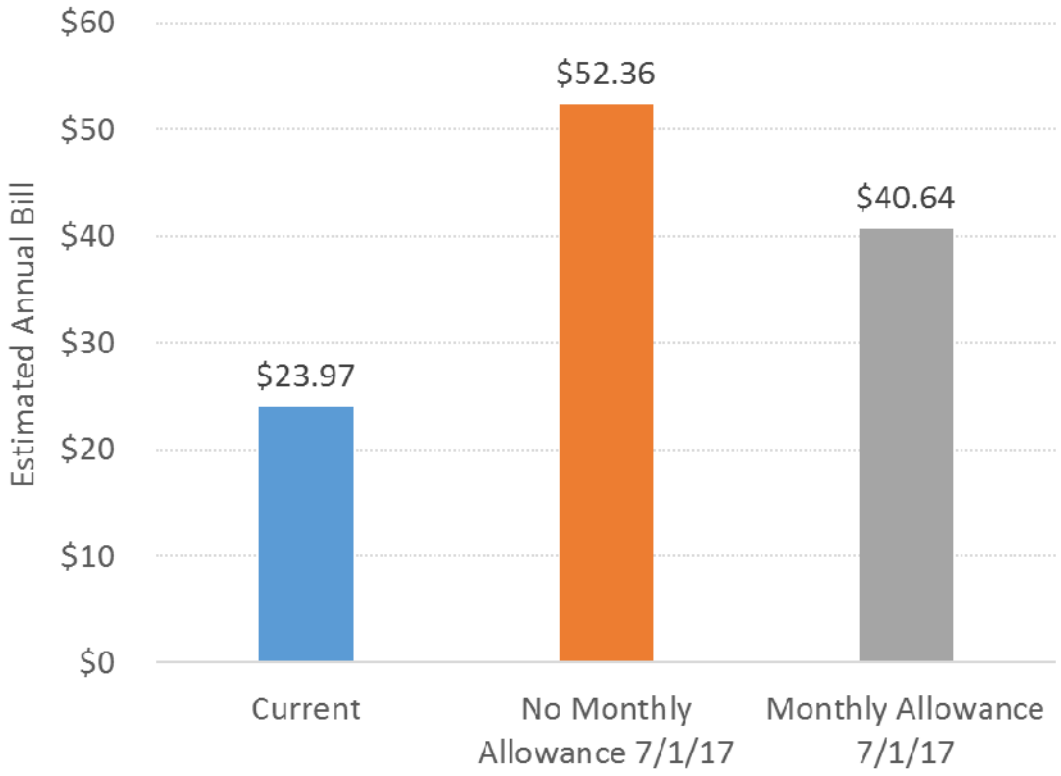
Monthly Allowance Based on Criteria

- Between 54% and 62% of water in monthly allowances
  - Minimum month system-wide water use 2014 & 2015 applied to all months = water in monthly allowances

	Current	Proposed	
3/4" or smaller	20	11	HCF
1"	21	30	HCF
1 1/2"	22	30	HCF
1 3/4"	22	30	HCF
2"	36	60	HCF
3"	90	155	HCF
4"	155	155	HCF
6"	330	155	HCF

