



**SPECIAL  
BOARD OF DIRECTORS  
SAN LORENZO VALLEY WATER DISTRICT  
AGENDA  
May 1, 2017**

**MISSION STATEMENT:** Our Mission is to provide our customers and future generations with reliable, safe and high quality water at an equitable price; to create and maintain outstanding service and community relations; to manage and protect the environmental health of the aquifers and watersheds; and to ensure the fiscal vitality of the San Lorenzo Valley Water District.

Notice is hereby given that a special meeting of the Board of Directors of the San Lorenzo Valley Water District will be held on **Monday, May 1, 2017 at 6:00 p.m., Highlands Park Senior Center, 8500 CA-9, Ben Lomond, California 95005.**

*In compliance with the requirements of Title II of the American Disabilities Act of 1990, the San Lorenzo Valley Water District requests that any person in need of any type of special equipment, assistance or accommodation(s) in order to communicate at the District's Public Meeting can contact the District Secretary's Office at (831) 430-4636 a minimum of 72 hours prior to the scheduled meeting.*

*Agenda documents, including materials related to an item on this agenda submitted to the Board of Directors after distribution of the agenda packet, are available for public inspection and may be reviewed at the office of the District Secretary, 13060 Highway 9, Boulder Creek, CA 95006 during normal business hours. Such documents are also available on the District website at [www.slvwd.com](http://www.slvwd.com) subject to staff's ability to post the documents before the meeting.*

1. Convene Meeting/Roll Call

2. Additions and Deletions to Agenda:

*Additions to the Agenda, if any, may only be made in accordance with California Government Code Section 54954.2 (Ralph M. Brown Act) which includes, but is not limited to, additions for which the need to take action is declared to have arisen after the agenda was posted, as determined by a two-thirds vote of the Board of Directors (or if less than two-thirds of the members are present, a unanimous vote of those members present).*

3. Oral Communications:

*This portion of the agenda is reserved for Oral Communications by the public for items which are not on the Agenda. Please understand that California law (The Brown Act) limits what the Board can do regarding issues raised during Oral Communication. No action or discussion may occur on issues outside of those already listed on today's agenda. Any person may address the Board of Directors at this time, on any subject that lies within the jurisdiction of the District. Normally, presentations must not exceed three (3) minutes in length, and individuals may only speak once during Oral Communications. Any Director may request that the matter be placed on a future agenda or staff may be directed to provide a brief response.*

4. Unfinished Business:

*Members of the public will be given the opportunity to address each scheduled item prior to Board action. The Chairperson of the Board may establish a time limit for members of the public to address the Board on agenda.*

a. SAN LORENZO VALLEY WATER DISTRICT RATE STUDY-PRESENTED BY NBS

Discussion by the Board relative to the SLVWD rate study.

- (1) Review of Capacity Charges
- (2) Review of Sewer Rates
- (3) Discussion of Water Rate Design Scenarios

6. Adjournment

**Certification of Posting**

I hereby certify that on April 27, 2017 I posted a copy of the foregoing agenda in the outside display case at the District Office, 13060 Highway 9, Boulder Creek, California, said time being at least 24 hours in advance of the meeting of the Board of Directors of the San Lorenzo Valley Water District (Government Code Section 54954.2).

Executed at Boulder Creek, California on April 27, 2017

\_\_\_\_\_  
Holly B. Morrison, Dist. Secretary  
San Lorenzo Valley Water Dist.

A high-speed photograph of water being poured from a glass, creating a dynamic splash with many bubbles. The background is a mix of white, light blue, and dark blue, with a green vertical bar on the right side.

# San Lorenzo Valley Water District

## Rate Design Study

*Public Workshop*

*May 1, 2017*

*Presented by*

**Greg Clumpner, Director, NBS**

**Carmen Narayanan, Consultant, NBS**

# Overview & Meeting Objectives

- **Recap of Rate Study Tasks**
- **Sewer Rates**
  - ✓ Proposed Rates and Bill Comparisons
- **Water Connection Fees**
- **Water Rate Design Alternatives**
  - ✓ Recap of Cost-of-Service Analysis
  - ✓ Overview of Rate Design Alternatives
  - ✓ Examples of 1-Tier vs. 2-Tier Monthly Bills
- **Next Steps**

# Rate Study Tasks & Methodology

## Key Components in a Rate Study:

### 1 FINANCIAL PLAN / REVENUE REQUIREMENTS

Step 1: Financial Plan/  
Revenue Requirements -  
Compares current sources  
and uses of funds and  
determines the revenue  
needed from rates and  
projected rate adjustments.

