



# Sausalito-Marin City Sanitary District

*Directors*  
Raymond Gergus, *President*  
Bill Ring, *Vice President*  
Ann Arnott  
Don Beers  
Dan Rheiner

**RATE STRUCTURE REVIEW  
Special Board Meeting**

**January 30, 2013**



# *Our Program For Today*

- Present the results of the District's Sewer Rate Structure Study
- Receive public input and answer questions
- Report on the infrastructure challenges facing the District and our ten-year plan to upgrade the wastewater treatment plant and sewer pipelines.
- Explain the District's expense, revenue and reserve requirements
- Discuss the sewer rate structures that were studied
- Selection of the sewer rate structure for consideration

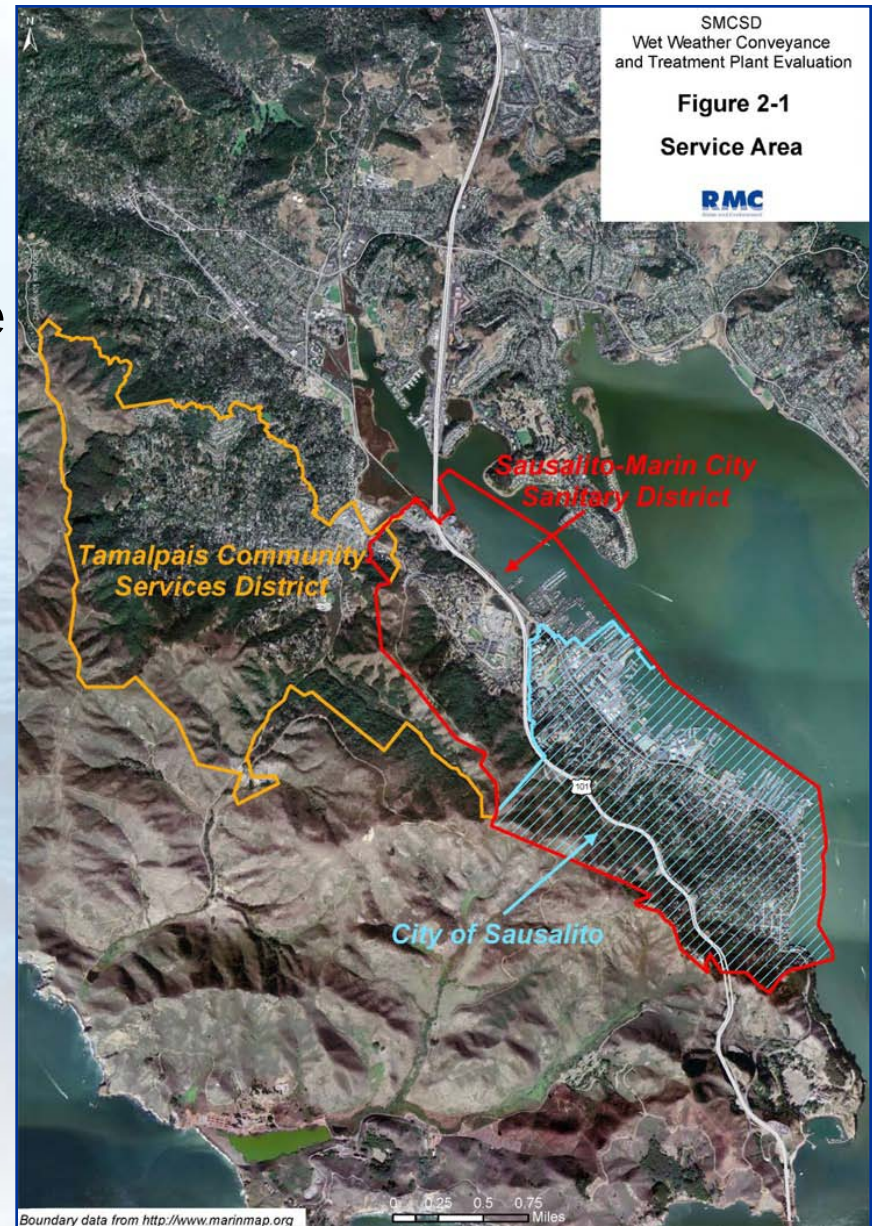
# *District Background*

- Local Residents formed District in 1950's to collect, transport and treat sewage from the City of Sausalito, Marin City & other unincorporated communities,
- Governed by a 5 member Board of Directors elected by the community
- Employ 12 full time employees, providing around-the-clock service



