



Mesa Water District

Water Rate Study –
Selected Financial Plan and
Proposed Rates

Nov. 16, 2021

Raftelis Project Team



Steve Gagnon, PE (AZ)
Project Manager

25 years experience

Extensive Orange County water and
wastewater rate setting experience

E: sgagnon@raftelis.com

P: 714.351.2013




Theresa Jurotich, PE, PMP
Assistant Project Manager

24 years experience

Extensive national water and
wastewater rate setting experience

E: tjurotich@raftelis.com

P: 206.707.9155



Agenda

1. Recap of financial plan assumptions
2. Scenarios and selected financial plan
3. Review Rates
4. Typical single family bill impacts

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Summary

	Fiscal Year				
	2023	2024	2025	2026	2027
Revenue Increase	8.0%	8.0%	5.0%	5.0%	5.0%
Typical Single Family Water Bill Increase before Capital Charge	1.84%	1.97%	1.98%	1.83%	1.83%

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Financial plan assumptions

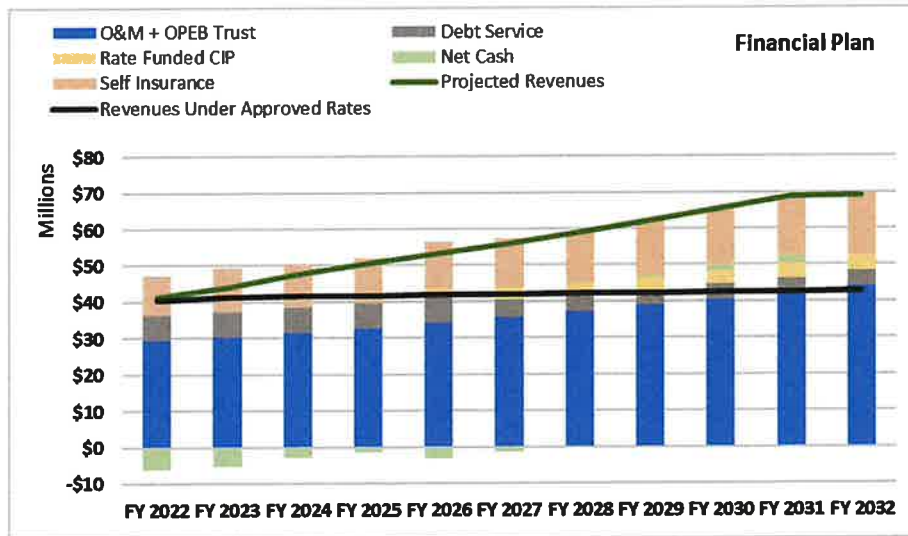
- Mesa Water Staff present financial plan options with different revenue adjustments, capital expenses and self insurance funding scenarios

Values in millions	Fiscal Year										
	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Total Capital Projects*	\$33.3	\$20.1	\$8.5	\$4.4	\$4.5	\$4.6	\$4.8	\$4.9	\$5.1	\$5.2	\$5.4
Self Insurance Funding	\$11.0	\$12.0	\$12.0	\$12.2	\$12.8	\$13.5	\$14.1	\$14.9	\$15.6	\$16.4	\$17.2