### 2 COST-OF-SERVICE ANALYSIS

Step 2: Cost-of-Service  
Analysis - Allocates  
revenue requirements to the  
customer classes in a "fair  
and equitable" manner that  
complies with Prop 218.

### 3 RATE DESIGN

Step 3: Rate Design -  
Considers what rate  
structure alternatives will  
best meet the District's  
need to collect rate revenue  
from each customer class.

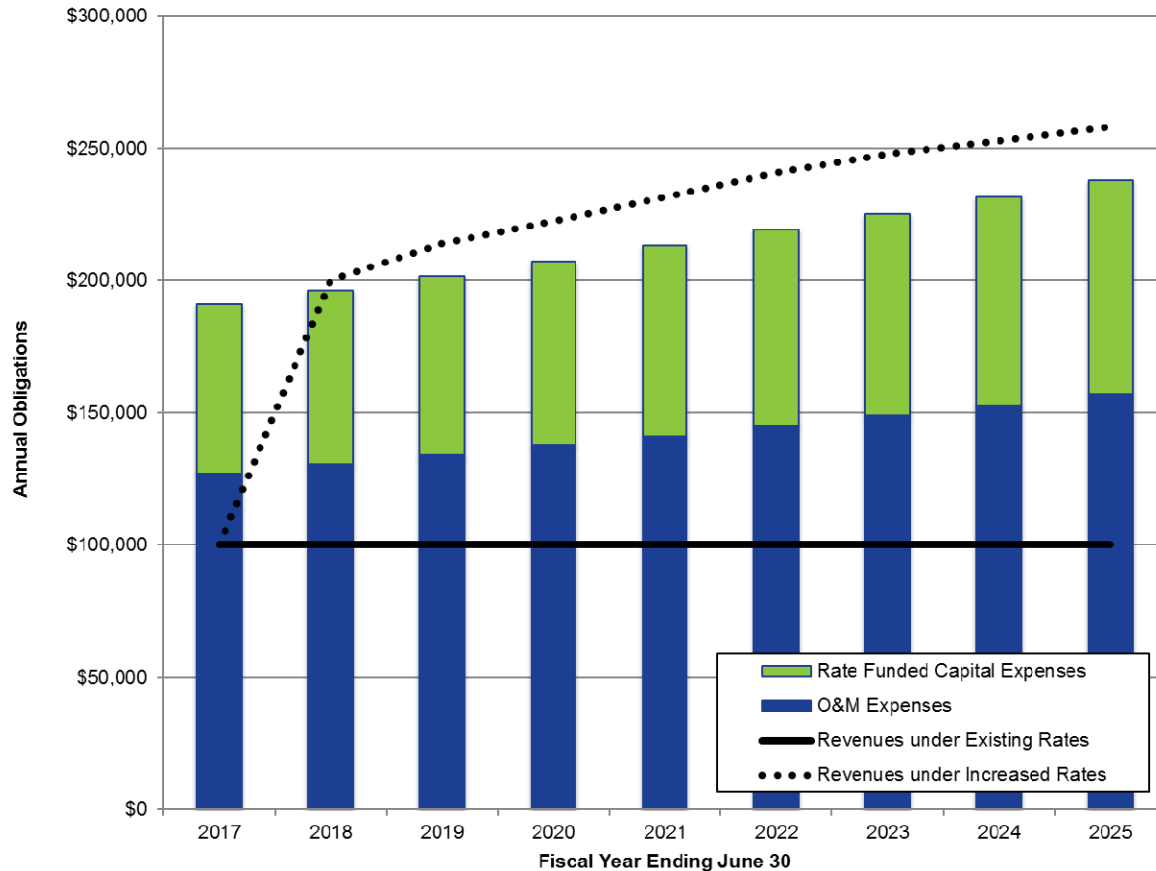
**Covered in Cost of Service Study  
(adopted January 2017)**

