

Wastewater Cost of Service Study and Initiation of Proposition 218 Rate Process

Stan Gryczko

Director – Public Works Utilities & Operations

Adrienne Heinig

Assistant to the Director

August 29, 2023



Background

- **Wastewater Utility is an enterprise fund**
- **Housed in the Public Works Utilities & Operations Dept.**
- **Roughly 24 FTE (including regulatory personnel)**
- **Management of collections system, Plant, NPDES permit**
- **Serves City customers as well as County Service Areas**
- **Rates last updated in 2017 (allocation adjustment)**
- **Rates last raised in December 2014**

Purpose and Goals of Cost of Service Studies

- **Review current and projected costs, existing rate structure**
- **Develop long-term financial plan for O&M, debt, CIP needs**
- **Understand rate revenue required to meet needs**
- **Determine ratepayer share of expenses based on customer class**
- **Recommended rate schedule to equitably recover costs and meet Proposition 218 requirements**
- **Core function of City's Utilities Commission**

Wastewater Utility Enterprise Snapshot FY 2023

- Rate revenue just under \$14M
(total revenue \$16.9M)
- Expenditures between \$17/18M
 - Includes:
 - Annual debt payments of about \$2.1M
 - Capital costs of about \$4.3M



Study Findings

- **Expenses outpacing revenue**
- **Cost of treatment of ammonia not captured in current rates**
- **Wastewater costs more fixed than volumetric, current rates do not reflect that**
- **Highest drivers of cost increases:**
 - **Significant capital improvement costs**
 - **Inflationary pressure on resources**



Current Rate Structure

First Step

- **Customer classes are determined by strength of wastewater. Includes:**
 - **Water Flow (in CCF)**
 - **Biochemical Oxygen Demand (BOD)**
 - **Total Suspended Solids (TSS)**
 - **Ammonia (N)**

Second Step

- **Grouped into classes based on shared strength factors.**
- **Current Classes include:**
 - **Residential Single-family**
 - **Residential Multi-family (10 classes)**
 - **Commercial (7 classes)**
 - **Industrial (some by individual agreement)**

Current Rate Components

Residential

- **Monthly rate includes:**
 - Base rate for all users
 - Per unit rate based on housing type
 - Volumetric rate (\$/CCF) based on average winter water use from Nov-Feb of prior year

Commercial/Industrial

- **Monthly rate includes:**
 - Base rate for all users
 - Volumetric rate (\$/CCF) based on average winter water use from Nov-Feb of prior year

Proposed Rate Adjustments

- Add ammonia to calculation of strength of flow for all customers
- Adjust balance between fixed to volumetric costs
- Condense multi-family & commercial customer classes
- Introduce new rate for larger dormitory-style housing units
- Annual adjustments until May 2028



Adjusting Fixed to Volumetric Ratio of Charges

- **Current rate structure around 50/50 fixed to volumetric**
- **Study found wastewater expenditures are 73% fixed and 27% volumetric**
- **Many agencies rates are structured as 100% fixed**
- **Recommendation to shift to slightly higher fixed (60%) and lower volumetric (40%)**
- **Propose restructuring rates first, annual adjustments off of restructured rates**

Larger “Dormitory Style Housing” Specific Rates

- Focused on developments with 5 or more beds per unit
- Need to capture increased demand with a *per bed* rate, rather than a *per unit* rate
- Calculation based on average number of people per day in single family residential – one bed equals 1/3 of the single family residential use

Larger “Dormitory Style Housing” Specific Rates

Example:

- A multi-family housing development with 57 units, each with five or more beds per unit, totaling 549 beds
- Fixed Rate Calculation (based on proposed rates):
 - $\$8.78/\text{bed} * 549 \text{ beds} = \$4,820.22/\text{month}$
 - For comparison, per unit rate would be $\$18.81 * 57 = \$1,072.17/\text{month}$

Multi-family Customer Class Unit Rate Consolidation

Customer Class	Rate
Single Family	18.26
Condominium	12.46
Duplex	14.22
3 Units	15.02
4 Units	15.32
5-10 Units	12.88
11-19 Units	12.88
20-49 Units	12.88
50 or More Units	12.88
Mobile Home	12.85

