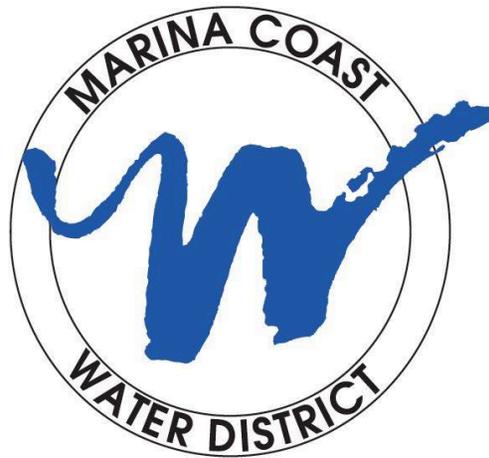


# Marina Coast WD



## Water, Wastewater & Recycled Water Capacity Fee Tables

**10/17/2019**



BARTLE WELLS ASSOCIATES

Independent Public Finance Advisors

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**Table 1**  
**Marina Coast WD**  
**Current Capacity Fees**

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**Residential Fees**

| <u>Water Capacity Fees</u>   | <u>Central Marina</u> <sup>1</sup> | <u>Ord Community</u> <sup>1</sup> |
|------------------------------|------------------------------------|-----------------------------------|
| Water Capacity Fee (per EDU) | \$4,526                            | \$8,010                           |
| Sewer Capacity Fee (per EDU) | \$2,333                            | \$3,322                           |

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1 Last updated 2013, does not include regional wastewater fees

*Each residential connection (single-family, multiple dwelling, condominium, trailer space, or mobile home) is one (1) EDU.*

**Non Residential Water Fees**

Each EDU is equivalent to 0.33 Acre foot water use per year.  
Refer to MCWD "Appendix c" for assigned water use factors

**Non Residential Sewer Fees**

Each twenty (20) fixture units are equivalent to one (1) equivalent dwelling unit (EDU).  
For each hotel/motel unit a minimum of one (1) EDU per room will be applied.  
Each nonresidential connection is a minimum of one (1) EDU.

**Table 2A**  
**Marina Coast WD**  
**Capital Improvement Plan Summary**

|   | Nearterm 2035 CIP      |                      |                     |
|---|------------------------|----------------------|---------------------|
|   | Allocation to Existing | Allocation to Future | Total to Nearterm   |
| Marina Water CIP                              | \$1,678,000            | \$292,000            | <b>\$1,970,000</b>  |
| Marina Share Combined Water CIP               | \$13,891,560           | \$5,095,440          | <b>\$18,987,000</b> |
| Ord Water                                     | \$7,914,500            | \$19,476,500         | <b>\$27,391,000</b> |
| Ord Share Combined Water CIP                  | \$5,769,390            | \$3,843,160          | <b>\$9,612,550</b>  |
| <b>Total Water CIP</b>                        | <b>\$29,253,450</b>    | <b>\$28,707,100</b>  | <b>\$57,960,550</b> |
| Marina Recycled Water (Adjusted) <sup>1</sup> | \$8,162,000            | \$5,723,458          | <b>\$13,885,458</b> |
| Ord Recycled Water (Adjusted) <sup>1</sup>    | \$7,238,000            | \$41,231,891         | <b>\$48,469,891</b> |
| <b>Total Recycled CIP</b>                     | <b>\$15,400,000</b>    | <b>\$46,955,349</b>  | <b>\$62,355,349</b> |
| <b>Total Marina Water<sup>2</sup></b>         | <b>\$23,731,560</b>    | <b>\$11,110,898</b>  | <b>\$34,842,458</b> |
| <b>Total Ord Water<sup>2</sup></b>            | <b>\$20,921,890</b>    | <b>\$64,551,551</b>  | <b>\$85,473,441</b> |
| Marina Wastewater                             | \$5,033,148            | \$2,166,654          | <b>\$7,199,802</b>  |
| Marina Share Combined Wastewater CIP          | \$91,520               | \$0                  | <b>\$91,520</b>     |
| Ord Wastewater                                | \$14,850,151           | \$21,841,121         | <b>\$36,691,272</b> |
| Ord Share Combined Wastewater CIP             | \$124,780              | \$0                  | <b>\$124,780</b>    |
| <b>Total Wastewater CIP</b>                   | <b>\$20,099,599</b>    | <b>\$24,007,775</b>  | <b>\$44,107,374</b> |
| <b>Total Marina Wastewater</b>                | <b>\$5,124,668</b>     | <b>\$2,166,654</b>   | <b>\$7,291,322</b>  |
| <b>Total Ord Wastewater</b>                   | <b>\$14,974,931</b>    | <b>\$21,841,121</b>  | <b>\$36,816,052</b> |

