

ORDINANCE NO. 112

**AN ORDINANCE OF THE BOARD OF DIRECTORS OF THE NAPA SANITATION DISTRICT, AMENDING DISTRICT CODE, TITLE 4, SECTION 4.04 RELATING TO SEWER USE REGULATIONS AND TITLE 5, SECTION 5.01 RELATING TO SEWER SERVICE CHARGES, SECTION 5.02 CAPACITY CHARGES, AND SECTION 5.03 RELATING TO WASTE HAULER FEES**

**WHEREAS**, the Napa Sanitation District (“District”) charges sewer service charges in accordance with the California Health and Safety Code Section 5470, et. seq.; and

**WHEREAS**, Article XIII D of the California Constitution (“Proposition 218”) establishes the process by which the District can increase its sewer service charges; and

**WHEREAS**, the District engaged Carollo Engineers to conduct an independent analysis of District sewer service charges, based on the District’s revenue needs, in accordance with industry and professional standards (“Rate Study”); and

**WHEREAS**, the Board of Directors discussed the capital needs, financial plan, and revenue requirements of the District at several board meetings, including April 15, 2020, August 19, 2020, October 7, 2020, October 21, 2020, November 4, 2020, and November 18, 2020; and

**WHEREAS**, the District engaged Katz and Associates to assist with the rate notice, printed materials, public outreach efforts to a variety of stakeholders, including large customers, developers, homeowners, and environmental and taxpayer groups and provide communication assistance for the sewer service charge rate modification; and

**WHEREAS**, the Board of Directors carefully considered the Carollo Engineers Rate Study, and voted to accept the Study on November 18, 2020; and

**WHEREAS**, the Rate Study accepted by the Board is hereby incorporated into the record of evidence used to support and justify the proposed rates; and

**WHEREAS**, the Rate Study determined that the District’s existing methodology and formulae for determining residential, commercial and industrial sewer service charges are no longer accurate; and

**WHEREAS**, the Rate Study determined that the ratios used for the various residential customers should be adjusted as follows:

Single Family Dwelling	1.00 Equivalent Dwelling Unit (EDU) per unit
Duplex	0.80 Equivalent Dwelling Unit (EDU) per unit
Condominiums and Townhouses	0.85 Equivalent Dwelling Unit (EDU) per unit
Triplex, Fourplex, Apartments	0.80 Equivalent Dwelling Unit (EDU) per unit
Mobile Home	0.85 Equivalent Dwelling Unit (EDU) per unit
Overnight Trailer Park	0.40 Equivalent Dwelling Unit (EDU) per unit
Single Family Dwelling with Accessory Dwelling Unit (ADU)	1.50 Equivalent Dwelling Unit (EDU) per unit; and

**WHEREAS**, the District’s rate structure is based on the Equivalent Dwelling Unit (EDU) concept. An EDU is a unit of measure intended to represent the volume, biochemical oxygen demand (BOD), and total suspended solids (TSS) of wastewater generated by a typical single family residential (SFR) home. This allows NapaSan to compare the wastewater “demand” of different parcels and customers using a standardized unit of measure.

**WHEREAS**, the Rate Study determined that the factors and estimates of a single family home’s wastewater flow, BOD, and TSS, the factors that are used to allocate the costs of the sewer system to individual customers, should be updated to reflect current estimates of those factors; and

**WHEREAS**, the Rate Study determined that the assumed average daily flow of a typical single family residential home is 117 gallons per day (gpd) instead of 210 gpd in the existing rate structure; and

**WHEREAS**, the Rate Study determined that average BOD increased from 175 to 314 mg/L and TSS from 200 to 359 mg/L, primarily due to increased concentrations resulting from reduced flow; and

**WHEREAS**, based on these determinations, the Rate Study concluded that the allocation between flow, BOD, and TSS, which is used to calculate the strength factor for individual customer classes, should be adjusted to 58%, 15%, and 27%, respectively; and

