

# 2019 Water Rate Study Presentation

City Council Meeting  
Study Session  
August 13, 2019



# Executive Summary:

- Water is a 24/7 community service, asset, and commodity
- Water is critical to public health and the environment
- The water system operates as an enterprise fund
- Current and future capital improvement projects are necessary
- Water operational costs (especially buying water) have gone up
- California water costs have increased 6% per year over the last 12 years
- No rate increases over the last 5 years
- Expenses are now exceeding revenues
- Rate increases are needed (\$3.28/month avg.)



# Presentation Outline:

- Recent water systems discussions
- Background on the water system
- Current and future Capital Improvement Program
- Enterprise funds and water rates
- Financial plan
- Proposed water rate changes
- Next steps and implementation schedule
- Additional information slides



# Recent Water Projects/Discussions at City Council :

- Jan. 22, 2019, Presentation on Advanced Metering Systems
- Feb. 2, 2019, Capital Improvement Program Planning
- Mar. 12, 2019, Capital Improvement Program Early Look
- Mar. 26, 2019, Spyglass Hill Reservoir Mixing System Contract
- May 14, 2019, **Water Master Plan Approval**  
Big Canyon Reservoir Improvement Completion
- May 28, 2019, Capital Improvement Program Final Draft  
Water Transmission Valve Project Contract  
Lido Village West Newport Water Main Completion
- Jun. 11, 2019, Capital Improvement Program Approval
- Jun. 25, 2019, Balboa Island Water Main Completion
- Jul. 9, 2019, Water Well Rehab Contract



# Water System

Extensive & Complex System Covering Most of the City's Boundaries  
Water Deliveries Double in the Summertime

## System Overview

- 302 Miles of Potable Water Pipeline
- 202 Million Gallon Storage Capacity
- 26,550 Service Connections
- 17 Booster Pumps
- 42 Pressure Reducing Stations
- 2,723 Fire Hydrants
- 8,172 Distribution Valves
- 12 Interconnects with Local Agencies

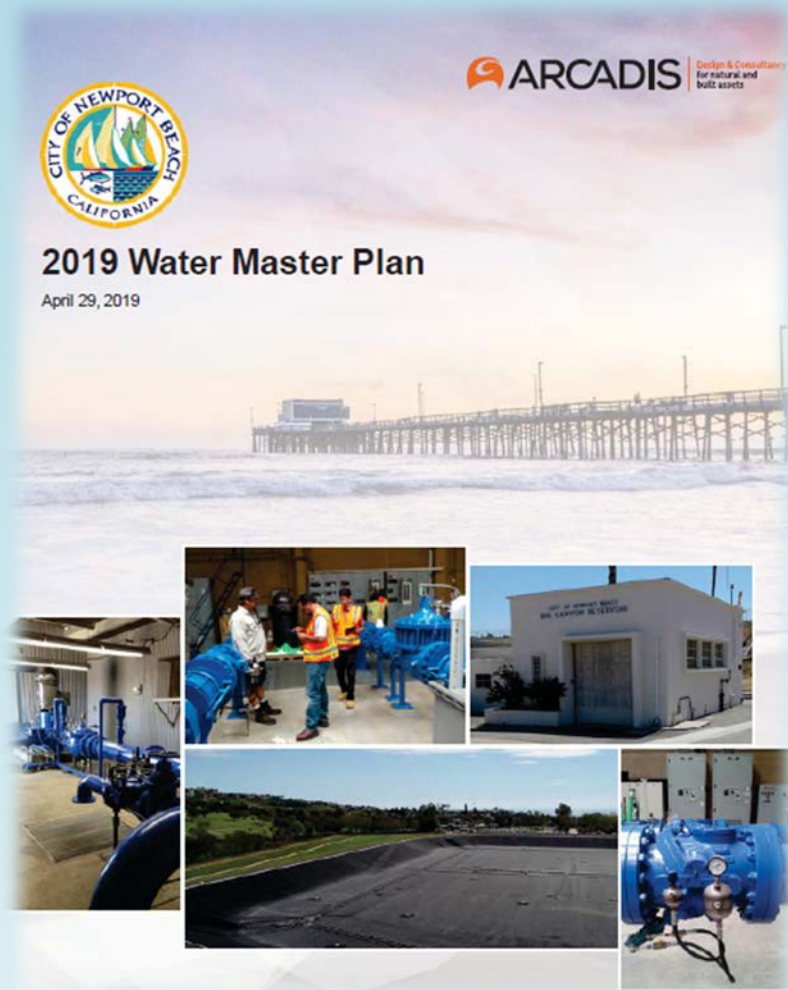


## 2018 Water Delivery Facts

- 4.8 Billion Gallons Delivered (~15,000 acre feet)
  - 74% from 4 Local Groundwater Wells
  - 23% from 6 Import Connections
  - 3% from local Recycled Supplier

