

# Marina Coast Water District

## Recycled Water Rate Study

Board of Directors Presentation  
February 22, 2022



# Agenda

1. Expense Summary Review
2. Proposed Financial Plan
3. Recycled Water COS and Rates
4. Next Steps

# Review

- January Board meeting:
  - › Rate Study overview
  - › Recycled Water (RW) system cost build-up
  - › RW system customer and conversion projections
  - › Open items in January:
    - Unique fixed charge
    - RW reserve policies
    - Multi-year rate forecast

# Financial Reserves and the Recycled Water System

- Much of the RW system costs are level payments related to debt/loan service
- New systems do not require the kind of capital repair and replacement (R&R) program that aging water systems require
- Recommendation:
  - › Operating Reserve: 90-120 days of working capital for O&M expenses
    - Aligns with the potable utility fund policies
    - Target = \$200,000 built up over four years
  - › Emergency Reserve: utilize a line of credit with MCWD's lending/banking institution
    - Minimizes increases to rates to fund reserves
    - Alternative: short-term internal borrowing in case of emergency

# Expense Forecast Summary

Required Revenue	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027
	Budget	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast
<b>Treatment</b>							
MCWD Share of M1W O&M	\$ -	\$ 1,580,393	\$ 1,659,413	\$ 1,742,384	\$ 1,829,503	\$ 1,920,978	\$ 2,017,027
MCWD Share of Renewal Replacement	-	212,011	224,732	238,216	252,509	267,660	283,719
MCWD Share of M1W SRF	382,615	732,474	732,474	732,474	732,474	732,474	732,474
MCWD Share of SRF Reserve	-	732,474	-	-	-	-	-
<b>Subtotal</b>	<b>\$ 382,615</b>	<b>\$ 3,257,353</b>	<b>\$ 2,616,619</b>	<b>\$ 2,713,074</b>	<b>\$ 2,814,486</b>	<b>\$ 2,921,111</b>	<b>\$ 3,033,220</b>
<b>Transmission</b>							
MCWD SRF	517,351	518,098	819,678	820,483	819,885	820,633	820,633
MCWD Share of MCWD O&M	-	11,973	12,572	13,201	13,861	14,554	15,281
M1W Share of Existing Pipeline	-	(33,413)	(33,413)	(33,413)	(33,413)	(33,413)	(33,413)
Debt Service Reserve	-	-	302,408	-	-	-	-
<b>Subtotal</b>	<b>\$ 517,351</b>	<b>\$ 496,658</b>	<b>\$ 1,101,245</b>	<b>\$ 800,270</b>	<b>\$ 800,332</b>	<b>\$ 801,773</b>	<b>\$ 802,501</b>
<b>Distribution</b>							
MCWD O&M	\$ -	\$ 291,476	\$ 306,050	\$ 321,352	\$ 337,420	\$ 354,291	\$ 372,005
MCWD SRF	-	-	335,846	335,846	335,846	335,846	335,846
Debt Service Reserve	-	-	335,846	-	-	-	-
<b>Subtotal</b>	<b>\$ -</b>	<b>\$ 291,476</b>	<b>\$ 977,743</b>	<b>\$ 657,199</b>	<b>\$ 673,266</b>	<b>\$ 690,137</b>	<b>\$ 707,852</b>
<b>Additional Costs</b>							
MCWD Administration Overhead	\$ -	\$ 195,656	\$ 205,439	\$ 215,711	\$ 226,497	\$ 237,822	\$ 249,713
Reserve Funding	-	-	50,000	50,000	50,000	50,000	-
SRF Reserve Payback	-	-	(638,254)	212,751	212,751	212,751	-
<b>Subtotal</b>	<b>\$ -</b>	<b>\$ 195,656</b>	<b>\$ (382,815)</b>	<b>\$ 478,463</b>	<b>\$ 489,248</b>	<b>\$ 500,573</b>	<b>\$ 249,713</b>
<b>Total: Expenses</b>	<b>\$ 899,966</b>	<b>\$ 4,241,143</b>	<b>\$ 4,312,791</b>	<b>\$ 4,649,005</b>	<b>\$ 4,777,333</b>	<b>\$ 4,913,595</b>	<b>\$ 4,793,285</b>
<i>Increase</i>			1.7%	7.8%	2.8%	2.9%	-2.4%
					FY22 - FY27 CAGR		3.11%

