



Marina Coast WD

Water, Wastewater, & Recycled Capacity Fee Discussion

FORA Meeting
September 19, 2019



BARTLE WELLS ASSOCIATES
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Current Capacity Fees

	Marina	Ord
Water Capacity Fee	\$4,526	\$8,010
Sewer Capacity Fee	\$2,333	\$3,322
Total	\$6,859	\$11,332

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
EDUs based on Appendix "C" in MCWD Code

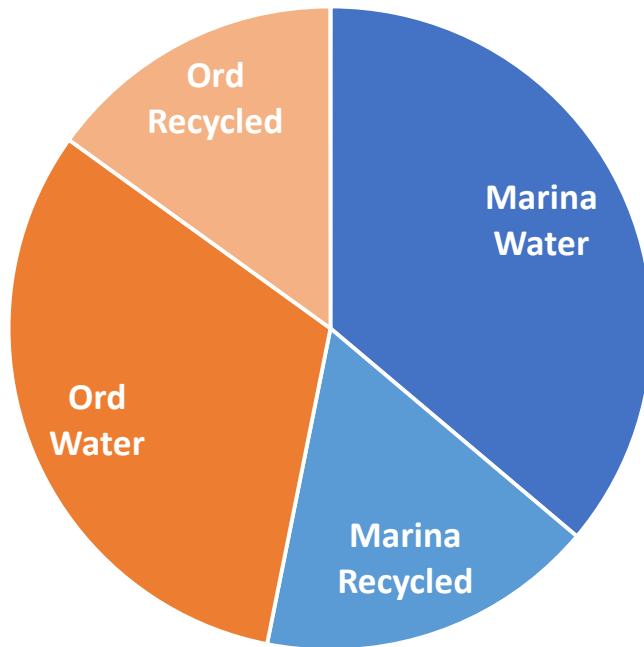
Non-Residential Sewer Fees

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



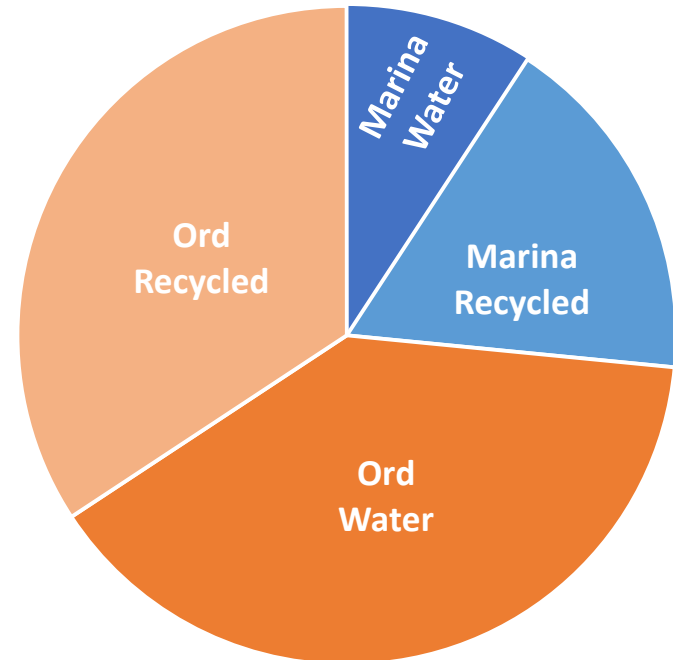
Water and Recycled CIP Summary - Nearterm \$136 million