***Utilities Department***





# 2019 Water Master Plan\*

Newport Beach City Council Meeting  
May 14, 2019

\* Increased Capital Projects by \$2.2mil annually



# *Replacing Infrastructure:*





# *Replacing Infrastructure:*





# Water Utility Customer Service:

- On-call and 24-hour emergency service
- Water quality testing
- Public health and environment protections
- Water conservation and use efficiency
- Leak detection notifications
- Consolidating municipal billing
- Fire fighting support



2019 Water Rate Study





# Water Enterprise Fund:

- Best Practice
- Segregated fund
- Similar intent to a private business enterprise
- Can only be spent for the specific purpose of water
- Separate accounting and financial reporting
- Not a part of the General Fund



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# City of Newport Beach

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## Water Rate Study

August 13, 2019





# Background on the Water Utility

- Most recent rate increase: January 2014
  - › *No rate changes in the last 5 years*
- *Cost to purchase water has increased by 75% since 2014*
- In 2015, the State experienced historical drought conditions
  - › Newport Beach successfully cut back over 20%
- In 2019, the City conducted a Water Master Plan study to determine the capital needs of the water system
  - › \$7.2 million dollars per year ( ↑ \$2.2mil annual increase)



# Goals and Objective of the Study

- Develop a financial plan that sufficiently funds the operating / maintenance costs, future water supply costs, and future capital needs of the water utility
- Develop a reserve policy that takes into account the different types of risk the water utility faces, including future drought conditions
- Enhance revenue stability while maintaining affordability and communicating intention of conservation



# Proposed Reserve Policy

- **O&M Reserve** – for Operating Cash Flow
  - › 33% of operating expenses ( or 4 months of expenses)
- **Capital Reserve** – for Capital Working Capital
  - › 75% of 5-year average CIP
- **Rate Stabilization Reserve** – for unexpected water demand reduction or unexpected water supply cost increases, emergencies, and nonbudgeted CIP capital projects, causing net revenue loss for the Water Fund
  - › **Recommended Rate Stabilization Reserve Target Balance: \$2.7M**