1 - Includes future interest costs, excludes capital contributions and grants See Table 2B

2 - Includes Water & Recycled Water CIP

See 2019 Master Plan, AKEL Engineering for Detail

**Table 2B**  
**Marina Coast WD**  
**Capital Improvement Plan - Combined CIP Detail**

| Project         | Nearterm Water CIP - Combined |                    |                    |                    | % Total             | Cost Total          |
|-----------------|-------------------------------|--------------------|--------------------|--------------------|---------------------|---------------------|
|                 | Marina Existing               | Marina Future      | Ord Existing       | Ord Future         |                     |                     |
| G-P1            | 97%                           | 0%                 | 3%                 | 0%                 | 100%                | \$1,890,000         |
| G-P2            | 10%                           | 0%                 | 65%                | 25%                | 100%                | \$155,000           |
| G-P3            | 8%                            | 0%                 | 52%                | 40%                | 100%                | \$194,000           |
| G-P4            | 97%                           | 0%                 | 3%                 | 0%                 | 100%                | \$194,000           |
| G-P5            | 73%                           | 19%                | 2%                 | 6%                 | 100%                | \$194,000           |
| G-P6            | 13%                           | 0%                 | 87%                | 0%                 | 100%                | \$1,169,000         |
| G-P7            | 0%                            | 77%                | 0%                 | 23%                | 100%                | \$1,640,000         |
| G-P8            | 0%                            | 77%                | 0%                 | 23%                | 100%                | \$2,120,000         |
| G-P9            |                               |                    |                    |                    |                     |                     |
| G-P10           | 0%                            | 77%                | 0%                 | 23%                | 100%                | \$1,285,000         |
| G-P11           |                               |                    |                    |                    |                     |                     |
| <b>Subtotal</b> |                               |                    |                    |                    |                     | <b>\$8,841,000</b>  |
| G-T-A1          | 97%                           | 0%                 | 3%                 | 0%                 | 100%                | \$5,841,000         |
| G-T-A2          | 73%                           | 19%                | 2%                 | 6%                 | 100%                | \$5,841,000         |
| G-T-B2          | 6%                            | 0%                 | 44%                | 50%                | 100%                | \$3,894,000         |
| <b>Subtotal</b> |                               |                    |                    |                    |                     | <b>\$15,576,000</b> |
| G-PS-B          | 10%                           | 0%                 | 65%                | 25%                | 100%                | \$737,000           |
| <b>Subtotal</b> |                               |                    |                    |                    |                     | <b>\$737,000</b>    |
| G-W31           |                               |                    |                    |                    |                     |                     |
| G-W34           |                               |                    |                    |                    |                     |                     |
| G-W35           | 0%                            | 37%                | 0%                 | 63%                | 100%                | \$103,000           |
| G-G36           |                               |                    |                    |                    |                     |                     |
| G-W1            | 37%                           | 0%                 | 63%                | 0%                 | 100%                | \$2,801,000         |
| <b>Subtotal</b> |                               |                    |                    |                    |                     | <b>\$2,904,000</b>  |
| G-PRV-B1        | 73%                           | 19%                | 2%                 | 6%                 | 100%                | \$137,000           |
| <b>Subtotal</b> |                               |                    |                    |                    |                     | <b>\$137,000</b>    |
| G-WD1           | 37%                           | 0%                 | 63%                | 0%                 | 100%                | \$465,000           |
| <b>Subtotal</b> |                               |                    |                    |                    |                     | <b>\$465,000</b>    |
| <b>Total</b>    | <b>\$13,891,560</b>           | <b>\$5,095,440</b> | <b>\$5,829,840</b> | <b>\$3,843,160</b> | <b>\$28,660,000</b> | <b>\$28,660,000</b> |