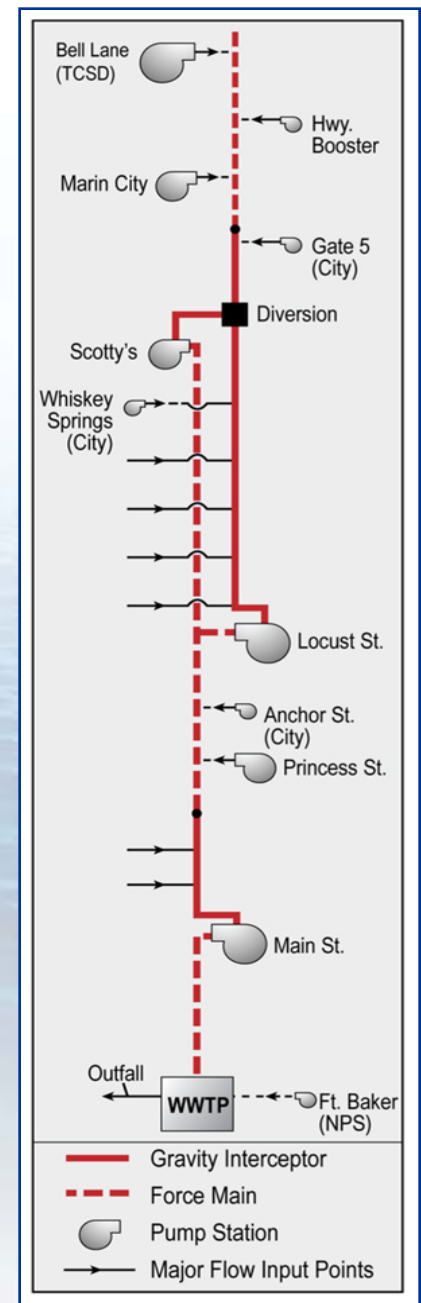
# Our Service Area: Shared Challenges

- City of Sausalito
  - Owns 23 miles of sewers within the City Boundary
- TCSD (served under contract)
  - Owns 27 miles of sewers
- SMCSD - Marin City
  - SMCSD Owns 6 miles of sewers
- NPS – Marin Headlands
  - NPS Owns 15 miles of sewer
- ~10,000 Property Owners
  - Own about 70 miles of sewer laterals



# *The Problem: Excessive Storm Water Flows from Collection Systems Overload Conveyance System and Treatment Plant*

- Pump stations
- Pressure pipelines
- Gravity sewers
- Constructed originally in the 1950s with upgrades from 1980's to present
- For example: During storms wastewater flow can increase from 2 to over 10 MGD



# *USEPA and Regional Water Board Regulatory Action*

- SMCSD was issued Administrative Compliance Orders by USEPA in 2007 and 2008 requiring:
  - Immediate elimination of Sanitary Sewer Overflows and treatment Plant bypasses
  - Collection System Maintenance and Management
  - Collection System Assessment
  - Capacity Assurance
  - Treatment Plant and collections Infrastructure renewal
- Required capital improvements are underway and a four year sewer rate plan was approved for funding - \$40 million investment required

## *Study Team*

- HF&H Consultants, was retained by the District to provide expert advise on the design of the new Rate Structure.
- Kent Alm, District Counsel, is the District's legal adviser on sewer rates and other matters.
- The Board assigned Directors Don Beers and Bill Ring to provide policy guidance to the study team.
- District staff provides input and technical assistance for the study team and Board of Directors.

*Part 2.*  
*Sewer Rate Structure Design*



# *Sewer Rates Background*

- For 60 years, SMCSD has charged a fixed sewer rate for all residential customers. (Single family, multiple family and floating homes) based on the cost to operate, maintain, and renew the wastewater system:
- July 2010 - Sewer Charge Ordinance adopted with 4 year rate plan
  - Current sewer rate for residential dwelling units is \$647 per year. Year 3 of adopted four year phased rate increase plan.
  - The scheduled 2013/14 sewer rate for residential dwelling units is \$725 per year. 4<sup>th</sup> and final year of adopted rate plan