**Focus of Rate  
Design Study**

# Sewer Rates

# Sewer Financial Plan

**Wastewater Cost Requirements vs. Revenue Under Existing and Increased Rates**



## Increase Rates Annually to:

1. Meet Revenue Requirements
2. Fund Capital R&R and Improvement
3. Build & Maintain Appropriate Reserve Funds

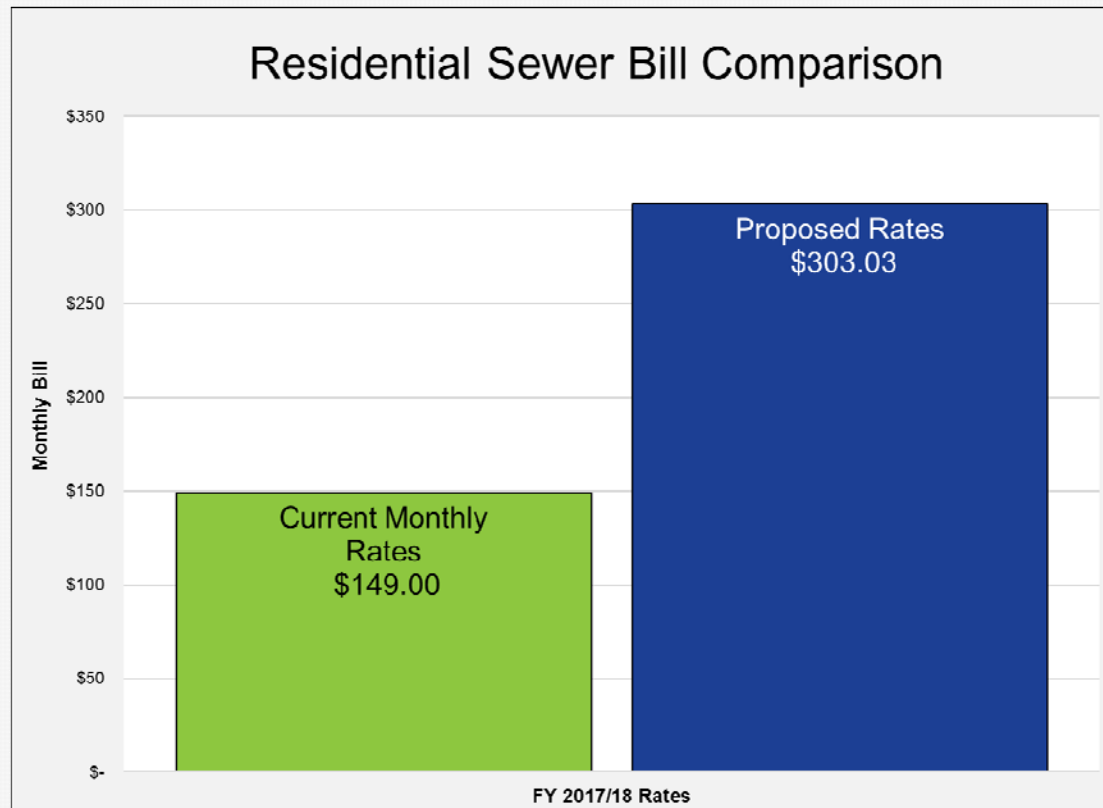
# Proposed Sewer Rates

Sewer Rate Schedule	Current Rates	Proposed Rates				
		FY 2017/18	FY 2018/19	FY 2019/20	FY 2020/21	FY 2021/22
<i>Projected Increase in Rate Revenue per Financial Plan:</i>		100.00%	7.00%	4.00%	4.00%	4.00%
<b>Monthly Fixed Service Charges:</b> All Customers	\$149.00	<b>\$303.03</b>	\$324.24	\$337.21	\$350.70	\$364.73

**Note: Current Rates generate about \$98,000 in annual revenue.**

**Budgeted revenues are equal to \$100,000. To generate this level of revenue, current rates would be \$151.50.**

**Revenue Requirements are equal to \$200,000.**





# Sewer Rate Study Recommendations

- 1. Recommend Moving Forward with Rate Adjustments, leading up to the Prop 218 Process.**
- 2. Adopt Recommended Rate Adjustments at a Future Board Meeting:**
  - Increases will maintain positive financial position and ensure a sufficient and stable funding source.
  - Demonstrate the fairness and equity required by Prop 218.

