# Appeal for Water Rate Reduction

**SJWD Board Meeting**
**February 19, 2025**

# Agenda

1. **Key Observations**
   - Rate comparison
   - Effective Cost

2. **SJWD Data Analysis**
   - Consumption Vs Cost
   - Rate Structure
   - Impact on Revenue

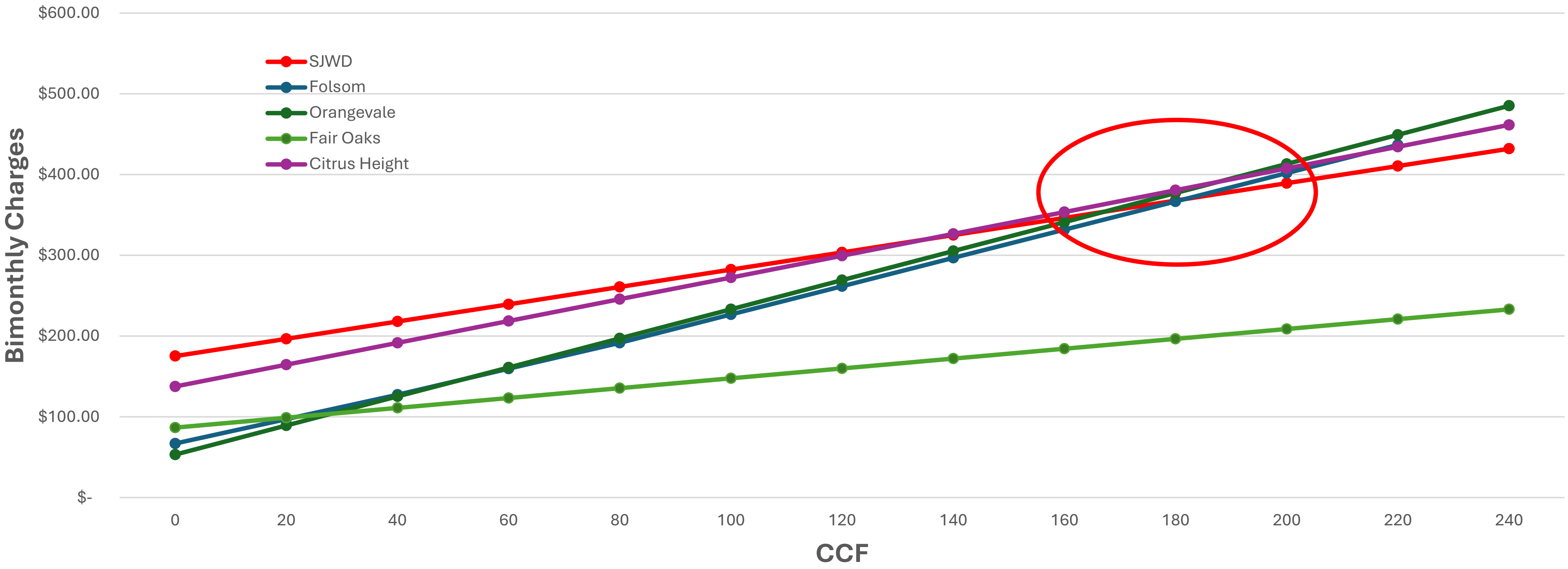
3. **Conclusion, Proposed Solutions & Plan of Action**

# Key Observations

- Our reduced water usage did not reflect $$$ savings in our bills!
- SJWD retail charges are higher than all water agencies that buy wholesale water from SJWD.
- We live in Folsom but we pay ~1.5X more in water bills than other Folsom residents. ($242 Vs $168 bimonthly bill; 30CCF)
- Bills increased by 42% since 2019 even with normal water use.
- This prompted us to explore why we pay so much more.