Proposed rate adjustments

Customer Class	Rate
Single Family	26.33
Multi Family	18.81

Commercial Customer Class Consolidation

Existing

Class	Type
C-1	Office, Retail, Motels
C-2	Laundry, Dry Cleaning
C-3	Churches, Schools, Medical/Dental, Manufacturing, Storage
C-4	Convalescent Hospital
C-5	Auto Repair / Auto Dealers / Car Wash
C-6	Restaurants / Fast Food
C-7	Industrial

Proposed Change

Strength Category	Example Customer Classes
Low	Banks & Financial Institutions, Barber Shops, Hair Salons, Dry Cleaners, Laundromats, Offices, Offices-Medical/Dental (without surgery)
Standard	Auto Dealers, Beauty Shops, Nail Salons, Pet Groomers, Bars & Taverns, Halls & Lodges, Fire Stations, Hospitals, Hotels, Motels, Vacation Rentals
Medium	Restaurants without dishwasher/garbage disposal, Hotels/Motels with a restaurant, carpet cleaners, Funeral Homes, Tasting Rooms
High	Restaurants with a Dishwasher, Bakeries, Butcher Shops, Markets with food service, dairy products, and specialty foods manufacturing

Utilities Commission Action

- **At their meeting in December, the Utilities Commission recommended staff move forward with the following adjustments to Wastewater Rates for Council approval (all motions included below were approved unanimously):**
 - **To move to wastewater rates that are 60% fixed, 40% volumetric**
 - **To simplify current rate structures for multi-family charges, excluding developments with 5+ bedroom units**
 - **To adopt a separate fixed rate per bed for future dormitory-style multi-family customers with 5 or more beds per unit**
 - **To combine customer classes for commercial customers**

Proposed Rates - Residential

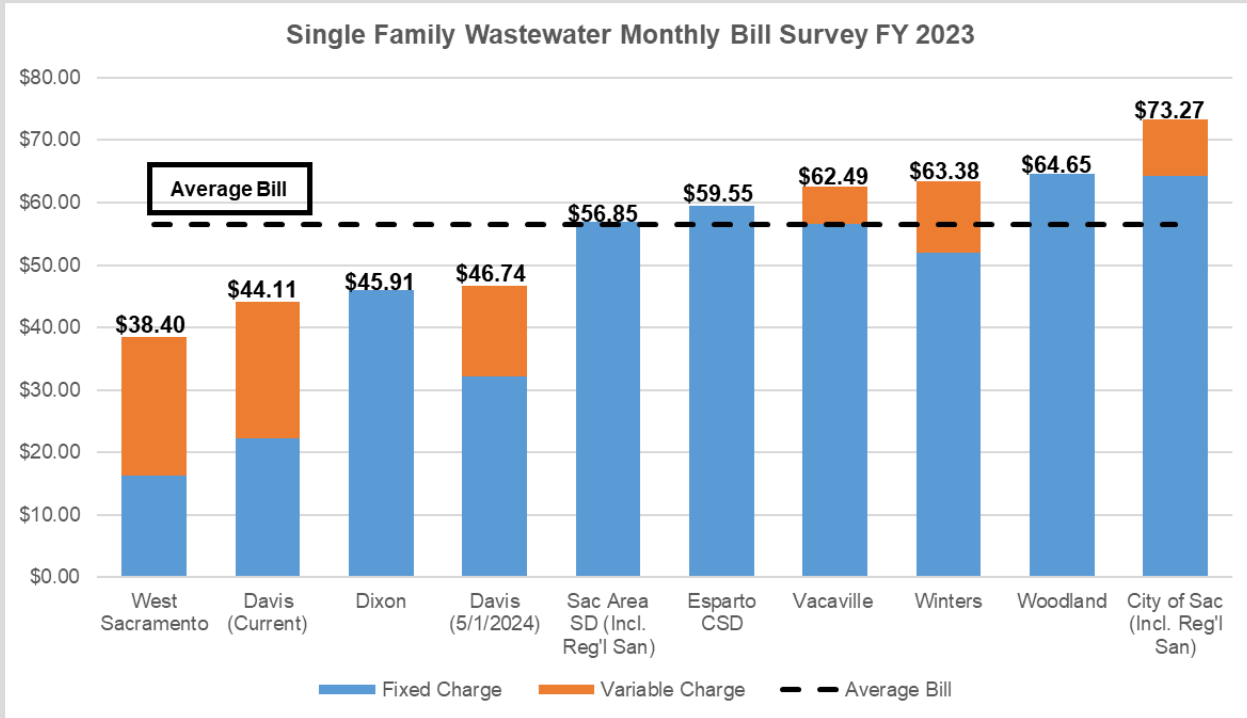
	Current Rates	Fixed/ Volumetric Rate Restructure
Fixed Rates - Monthly \$/account		
All Users	\$3.94	\$4.24
Monthly per Dwelling Unit Rate		
Single Family	\$18.26	\$26.33
Multi Family	varies	\$18.81
Dormitory ** (per bed)	N/A	\$8.78
Volumetric Rate - Per CCF		
Residential	\$3.13	\$1.99