# Water Connection Fees

# Overview of Connection Fee Methodology

AWWA Manual M1\* establishes guidelines for three approaches for connection fees:

1. **Buy-In Method**: based on the value of the existing system's capacity.
2. **Incremental Cost Method**: based on the value or cost to expand the existing system's capacity.
3. **Combined Approach**: based on a blended value of existing and expanded system capacity.
4. **Connection Fees are Based on a Simple Calculation:**  
$$\frac{\text{Asset Replacement Costs less Depreciation}}{\text{Projected Number of New EDU's}} = \$/\text{EDU}$$

\*Principles of Water Rates, Fees, and Charges, Chapter VII.2 (7th ed.). (2017). Denver, CO: American Water Works Association.

# Water Connection Fee Findings

- Planning Period through FY 2035/36
- Fees calculated using the “combined” approach.

Demographic Statistics	Existing Total	Projected Service Total	Allocation Factors		Cumulative Change	
			Existing Services	Future Services	Number of Units	% Increase
SFR Meter Equivalent Units	8,055	10,082	79.9%	20.1%	2,027	25.2%

System Asset Values Allocated to Future Development	
<b>Projected Increase In Connections to the Water System</b>	<b>Customers</b>
Increase in 5/8-inch Equivalent Meters (1)	<b>2,027</b>
<b>System Asset Values Allocated to Future Development</b>	
<i>System Asset Values Allocated to New Development</i>	
Existing System Buy-In (2)	\$ 10,474,476
Future System Expansion (3)	<u>11,446,715</u>
Total: Existing & Future System Costs	\$ 21,921,191
<i>Adjustments to Cost Basis:</i>	
Cash Reserves	\$ 521,778
Outstanding Long-Term Debt (Principal) Allocated to Future Users	<u>(1,003,901)</u>
Total: Adjustments to Cost Basis	\$ (482,123)
<b>Total Adjusted Cost Basis for New Development</b>	<b>\$ 21,439,068</b>
<b>Maximum Water Connection Per 5/8 or 3/4-inch meter</b>	<b>\$ 10,577</b>

**New Connection Fee is about Double the Current Fee**

# Connection Fee Recommendations

## 1. Adopt Recommended New Connection Fees:

- New Connection Fees will ensure growth pays its fair share of water system capital costs.
- Demonstrates the fairness and equity required under State Law.

# Water Rate Design Alternatives

# Overview of Rate Design Alternatives

## ■ Rate Design Alternatives:

- ✓ Rate Design will be Based on Financial Plan & Cost-of-Service Results
- ✓ Rate Design Components:
  - % Fixed vs. Variable Revenue?
  - Single-Family: 1-Tier or 2-Tiered Rates?
  - Conservation Rates?
  - Eliminate Volumetric Surcharge (*Assumed to be Removed*)

## ■ Water Bill Comparisons

# Water Rate Design Alternatives

## *% Fixed vs. Variable Charges: Rate Alternatives Adjust Revenue Collected*

Option	Fixed	Variable	Total	Attributes
<i>Current Rates</i> <sup>1</sup>	<i>50%</i>	<i>50%</i>	<i>100%</i>	
Rate Alternative #1	70%	30%	100%	Lower Volumetric Rates
Rate Alternative #2	50%	50%	100%	Reflects Current Rates
Rate Alternative #3	30%	70%	100%	Higher Volumetric Rates

1. Current Rates Variable portion includes drought surcharge revenue, which will be eliminated.

**Alt. #3 Shifts more costs to high users.**

*Note: If current fixed charge remains the same (\$34.00/month for a 5/8-inch meter), Rate Design would equal approximately 37% Fixed / 63% Variable.*



# Water Rate Design Alternatives (cont.)

## Single-Family Vol. Rates: 1-Tier or 2-Tiered Rates?

<i>Variable Rate Options</i>		
Customer Class	Uniform	Tiered
Single Family Residential	✓	✓
Non-Residential	✓	

?