# Water Districts Rate Comparison

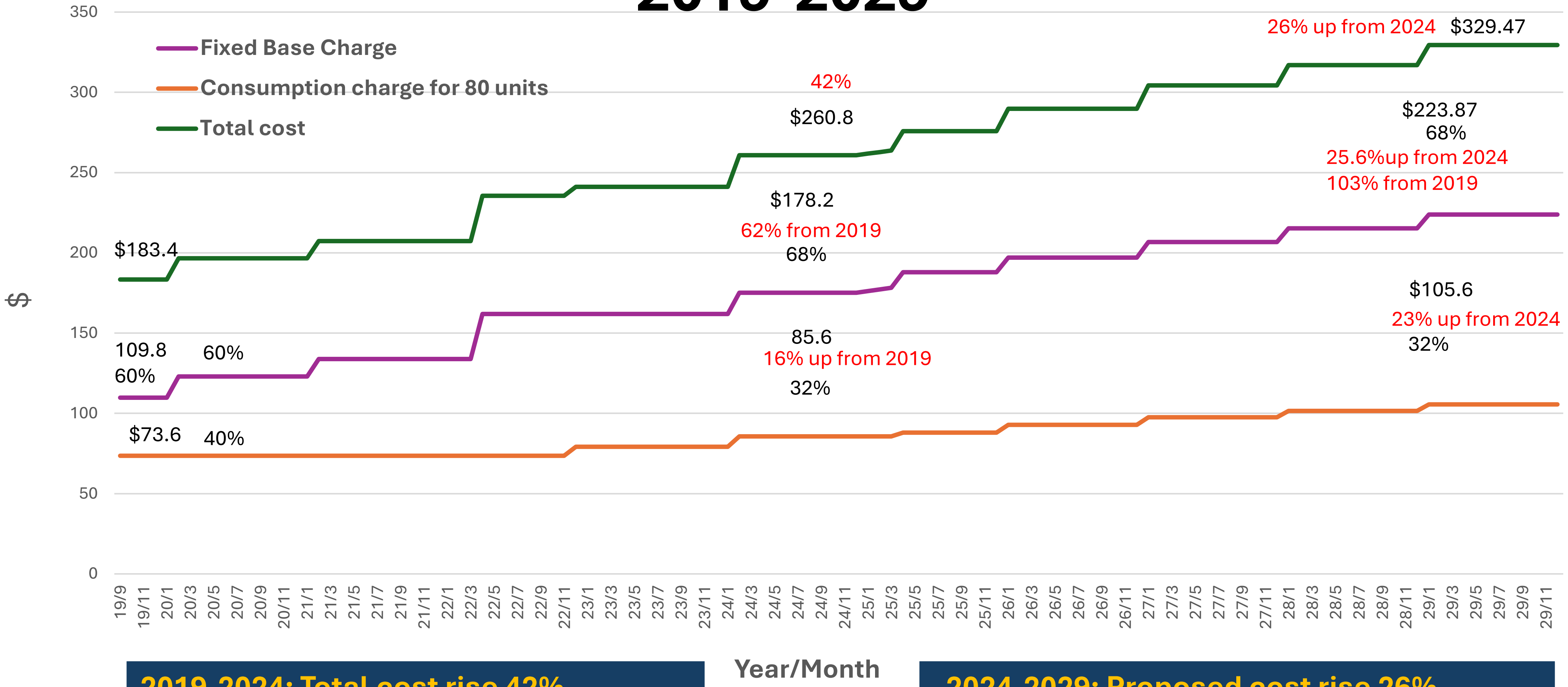
## San Juan Vs Folsom , Orangevale, Fair Oaks, Citrus Heights  Bimonthly Water Charges




**To break even with our neighboring districts, we need to consume at least 160 CCF bimonthly which we never can!**

**My bimonthly usage average for the last 8 years is 45 CCF.**

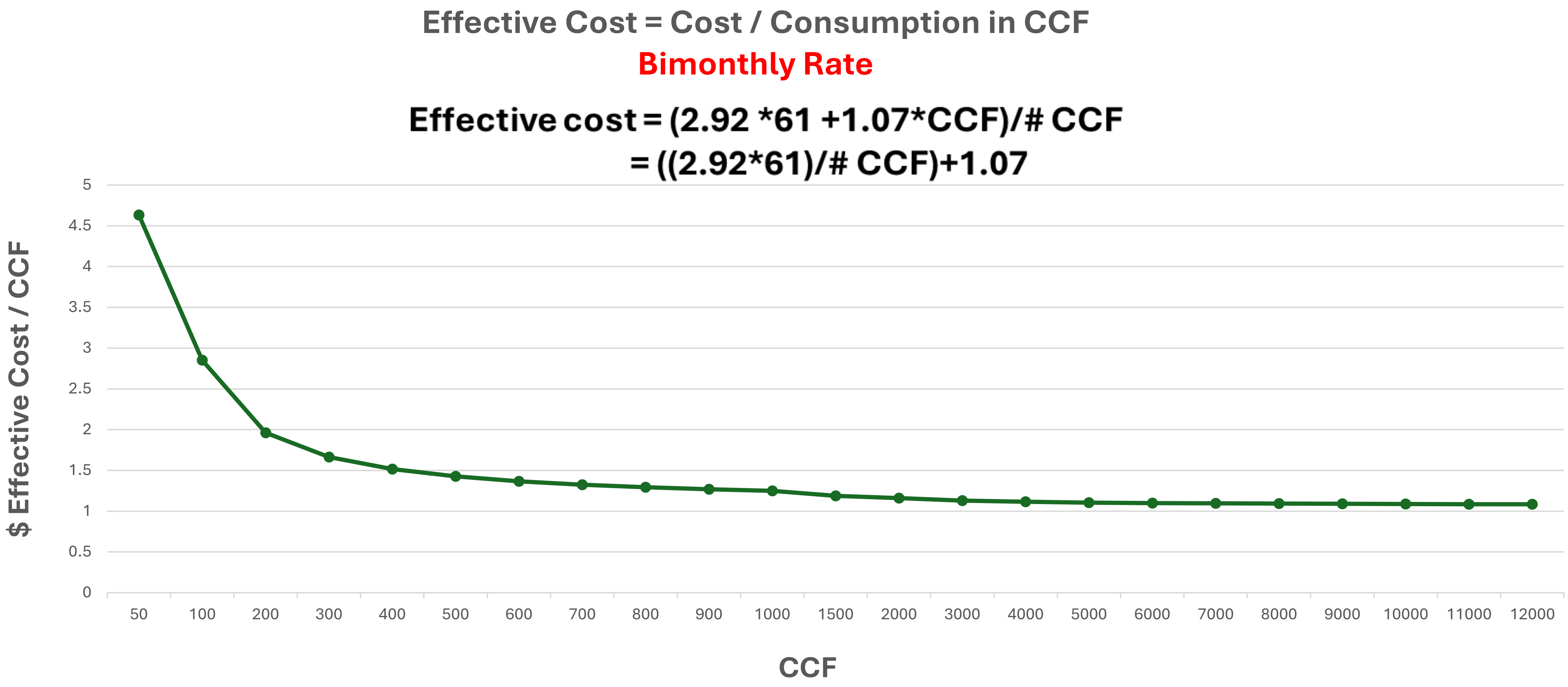
# SJWD Fixed & Variable Bimonthly Rate Increases 2019-2029