# *Rates Under Study*

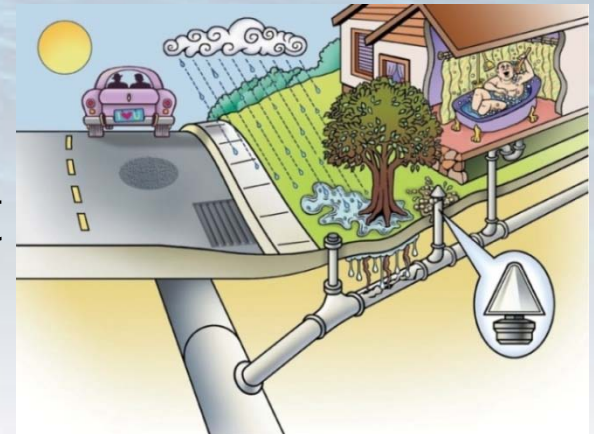
- Included in study
  - SMCSD's sewer service charge for transmission, treatment, and disposal of residential wastewater.
  - Previously adopted rate increases for FY 2013-14 will be reviewed by SMCSD Board prior to implementation.
- Excluded from study (not SMCSD's responsibility)
  - City of Sausalito collection system charge
  - TCSD collection system charge
  - National Park Service collection and treatment charges

# *What are the overall study objectives?*

- Respond to customer inquiries
  - Why charge all residential customers the same amount?
- Identify potential sewer rate structure alternatives and refinements
- Understand the impacts of changing the current structure
  - Customer bill impacts
  - District financial impacts
  - District implementation requirements
- Maintain financial stability and revenue neutrality

# *Background - Rate Structure Policy Guidance*

- Rate Structure Design must ensure a stable flow of revenue.
- Rate Structure based on Customer Class wastewater flow and loading, not an individual customer flow and loading.
- Sewer Rate Flow components include estimates of both domestic water usage and inflow and infiltration for each user class.
- For single family residences, the domestic flow return rate is estimated at 87% to account for landscape irrigation & other non-sewered discharge.



# Fixed and Variable Expenses

- Fixed Costs: do not vary with changes in flow or number of customers
- Variable Costs: vary with changes in flow or number of customers
- The majority of the District's costs are fixed and do not vary with flow

	FY 13-14 Budget		
	Fixed	Variable	Total
O&M Expenses			
Power	\$ -	\$ 236,900	\$ 236,900
Chemicals	\$ -	\$ 229,175	\$ 229,175
Personnel	\$ 2,082,430	\$ -	\$ 2,082,430
Supplies	\$ 53,560	\$ -	\$ 53,560
Repairs & Maintenance	\$ 513,105	\$ -	\$ 513,105
Other O&M Expenses	\$ 319,805	\$ -	\$ 319,805
Administration Expenses	\$ 183,937	\$ -	\$ 183,937
Debt Service	\$ 371,535	\$ -	\$ 371,535
Contribution to Cap. Program	\$ 1,304,094	\$ 192,352	\$ 1,496,446
Total Expenses	\$ 4,828,466	\$ 658,427	\$ 5,486,893
	88%	12%	100%

# Revenue From Current Fixed Residential Rate Structure

	EDUs				
	Reported to County	12-13 Adopted Rate	12-13 Rate Revenue	13-14 Adopted Rate	13-14 Rate Revenue
<u>Residential</u>					
Single family	1,423	\$647	\$ 920,363	\$725	\$ 1,031,319
Floating Homes	397	\$647	257,144	\$725	288,144
Multi family	<u>3,685</u>	\$647	<u>2,384,310</u>	\$725	<u>2,671,754</u>
Total Residential	5,505		3,561,817		3,991,217

# *Reserve Fund Policy to Maintain Financial Stability*

Operating Reserve	Capital Reserve	Renewal and Replacement Reserve	Disaster Recovery Reserve (Starting FY 2015/16)
Provide capital for operating expenses cash flow	Provide capital for major capital projects in 10 year capital program. Inc	Provide capital for renewal and replacement of equipment and assets	Provide capital finding for emergency recovery until long-range funding is arranged
9 months of operating capital – 2019/20 Target level: \$2.8 million	Average annual 10 year capital program expenses. Includes loan financing – 2019/20 Target level: \$2.4 Million	Two years of annual replacement costs – Target Level: \$1.3 million	Target level \$1.5 million

- FY2019/20 Total Combined Reserve Target Amount: \$8.0 million
- Maintain adequate reserves for capital project loan requirements
- May be utilized for sewer rate stabilization

# *Residential Indoor Water Use*

Avg. Single Family Size <sup>1</sup>	2.39
Indoor Water use per Capita per Day <sup>2,3</sup>	59 gpd
Indoor Water use per Avg. Family per Day	141 gpd
Single Family Average Winter Flow (MMWD)	163 gpd
Estimated Unsewered Water Use (e.g. irrigation)	13%
Return Rate to Sewer	87%

<sup>1</sup> Source: 2010 Bay Area Census, City of Sausalito

<sup>2</sup> Source: US Water Resources Council, Second National Water Assessment, The Nation's Water Resources 1975-2000