- Changes from January 19 presentation:
  - › Included recycled reserve funding to target \$200,000 by 2026.
  - › Assumes potable funds the SRF debt reserves upfront, to be repaid through recycled rates by FY 2026.
    - Allows for smoothing of the financial forecast and avoids higher rates in year one, then lowering rates in year two, and raising again in year three

# Forecast of Recycled Water Demand

Units of Service Summary	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027
	Budget	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast
<b>Volume (Ccf)</b>							
Retail	-	-	9,822	29,758	57,062	57,062	57,062
Golf Course	-	-	199,069	199,069	199,069	199,069	199,069
University	-	-	37,897	37,897	37,897	37,897	37,897
Contractual Customers	-	-	-	-	-	-	-
MCWD Utility Use	-	-	374,813	354,877	327,573	327,573	327,573
<b>Total Purchased</b>	-	-	621,601	621,601	621,601	621,601	621,601
<b>Volume (AF)</b>							
Retail	-	-	23	68	131	131	131
Golf Course	-	-	457	457	457	457	457
University	-	-	87	87	87	87	87
Contractual Customers	-	-	-	-	-	-	-
MCWD Utility Use	-	-	860	815	752	752	752
<b>Total Purchased</b>	-	-	1,427	1,427	1,427	1,427	1,427

# Cost of Service and Rate Design

- Creation of hypothetical future test year for rate design
  - › FY 2023 expenses, FY 2025 customer demand and connections
  - › Advantages:
    - Allows setting fair and unique recycled water rates
    - Smooth rate increases without fluctuation as new customers connect
  - › Disadvantages:
    - Disconnect between rates and timing of customers
    - Requires potable utility to temporarily fund outsized share of expenses

# Cost Allocations

Cost Allocation to Retail	Allocation		Common to All Costs		
	Retail	Contractual / Potable	Retail	Contractual / Potable	Total
<b>Cost Component</b>					
Treatment	41.2%	58.8%	\$ 1,078,180	\$ 1,538,439	\$ 2,616,619
Transmission	41.2%	58.8%	329,161	469,676	798,837
Distribution	41.2%	58.8%	264,494	377,402	641,896
Overhead	41.2%	58.8%	84,651	120,788	205,439
Contribution to Reserves	41.2%	58.8%	20,603	29,397	50,000
<b>Total:</b>			\$ 1,777,089	\$ 2,535,703	\$ 4,312,791

## FY 2025 Volume

Retail	57,062	41.2%	<b>Average Unit Ccf Cost:</b> \$	6.94
Golf Course	199,069			
University	37,897	58.8%		
Contractual	-			
Potable	327,573			
<b>Total:</b>	621,601			

- Costs allocated between retail and potable utilities based on volume.
- Cost to potable utilities for recycled water used is \$6.94 per Ccf.



# Retail Rate Design

Retail Cost of Service	Cost Components			Total
	Volume	Customers	Eq. Meters	
<b>FY 2023 Expenses</b>				
Treatment	100.0%		0.0%	\$ 1,078,180
Transmission	85.0%		15.0%	329,161
Distribution	85.0%		15.0%	264,494
Overhead	82.0%	18.0%	0.0%	84,651
Contribution to Reserves	100.0%		0.0%	20,603
<b>Total</b>	<b>\$ 1,672,831</b>	<b>\$ 15,209</b>	<b>\$ 89,048</b>	<b>\$ 1,777,089</b>
<b>FY 2025 Units of Service</b>				
Retail	57,062	66	190	
Golf Course	199,069	1	43	
<b>Total</b>	<b>256,131</b>	<b>67</b>	<b>233</b>	
<b>Annual Unit Cost</b>	<b>\$ 6.53</b>	<b>\$ 227.00</b>	<b>\$ 381.64</b>	
<b>Monthly Unit Cost</b>		<b>\$ 18.92</b>	<b>\$ 31.80</b>	

- Recovers retail costs determined in previous step.
- Customer cost based on \$18.92 per customer per month based on Carollo 2018 rate study.
- Capacity-related costs allocated to target similar total monthly fixed charge as the adopted FY 2023 Ord fixed charge.