**2019-2024: Total cost rise 42%**
**Fix rate rise: 62%**
**Variable rate rise 16%**

**2024-2029: Proposed cost rise 26%**
**Fix rate rise 25.6%**
**Variable rate rise 23%**

# Cost/CCF Consumption Dependence



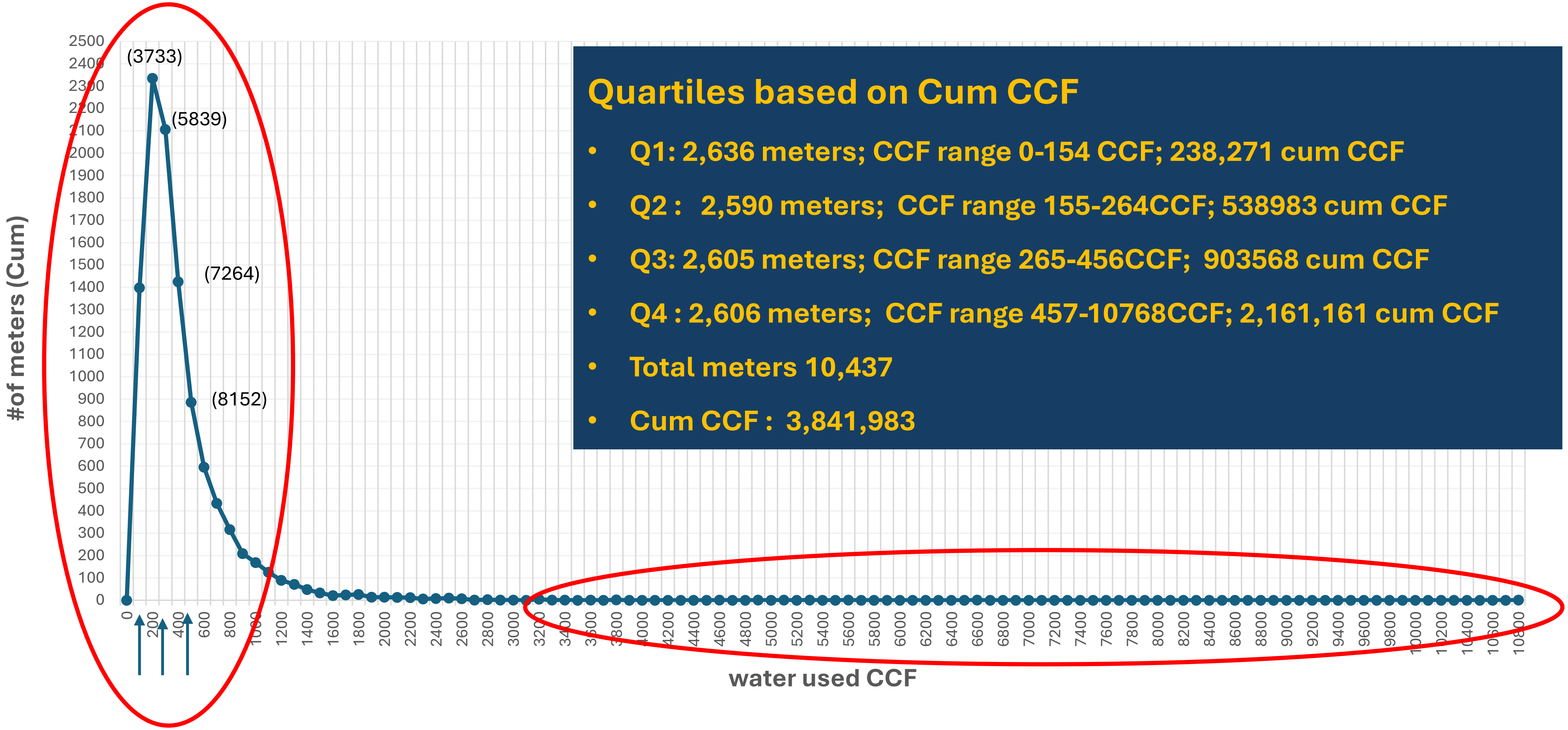

**For customers with high water usage , the effective cost goes as low as $1.07 /CCF.**

# Data Analysis

## SJWD Single-Family Residential Retail Consumption Data

## July 2023-June 2024
## <= 1” Meters

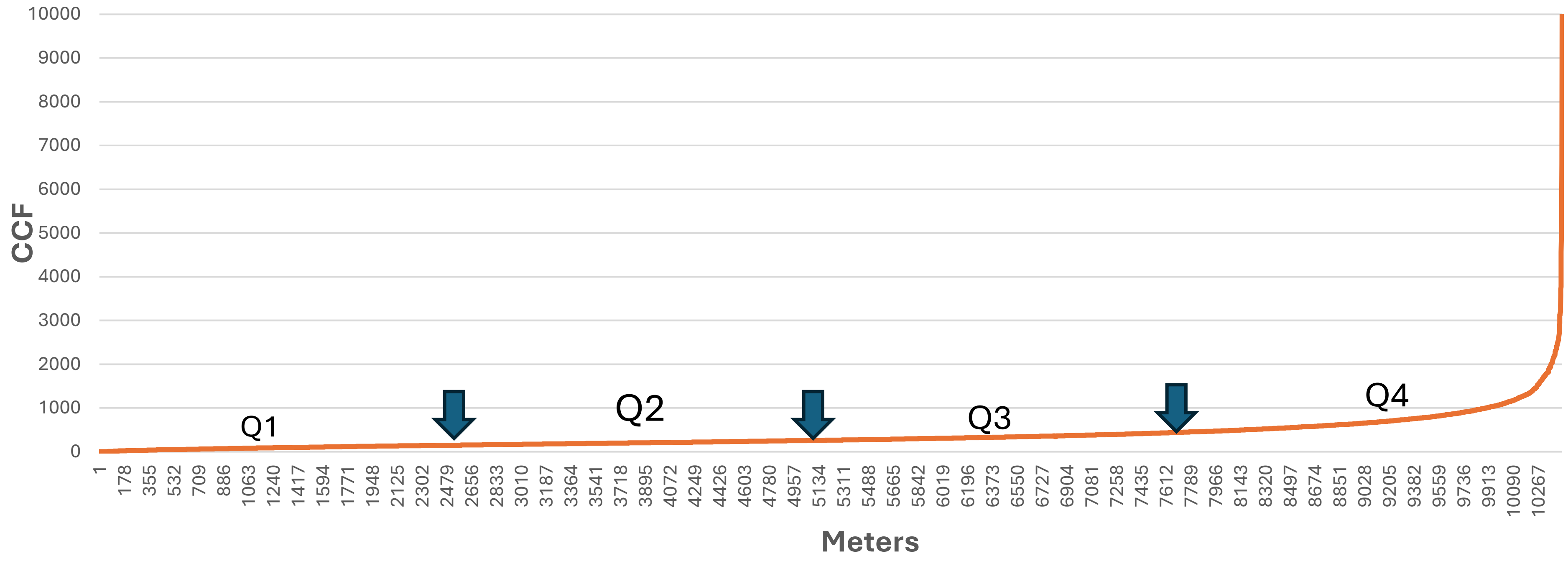
# Single-Family Residential Water Usage <= 1" Meter Size




## Quartiles based on Cum CCF

- Q1: 2,636 meters; CCF range 0-154 CCF; 238,271 cum CCF
- Q2 : 2,590 meters; CCF range 155-264CCF; 538983 cum CCF
- Q3: 2,605 meters; CCF range 265-456CCF; 903568 cum CCF
- Q4 : 2,606 meters; CCF range 457-10768CCF; 2,161,161 cum CCF
- Total meters 10,437
- Cum CCF : 3,841,983

# Meters Vs CCF Data




**Q1: 2636 accounts in Q1 consume cum 238,271 CCF with an individual max of 154 CCF (6.2% of total consumption).**

**Q2: 2590 accounts in Q2 consume cum 538,983 CCF with an individual max of 264 CCF (14% of total consumption).**

**Q1+Q2= 777,254 CCF**

**Q3: 2605 accounts in Q3 consume cum 903,568 CCF with an individual max of 456 CCF (23.5% of total consumption).**

**Q1+Q2+Q3=1,680,822 CCF**

**Q4: 2606 accounts in Q4 consume cum 2,161,161 CCF with an individual max of 10,768 CCF (56.3% of total consumption).