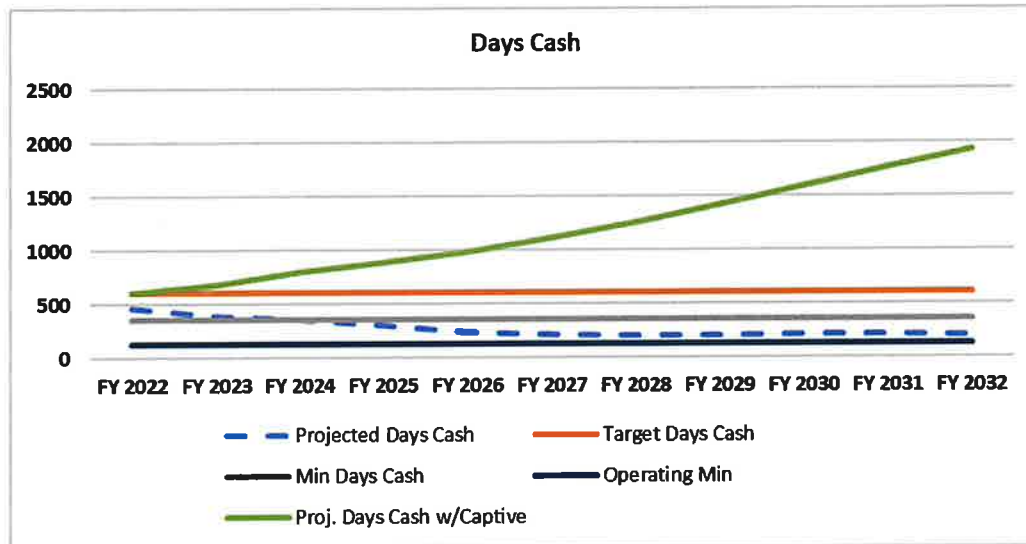
*Bond proceeds fund capital until FY 2025

Proposed financial plan

Fiscal Year	Revenue Increase
2023	8.0%
2024	8.0%
2025	5.0%
2026	5.0%
2027	5.0%



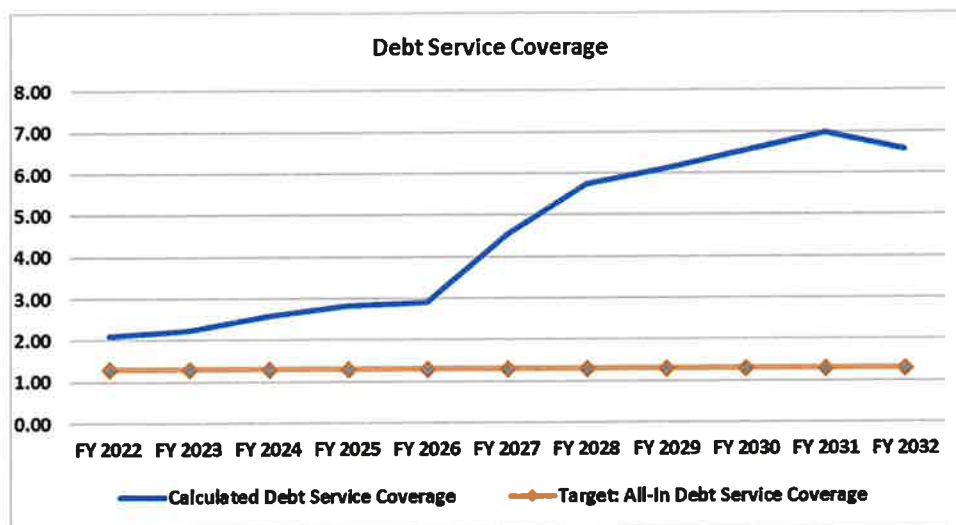
Days Cash



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Debt coverage

- Includes capacity fee revenue & grants in coverage calc



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Rate Design



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Changes since last study

- Recover a portion revenue requirements via a capital charge to be collected via the orange county treasurer-tax collector
- Self insure (captive)
- Private fire charges start at 1" meters instead of 2"
- Increase the amount of revenue recovered through fixed charges
- Billing cost component is recovered per bill, thus monthly charges are not exactly half of bi-monthly charges

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October 26, 2021 Committee Recommendation

- Option 2: Target about 24 percent of revenue collected through the capital charge by FY 2027
- Average annual increase in single family water *bill* of 1.9%
- Percent of net revenue requirement collected through capital charge:
 - FY 2023 = 11.1%
 - FY 2024 = 16.8%
 - FY 2025 = 19.3%
 - FY 2026 = 21.8%
 - FY 2027 = 24.1%

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Rates



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Basic Charge Derivation of FY 2023