Comparison Monthly SF Water Bill with & without Monthly Allowance

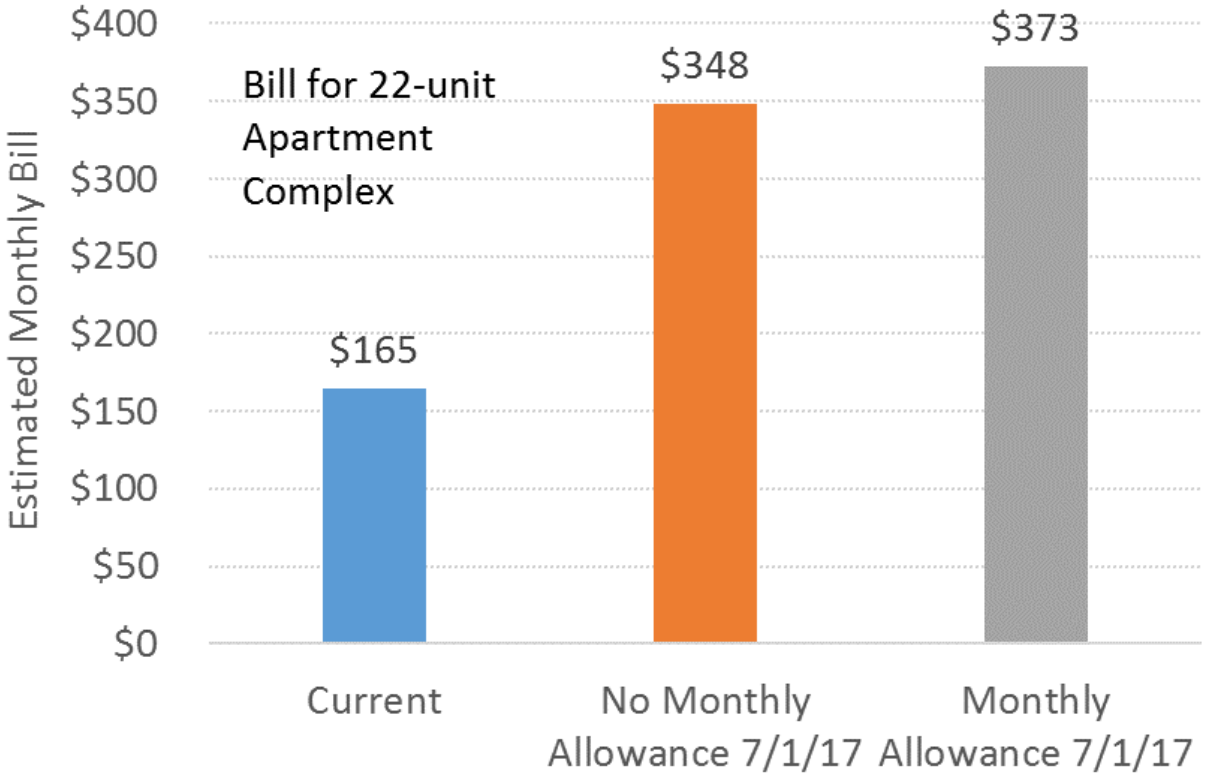
Assumes AWWA Meter Ratios & COS Split; Single Family ¾" Meter using 15 HCF of Water