**

**Q1+Q2+Q33+Q4=3,841,983 CCF**

# Analysis of SJWD Single-Family Homes Consumption Data

**SJWD July 2023-June 2024 Residential Retail Distribution Data**

**<= 1" Meters**

**Observation:** Consumption data is divided into quartiles.

Q1: There are 2,636 accounts in Q1 consuming a cumulative 238,271 CCF with individual max at 154 CCF (6.2%)

Q2: There are 2,590 accounts in Q2 consuming a cumulative 538,983 CCF with individual max at 264 CCF (14%) Q1+Q2= 777,254 CCF

Q3: There are2,605 accounts in Q3 consuming a cumulative 903,568 CCF with individual max at 456 CCF (23.3%) Q1+Q2+Q3=1,680,822CCF

Q4: There are 2,606 accounts in Q4 consuming a cumulative 2,161,161 CCF with individual max of 10,768CCF (56.3%) Q1+Q2+Q3+Q4 = 3,841,983

**Analysis:** 10,437 meters used 3,841,983 CCF of water

Q1: Customers used an average of 90 CCF last year for a cost of $1162, which means an effective cost of $12.91/CCF

Q2: Customers used an average of 208 CCF last year for a cost of $1288.36, which means an effective cost of $6.19/CCF

Q3: Customers used an average of 347 CCF last year for a cost of $1437.09, which means an effective cost of $4.14/CCF

Q4: Customers used an average of 829 CCF last year for a cost of $1952.83, which means an effective cost of $2.36/CCF