**WHEREAS**, based on this conclusion, the Rate Study determined that the changes in the EDU formula and allocation of flow, BOD, and TSS resulted in a new strength factor formula; and

**WHEREAS**, the Rate Study determined that the above changes will allow the sewer service charge rate to stay the same for the next five (5) years and still meet the District’s revenue requirements; and

**WHEREAS**, in order to moderate the impact on customers, the Rate Study recommended that such changes be phased in. In particular, the Rate Study recommended the change in ratios between residential customer type take place over five (5) years and the change in the flow, BOD, and TSS calculation over six (6) years; and

**WHEREAS**, the Rate Study recommended an annual 3.0 percent revenue increase and that the revenue requirements from sewer service charges are to be as follows:

FY 2021/22	\$32,119,000
FY 2022/23	\$33,386,000
FY 2023/24	\$34,718,000
FY 2024/25	\$35,965,000
FY 2025/26	\$37,255,000; and

**WHEREAS**, the Rate Study calculated the per 1.0 EDU sewer service charge necessary to meet the revenue needs to be as follows:

FY 2021/22	\$738.60
FY 2022/23	\$738.60
FY 2023/24	\$738.60
FY 2024/25	\$738.60
FY 2025/26	\$738.60; and

**WHEREAS**, the Rate Study determined that the waste hauler fee structure should be consolidated into one flow category; and

**WHEREAS**, the Rate Study recommended that the revenue requirements from waste hauler fees to be as follows:

FY 2021/22	\$283,000
FY 2022/23	\$294,000
FY 2023/24	\$306,000
FY 2024/25	\$317,000
FY 2025/26	\$328,000; and

**WHEREAS**, the Rate Study calculated the per gallon waste hauler fee necessary to meet the revenue needs to be as follows:

FY 2021/22	\$0.22
FY 2022/23	\$0.23
FY 2023/24	\$0.24
FY 2024/25	\$0.25
FY 2025/26	\$0.26; and

**WHEREAS**, revenues derived from the charges do not exceed the funds required to provide sewer service and are not used for any purpose other than that for which the charges were imposed; and

**WHEREAS**, the amount of the charges do not exceed the proportional cost of the service attributable to the properties receiving service; and

**WHEREAS**, the charges are imposed only on those properties actually receiving service or those for which service is immediately available; and

**WHEREAS**, on or before February 9, 2021, the District mailed a Notice of Public Hearing to the record owner of every parcel served by the District, stating the proposed sewer service charges, the basis upon which the charges were calculated, the reason for the charges, together with the date, time and location of the Public Hearing on the proposed charges; and

**WHEREAS**, the Notice of Public Hearing also included a description of the protest process and provided a form that property owners could use to protest the increase; and

**WHEREAS**, the Notice of Public Hearing also contained information describing how the rates were being modified, who would be affected, how customers would be affected, and why a rate increase was needed; and

**WHEREAS**, the Public Hearing for the proposed charges was held on March 31, 2021, which was more than 45 days after the Notice of Public Hearing was mailed to record owners; and

**WHEREAS**, at the Public Hearing, the District considered all protests against the proposed charge, and the number of written protests against the proposed charge was less than a majority of owners of the identified parcels;

**NOW, THEREFORE, BE IT ORDAINED BY THE BOARD OF DIRECTORS OF THE NAPA SANITATION DISTRICT:**

**SECTION 1.** Sections 4.04.100 – Acceptable Wastes, 5.01.010 – Rates, 5.01.030 – Water Metered Commercial, Public Utilities and Public Agency Facilities, 5.01.060 – Industrial User Waste Charges, 5.02.030 – Capacity Charge Calculation, 5.03.010 – Hauled Waste Fees, of District Code are hereby amended as follows:

**4.04.100 Acceptable Wastes**

**Domestic Sanitary Sewage.** The following parameters are the typical physical, chemical, and biological characteristics of domestic sanitary sewage:

<b>Waste Characteristic</b>	<b>Typical Concentration</b>
Total Dissolved Solids	500 mg/L
Turbidity	250 JTU/NTU
Color	500 CU
Biochemical Oxygen Demand	<del>175 mg/L</del> 314 mg/L
Chemical Oxygen Demand	500 mg/L
Suspended Solids	<del>200 mg/L</del> 359 mg/L
Settleable Solids	10 mg/L
Sulfide	0.5 mg/L
Grease (vegetable based)	75 mg/L
Detergent (MBAS)	10 mg/L
Ammonia	20 mg/L
Phosphate (Total)	25 mg/L

**5.01.010 Rates**

Sewer Service Charges are hereby prescribed for all premises connected to the sanitation or sewerage system of the District.

The annual Sewer Service Charge rate shall be as follows:

Fiscal Year (FY)	Sewer Service Charge per EDU
<del>2016-2017</del>	<del>\$554.88</del>
<del>2017-2018</del>	<del>\$638.10</del>
<del>2018-2019</del>	<del>\$676.38</del>
<del>2019-2020</del>	<del>\$710.20</del>
<del>2020-2021</del>	<del>\$738.62</del>
2021-2022 and thereafter	\$738.60

Sewer Service Charges shall be collected on the tax roll of the County of Napa, State of California, in the manner provided pursuant to Section 5471 through 5473.11 of the Health and Safety Code of the State of California, as amended. Pursuant to Health and Safety Code section 5473 and 5473.1, a written report containing a description of each parcel of real property receiving such services and facilities and the amount of the charge for each parcel shall be filed with the Secretary of the District.

An EDU shall be calculated using the following flow, biochemical oxygen demand (BOD), and total suspended solids (TSS) estimates below for a single family home.

Fiscal Year	Flow (gpd)	BOD (mg/L)	TSS (mg/L)
<del>2021-2022</del>	<del>188</del>	<del>209</del>	<del>238</del>
<del>2022-2023</del>	<del>167</del>	<del>240</del>	<del>274</del>
<del>2023-2024</del>	<del>150</del>	<del>265</del>	<del>303</del>
<del>2024-2025</del>	<del>137</del>	<del>284</del>	<del>324</del>
<del>2025-2026 and thereafter</del>	<del>126</del>	<del>301</del>	<del>344</del>

~~Residential~~ The EDUs below for residential units types, ~~as shown below,~~ are based upon the average wastewater flow for a ratio to a single family dwelling (1.0 EDU) using the estimates above. One (1) service unit shall be equivalent to 210 gallons per day with a strength factor of ~~1.0.~~

<del>Residential Unit Category</del>	<del>Annual Sewer Service Units</del>
<del>R01 Single Family Dwelling, Granny Units, each unit</del>	<del>1.0</del>
<del>R02 Duplex, each unit</del>	<del>1.0</del>
<del>R04 Condominiums &amp; Townhouses, each unit</del>	<del>1.0</del>
<del>R03 Triplex Apartment, each unit</del>	<del>0.6</del>
<del>R03 Fourplex Apartment, each unit</del>	<del>0.6</del>
<del>R03 All other Apartment Units, each unit</del>	<del>0.6</del>
<del>R13 Single Room Occupancy, each unit</del>	<del>0.6</del>
<del>R05 Mobile Home, per space</del>	<del>0.6</del>
<del>R06 Overnight Trailer Parking, per space</del>	<del>0.4</del>