Estimated Monthly Bill for a Multi-Unit Residential Customer

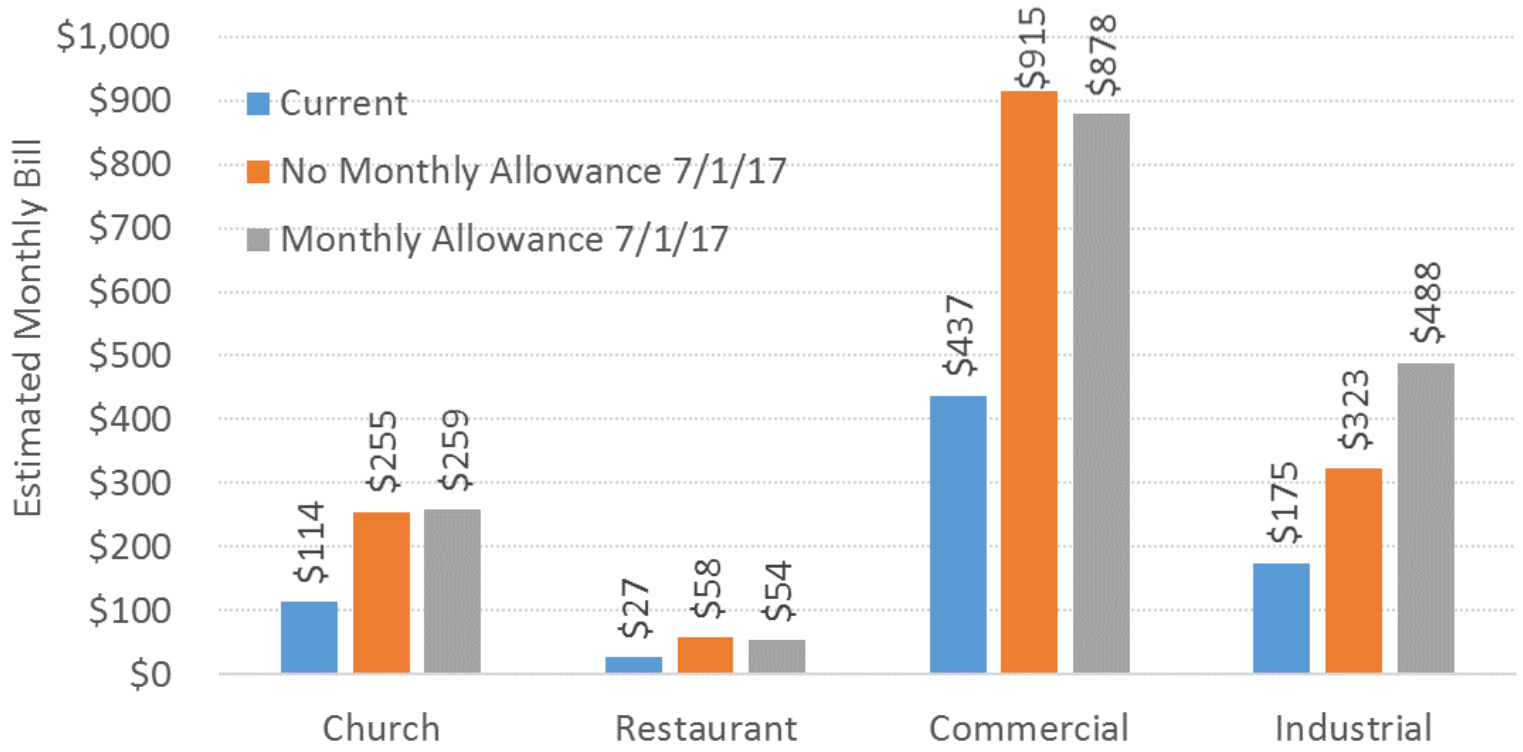
Assumes AWWA Meter Ratios & COS Split

2" Meter



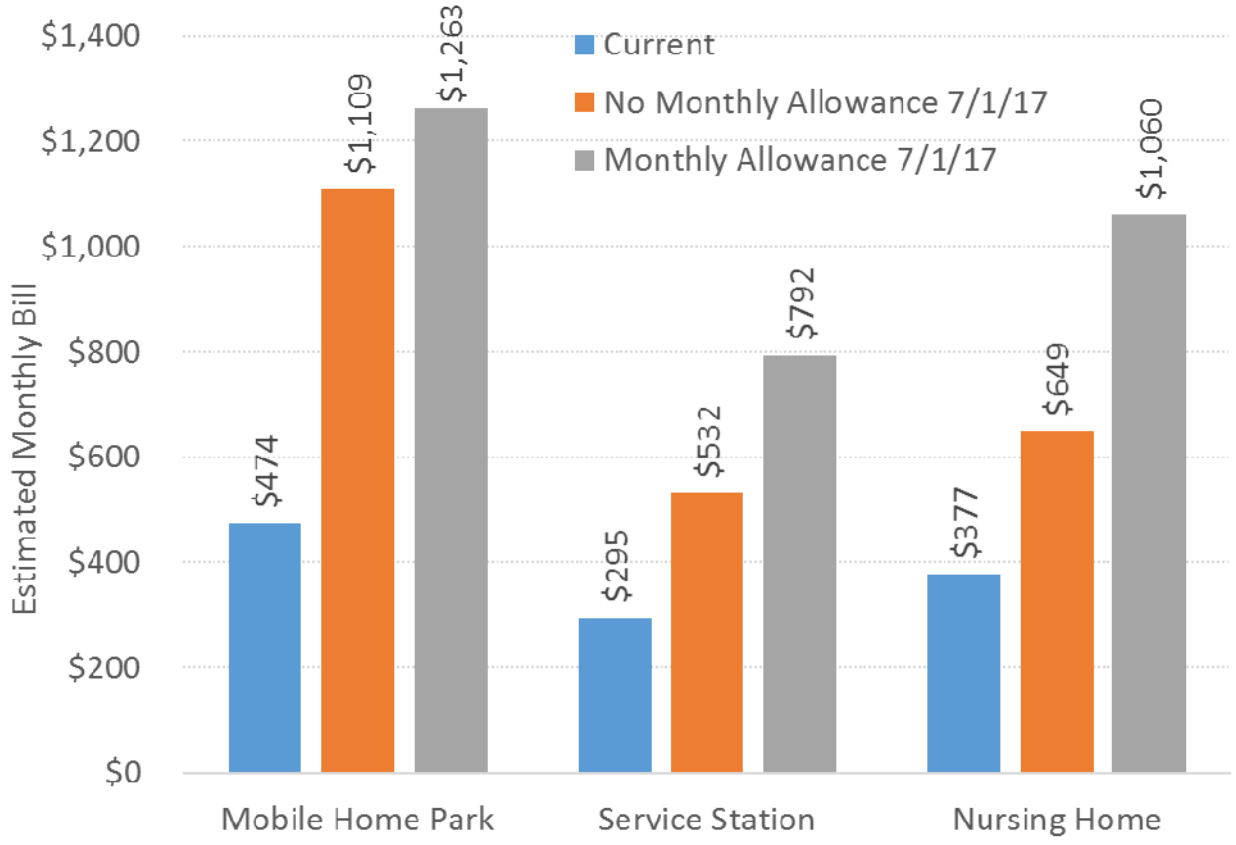
Average Monthly Bill Impact to Sample Non-Residential Users