Meter Size	Billing \$/bill	Meter		Total \$/bi-mo	Total \$/mo
		Capacity \$/mtr/mo	Public Fire \$/mtr/mo		
5/8-inch	\$16.05	\$0.35	\$13.14	\$29.55	\$22.81
3/4-inch	\$16.05	\$0.53	\$19.71	\$36.30	\$26.18
1-inch	\$16.05	\$0.88	\$32.85	\$49.79	\$32.92
1 1/2-inch	\$16.05	\$1.76	\$65.70	\$83.52	\$49.79
2-inch	\$16.05	\$2.82	\$105.12	\$124.00	\$70.03
3-inch	\$16.05	\$6.17	\$229.94	\$252.17	\$134.11
4-inch	\$16.05	\$11.10	\$413.90	\$441.06	\$228.56
6-inch	\$16.05	\$24.67	\$919.77	\$960.50	\$488.28
8-inch	\$16.05	\$42.30	\$1,576.75	\$1,635.11	\$825.58
10-inch	\$16.05	\$66.97	\$2,496.52	\$2,579.55	\$1,297.81

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Bi-monthly Basic charge, \$/bill

- Initial decrease in the Basic charge
- Slight increase in the Basic charge in FY 2024 onward

Proposed Rates	Fiscal Year					
	2022	2023	2024	2025	2026	2027
Effective Date	Jan 2022	Jan 2023	Jan 2024	Jan 2025	Jan 2026	Jan 2027
Bi-Monthly Potable Water & RW Basic Charge						
Meter Size						
5/8-inch	\$30.03	\$29.55	\$30.99	\$31.54	\$32.16	\$32.83
3/4-inch	\$45.36	\$36.30	\$37.77	\$38.57	\$39.50	\$40.42
1-inch	\$75.37	\$49.79	\$51.33	\$52.62	\$54.16	\$55.61
1 1/2-inch	\$151.36	\$83.52	\$85.23	\$87.76	\$90.83	\$93.57
2-inch	\$242.04	\$124.00	\$125.91	\$129.92	\$134.83	\$139.13
3-inch	\$529.38	\$252.17	\$254.72	\$263.42	\$274.15	\$283.40
4-inch	\$953.36	\$441.06	\$444.55	\$460.16	\$479.48	\$496.00
6-inch	\$2,119.97	\$960.50	\$966.58	\$1,001.20	\$1,044.12	\$1,080.67
8-inch	\$3,626.88	\$1,635.11	\$1,644.55	\$1,703.85	\$1,777.42	\$1,839.97
10-inch	\$5,746.80	\$2,579.55	\$2,593.70	\$2,687.56	\$2,804.04	\$2,902.99

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Monthly Basic charge, \$/bill

- Initial increase in the Basic charge due to collecting the billing component on a **per bill basis**
- Slight increase in the Basic charge from FY 2024 onward
- There are no 5/8 or 3/4" *monthly* customers

Proposed Rates	Fiscal Year					
	2022	2023	2024	2025	2026	2027
Effective Date	Jan 2022	Jan 2023	Jan 2024	Jan 2025	Jan 2026	Jan 2027
Monthly Potable Water & RW Basic Charge						
Meter Size						
5/8-inch	\$15.02	\$22.81	\$24.21	\$24.52	\$24.83	\$25.24
3/4-inch	\$22.68	\$26.18	\$27.60	\$28.03	\$28.50	\$29.03
1-inch	\$37.69	\$32.92	\$34.38	\$35.06	\$35.83	\$36.63
1 1/2-inch	\$75.68	\$49.79	\$51.33	\$52.62	\$54.16	\$55.61
2-inch	\$121.02	\$70.03	\$71.67	\$73.70	\$76.16	\$78.39
3-inch	\$264.69	\$134.11	\$136.08	\$140.46	\$145.82	\$150.52
4-inch	\$476.68	\$228.56	\$230.99	\$238.83	\$248.49	\$256.82
6-inch	\$1,059.99	\$488.28	\$492.01	\$509.35	\$530.81	\$549.15
8-inch	\$1,813.44	\$825.58	\$830.99	\$860.67	\$897.46	\$928.81
10-inch	\$2,873.40	\$1,297.81	\$1,305.57	\$1,352.53	\$1,410.77	\$1,460.32

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Approximate Annual Capital charge by meter size, \$/yr