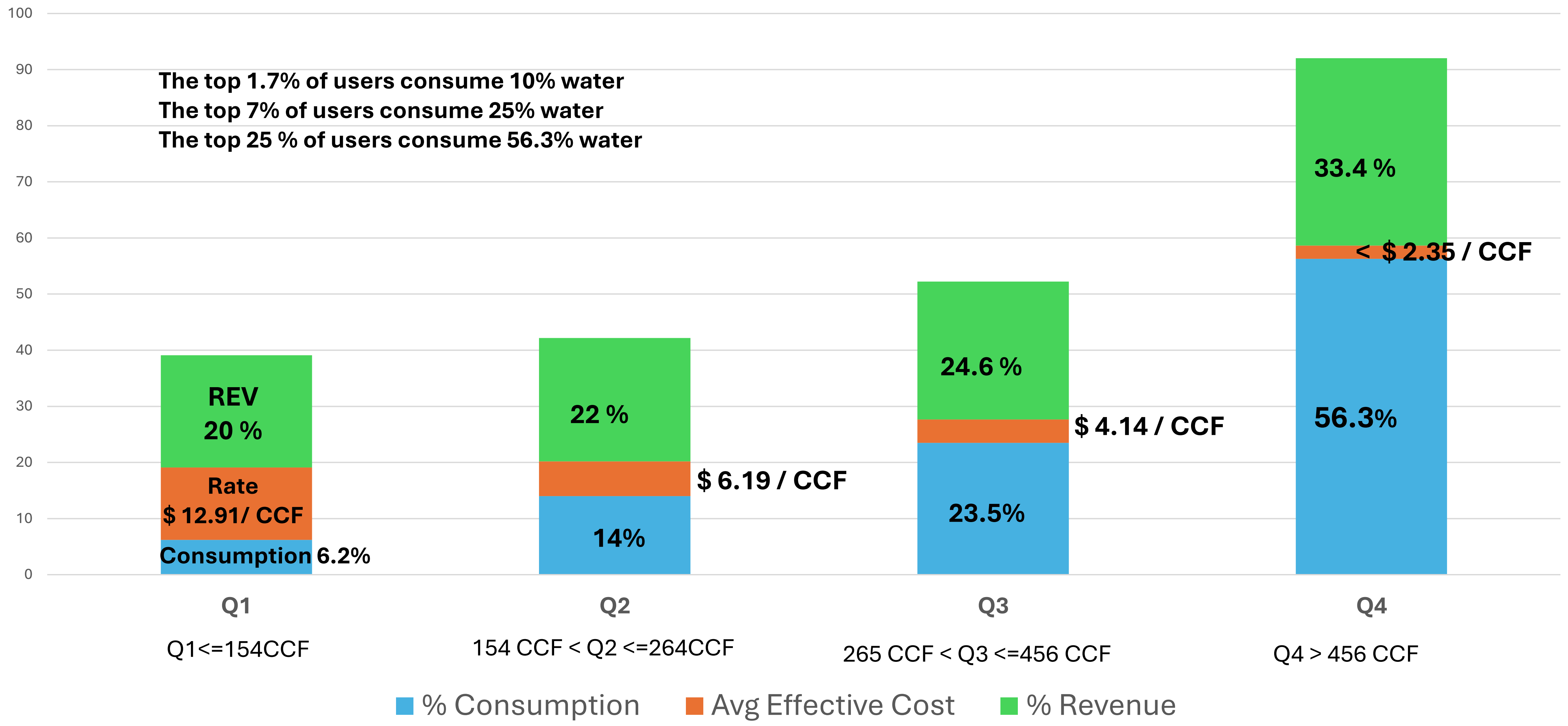
**The last 7% use 25% of water and pay the least effective costs.**

# 2024 Rate Model Revenue by Quartiles

| Quartiles | Fixed | Variable | Total | % Total Revenue | % water use | Average Effective Cost/ CCF |
|---|---|---|---|---|---|---|
| Q1: 2636 Meters | $2.92x365x2636 = $2,809,449 | $254,950 | $3,064,399 | **20%** | **6.2%** | **$12.91** |
| Q2: 2590 Meters | $2.92x365x2590 = $2,760,422 | $576,712 | $3,337,134 | **22%** | **14%** | **$6.19** |
| Q3: 2605 Meters | $2.92x365x2605 = $2,776,409 | $966,818 | $3,743,227 | **24.6%** | **23.5%** | **$4.14** |
| Q4: 2606 Meters | $2.92x365x2606 = $2,777,475 | $2,312,442 | $5,089,917 | **33.4%** | **56.3%** | **$2.35 reducing to $1.07** |
| | | **Total Revenue:** | **$15,234,677** | | | |

**No EFFECTIVE COST EQUITY for customers!!**

# Comparison of Quartiles



# CONCLUSION

- We are already **paying the highest rates** among five other districts using the same water source.
- The fixed rate is **disproportionately high and unsustainable** for further increase!
- *'CUWCC Best Management Practice 1.4 recommends no more than 30% fixed revenue to maintain conservation pricing signals'* (CUWCC: California Urban Water Conservation Council)
- This Rate Structure **unfairly burdens low-usage consumers!**
  - https://ca-nv-awwa.org/CANV/downloads/2015/AFC15presentations/FixedCharges.pdfilimitedn
  - *'The AWWA states that Higher fixed service charges create higher minimum bills for all customers. This affects the affordability for low water use customers.'* (AWWA: American Water Works Association)