# Reserve Policy Discussion

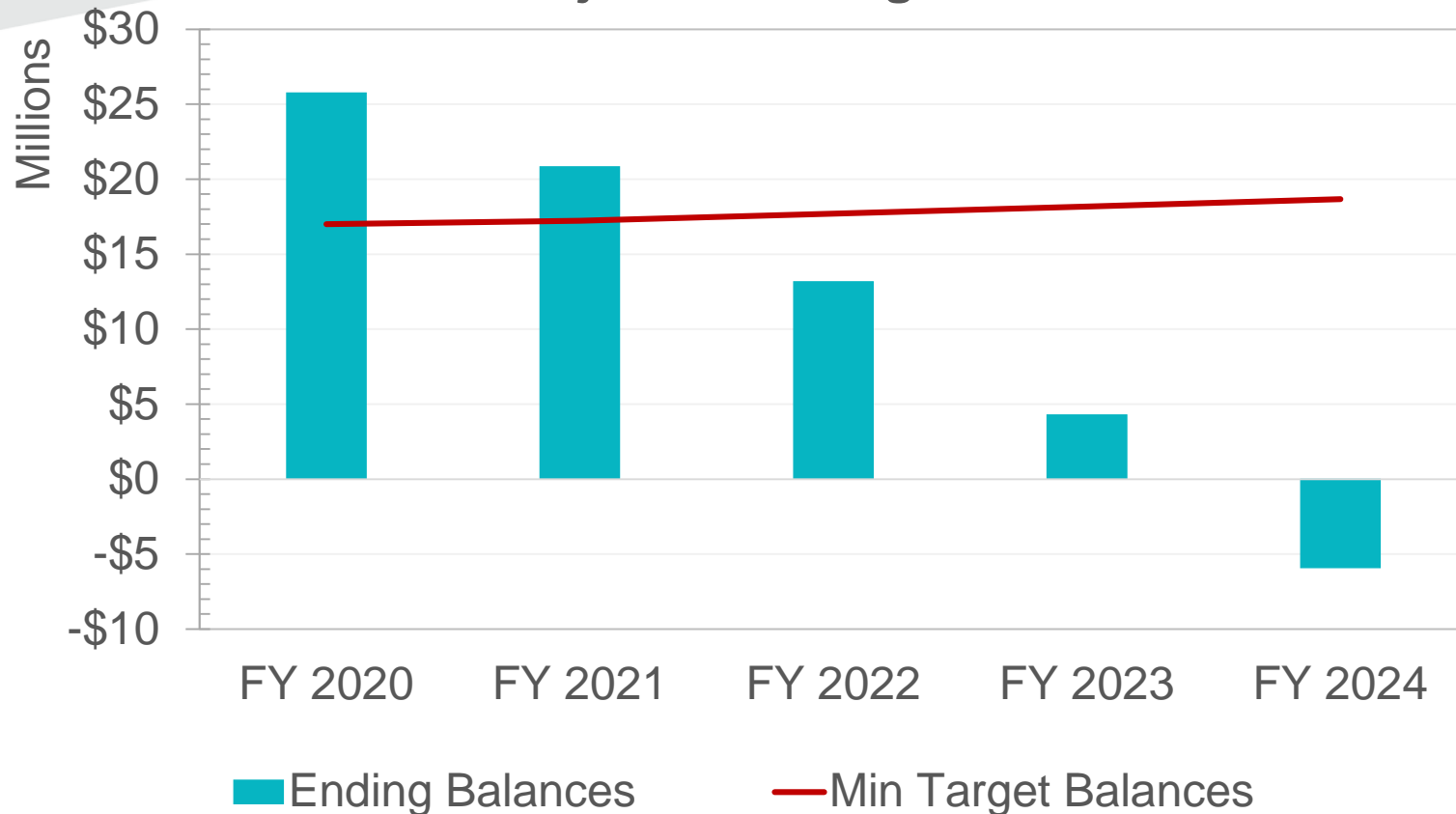
Reserves	Current Target Level		Proposed Target Level	
	Current Policy	FY 2020 Current Target	Proposed Policy	FY 2020 Proposed Target
O&M Reserve	50% of O&M	\$12.5M	33% of O&M	\$8.9M
Capital Reserve	Annual Master Plan	\$0-\$3M (variable)	75% of 5-yr average CIP	\$5.4M
Rate Stabilization Reserve	N/A	N/A	Net revenue loss for 30% water usage reduction	\$2.7M
Total Target Reserve		\$12.5M - \$15.5M		\$17.0M