<sup>3</sup> Compares closely with with the average value shown in Amy Vickers' "Handbook of Water Use and Conservation"



# Residential Wastewater Flow Factors (FY 11-12 winter flow, annualized)

	MMWD Annual Total (GPD)	Return Rate (%)	Annual Total (GPD) - Adjusted	EDUs Reported to County	GPD per EDU	Factors based on GPD per EDU	Factored EDUs
<u>Residential</u>							
Single family	232,187	87%	200,863	1,423	141	1.00	1,423
Floating Homes	22,245	100%	22,245	397	56	0.40	158
Multi family	397,567	100%	397,567	3,685	108	0.76	2,816
Total Residential	651,999		620,675	5,505			4,396
<u>Non Residential</u>							
Total Non Residential				2,063			2,063
Total				7,568			6,459

Assumes 13% of Single Family winter water use is for irrigation and other non-sewered discharge, such as car washing

(EDU = Equivalent single family dwelling unit)

# *Alternative Rate Structures Were Studied*

- Current rate structure
  - All residential are charged equally for equivalent strength wastewater
  - Non-residential charges increase in proportion to flow and wastewater strength (three classes)
- Objectives for alternative residential rate structures
  - Maintain revenue stability that is needed for best credit rating
  - Improve equity to address residential rate payer concerns
  - Can be implemented within available District resources

# *Sewer Rate Structure Studied But Eliminated - Alternative 1*

- Flow-based rates per individual customer
  - Combination of fixed and flow-based charges per customer
    - Fixed charge per parcel regardless of class
    - Flow charge based on each customer's winter water use
- Disadvantages
  - Technically complex to balance revenue stability and equity
  - Revenue is less stable
  - Requires additional resources for individual customer billing and County tax roll preparation
  - Requires Proposition 218 process

# *Sewer Rate Structure Studied but Eliminated - Alternative 2*

- Flow-based rates per customer class
  - Flow-based EDUs for each residential class
    - Reduces multi-family and floating home charges per EDU based on the flow per EDU for each residential class
    - Increases charge per EDU for single family and commercial customers
- Disadvantages
  - Requires further study of impacts
    - Implementation now creates significant revenue shortfall without Prop 218 process – approx. \$630k/year
  - Requires Prop 218 process