Residential Unit Type	Equivalent Dwelling Unit (EDU)				
	FY 2021- 2022	FY 2022- 2023	FY 2023- 2024	FY 2024- 2025	FY 2025- 2026
R01 Single Family Dwelling, each unit	1.00	1.00	1.00	1.00	1.00
R02 Duplex, each unit	0.96	0.92	0.88	0.84	0.80
R04 Condominiums & Townhouses, each unit	0.97	0.94	0.91	0.88	0.85
R03 Triplex Apartment, each unit	0.64	0.68	0.72	0.76	0.80
R03 Fourplex Apartment, each unit	0.64	0.68	0.72	0.76	0.80
R03 All other Apartment Units, each unit	0.64	0.68	0.72	0.76	0.80
R05 Mobile Home, per space	0.65	0.70	0.75	0.80	0.85
R06 Overnight Trailer Parking, per space	0.40	0.40	0.40	0.40	0.40
R07 Single Family Dwelling with ADU	1.50	1.50	1.50	1.50	1.50
R13 Single Room Occupancy, each unit	0.60	0.60	0.60	0.60	0.60

#### 5.01.030 Water Metered Commercial, Public Utilities and Public Agency Facilities

Using a single family dwelling as a standard, the following designated premises in the following table shall be charged based upon water consumption and strength. The strength factors noted below were calculated based upon State Water Resources Control Board Revenue Program Guidelines strength and flow factors and the flow, BOD and TSS assumptions shown in Section 5.01.010 and using Step 2 of the formula shown in Section 5.01.060.

Business Category	Strength Factor
Automobile Sales & Service	1.0
Bakeries/Candy/Ice Cream Manufacturing	2.7
Banks/Business Offices	1.0
Bars/Nightclubs/Wine Tasting/Beer Tasting	1.0
Bed and Breakfast Inns	1.0
Café/Coffee Shop	1.4
Car Wash	0.7
Carpet & Rug Cleaners	1.4
Churches	1.0
Convalescent/Care Homes/Hospitals	1.0
Daycare Facilities/Schools (Private)	0.8
Delicatessen (no cooking)	1.4
Delicatessen (cooking)	2.0
Dry Type Industries	1.0
Funeral Homes	2.6
Hotels/Motels (without restaurants)	1.0
Hotels/Motels (with restaurants)	2.0
Laundries-Commercial	1.4
Laundries-Self Service	0.9

Markets (with disposals)	2.6
Markets (without disposals), Convenience Stores	1.4
Membership Organizations, with kitchens	2.7
Membership Organizations, without kitchens	1.0
Merchandising/Department/Retail Stores	1.0
Mixed Use (1 water meter) ———	1.6
Physicians/Medical/Dental Offices	1.0
Printers/Newspapers	1.0
Repair Shops/Service Stations	1.0
Restaurants and Caterers	2.7
Service Related Enterprises/Hair Salons	1.0
Theaters	1.0

<b>Business Category</b>	<b>Strength Factor</b>
Automobile Sales & Service	1.00
Bakeries/Candy/Ice Cream Manufacturing	2.25
Banks/Business Offices	1.00
Bars/Nightclubs/Wine Tasting/Beer Tasting	1.00
Bed and Breakfast Inns	1.00
Café/Coffee Shop	1.29
Car Wash	0.80
Carpet & Rug Cleaners	1.29
Churches	1.00
Convalescent/Care Homes/Hospitals	1.00
Daycare Facilities/Schools (Private)	1.00
Delicatessen (no cooking)	1.29
Delicatessen (cooking)	1.82
Dry Type Industries	1.00
Funeral Homes	2.35
Hotels/Motels (without restaurants)	1.00
Hotels/Motels (with restaurants)	1.82
Laundries-Commercial	1.29
Laundries-Self Service	0.86
Markets (with food service)	2.35
Markets (without food service), Convenience Stores	1.29
Membership Organizations, with kitchens	2.25
Membership Organizations, without kitchens	1.00
Merchandising/Department/Retail Stores	1.00
Mixed Use (1 water meter)	1.29
Physicians/Medical/Dental Offices	1.00
Printers/Newspapers	1.00
Repair Shops/Service Stations	1.00
Restaurants and Caterers	2.25
Service Related Enterprises/Hair Salons	1.00
Theaters	1.00

**5.01.060 Industrial User Waste Charges**

Except as provided in Section 5.01.061, the monthly industrial user waste charges for each industry shall be determined by using the formula in the following table.