**Table 2C**  
**Recycled Water CIP Detail**

|   | <b>Nearterm 2035 Recycled Water CIP</b> |                      |                     |
|---|---|----------------------|---------------------|
|   | <b>Central Marina</b>                   | <b>Ord Community</b> | <b>Total</b>        |
| Existing Users  | \$0                                     | \$0                  | \$0                 |
| Future Users  |   |                      |                     |
| Capital Improvement Project Cost                                | \$3,164,723                             | \$37,634,141         | \$40,798,864        |
| Plus Future Interest Costs <sup>1</sup>                         | \$996,206                               | \$11,846,641         | \$12,842,847        |
| (Less Capital Contributions & Grants)                           | (\$875,471)                             | (\$10,410,891)       | (\$11,286,362)      |
| Total Future Users  | \$3,285,458                             | \$39,069,891         | \$42,355,349        |
|   | <b>\$3,285,458</b>                      | <b>\$39,069,891</b>  | <b>\$42,355,349</b> |
| <b>Total Recycled Water Capital Improvement Plan (Nearterm)</b> |   |                      |                     |
|   | <b>Central Marina</b>                   | <b>Ord Community</b> | <b>Total</b>        |
| Existing Users  | \$8,162,000                             | \$7,238,000          | \$15,400,000        |
| Future Users  | \$5,723,458                             | \$41,231,891         | \$46,955,349        |
|   | <b>\$13,885,458</b>                     | <b>\$48,469,891</b>  | <b>\$62,355,349</b> |

1 - 3 loans to fund RW projects, 30 year terms:

\$18m @ 1.8% interest Year 1, \$11.5m @ 2.5% interest Year 6, \$4.5m @ 3% interest Year 12 respectively

Source: MCWD

Source - 2019 Master Plan, AKEL Engineering and MCWD Estimates



**Table 4  
Marina Coast WD  
Growth Projections**

| <b>Current<br/>FY 2019 EDUs</b> | <b>Units</b>           | <b>% Growth to<br/>Nearterm 2035<sup>1</sup></b> | <b># Growth to Nearterm<br/>2035</b> | <b>Est. Total EDUs to<br/>Nearterm 2035</b> |
|---------------------------------|------------------------|--|--------------------------------------|---|
| <u>City of Marina</u>           |                        |  |                                      |   |
| 7,921                           | <i>Water EDUs</i>      | 24%  | 1,920                                | <b>9,841</b>                                |
| 6,322                           | <i>Wastewater EDUs</i> | 17%  | 1,092                                | <b>7,414</b>                                |
| <u>Ord Community</u>            |                        |  |                                      |   |
| 5,041                           | <i>Water EDUs</i>      | 79%  | 3,961                                | <b>9,001</b>                                |
| 5,172                           | <i>Wastewater EDUs</i> | 76%  | 3,908                                | <b>9,080</b>                                |
| <u>Total System</u>             |                        |  |                                      |   |
| 12,962                          | <i>Water EDUs</i>      | 45%  | 5,881                                | <b>18,842</b>                               |
| 11,494                          | <i>Wastewater EDUs</i> | 44%  | 5,000                                | <b>16,494</b>                               |

1 - Source: Table 3

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**Table 5**  
**Marina Coast WD**  
**Capacity Fee Methodologies Overview**

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**Current Methodology: Average Cost**

$$\frac{\textit{Existing Asset Value} + \textit{Total CIP}}{\textit{Total Units}}$$

**Proposed Methodology: Hybrid Buy-In + Marginal Future Cost**

$$\frac{\textit{Existing Asset Value}}{\textit{Total Units}} + \frac{\textit{Future User Share of CIP}}{\textit{Future Units}}$$

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**Table 6 - Proposed Fee Calculation**  
**Marina Coast WD**  
**Final Draft 2019 Capacity Charge Calculations - Hybrid Buy-In + Marginal Future Cost Methodology (to Nearterm 2035)**