**Need equity and fairness in distributing the cost of service Without compromising SJWD revenue.**

# Govt Codes that Guide the Rate Structures, Fees and Charges

- **Proposition 218: Right to Vote on Taxes Act 1996**
  - *'Specifically, local governments must make sure that no property owner's fee is greater than the proportionate cost to provide the property-related service to his or her parcel. Like assessments, this requirement may result in local governments setting property-related fee rates on a block-by-block, or parcel-by-parcel basis.'*
- **Section 6 Article 13D: Assessment and Property-Related Fee Reform 1996**
  - *'Requirements for Existing, New, or Increased Fees and Charges. A fee or charge shall not be extended, imposed, or increased by any agency unless it meets all of the following requirements:*
    1. *Revenues derived from the fee or charge shall not exceed the funds required to provide the property-related service.*
    2. *Revenues derived from the fee or charge shall not be used for any purpose other than that for which the fee or charge was imposed.*
    3. *The amount of a fee or charge imposed upon any parcel or person as an incident of property ownership shall not exceed the proportional cost of the service attributable to the parcel.*
    4. *No fee or charge may be imposed for a service unless that service is actually used by, or immediately available to, the owner of the property in question. Fees or charges based on potential or future use of a service are not permitted. Standby charges, whether characterized as charges or assessments, shall be classified as assessments and shall not be imposed without compliance with Section 4.'*
- **CHAPTER 3.8. Cost-of-Service Analysis [390 - 390.1] 2023**

  *'(b) "High water users" means the top 10 percent of water, in terms of volume of water consumed.'*
- **AB 1827: As amends the law on November 18, 2024**
  - ***'3750.6. (a) The fees or charges for property-related water service imposed or increased pursuant to Section 6 of Article XIII D of the California Constitution may include the incrementally higher costs of water service due to any of the following:***

    *(1) The higher water usage demand of parcels.*

    *(2) The maximum potential water use.*

    *(3) Projected peak water usage.*

    *(4) Any combination of paragraphs (1) to (3), inclusive.'*

  ***(b)*** *'(1) The incrementally higher costs of water service associated with higher water usage demands, the maximum potential water use, or projected peak water*

  *(2) In addition to any other method consistent with Section 6 of Article XIII D of the California Constitution, the incrementally higher costs of water service associated with higher water usage demand, maximum potential water use, or projected peak water usage may be allocated among customer classes, within customer classes, or both, based on meter size or peaking factors, as those methods reasonably assess the water service provider's cost of serving parcels that increase water usage demand, maximum potential water use, or projected peak water usage.'*

  (c) This section is declaratory of existing law.

# Possible Solution-1

SJWD can apply a tiered/zones-based rate or add a surcharge to different zones, which is evaluated by parcel size, elevation, length of pipes, and need for specific equipment like pumps.

**Example**:

- Indian Wells surcharges: (Hildebrand Consulting)
  Monthly Base Rate: $66.38 + $20.72Arsenic
  + Power per 100CCF: B Zone: $0.29, C Zone:$0.54, D Zone: $0.83, E Zone:$1.12
- Casitas surcharges: (Hildebrand Consulting)
  Base $67.44 Monthly T1: 10CCF Pumped: $2.10 /CCF Gravity $1.25 / CCF
  T2: 50CCF Pumped: $2.91 /CCF Gravity: $2.09 / CCF
  T3: > 50 CCF Pumped: $4.20 /CCF Gravity: $3.39 /CCF
- Santa Margarita Water District: Power surcharge: Monthly Base Rate: $26.16 Zone 3: 0.16/CCF, Zone 4: 0.27/CCF, Zone 5: 0.45/CCF

Ref: https://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/docs/example_residential_rate_structure_table_a18.pdf
https://www.smwd.com/159/SMWD
https://www.casitaswater.org/water-rate-calculator
https://www.iwvwd.com/water-rates

# Possible Solutions -2

- **Replace the existing fixed rate with fair effective cost to all customers by applying Scale factor proportion to usage**. ($100=$6+$14 +$23.5+ $56.3 per quartiles)
- **Re-evaluate the fixed rate and adjust the rate by**
  - Allocate pump charges to those zones that require pumps to supply water.
  - Surcharge rate for the selective zones that require specific service elements. (High Pressure for fire services, these are permit and development-related fees not service )
  - Evaluate Meter failure correlation to consumption if any and apply the cost proportionally.
- **Enforce limits on volume usage** and charge those with excessive or wasteful use to reduce the burden on low consumption/customers needing low service.
- **Listed in 'Guidance on reporting the residential rate structure (eAR)' as an example:** Base Rate (Variable) + Usage Rate (Uniform)
  - Variable Base Rate:
    - Tier 1: For 0-6 CCF, $9.89
    - Tier 2: For 6-9 CCF, $10.89
    - Tier 3: For 9-12 CCF, $11.89
    - Tier 4: After the initial 12 CCF, $12.89
  - Uniform Usage Rate:
    - $2.81 per CCF