# Proposed FY 2023 Retail Recycled Rates

Proposed Fixed Charges	Rate Components		
	Customer	Capacity	Total
<b>Meter Size</b>			
5/8"	\$ 18.92	\$ 31.80	\$ 50.72
3/4"	18.92	31.80	50.72
1"	18.92	53.00	71.92
1.5"	18.92	106.01	124.93
2"	18.92	169.62	188.53
3"	18.92	371.03	389.95
4"	18.92	667.86	686.78
6"	18.92	1,378.13	1,397.04
8"	18.92	2,968.27	2,987.19

Proposed Volume Charges	Rate
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<b>Customer</b>	
Retail	\$ 6.53
Golf Course	\$ 6.53

# Five-Year Retail RW Schedule: 3.5% per year

Recycled Rate Forecast	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027
	Budget	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast
<b>Monthly Fixed Charge</b>							
5/8"	\$ -	\$ -	\$ 50.72	\$ 52.50	\$ 54.34	\$ 56.25	\$ 58.22
3/4"	-	-	50.72	52.50	54.34	56.25	58.22
1"	-	-	71.92	74.44	77.05	79.75	82.55
1.5"	-	-	124.93	129.30	133.83	138.52	143.37
2"	-	-	188.53	195.14	201.97	209.04	216.36
3"	-	-	389.95	403.60	417.73	432.36	447.50
4"	-	-	686.78	710.82	735.70	761.45	788.11
6"	-	-	1,397.04	1,445.95	1,496.56	1,548.94	1,603.16
8"	-	-	2,987.19	3,091.75	3,199.97	3,311.97	3,427.89
<b>Volume (per Ccf)</b>							
Retail	\$ -	\$ -	\$ 6.53	\$ 6.76	\$ 7.00	\$ 7.25	\$ 7.51
Golf Course	-	-	6.53	6.76	7.00	7.25	7.51

# Potable's RW Financial Share: FY 2023 Example

Line	FY 2023 Potable Responsibility Detail	Forecasted Recycled Rate Revenue	Potable Utility Responsibility	COS Allocated Amount
<b>Recycled Rate Revenue</b>				
1	Fixed Charge Revenue	\$ 35,517	\$ 68,740	\$ 104,257
2	Volume Charge	1,364,300	308,532	1,672,831
3	University	236,739	26,199	262,938
4	<b>Potable Utility Use</b>		2,272,764	2,272,764
5	<b>SRF Reserve Funding</b>		638,254	638,254
6	<b>Total</b>	<u>\$ 1,636,556</u>	<u>\$ 3,314,490</u>	<u>\$ 4,951,046</u>

- Lines 1 and 2
  - › Temporary shortfalls in retail revenue as new customers connect
  - › Based on conversion schedule this declines each year and goes to \$0 in FY 2025
- Line 3
  - › Potable portion of university costs – rates/revenue set by contract
- Line 4
  - › Share of costs for RW utilized.
- Line 5
  - › Pre-funding of SRF debt reserves, to be repaid by RW over next 3 years

# Financial Plan Forecast

Financial Plan Summary	Projected Financial Plan				
	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
<b>Recycled Rate Revenue</b>					
Retail	\$ -	\$ -	\$ 82,902	\$ 267,467	\$ 498,638
Golf Course	-	-	1,316,915	1,371,106	1,427,543
Contractual	-	-	-	-	-
University	-	-	236,739	241,474	243,888
<b>Total: Rate Revenue</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 1,636,556</b>	<b>\$ 1,880,047</b>	<b>\$ 2,170,069</b>
<b>Expenses</b>					
Treatment	\$ 382,615	\$ 3,257,353	\$ 2,616,619	\$ 2,713,074	\$ 2,814,486
Transmission	517,351	496,658	1,101,245	800,270	800,332
Distribution	-	291,476	977,743	657,199	673,266
Overhead	-	195,656	205,439	215,711	226,497
Contribution to Reserves	-	-	50,000	50,000	50,000
<b>Total: Expenses</b>	<b>\$ 899,966</b>	<b>\$ 4,241,143</b>	<b>\$ 4,951,046</b>	<b>\$ 4,436,254</b>	<b>\$ 4,564,581</b>
<b>Net: Potable Responsibility</b>	<b>\$ 899,966</b>	<b>\$ 4,241,143</b>	<b>\$ 3,314,490</b>	<b>\$ 2,556,207</b>	<b>\$ 2,394,512</b>

- Includes 3.5% annual retail rate increases.
  - › Based on average annual increase in costs on slide 5

# Next Steps

- Receive feedback and direction on the rates proposal
- Report Development (Administrative Record)
- Initiate 218 Procedures: Authorize notice at March 21, 2022 Board Meeting
- Public Hearing: May 16, 2022



# Thank you!