Assumes AWWA Meter Ratios & COS Split



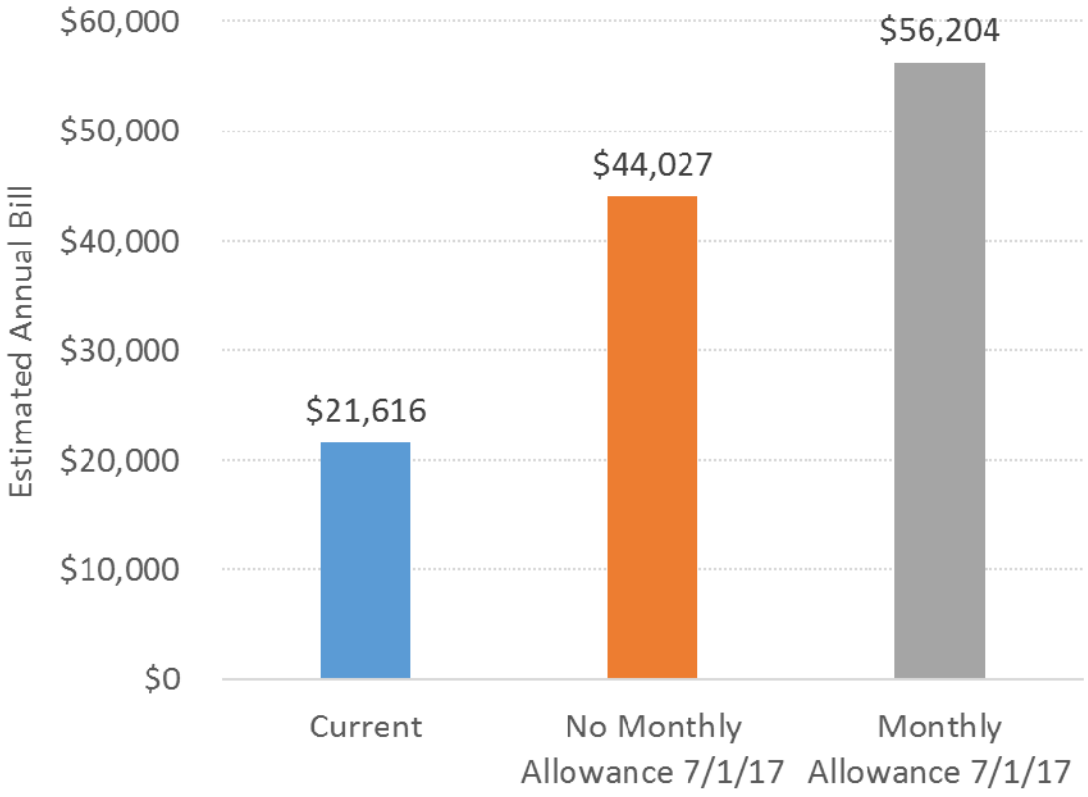
Estimated Average Monthly Bill Impact Large Water Users