# *Sewer Rate Structure Studied For Potential Implementation - Alternative 3*

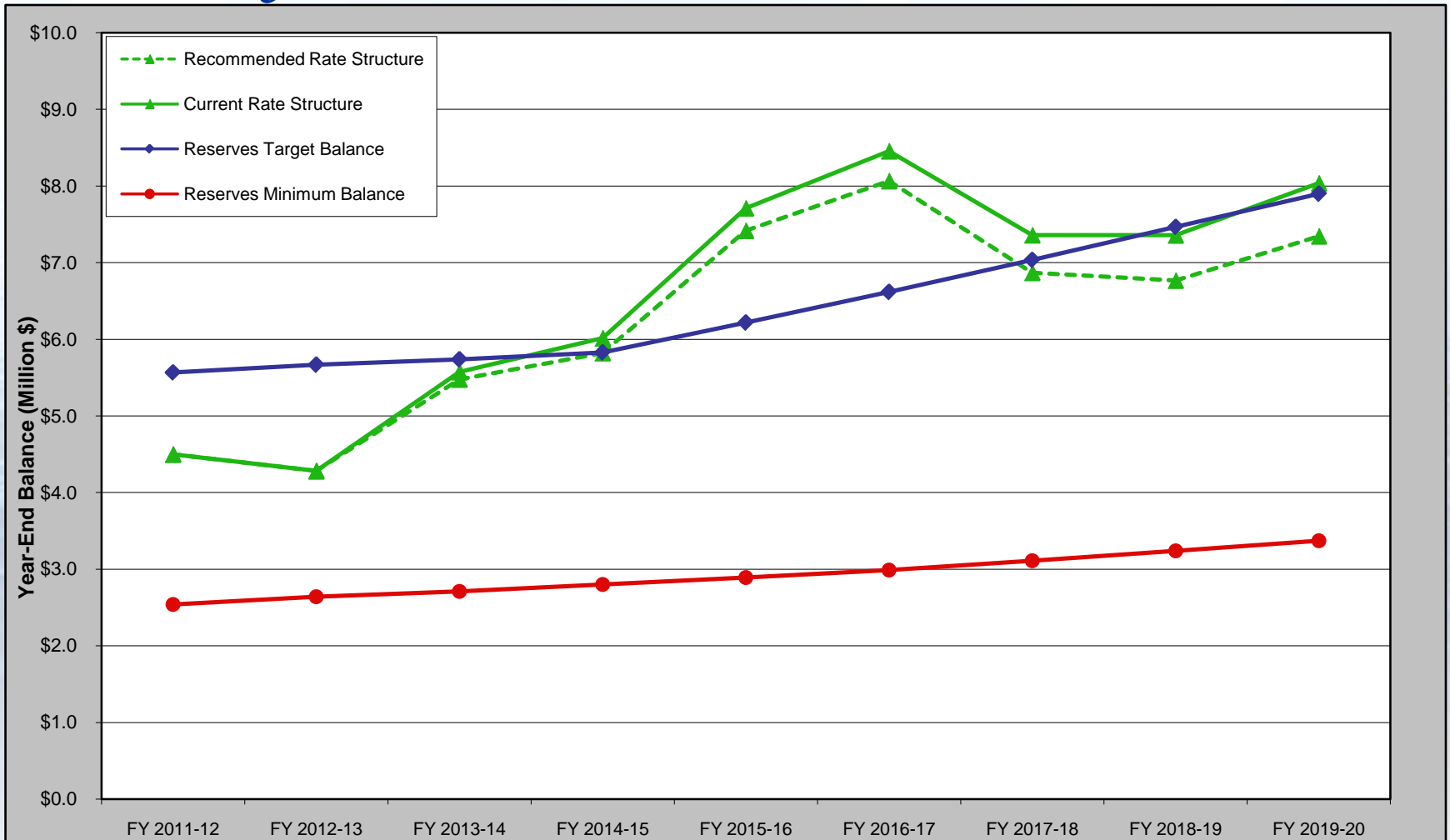
- Fixed and flow-based rates per customer class
  - 88% of revenue from a fixed charge per EDU
  - 12% of revenue from a flow-based charge per class
  - Customers in each residential class have the same sewer rate
- Advantages
  - Revenue stability and equity are linked to flow
    - Stability is maintained and equity is improved
  - Can be implemented this year without Prop 218 process and with manageable fiscal impact
    - Creates \$100,000 in reduced revenue per year
    - May require a Prop 218 process and rate adjustment in next few years

# Fixed Rate vs. Fixed and Flow-Based Rate

	Adopted Rate Revenue (100% Fixed)	RECOMMENDED RATES			13-14 Rate Revenue
		88% Fixed	Variable	Total	
<u>Fixed and Variable Costs</u>					
Revenue Requirement	\$5,486,893	\$4,828,466	\$658,427	\$5,486,893	
EDUs	7568	7,568	n/a	7,568	
Charge per EDU	\$725	\$638	\$87	\$725	
<u>Residential</u>					
Single family	\$1,031,319	\$638	\$87	\$725	\$1,031,319
Floating Homes	288,144	\$638	\$34	\$672	267,272
Multi family	<u>2,671,754</u>	\$638	\$66	\$704	<u>2,596,097</u>
Total Residential	3,991,217				3,894,689
<u>Non Residential</u>					
Total Non Residential	1,495,676				1,495,676
Total	\$5,486,893				\$5,390,365 -\$96,528

SMCSD customers in unincorporated area of the District are calculated with a \$55 per EDU supplemental charge for collection system maintenance and renewal

# Impact on SMCSD Reserves and Financial Stability - Alternative 3



# *Summary of Sewer Rate Structure Options*

- Current fixed rates per customer class (*Adopted*)
  - Previously approved by the rate payers and Board
  - Maintains revenue neutrality - no revenue shortfall to manage
  - Already adopted under Prop 218 – easy to implement
- Fixed and Flow-Based Rates per Customer Class (*Recommended Alternative 3*)
  - Could be implemented in FY 2013-14 without a new Prop 218 process
  - Maintains existing billing method on County property tax roll
  - Revenue reduction of \$100k per year can be managed
  - Provides for a sewer rate flow component



# *Study Team Recommendation and Next Steps*

- **Recommendation**

- Board acceptance of the Sewer Rate Structure Review presentation
- Board selection of the Alternative 3 rate structure option capped at adopted \$725 charge in FY 2013-14
- Direct the study team consider public input and prepare the necessary documentation for Board approval and adoption

- **Next Steps**

- May 2013 Public Special Meeting - review and approval
- June 2013 Regular Board Meeting - Board adoption of FY 2013/14 sewer rates - No Prop 218 notices required
- Charges are added to tax rolls for payment in December