Allocation to Existing Users



Existing Total: \$45 million

Allocation to Future Users

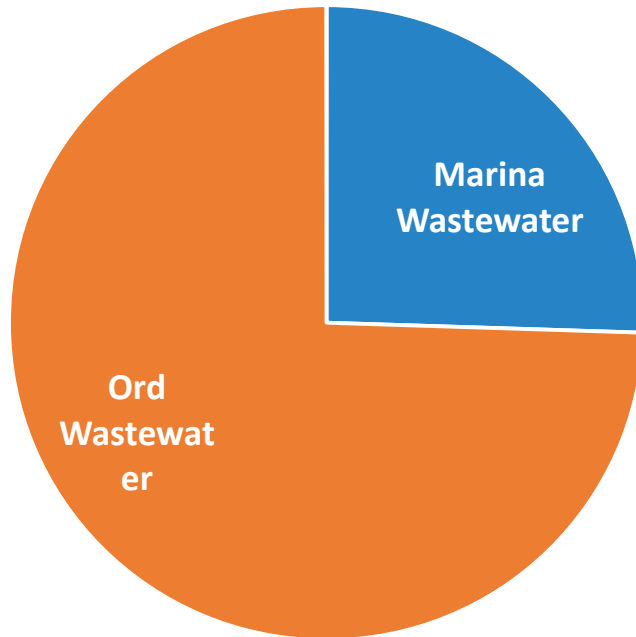


Future Total: \$91 million



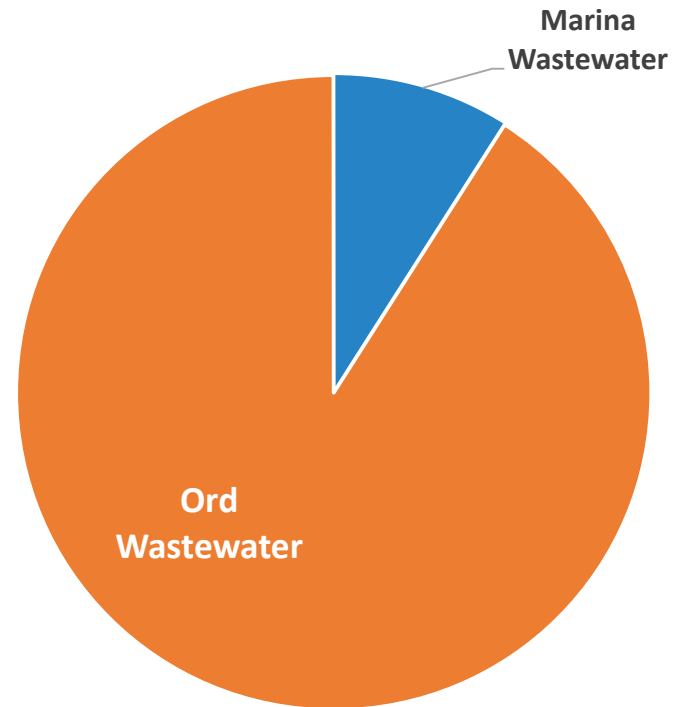
Wastewater CIP Summary - Nearterm \$44 million

Allocation to Existing Users



Existing Total: \$20 million

Allocation to Future Users



Future Total: \$24 million



Growth Projection Summary - Water

Development Horizon	Central Marina	Ord Community	Total
Existing EDUs (2018)	7,921	5,041	12,962
Nearterm EDUs (to 2035)	9,841	9,001	18,842
Buildout EDUs (to 2050)	9,841	23,243	33,084
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% Growth to Nearterm	24%	79%	45%
% Growth to Buildout	24%	361%	155%

EDUs estimated using:

- AKEL Engineering: Average Day Water Demand
- BWA/Marina CWD: 250 gpd or 0.28 AFY/EDU (revised estimate)



Growth Projection Summary – Wastewater

Development Horizon	Central Marina	Ord Community	Total
Existing EDUs (2018)	6,322	5,172	11,494
Nearterm EDUs (to 2035)	7,414	9,080	16,494
Buildout EDUs (to 2050)	7,414	21,609	29,023
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% Growth to Nearterm	17%	76%	44%
% Growth to Buildout	17%	318%	153%

EDUs estimated using:

- AKEL Engineering: Average Day Sewer Use
- BWA/Marina CWD: 175 gpd or 0.195 AFY/EDU (revised estimate)