Assumes AWWA Meter Ratios & COS Split



Estimated Annual Water Bill Impact
Live Oak Unified School District

Assumes AWWA Meter Ratios & COS Split



OPTION 4:
Collect for System Rehabilitation in Rates

- Include system rehabilitation costs in rates *recommended*
  - *Collect $1.0 million over 5 years for mains replacement*

Depreciation	**2017**	**2018** Year 1	**2019** Year 2	**2020** Year 3	**2021** Year 4	**2022** Year 5
Existing Assets Annual Depreciation	$303,664	$313,123	$322,877	$332,935	$343,306	$354,000
New Assets Annual Depreciation	$52,417	$54,737	$57,057	$59,609	$106,011	$153,444
Total Annual Depreciation	**$356,081**	**$367,860**	**$379,934**	**$392,544**	**$449,317**	**$507,444**
Percentage of Depreciation in Rates	0%	100%	100%	100%	100%	100%
Estimated System Rehabilitation Cost	**$0**	**$367,900**	**$379,900**	**$392,500**	**$449,300**	**$507,400**

- Do not include system rehabilitation in rates

Impact to Single Family Bill of Collection for System Rehabilitation

Assumes AWWA Meter Ratios & COS Split

	Current	7/1/2017	7/1/2017
¾" Meter		100% System Rehabilitation	0% System Rehabilitation
Typical Monthly Bill 15 HCF	$23.97	$52.36	$45.06