- Current SFR Rates are 4-Tiers
- Should new SFR Rates will be 1-Tier? 2-Tiers?
  - Single tier rates simple to administer, fair and equitable, and easy to defend.
  - Two Tiers promote water conservation better but are more difficult to defend (Prop 218-wise).
- Assumption: Eliminate Drought Surcharge of \$1/ccf

# Water Rate Design Alternatives *(cont.)*

## Conservation *(or Rate Stabilization)* Rates:

- **Revenue Stabilization** – These rates are intended to stabilize District’s variable rate revenues that may be effected by conservation or unusual weather patterns.
- **Implementation** – Once adopted through Prop 218, they can be implemented by Board of Directors as needed (e.g., if volumetric-rate revenue drops by 10% or more for two months, new volumetric rate could be implemented).
- **Reversible** – When volumetric revenue losses subside, use of conservation rates would end (go back to approved lower volumetric rates).
- **Public Notification** – District will provide adequate notice prior to Conservation Rates being implemented (or removed).

# Water Rate Design Alternatives (cont.)

## Rules for Conservation/Rate Stabilization Rates:

- **Implementation Triggers** – Conservation Rates will be developed to respond to the following “triggers”:
  - ✓ Two consecutive months of volumetric revenue losses of 10% or more (i.e., below the expected revenue level)
  - ✓ Higher volumetric rates would be implemented in increments of 5% (beginning with 10% and depending on the level of revenue losses)
  - ✓ Levels of Volumetric Rate Increases:

10%	15%	20%	25%	30%
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# **Water Bill Comparisons: Single- vs. Two-Tiers**

*(These are Generic Examples,  
Not Actual \$'s)*

# Water Rate Bill Comparisons (*generic*)

## Generic Rate Design Alternatives:

### General Assumptions for a Single-Tier Example:

#### Assumptions

- Average Residential Bill = \$100/Month
- Uniform (Single-) Tier Volumetric Rate
- Average SFR Use is 5 hcf/mo.
- *NOT Representative of Actual Costs*