- This assumes that the number of accounts is roughly equivalent to the number of parcels. A direct correlation is unlikely
- Likely have some parcels with multiple accounts

Proposed Rates	Fiscal Year					
	2022	2023	2024	2025	2026	2027
Effective Date	Jan 2022	Jan 2023	Jan 2024	Jan 2025	Jan 2026	Jan 2027
Potable Water Meter Size						
5/8-inch	\$0.00	\$99.92	\$163.45	\$198.13	\$235.17	\$274.93
3/4-inch	\$0.00	\$149.88	\$245.17	\$297.20	\$352.76	\$412.39
1-inch	\$0.00	\$249.79	\$408.61	\$495.33	\$587.92	\$687.31
1 1/2-inch	\$0.00	\$499.57	\$817.21	\$990.65	\$1,175.84	\$1,374.61
2-inch	\$0.00	\$799.31	\$1,307.54	\$1,585.04	\$1,881.35	\$2,199.37
3-inch	\$0.00	\$1,748.49	\$2,860.23	\$3,467.27	\$4,115.44	\$4,811.11
4-inch	\$0.00	\$3,147.29	\$5,148.40	\$6,241.08	\$7,407.79	\$8,659.99
6-inch	\$0.00	\$6,993.96	\$11,440.89	\$13,869.06	\$16,461.75	\$19,244.41
8-inch	\$0.00	\$11,989.65	\$19,612.96	\$23,775.53	\$28,220.13	\$32,990.42
10-inch	\$0.00	\$18,983.61	\$31,053.84	\$37,644.58	\$44,681.87	\$52,234.83

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Consumption rate, \$/ccf,

- Recycled water is at a 22% discount in FY 2027

Proposed Rates	Fiscal Year					
	2022	2023	2024	2025	2026	2027
Effective Date	Jan 2022	Jan 2023	Jan 2024	Jan 2025	Jan 2026	Jan 2027
Potable Water	\$4.72	\$4.85	\$4.91	\$5.01	\$5.10	\$5.19
Construction	\$5.21	\$4.85	\$4.91	\$5.01	\$5.10	\$5.19
Fireline Water	\$5.21	\$4.85	\$4.91	\$5.01	\$5.10	\$5.19
Recycled Water	\$3.08	\$3.40	\$3.56	\$3.72	\$3.89	\$4.07

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Bi-monthly Private Fireline Service, \$/bill

- Fire service lines are now 1" or larger. Previously they started at 2."
- Therefore, the proposed charge starts at the 1" service line size instead of the 2" line.

Proposed Rates	Fiscal Year					
	2022	2023	2024	2025	2026	2027
Effective Date	Jan 2022	Jan 2023	Jan 2024	Jan 2025	Jan 2026	Jan 2027
Fireline Service Size						
1-inch	\$8.30	\$17.38	\$18.81	\$18.94	\$19.02	\$19.24
1 1/2-inch	\$8.30	\$19.90	\$21.44	\$21.69	\$21.93	\$22.28
2-inch	\$8.30	\$24.24	\$25.96	\$26.43	\$26.95	\$27.51
3-inch	\$24.08	\$39.81	\$42.21	\$43.47	\$44.94	\$46.32
4-inch	\$51.29	\$66.67	\$70.23	\$72.85	\$75.98	\$78.75
6-inch	\$148.96	\$163.09	\$170.79	\$178.29	\$187.39	\$195.15
8-inch	\$317.40	\$329.38	\$344.25	\$360.16	\$379.55	\$395.92
10-inch	\$570.77	\$579.52	\$605.16	\$633.73	\$668.59	\$697.92

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Monthly Private Fireline Service, \$/bill

- As mentioned above, fire service lines are 1" or larger.
- Therefore, the proposed charge starts at the 1" service line size instead of the 2" line.