<b>Industrial User Sewer Service Unit Assignment Formula *</b>			
-			-
Parameter	Cost Allocation	Assumed Loading (1.0 Unit)	-
-			-
Flow	50%	210 gal/day	-
BOD	25%	175 mg/L	-
TSS	25%	200 mg/L	-
-			-
<b>Step 1</b>			
Flow Factor		= Daily Flow ÷ 210 gals/day — or Annual Flow ÷ 76,650 gals/year	-
-			-
<b>Step 2</b>			
Strength Factor		= 0.50 + (BOD ÷ 175 × 0.25) + (TSS ÷ 200 × 0.25)	-
-			-
<b>Step 3</b>			
Equivalent Dwelling Units (EDUs)		= (Flow Factor) × (Strength Factor)	-
-			-
<b>Step 4</b>			
Monthly Sewer Service Charge		= (EDUs) × (Current Rate per EDU) ÷ 12	-
-			-

<b>Industrial User Sewer Service Unit Assignment Formula *</b>						
Parameter	Cost Allocation	Assumed Loading (1.0 Unit)				
		FY 2021- 2022	FY 2022- 2023	FY 2023- 2024	FY 2024- 2025	FY 2025- 2026
Flow (gpd)	58%	188	167	150	137	126
BOD (mg/L)	15%	209	240	265	284	301
TSS (mg/L)	27%	238	274	303	324	344
<b>Step 1</b>		<b>For FYE 2022</b>				



$$\text{Flow Factor} = \frac{\text{Daily Flow}}{188 \text{ gals/day}} \text{ or } \frac{\text{Annual Flow}}{68,620 \text{ gals/year}}$$

**Step 2**

$$\text{Strength Factor} = 0.58 + (\text{BOD} \div 209 \times 0.15) + (\text{TSS} \div 238 \times 0.27)$$

**Step 3**

$$\text{Equivalent Dwelling Units (EDUs)} = (\text{Flow Factor}) \times (\text{Strength Factor})$$

**Step 4**

$$\text{Monthly Sewer Service Charge} = (\text{EDUs}) \times (\text{Current Rate per EDU}) \div 12$$

\* Formula is designed to provide a multiplier for high-strength flows. Minimum assignment is 1.0 service unit.

**5.01.061 Industrial User Waste Charges for Winery-Related Operations That Do Not Measure Flow and Strength**

Sewer service charges for Winery-Related Operations that have not yet installed, or received a waiver from installing flow meters and samplers to measure their facility's industrial wastewater flow and strength pursuant to District Code 4.04.170(D), shall be based on a fixed strength factor of 11.25, which is based upon an assumed BOD of 7,000 mg/L and TSS of 600 mg/L, multiplied by a flow factor based upon monthly flow data measured from the municipal potable water meter, after an adjustment to account for domestic waste. Monthly sewer service charges shall then be calculated using Step 4 in Section 5.01.060.

**5.02.030 Capacity Charge Calculation**

The following fees shall be paid to the District prior to the issuance of a permit to connect with the District's sewerage works.

- C. **Industrial.** Industrial capacity charges for wastewater strength and flow that exceeds domestic wastewater characteristics shall be calculated using the average daily flow, BOD, and TSS data for the anticipated peak 30-day period, with a minimum of 1.0 EDU for an industrial facility. The data shall be provided to the District. These three parameters will be applied to the following formula in the following table to determine the number of Sewer Service Units (Equivalent Dwelling Units - EDU).