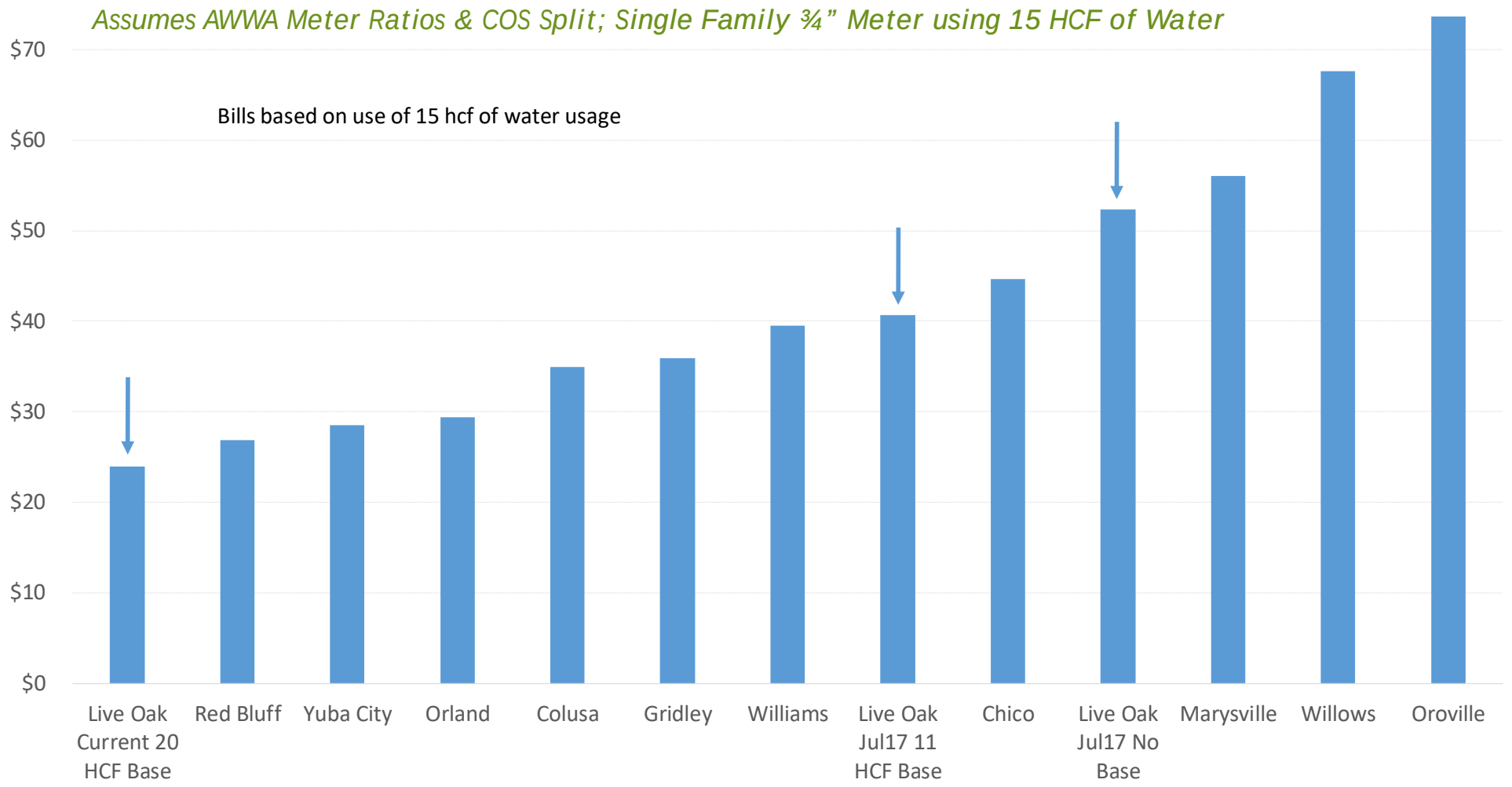
Affordability

- EPA – water bills affordable if <2.5% of MHI
- SWRCB – water bills are affordable in Disadvantaged communities if >1.5% but < 2.0% of MHI

Assumes AWWA Meter Ratios & COS Split

Item	Current Rates	7/1/2017 Rates	7/1/2017 Rates
Monthly Water Bill	*20 HCF Allowance*	*No Allowance*	*11 HCF Allowance*
Monthly Median Household Income (MHI)	$3,529	$3,529	$3,529
Average Monthly Water Bill (Single Family Customer)	$23.97	$52.36	$40.64
Average Monthly Water Bill as Percentage of MHI	**0.7%**	**1.5%**	**1.2%**

Water Bill Comparison Single Family



WATER CONNECTION FEE

Water Connection Fee Methodology

- Total Costs: $4.5 Million
- EDUs Served: 1,279
- Changed to match impact fee schedules by land use (per unit for residential or per building square foot for non-residential)
- Fee is calculated using 2016 construction costs; therefore it should be increased each year using an inflator such as the Engineering News Record Construction Cost Index March to March increase