# Need a Fair Rate Distribution within <= 1" Customer Group

## Weight Comparison of 'RES' and 'COM' Meter Sizes and with >=1.5" Meters

| Meter | Number | Fixed Rate/Day | Variable Rate/CCF | Cum CCF | Fixed Rev | Variable Rev | Total Rev | % Res Rev | % of Res Meters | RE % of Total meters | RE% of Total $ |
|---|---|---|---|---|---|---|---|---|---|---|---|
| <=1" RES | 10437 | 2.92 | 1.07 | 3841983 | 11123755 | 4110922 | 15234676 | 99.51% | 99.82% | 95.00% | 87.13% |
| 1.5" RES | 15 | 7.34 | 1.07 | 9339 | 40186.5 | 9992.73 | 50179.23 | 32.78% | 14.35% | 0.14% | 0.29% |
| 2" RES | 4 | 11.61 | 1.07 | 7405 | 16950.6 | 7923.35 | 24873.95 | 16.25% | 3.83% | 0.04% | 0.14% |
| 3" RES | 0 | 21.54 | 1.07 | | 0 | | | | | | |
| 4" RES | 0 | 35.72 | 1.07 | | 0 | | | | | | |
| 6" RES | 0 | 71.18 | 1.07 | | 0 | | | | | | |
| Total Meters | 10456 | | | | | Total RE $ | 15309730 | | | 95.18% | 87.56% |
| | | | | | | | | | | | |
| **Meter** | **Number** | **Fixed Rate/Day** | **Variable Rate/CCF** | **Cum CCF** | **Fixed Rev** | **Variable Rev** | **Total Rev** | **% CO Rev** | **% of CO Meters** | | |
| 1" COM | 241 | 2.92 | 1.07 | 95483 | 256857.8 | 102166.8 | 352340.8 | 16.20% | 45.47% | 2.19% | 2.02% |
| 1.5" COM | 112 | 7.34 | 1.07 | 141942 | 300059.2 | 151877.9 | 442001.2 | 20.32% | 21.13% | 1.02% | 2.53% |
| 2" COM | 150 | 11.61 | 1.07 | 313581 | 635647.5 | 335531.7 | 949228.5 | 43.65% | 28.30% | 1.37% | 5.43% |
| 3" COM | 23 | 21.54 | 1.07 | 134972 | 180828.3 | 144420 | 315800.3 | 14.52% | 4.34% | 0.21% | 1.81% |
| 4" COM | 3 | 35.72 | 1.07 | 46401 | 39113.4 | 49649.07 | 85514.4 | 3.93% | 0.57% | 0.03% | 0.49% |
| 6" COM | 1 | 71.18 | 1.07 | 4012 | 25980.7 | 4292.84 | 29992.7 | 1.38% | 0.19% | 0.01% | 0.17% |
| Total Meters | 530 | | | | Total CO $ | | 2174878 | | | 4.82% | 12.44% |

**The cost of service is unfair to the low-consumption customers within the <= 1" Residential group that needs fixing. The meter capacity factors for >1" meters do not correct the unfair cost of service within the large( >95%) of 1" meters.**

# Proposed Plan of Action

- **SJWD can apply fairness and equity for all customers without compromising the revenue stream!**

- **I urge the SJWD Board to fix the unfair rate structure following government guidelines within the 95% <=1” meter customers.**
  - **Go beyond the uniform rates to distribute the service cost fairly and proportionally.**
  - **Ensure that all customer groups pay fair and proportionate costs for only those services that directly benefit them.**
  - **Before increasing the rates**