Proposed Rates	Fiscal Year					
	2022	2023	2024	2025	2026	2027
Effective Date	Jan 2022	Jan 2023	Jan 2024	Jan 2025	Jan 2026	Jan 2027
Fireline Service Size						
1-inch	\$3.95	\$16.72	\$18.12	\$18.21	\$18.26	\$18.44
1 1/2-inch	\$3.95	\$17.98	\$19.44	\$19.59	\$19.71	\$19.96
2-inch	\$3.95	\$20.15	\$21.70	\$21.96	\$22.22	\$22.58
3-inch	\$11.47	\$27.93	\$29.82	\$30.48	\$31.22	\$31.98
4-inch	\$24.42	\$41.37	\$43.83	\$45.17	\$46.74	\$48.20
6-inch	\$70.93	\$89.57	\$94.11	\$97.89	\$102.44	\$106.40
8-inch	\$151.14	\$172.72	\$180.84	\$188.83	\$198.52	\$206.78
10-inch	\$271.80	\$297.79	\$311.30	\$325.61	\$343.05	\$357.78

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Typical Bill & Next Steps

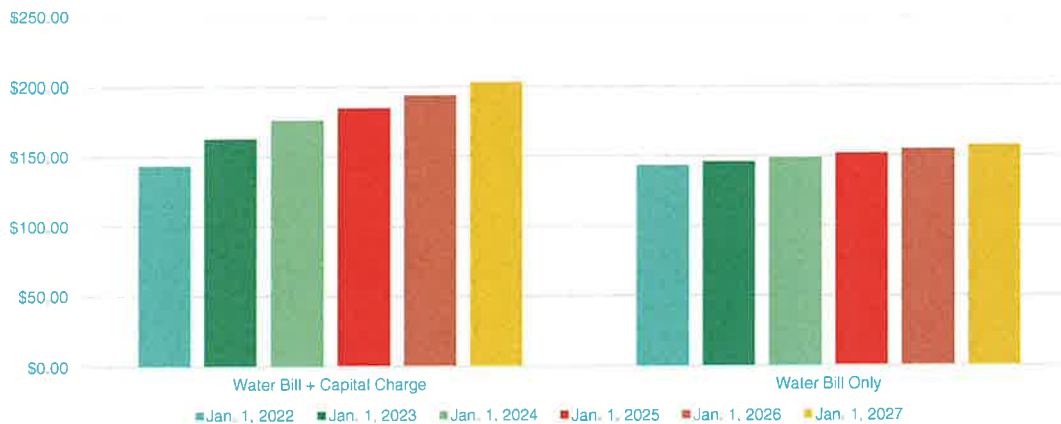


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Average Single Family Customer Bill Impact (5/8" meter) and 24 ccf *bi-monthly*

	Jan. 1, 2022	Jan. 1, 2023	Jan. 1, 2024	Jan. 1, 2025	Jan. 1, 2026	Jan. 1, 2027
Bi-monthly Basic Charge: 5/8"	\$30.03	\$29.55	\$30.99	\$31.54	\$32.16	\$32.83
Capital Charge, 5/8" (\$/bi-mo)	\$0.00	\$16.65	\$27.24	\$33.02	\$39.20	\$45.82
Usage Charge (ccf): 24	\$113.28	\$116.40	\$117.84	\$120.00	\$122.40	\$124.56
Total Water Bill + Capital Charge	\$143.31	\$162.60	\$176.07	\$184.56	\$193.76	\$203.21
Total Water Bill	\$143.31	\$145.95	\$148.83	\$151.54	\$154.56	\$157.39
% Change in Water Bill		1.84%	1.97%	1.82%	1.99%	1.83%

Average Single Family Customer Bill Impact



Next Steps

Date	Action
Tuesday, November 16, 2021	Board Direction
Monday, November 22, 2021	Mail Prop. 218 Notice
Wednesday, January 12, 2022	Public Hearing

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Recommend Motion

1. Receive the draft report of the Water Rate Study;
2. Direct staff to finalize the proposed rate schedule for Calendar Years 2023 through 2027;
3. Direct staff to proceed with Proposition 218 notice preparation and mailing; and,
4. Direct staff to schedule two public hearings for January 12, 2022.
 - › Proposed water rate adjustments over a five-year period
 - › Proposal to level a Capital Charge for collection by way of the Orange County-Tax Collector

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End of Presentation