Calculated Water Connection Fees

Current Connection Fees

By Meter Size

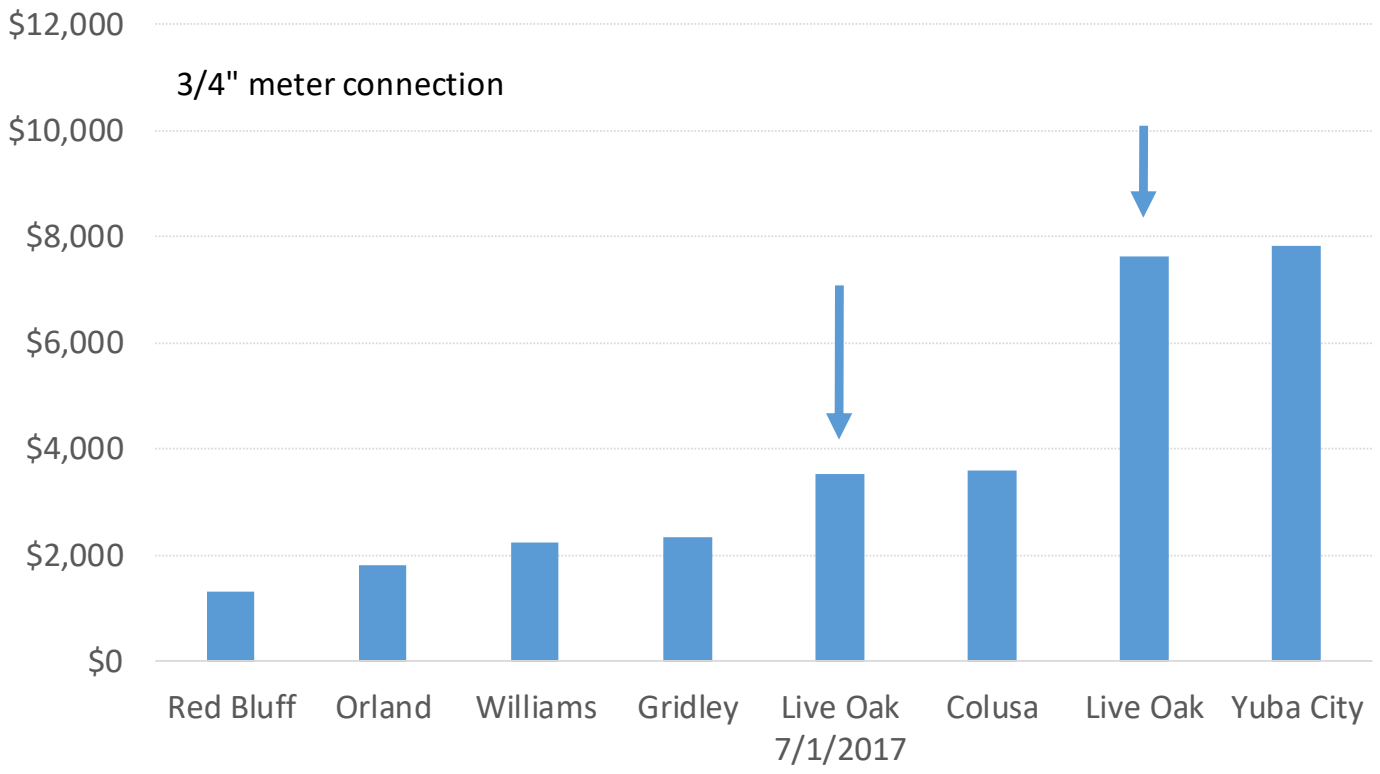
¾" or less - $7,635

Item	EDU Factors	Fee per EDU
FEE PER EDU [1]		**$3,518**
LAND USE		
Residential	*Per Unit*	***Per Unit***
Single Family	1.00	**$3,518**
Duplex (per unit)	0.80	**$2,797**
Multi Family (per unit)	0.60	**$2,110**
Non-Residential	*Per 1,000 sqft*	***Per 1,000 sqft***
Office	0.4258	**$1,498**
Commercial	0.5109	**$1,798**
Industrial	0.3193	**$1,123**
Warehouse	0.3193	**$1,123**

Source: HEC.

[1] The fee would be increased each year by an automatic inflator such as the ENR CCI March to March increase.

Connection Fee Comparison



Annual Water Production -2016					2015	2014	2013
Year-Month	Booster Puming Station	Well 3	Well 4	Combined Total	Combined Total	Combined Total	Combined Total
14-Jan	7.94	0.00	9.70	17.64	19.30	24.31	20.61
14-Feb	7.68	1.19	9.19	18.06	18.08	20.43	20.51
14-Mar	6.83	4.95	7.21	18.99	25.67	24.48	29.34
14-Apr	13.77	6.00	7.97	27.74	28.64	31.20	34.44
14-May	19.01	7.56	8.05	34.62	34.38	45.11	46.86
14-Jun	23.08	10.20	8.91	42.19	36.66	53.02	53.53
14-Jul	21.91	14.18	12.94	49.03	38.34	54.51	56.22
14-Aug	31.49	10.86	6.20	48.55	39.01	50.47	54.26
14-Sep	23.94	8.63	10.63	43.20	34.43	40.29	45.50
14-Oct	8.46	9.27	11.81	29.54	31.70	31.88	37.39
14-Nov				0.00	21.86	21.57	28.43
14-Dec				0.00	19.57	18.79	24.02
Total Per Site	164.11	72.84	92.61	329.56			
Grand Total MG				329.56	347.64	416.06	451.11