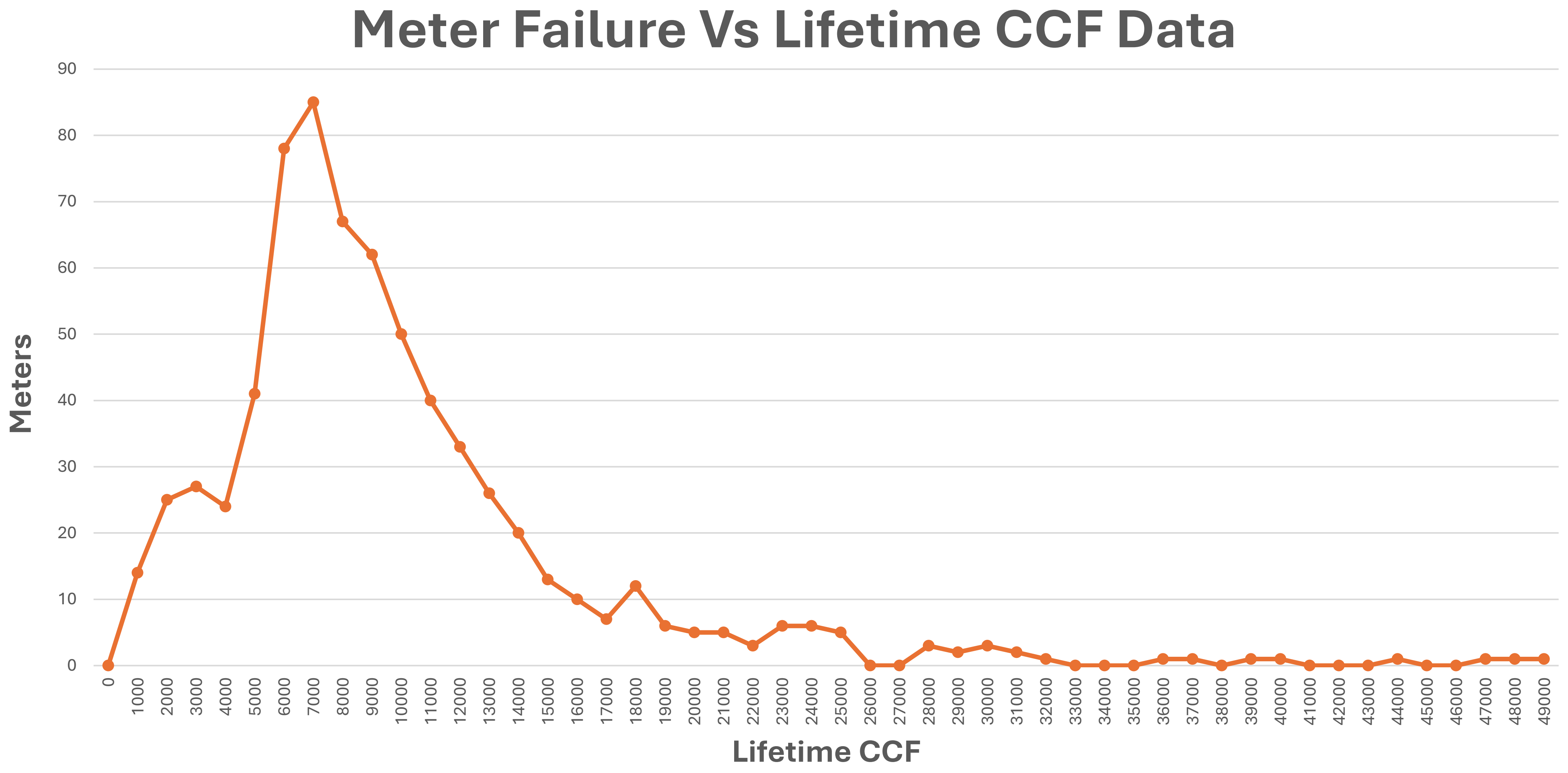
# BACK-UP

# Various Districts Rate Structures

| District | Fixed | Variable | Surcharge |
|---|---|---|---|
| **SJWD** | **$178.2 / Bimonthly** | **$1.07/CCF** | |
| **Alameda ACWD** | **$101.87/ Bimonthly** | **$4.97/CCF** | |
| **Santa Margarita SMWD** | **$26.16 Monthly** | **T1: $3.11, T2: $3.45, T3: $4.33, T4:$7.27** | **Power:<br>Zone 3: 0.16/CCF,Zone 4: 0.27/CCF<br>Zone 5: 0.45/CCF** |
| **Walnut Valley** | **$51.59/ Monthly<br>$103.18 Bimonthly** | **T1: 1-09 CCF: $3.55/CCF, T2:10-40 CCF:$4.49/ CCF, T3: 41+ CCF: $5.97/ CCF** | **Pumping:<br>Z1: 00.00,Z2: 0.26/CCF, Z3: 0.48/CCF** |
| **Linda** | **$41.15/Monthly<br>$82.30 Bimonthly** | **$1.65/CCF** | |
| **Casitas** | **$67.44 Monthly<br>$134.88 Bimonthly** | **Pumped: $2.10 /CCF Gravity $1.25 / CCF T1: 10 CCF<br>Pumped: $2.91 /CCF Gravity: $2.09 / CCF T2: 50 CCF<br>Pumped: $4.20 /CCF Gravity: $3.39 /CCF T3: >50CCF** | **Monthly adjudication impact charge $2.52** |
| **East Bay*** | **$53.60/Monthly<br>$107.2 Bimonthly** | **$5.42 <172 gpd, $7.44 172<gpd<393, $9.83 gpd>393 gpd** | |
| **Indian Wells** | **$59.27/Monthly<br>$118.54 Bimonthly** | **$2.21 0-33CCF T1, $7.46 33+ T2** | **$18.50 Arsenic<br>Power per 100CCF, B Zone: $0.29, C Zone:$0.54, D Zone: $0.83, E Zone:$1.12 /100CCF** |
| **Marin** | **$76.08/bimonthly** | **T1 0-15CCF $9.16 / CCF, T2 16-25CCF $11.98 / CCF, T3 26-80 CCF $19.33/ CCF T4 81+ $24.77/CCF** | **Capital Maintenance Fee: $33.08, Watershed Management Fee :$6.82** |

# Comparison with Other Water Districts (1” connection

| Units | SJWD | FWD | OWD | FOWD | CHWD |
|---|---|---|---|---|---|
| 0 | $ 175.20 | $ 40.18 | $ 53.20 | $ 86.65 | $ 137.55 |
| 20 | $ 196.60 | $ 70.38 | $ 89.20 | $ 98.85 | $ 164.55 |
| 40 | $ 218.00 | $ 100.58 | $ 125.20 | $ 111.05 | $ 191.55 |
| 60 | $ 239.40 | $ 132.78 | $ 161.20 | $ 123.25 | $ 218.55 |
| 80 | $ 260.80 | $ 164.98 | $ 197.20 | $ 135.45 | $ 245.55 |
| 100 | $ 282.20 | $ 199.98 | $ 233.20 | $ 147.65 | $ 272.55 |
| 120 | $ 303.60 | $ 234.98 | $ 269.20 | $ 159.85 | $ 299.55 |
| 140 | $ 325.00 | $ 269.98 | $ 305.20 | $ 172.05 | $ 326.55 |
| 160 | $ 346.40 | $ 304.98 | $ 341.20 | $ 184.25 | $ 353.55 |
| 180 | $ 367.80 | $ 339.98 | $ 377.20 | $ 196.45 | $ 380.55 |
| 200 | $ 389.20 | $ 374.98 | $ 413.20 | $ 208.65 | $ 407.55 |
| 220 | $ 410.60 | $ 409.98 | $ 449.20 | $ 220.85 | $ 434.55 |
| 240 | $ 432.00 | $ 444.98 | $ 485.20 | $ 233.05 | $ 461.55 |


Meter Failure Vs Lifetime CCF Data
Meters
Lifetime CCF
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# SJWD 2024 Rate Model

$ Rev /Meter/Year = $2.92*365+$1.07*CCF

<= 1" Meters :10437