# Water Rate Alternatives (cont.)

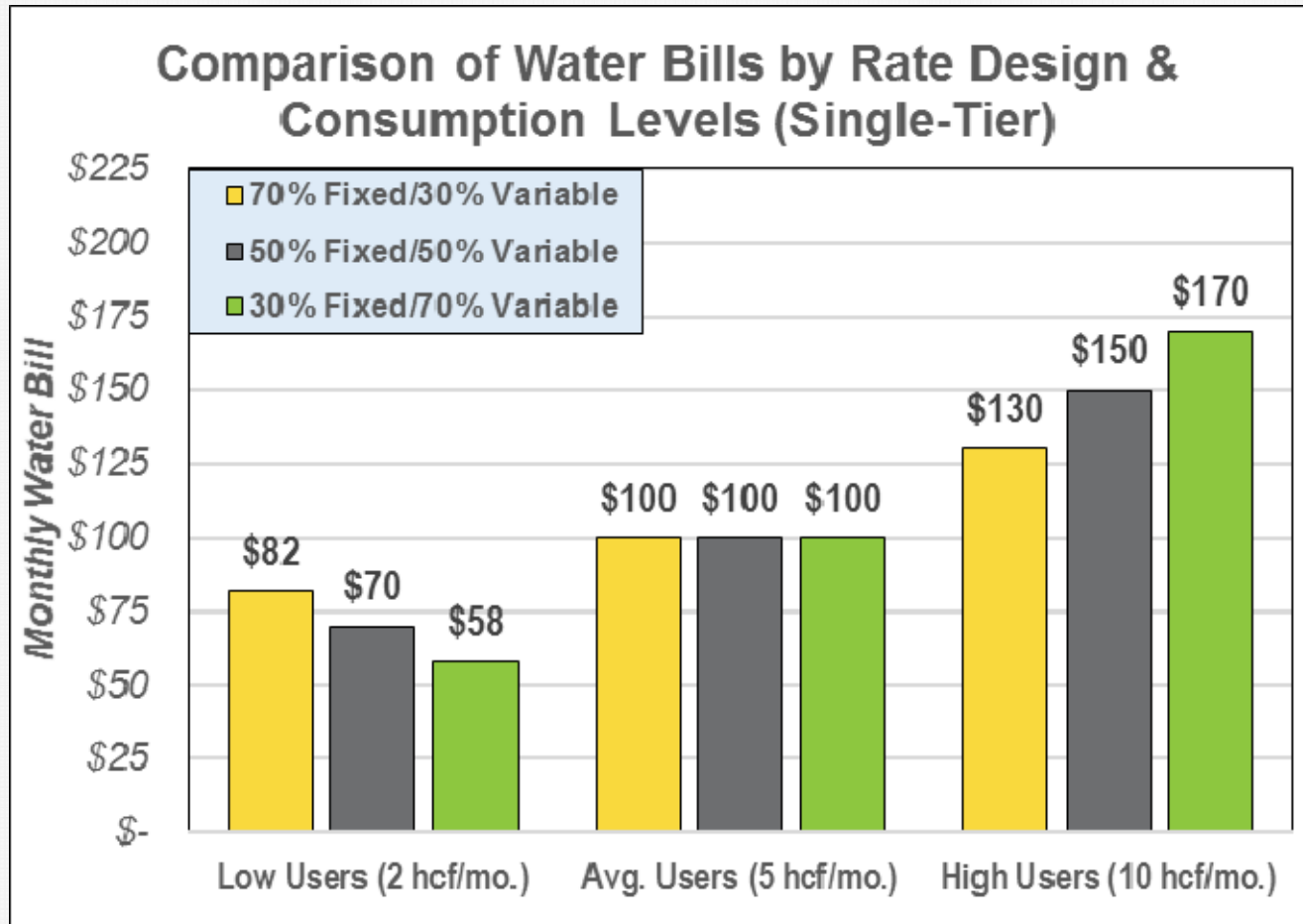
## Generic Rate Results (Single-Tier Alternatives):

**Customer  
Bill Impacts**

	Rate Design Alternatives		
	Alt. #1	Alt. #2	Alt. #3
<b>Allocation %:</b>	<b>70% Fixed/ 30% Variable</b>	<b>50% Fixed/ 50% Variable</b>	<b>30% Fixed/ 70% Variable</b>
<i>Fixed Charge:</i>	\$70.00	\$50.00	\$30.00
<i>Vol. Rate:</i>	\$6.00	\$10.00	\$14.00
<b>Low User (2 hcf/mo)</b>			
Mo. Fixed	\$70.00	\$50.00	\$30.00
Mo. Vol.	<u>\$12.00</u>	<u>\$20.00</u>	<u>\$28.00</u>
<b>Total Mo. Bill</b>	<b>\$82.00</b>	<b>\$70.00</b>	<b>\$58.00</b>
<b>Average User (5 hcf/mo)</b>			
Mo. Fixed	\$70.00	\$50.00	\$30.00
Mo. Vol.	<u>\$30.00</u>	<u>\$50.00</u>	<u>\$70.00</u>
<b>Total Mo. Bill</b>	<b>\$100.00</b>	<b>\$100.00</b>	<b>\$100.00</b>
<b>High User (10 hcf/mo)</b>			
Mo. Fixed	\$70.00	\$50.00	\$30.00
Mo. Vol.	<u>\$60.00</u>	<u>\$100.00</u>	<u>\$140.00</u>
<b>Total Mo. Bill</b>	<b>\$130.00</b>	<b>\$150.00</b>	<b>\$170.00</b>