Fee Methodology Overview

Current Methodology: Average Cost

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

Proposed Methodology: Hybrid Buy-In + Marginal Future Cost

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



Calculation – Estimated FORA Obligation Water Augmentation

FORA FY 2008-2009 CIP for Water Augmentation	\$40,483,570
Index to 2019	1.438
FORA Water Augmentation indexed to 2019	\$50,215,374
Future EDUs to Nearterm 2035	14,387
Estimated FORA Obligation	\$3,491

Fee Calculation – Water	Carollo	BWA	Carollo	BWA
	Current Marina Water	Proposed Marina Water	Current Ord Water	Proposed Ord Water
Total Value of Existing Assets Net of Liabilities	\$9,916,088	\$28,093,716	\$24,541,654	\$32,316,389
Total System EDUs to Nearterm 2035	8,269	9,841	14,387	9,001
Buy-In Portion of Capacity Fees	\$1,199	\$1,225	\$1,706	\$3,590
Shared CIP Allocated to All Users		\$10,600,000		\$9,400,000
Total EDUs to Nearterm 2035		9,841		9,001
Shared CIP Portion of Capacity Fees (Groundwater Injection Barrier)		\$1,077		\$1,044
Water Master Plan CIP - Future Users Only	\$27,514,092	\$8,384,440	\$90,693,766	\$35,623,660
Future EDUs to Nearterm 2035 (Total for Current)	8,269	1,920	14,387	3,961
Water CIP Future User Portion of Capacity Fees	\$3,327	\$4,366	\$6,304	\$8,994
Recycled Water Master Plan - Future Users Only		\$3,285,458		\$39,069,891
Future EDUs to Nearterm 2035 (Total for Current)		1,920		3,961
Recycled Water Future Users Only Portion of Capacity Fees		\$1,711		\$9,864
Subtotal Water Capacity Fee	\$4,526	\$8,379	\$8,010	\$23,494
Plus Estimated FORA Obligation			\$3,491	
Total Water Capacity Fee	\$4,526	\$8,379	\$11,501	\$23,494

Fee Calculation – Wastewater	Carollo Current Marina WW	BWA Proposed Marina WW	Carollo Current Ord WW	BWA Proposed Ord WW
Total Value of Existing Assets Net of Liabilities	\$13,650,674	\$5,979,786	\$3,848,904	\$8,421,578
Total System EDUs to Nearterm 2035	10,748	7,414	11,734	9,080
Buy-In Portion of Capacity Fees	\$1,270	\$807	\$328	\$927
Wastewater Master Plan CIP - Future Users Only	\$11,423,891	\$2,166,654	\$35,130,846	\$21,841,121
Future EDUs to Nearterm 2035	10,748	1,092	11,734	3,908
WW CIP Future User Portion of Capacity Fees	\$1,063	\$1,984	\$2,994	\$5,589
Total Wastewater Capacity Fee	\$2,333	\$2,791	\$3,322	\$6,516

Fees based on Hybrid Buy-In + Marginal Future Cost

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

	Current	Proposed	\$ Increase (Decrease)
Marina Water	\$4,526	\$8,379	\$3,853
Marina Sewer	\$2,333	\$2,791	\$458
Total	\$6,859	\$11,170	\$4,311
<i>Water Supply Augmentation Portion</i>		\$2,788	\$2,788

	Current	Proposed	\$ Increase (Decrease)
Ord Community Water	\$8,010	\$23,494	\$15,484
Ord Community Sewer	\$3,322	\$6,516	\$3,194
Total	\$11,332	\$30,010	\$18,678
<i>Water Supply Augmentation Portion</i>		\$10,908	\$10,908