| System Capacity Charge  | recovers development share of existing facilities + future CIP |                      |                        |                     |                        |
|---|--|----------------------|------------------------|---------------------|------------------------|
|   | 2019<br>ENR CCI Adj.   | Marina Water         | Ord Water              | Marina Sewer        | Ord Sewer              |
| <b>Existing Asset Component - Applies to All Users</b>            |  |                      |                        |                     |                        |
| 1 2018 CAFR Existing Infrastructure Asset Value                   | 4.4%   | \$ 29,329,840        | \$ 119,244,541         | \$ 11,566,871       | \$ 39,849,292          |
| 2 Less Accumulated Depreciation on Existing Infrastructure Assets | 4.4%   | \$ (17,276,185)      | \$ (12,229,952)        | \$ (5,587,085)      | \$ (4,179,314)         |
| <b>3 RCNLD of Water Infrastructure in Service (sum of 1 to 2)</b> |  | <b>\$ 12,053,654</b> | <b>\$ 107,014,589</b>  | <b>\$ 5,979,786</b> | <b>\$ 35,669,978</b>   |
| <b>Value of Other Depreciable Assets</b>                          |  |                      |                        |                     |                        |
| 4 Less Value of Easements   | 4.4%   | \$ -                 | \$ (14,720,400)        | \$ -                | \$ (11,275,200)        |
| 5 Less Water/Sewer Rights Assets                                  | 4.4%   | \$ -                 | \$ (59,977,800)        | \$ -                | \$ (15,973,200)        |
| <b>6 RCNLD of Other Depreciable Assets (sum of 4 to 5)</b>        |  | <b>\$ -</b>          | <b>\$ (74,698,200)</b> | <b>\$ -</b>         | <b>\$ (27,248,400)</b> |
| <b>7 Total Value of Capital Assets (3 + 6)</b>                    |  | <b>\$ 12,053,654</b> | <b>\$ 32,316,389</b>   | <b>\$ 5,979,786</b> | <b>\$ 8,421,578</b>    |
| <b>Existing and Future Customer Base- EDUS</b>                    |  |                      |                        |                     |                        |
| 8 Total Existing EDUs   |  | 7,921                | 5,041                  | 6,322               | 5,172                  |
| 9 Number of Future EDUs to Nearterm - 2035                        |  | <u>1,920</u>         | <u>3,961</u>           | <u>1,092</u>        | <u>3,908</u>           |
| <b>10 Total Number of EDUs to Nearterm (8+9)</b>                  |  | <b>9,841</b>         | <b>9,001</b>           | <b>7,414</b>        | <b>9,080</b>           |
| <b>11 Buy In Capacity Fee Component (7/10) \$/EDU</b>             |  | <b>\$ 1,225</b>      | <b>\$ 3,590</b>        | <b>\$ 807</b>       | <b>\$ 927</b>          |
| <b>Future Cost Component - Applies to Future Users Only</b>       |  |                      |                        |                     |                        |
| <b>CIP allocated to Future Users - Nearterm 2035</b>              |  |                      |                        |                     |                        |
| 12 Water Master Plan  |  | \$ 5,387,440         | \$ 23,319,660          | \$ -                | \$ -                   |
| 13 Sewer Master Plan  |  | \$ -                 | \$ -                   | \$ 2,166,654        | \$ 21,841,121          |
| 14 Recycled Water Master Plan <sup>1</sup>                        |  | <u>\$ 3,285,458</u>  | <u>\$ 39,069,891</u>   | <u>\$ -</u>         | <u>\$ -</u>            |
| <b>15 Total Value of Future CIP to Nearterm (12+13+14)</b>        |  | <b>\$ 8,672,898</b>  | <b>\$ 62,389,551</b>   | <b>\$ 2,166,654</b> | <b>\$ 21,841,121</b>   |
| <b>Future Customer Base- EDUS</b>                                 |  |                      |                        |                     |                        |
| 16 Number of Future EDUs to Nearterm - 2035 (9)                   |  | 1,920                | 3,961                  | 1,092               | 3,908                  |
| <b>17 Expansion Capacity Fee Component (15/16) \$/EDU</b>         |  | <b>\$ 4,517</b>      | <b>\$ 15,753</b>       | <b>\$ 1,984</b>     | <b>\$ 5,589</b>        |
| <b>System Capacity Charge Results - EDUs</b>                      |  |                      |                        |                     |                        |
| <b>18 Estimated System Capacity Charge (11+17) \$/EDU</b>         |  | <b>\$ 5,741</b>      | <b>\$ 19,343</b>       | <b>\$ 2,791</b>     | <b>\$ 6,516</b>        |
| 19 Current Capacity Charge \$/EDU                                 |  | \$ 4,526             | \$ 8,010               | \$ 2,333            | \$ 3,322               |
| 20 Difference (18-19)   |  | \$ 1,215             | \$ 11,333              | \$ 458              | \$ 3,194               |

1 - excludes Capital Contributions and Grants. Includes Interest Cost, See Table 2C

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**Table 7**  
**Marina Coast WD**  
**Estimated Sewer Flow Per EDU**

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Estimated population per household: **2.8** people.

| Year    | Population | Sewer Flow<br>gpcd |
|---------|------------|--------------------|
| 2010    | 30,840     | 68                 |
| 2011    | 31,141     | 67                 |
| 2012    | 31,445     | 64                 |
| 2013    | 31,752     | 64                 |
| 2014    | 32,062     | 61                 |
| 2015    | 32,375     | 56                 |
| 2016    | 33,346     | <u>58</u>          |
| Average |            | 63                 |

ADWF sewer flow per day per person, the average from 2010 to 2016 is 63 gpcd.  
The sewer flow trend is downward from approximately 68 gpcd in 2010 to 58 gpcd in 2016.