# Sample Water Bill Comparisons

## Generic Rate Results (Single-Tier):



# Water Rate Bill Comparisons (*generic*)

## Generic Rate Design Alternatives:

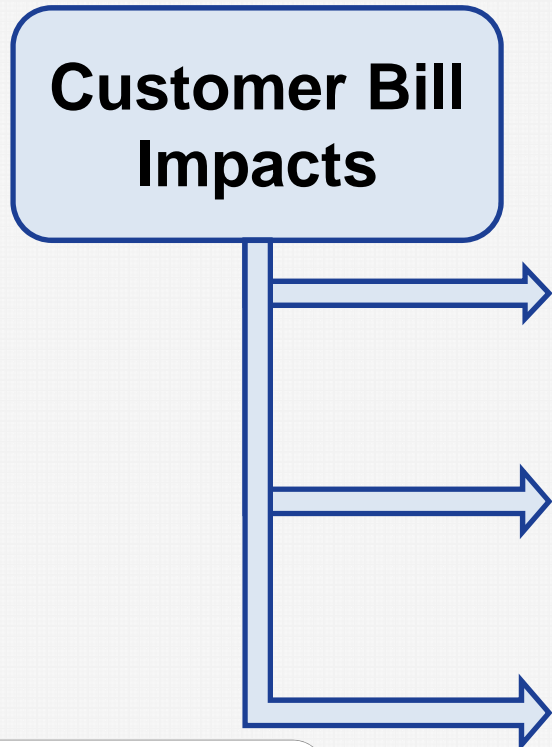
### General Assumptions for a Two-Tier Example:

Assumptions	
●	<i>Average Residential Bill = \$100/Month</i>
●	<b>2-Tier Volumetric Rates</b>
●	<b>50% Increase from Tier 1 to Tier 2</b>
●	<i>Average SFR Use is 5 hcf/mo.</i>
●	<b>Tier 2 Applies to &gt; 5 hcf</b>
●	<i>NOT Representative of Actual Costs</i>



# Water Rate Alternatives (cont.)

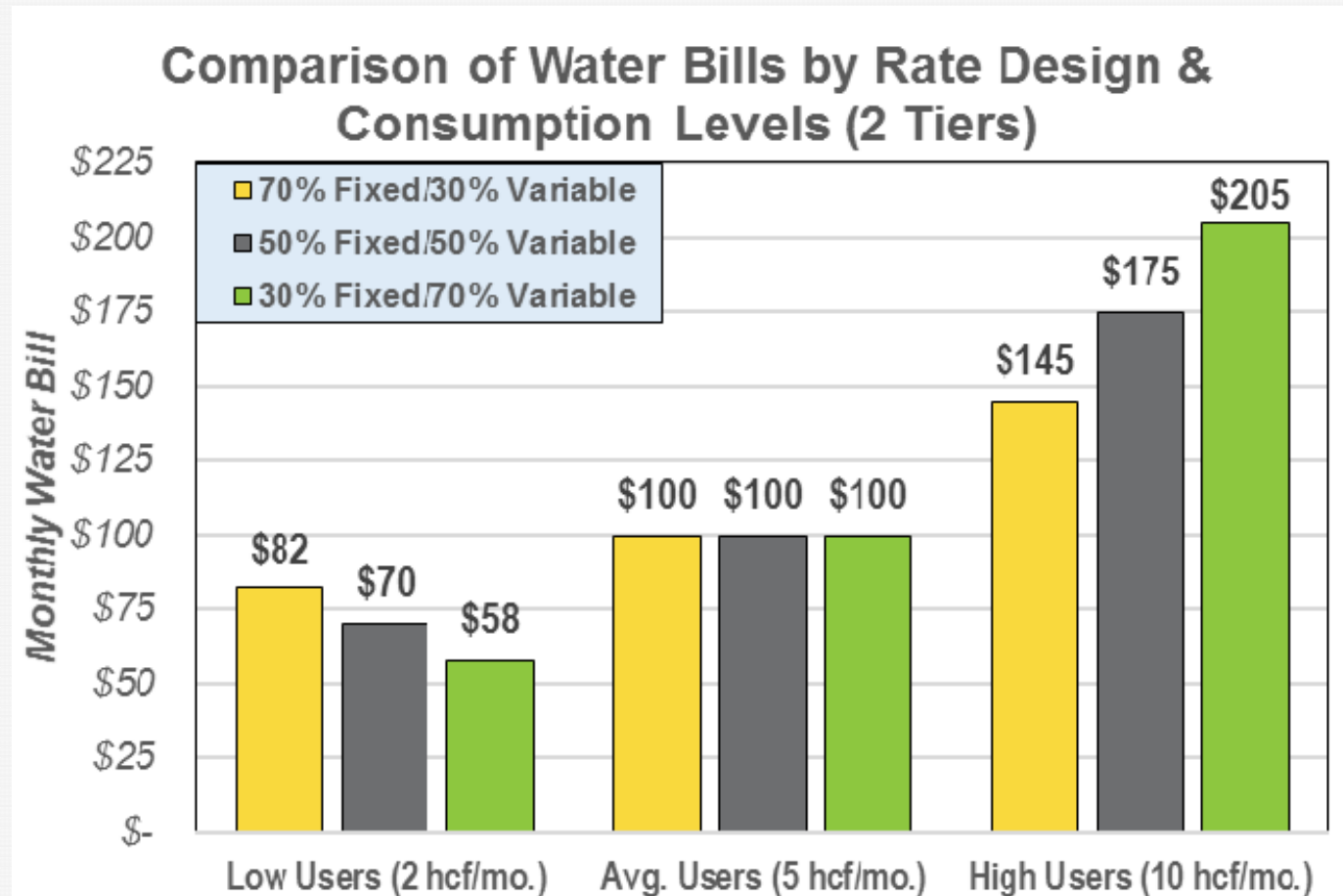
## Generic Rate Results (Two-Tier Alternatives):