Updated Use Factors

Type of Use	Basis	Existing Assigned Water Use Rate By Acre-Ft	Proposed Assigned Water Use Rate By Acre-Ft
Residential			
Multi Family - Apartment	DU	x 0.33	0.21
Apartment (senior complex)	DU	x	0.12
Group Housing (boarding, dormitory, convalescent)	Occupant	x	0.062
Condominium/Townhouse	DU	x 0.33	0.24
Mobile Home	DU	x 0.33	0.21
Multi-Family - Duplex to Fourplex	DU	x 0.33	0.24
Single Family 0<lot<0.08 acres (13 or more units per acre)	DU	x 0.33	0.25
Single Family 0.08<=lot<0.12 acres (9-12 Units/Acre)	DU	x 0.33	0.28
Single Family 0.12<=lot<0.22 (5-8 Units /Acre)	DU	x 0.33	0.33
Single Family 0.22<=lot<0.67 (2- 4 Units/acre)	DU	x 0.33	0.52
Single Family (lot>= 0.67 acres)	acres	x	0.89
Accessory Dwelling Unit < 640 sq. ft.	DU	x	0.17
Accessory Dwelling Unit 641 to 800 sq. ft.	DU	x	0.21
Accessory Dwelling Unit 841-1200 sq. ft.	DU	x	0.25



Updated Use Factors

Type of Use	Basis	Existing Assigned Water Use Rate By Acre-Ft	Proposed Assigned Water Use Rate By Acre-Ft
<u>Non-Residential</u>			
Auto Sales/Repair Shops (Gross Floor Area)	sq. ft.	x 0.00007	0.00006
Bank	sq. ft.	x	0.00030
Bakery	sq. ft.	x	0.00027
Bar (w/o restaurant)	sq. ft.	x 0.024/seat	0.00023
Beauty shop/barber shop	stations	x 0.059	0.050
Car Wash w/ recycle	sq. ft.	x *	*
Child Care	sq. ft.	x 0.0072	0.0061
Dry Cleaners (onsite cleaning)	sq. ft.	x 0.00040	0.00040
Gas Station (w/o minimart or restaurant)	pumps	x 0.1051	0.1051
Gym, Health Club (w/o aquatics)	sq. ft.	x	0.000117
Hotel/Motel/Bed & Breakfast (Guest room portion only)	units	x 0.170	0.110
Laundromat (self-serve)	washers	x 0.202	0.202
Laundry - Commercial	sq. ft.	x 0.1735	*
Office - General (nonmedical, includes chiropractor)	sq. ft.	x 0.00012	0.000102
Office - Government, Education	sq. ft.	x	0.000092



Updated Use Factors

Type of Use	Basis	Existing Assigned Water Use Rate By Acre-Ft	Proposed Assigned Water Use Rate By Acre-Ft
Office - Dental	sq. ft.	x 0.00029	
Office - Medical, Dental	sq. ft.	x 0.00018	0.000162
Manufacturing (other than food, beverage, chemical)	sq. ft.	x	0.056
Manufacturing (food, beverage, chemical)	sq. ft.	x	*
Meeting Halls, Churches, School Room	sq. ft.	x 0.0001	0.000092
Nursing Home (care portion only)	bed	x 0.142/room	0.12
Laboratory	sq. ft.	x	0.000082
Laboratory - Photographic	sq. ft.	x 0.003	0.003
Landscape (non-turf)	acres	x 2.1	2.1
Landscape (turf)	acres	x 2.5	2.5
Plant Nursery	sq. ft.	x 0.00009	0.00009