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Source: AKEL Engineering

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**Table 8**  
**Marina Coast WD**  
**Calculation of Typical Single Family Residence (2 bathroom) Fixture Units**

| <b>Fixture Type</b>   | <b>Quantity</b> | <b>DFU (1)</b> | <b>Total DFU</b> |
|---|-----------------|----------------|------------------|
| Bathtub(with or without shower)                             | 1               | 2              | 2                |
| Clothes Washer  | 1               | 3              | 3                |
| Dishwasher  | 1               | 2              | 2                |
| Lavatory Sink   | 2               | 1              | 2                |
| Shower (single)   | 1               | 2              | 2                |
| Kitchen Sink  | 1               | 2              | 2                |
| Toilet (1.28 gal per flush)                                 | 2               | 3              | 6                |
| <b>Fixture Units in a Typical Single Family Residence =</b> |                 |                | <b>19</b>        |

1. DFU=Drainage Fixture Units as defined in Chapter 7 of California Plumbing Code

**Table 9**  
**Marina Coast WD**  
**Example Calculation of ADU (1 bathroom) Fixture Units**

| <b>Fixture Type</b>                 | <b>Quantity</b> | <b>DFU (1)</b> | <b>Total DFU</b> |
|-------------------------------------|-----------------|----------------|------------------|
| Bathtub(with or without shower)     | 0               | 2              | 0                |
| Clothes Washer                      | 0               | 3              | 0                |
| Dishwasher                          | 0               | 2              | 0                |
| Lavatory Sink                       | 1               | 1              | 1                |
| Shower (single)                     | 1               | 2              | 2                |
| Kitchen Sink                        | 1               | 2              | 2                |
| Toilet (1.28 gal per flush)         | 1               | 3              | 3                |
| <b>Fixture Units in Example ADU</b> |                 |                | <b>8</b>         |

1. DFU=Drainage Fixture Units as defined in Chapter 7 of the California Plumbing Code

**Table 10**  
**Marina Coast WD**  
**Proposed Capacity Fees**

**Residential Fees**

| Marina Central                                      |                |                |                        |
|---|----------------|----------------|------------------------|
| Proposed Capacity Fees - Hybrid Approach (Nearterm) | Current        | Proposed       | \$ Increase (Decrease) |
| Water Capacity Fee - \$/EDU                         | \$4,526        | \$5,741        | \$1,215                |
| Sewer Capacity Fee - \$/EDU                         | <u>\$2,333</u> | <u>\$2,791</u> | <u>\$458</u>           |
| <b>Total Capacity Fee</b>                           | <b>\$6,859</b> | <b>\$8,532</b> | <b>\$1,673</b>         |

| Ord Community                                       |                 |                 |                        |
|---|-----------------|-----------------|------------------------|
| Proposed Capacity Fees - Hybrid Approach (Nearterm) | Current         | Proposed        | \$ Increase (Decrease) |
| Water Capacity Fee - \$/EDU                         | \$8,010         | \$19,343        | \$11,333               |
| Sewer Capacity Fee - \$/EDU                         | <u>\$3,322</u>  | <u>\$6,516</u>  | <u>\$3,194</u>         |
| <b>Total Capacity Fee</b>                           | <b>\$11,332</b> | <b>\$25,859</b> | <b>\$14,527</b>        |