	Rate Design Alternatives		
	Alt. #1	Alt. #2	Alt. #3
<b>Allocation %:</b>	<b>70% Fixed/ 30% Variable</b>	<b>50% Fixed/ 50% Variable</b>	<b>30% Fixed/ 70% Variable</b>
<i>Fixed Charge:</i>	\$70.00	\$50.00	\$30.00
<i>Vol. Rate (Tier 1):</i>	\$6.00	\$10.00	\$14.00
<i>Vol. Rate (Tier 2):</i>	\$9.00	\$15.00	\$21.00
<b>Low User (2 hcf/mo)</b>			
Mo. Fixed Charge	\$70.00	\$50.00	\$30.00
Tier 1 Charges	\$12.00	\$20.00	\$28.00
Tier 2 Charges	\$0.00	\$0.00	\$0.00
<b>Total Mo. Bill</b>	<b>\$82.00</b>	<b>\$70.00</b>	<b>\$58.00</b>
<b>Average User (5 hcf/mo)</b>			
Mo. Fixed	\$70.00	\$50.00	\$30.00
Tier 1 Charges	\$30.00	\$50.00	\$70.00
Tier 2 Charges	\$0.00	\$0.00	\$0.00
<b>Total Mo. Bill</b>	<b>\$100.00</b>	<b>\$100.00</b>	<b>\$100.00</b>
<b>High User (10 hcf/mo)</b>			
Mo. Fixed	\$70.00	\$50.00	\$30.00
Tier 1 Charges	\$30.00	\$50.00	\$70.00
Tier 2 Charges	\$45.00	\$75.00	\$105.00
<b>Total Mo. Bill</b>	<b>\$145.00</b>	<b>\$175.00</b>	<b>\$205.00</b>

# Sample Water Bill Comparisons

## Generic Rate Results (Two-Tiers):



# Water Rate Design Summary:

## *Observations of Rate Design Alternatives:*

### **1. Higher % Fixed Charges:**

- Provide Less Conservation Incentives
- Spread Higher Share of System Costs to All Users (Regardless of Consumption Levels)
- Provide Greater Revenue Stability

### **2. Higher % Volumetric Charges:**

- Shift Costs to Those Using More Water
- Benefits “Part-Time” Residents (*w/ Lower Fixed Rates*)
- Subjects District to Drought-Risks/Revenue Instability

# Next Steps

- 1. Board Needs to Engage the Bear Creek Estates Community on the Rate Study.**
- 2. Board Needs to Accept/Approve Recommended Sewer Rates & Initiate Prop 218 Process.**
- 3. Board Needs to Accept/Approve Recommended Water Connection Fees.**
- 4. District will Conduct at Least Two More Workshops.**
- 5. Board will then Consider Whether to Proceed with Prop 218 Noticing/Approval for Water Rates.**

# QUESTIONS and COMMENTS