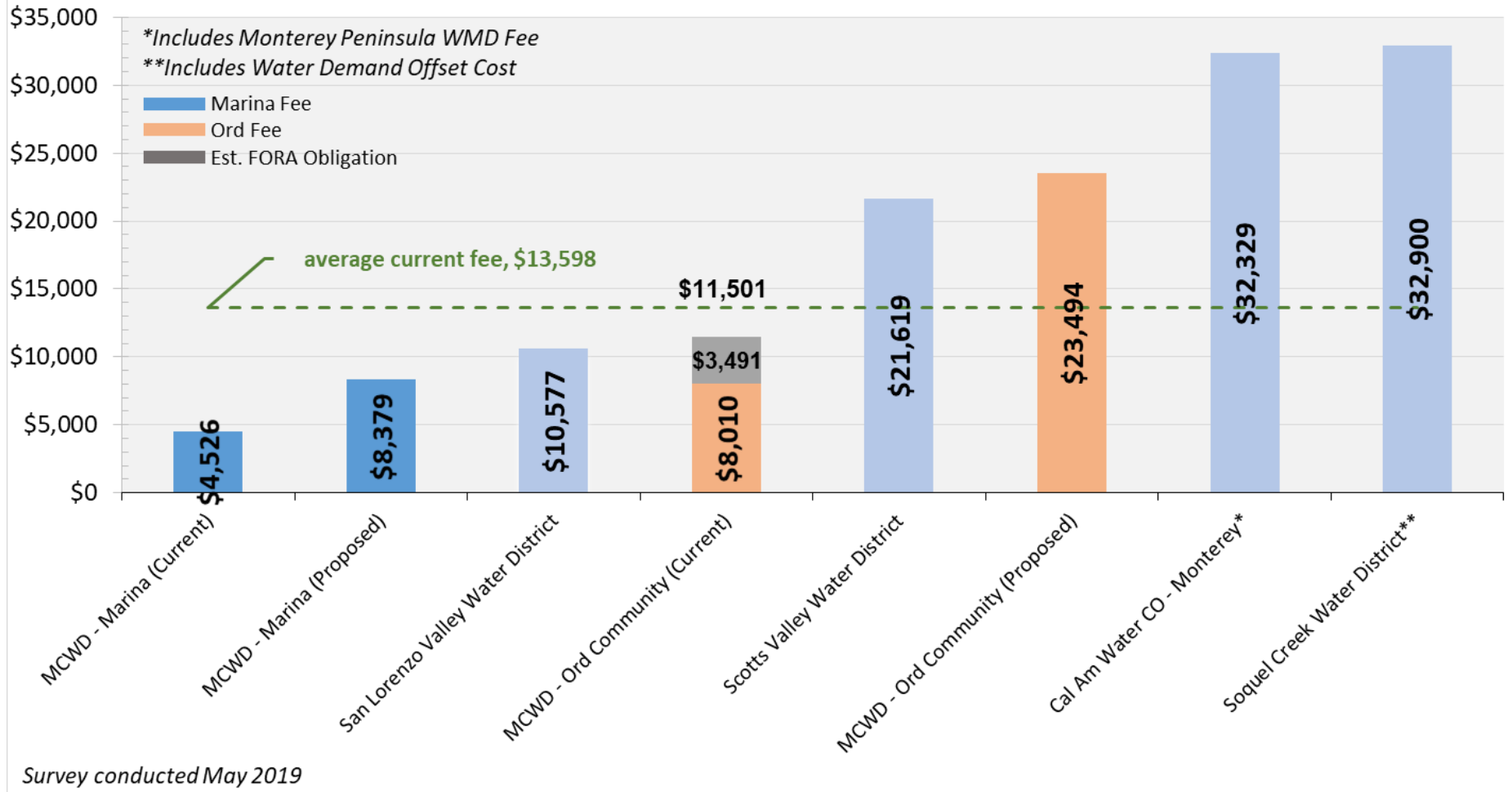


Updated Use Factors

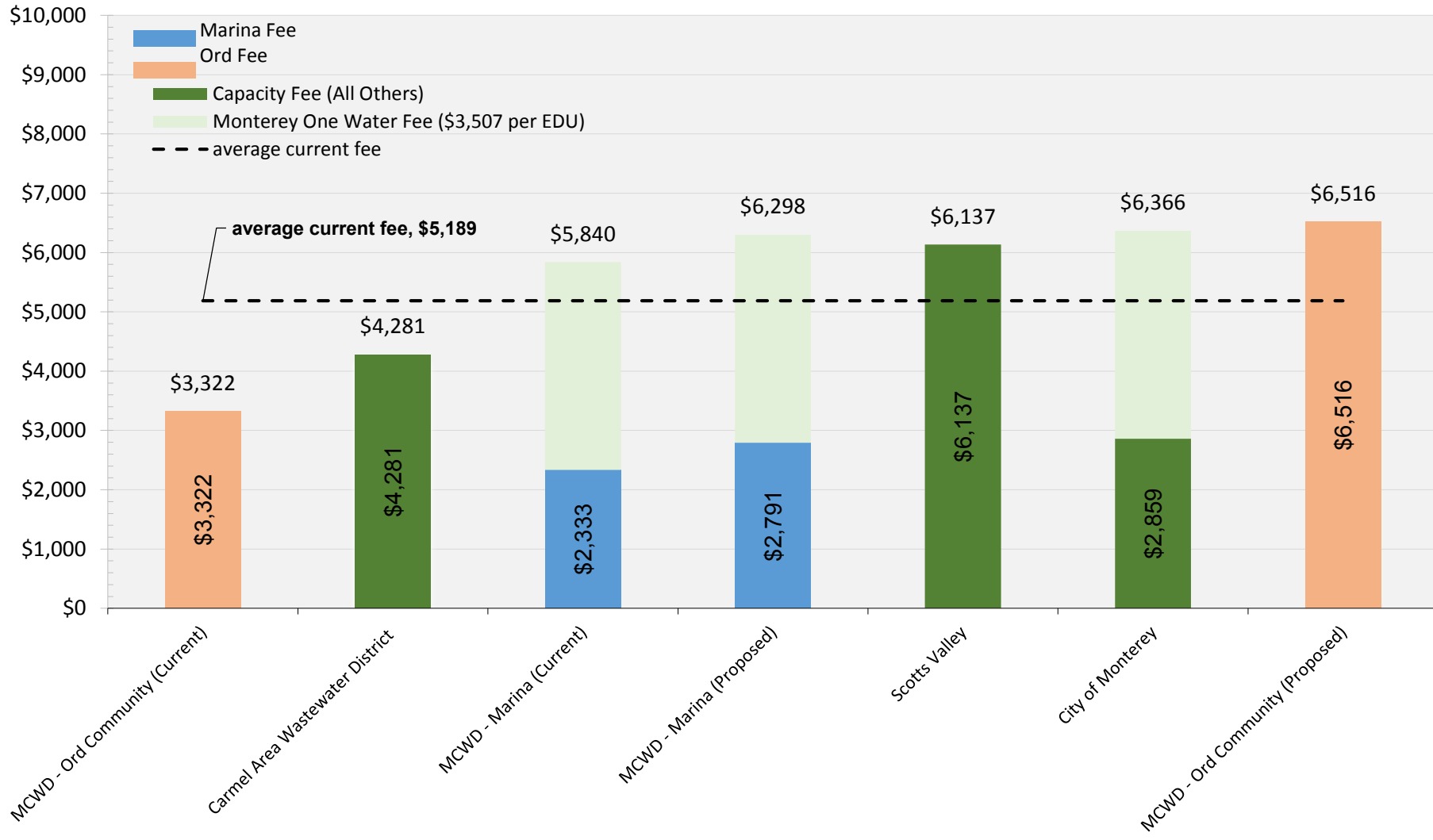
Type of Use	Basis	Existing Assigned Water Use Rate By Acre-Ft	Proposed Assigned Water Use Rate By Acre-Ft
Public Restroom	toilets	x 0.0676	0.058
Restaurant (incl. fast food, deli, sandwich shop)	seats	x 0.029	
Restaurant (full service - 3 meals, dish washing)	sq. ft.	x	0.00125
Restaurant (Fast-food/casual with onsite prep)	sq. ft.	x	0.00051
Restaurant (take out w/ minimal onsite prep)	sq. ft.	x 0.0027	0.00027
Store - General Retail (Department Store)	sq. ft.	x 0.00005	0.00005
Store - Grocery and Markets	sq. ft.	x 0.00039	0.00033
Swimming Pool (per 100 sq. ft. pool area)		x 0.020	0.02
Theater	seats	x 0.0014	0.0012
Veterinary	sq. ft.	x 0.00026	0.00022
Warehouse, Distribution, Self Storage	sq. ft.	x 0.00001	0.00001



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



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



survey conducted April 2019

Questions and Comments

Please provide feedback by 9/20/19



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