Rate Adjustment By Year				
2024	2025	2026	2027	2028
January 1	May 1	May 1	May 1	May 1
Fixed Rates				
\$4.45	\$4.67	\$4.90	\$5.15	\$5.41
Monthly per Dwelling Unit Rate				
\$27.65	\$29.03	\$30.48	\$32.01	\$33.61
\$19.75	\$20.74	\$21.78	\$22.87	\$24.01
\$9.22	\$9.68	\$10.16	\$10.67	\$11.20
Volumetric Rate				
\$2.09	\$2.19	\$2.30	\$2.42	\$2.54

Proposed Rates - Commercial

	Current Rates	Fixed/ Volumetric Rate Restructure	Rate Adjustment By Year				
			2024	2025	2026	2027	2028
			January 1	May 1	May 1	May 1	May 1
Fixed Rates - Monthly \$/account			Fixed Rates				
Base Rate	\$3.94	\$4.24	\$4.45	\$4.67	\$4.90	\$5.15	\$5.41
Volumetric Rates* - Per CCF			Volumetric Rates				
Low Strength	\$4.67	\$4.48	\$4.71	\$4.94	\$5.19	\$5.45	\$5.72
Standard Strength	\$4.96	\$4.82	\$5.06	\$5.32	\$5.58	\$5.86	\$6.16
Medium Strength	\$5.11	\$5.00	\$5.25	\$5.52	\$5.79	\$6.08	\$6.39
High Strength	\$7.46	\$7.85	\$8.24	\$8.65	\$9.08	\$9.54	\$10.01

Rates of Surrounding Communities & Degree of Impact



RESIDENTIAL INDICATOR FINANCIAL IMPACT	RESIDENTIAL INDICATOR (CPH AS % MHI) ¹²
Low	Less than 1.0 Percent of MHI
Mid-Range	1.0 to 2.0 Percent of MHI
High	Greater than 2.0 Percent of MHI

Proposed Single Family Monthly Bill	\$46.58
Davis Proposed Average Annual Bill	\$557.16
Davis Average Household Income (2022)	\$81,231
% of Davis Household Income of Wastewater Bill	0.69%

Tentative Timeline for Proposition 218 Notice and Rate Implementation

Date	Action
August 29, 2023	City Council approval of initiation of Proposition 218 process
September 7, 2023	Notices sent to property owners (Postmarked by)
November 7, 2023	Public Hearing/Protest Hearing at City Council meeting
January 1, 2024	Rates become effective (if adopted)

Staff Recommendation

- 1. Receive Wastewater Fee Report and presentation from City staff and Bartle Wells Associates on the Wastewater Utility Cost of Service Study and development of rate structure recommendations; and**
- 2. Direct staff to initiate the Proposition 218 process and take necessary steps including the preparation of Notices for City and County Service Area (CSA) customers to be mailed noticing a public hearing to be held on or after November 7, 2023 to consider implementation of rate adjustments by January 1, 2024.**