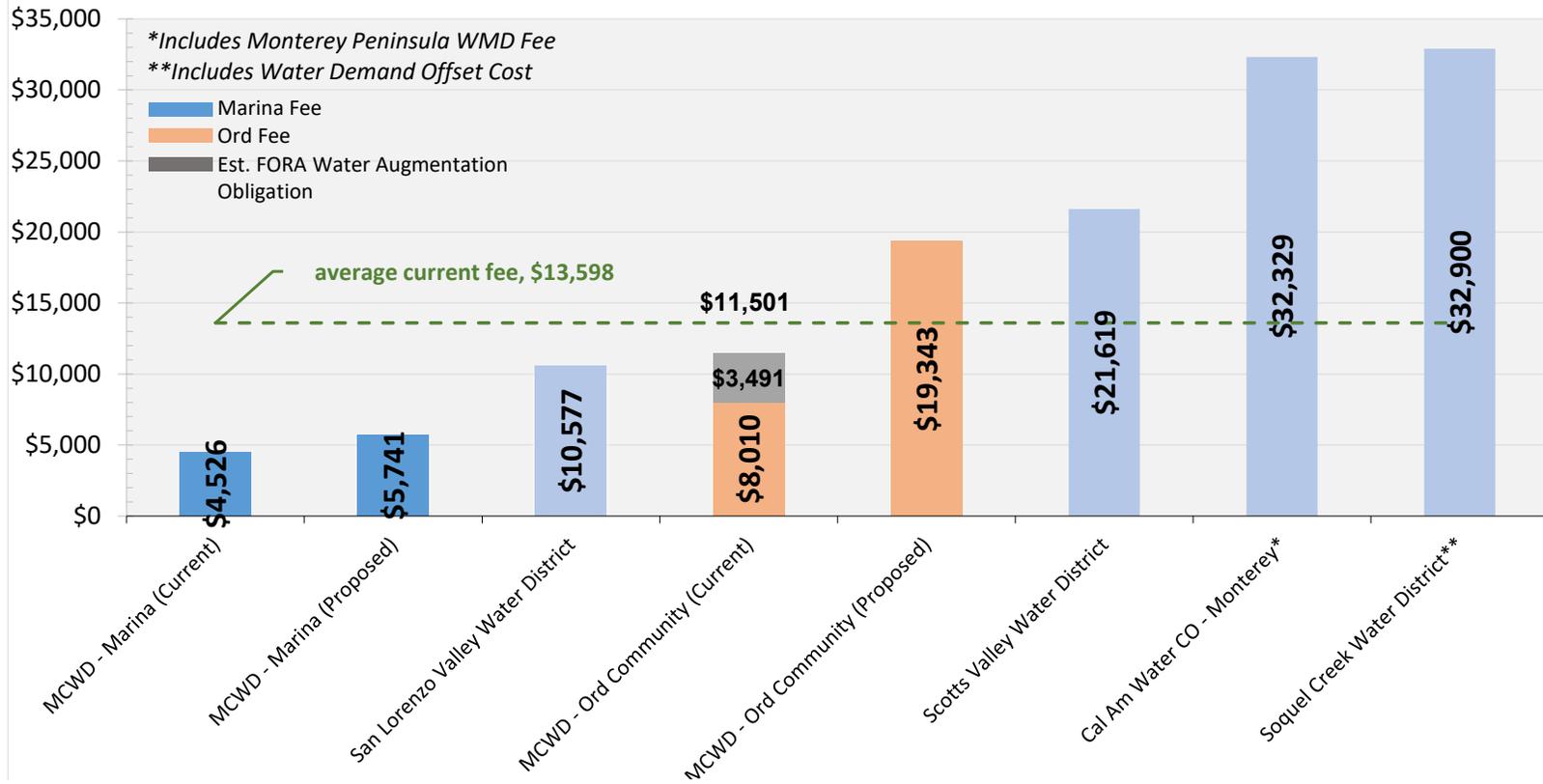
**Non Residential Water Fees**

Each EDU is equivalent to 0.28 Acre foot water use per year.  
 Refer to MCWD "Appendix C" for assigned water use factors

**Non Residential Sewer Fees**

Each nineteen (19) fixture units are equivalent to one (1) equivalent dwelling unit (EDU).  
 Each Single Family Residential connection is one (1) EDU  
 Each Multi Family Residential Connection (multiple dwelling, condominium, trailer space or mobile home) is 0.8 EDU  
 Each nonresidential connection is a minimum of one (1) EDU.  
 Hotels are considered non-residential units and are a minimum of one (1) EDU  
 Updated Sewer Flow per EDU = 62gpd \* 2.8 persons/household = 174gpd/EDU

### Single-Family Residential Water Capacity Fees, FY 18/19



## Single-Family Residential Wastewater Capacity Fees, FY 18/19