<b>Industrial User Capacity Charges Assignment Formula</b>			
-	-	-	-
Parameter	Cost Allocation	Assumed Loading (1.0 Unit)	-
-	-	-	-
Flow	50%	210 gal/day	-
BOD	25%	175 mg/L	-
TSS	25%	200 mg/L	-

-	-
<b>Step 1</b>	-
Flow Factor	= $\frac{\text{Average Daily Flow}}{210 \text{ gals/day}}$
-	-
<b>Step 2</b>	-
Strength Factor	= $0.50 + (\text{BOD} \div 175 \times 0.25) + (\text{TSS} \div 200 \times 0.25)$
-	-
<b>Step 3</b>	-
Equivalent Dwelling Units (EDUs)	= (Flow Factor) x (Strength Factor)
-	-
<b>Step 4</b>	-
Capacity Charge	= (Equivalent Dwelling Units) x (Current Single Family Dwelling Rate)
-	-

Industrial User Sewer Capacity Charges Assignment Formula *						
Parameter	Cost Allocation	Assumed Loading (1.0 Unit)				
		FY 2021- 2022	FY 2022- 2023	FY 2023- 2024	FY 2024- 2025	FY 2025- 2026
Flow (gpd)	58%	188	167	150	137	126
BOD (mg/L)	15%	209	240	265	284	301
TSS (mg/L)	27%	238	274	303	324	344
<b>Step 1</b>						
Flow Factor		For FYE 2022				
		= $\frac{\text{Average Daily Flow}}{188 \text{ gals/day}}$				
<b>Step 2</b>						
Strength Factor		= $0.58 + (\text{BOD} \div 209 \times 0.15) + (\text{TSS} \div 238 \times 0.27)$				
<b>Step 3</b>						
Equivalent Dwelling Units (EDUs)		= (Flow Factor) x (Strength Factor)				
<b>Step 4</b>						
Capacity Charge		= (EDUs) x (Current Single Family Dwelling Rate)				

**5.03.010 Hauled Waste Fees**

Hauled wastes, including ~~portable toilet waste and~~ septic tank pumpage ~~discharge~~ waste, shall be charged ~~as a percentage of the annual sewer service charge for each minimum load~~ as follows:

Domestic waste	1,500-gals	70%
Restaurant — domestic waste	1,500-gals	103%
Winery waste	1,500-gals	145%
Portable toilet waste	—276-gals	8%

~~Example Domestic Septic Wastewater Fee for 2,500 gallons of waste:~~  
~~$$\frac{((2,500 \text{ gallon domestic waste}) \times (\text{Current Annual Sewer Service Charge Rate}) \times (0.70))}{1,500}$$~~

Fiscal Year	Hauled Waste Fee per gallon
2021-2022	\$0.22
2022-2023	\$0.23
2023-2024	\$0.24
2024-2025	\$0.25
2025-2026	\$0.26

Hauled winery waste is not included in this fee table. Winery waste can be hauled by truck to Napa Sanitation District on a case-by-case basis and charged fees determined by the General Manager at that time.

**SECTION 2.**

- Effective Date.** This Ordinance shall take effect and be enforced July 1, 2021 or sixty (60) days following final action, whichever is later.
- Severability.** If any provision of the ordinance or the application thereof to any person or circumstance is held invalid, the remainder of the ordinance, including the application of such part or provision to other persons or circumstances shall not be affected thereby and shall continue in full force and effect. To this end, provisions of this ordinance are severable.
- Within 15 days of adoption, this Ordinance shall be published in the Napa Valley Register, pursuant to California Health and Safety Code Sec. 4766 and California Government Code Section 25124.
- Following a first reading of the title of this ordinance, which occurred at the regular meeting of the District Board, held on March 3, 2021, the foregoing ordinance was duly:

\* \* \* \* \*

PASSED AND ENACTED at a regular meeting of the Board of Directors of Napa Sanitation District  
duly held on the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

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Scott Sedgley, Chair  
Napa Sanitation District

ATTEST:

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Cheryl Schuh, Secretary  
Napa Sanitation District  
3702586.1