# Status Quo Financial Plan – Fund Balance

If water rates remain unchanged

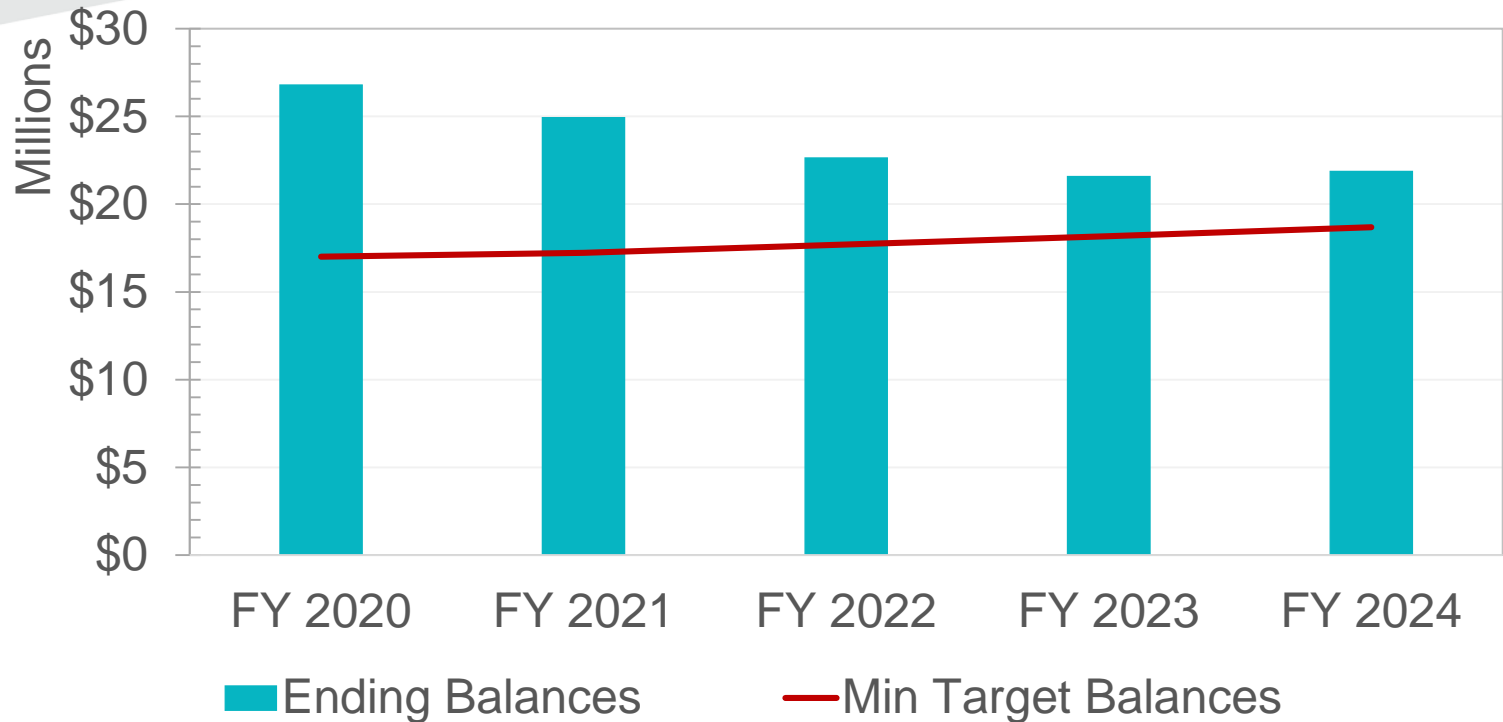
## Projected Ending Balances



# Proposed Financial Plan

7.4% increase per year for the next 5 years (\$3.28/month avg. for 1<sup>st</sup> year)

## Projected Ending Balances



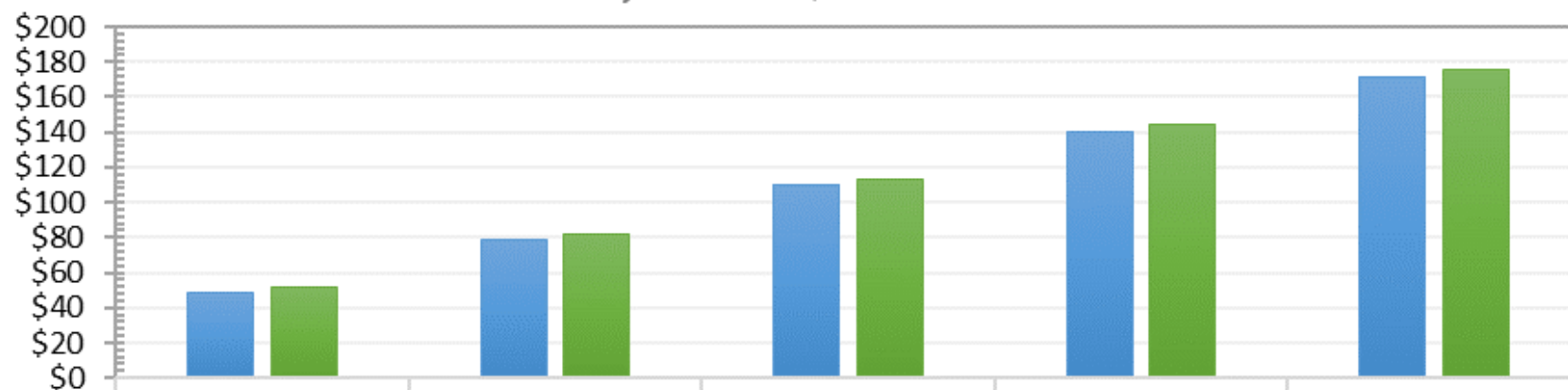


# Customer Impact Analysis

*\$3.28/month is the average, (\$40/year)*

## Sample Customer Bills Impacts

*Monthly Water Bills, 5/8-inch meter*



■ Current Bills	10 HCF	20 HCF	30 HCF	40 HCF	50 HCF
	\$48.07	\$78.87	\$109.67	\$140.47	\$171.27
■ Proposed Bills	\$51.35	\$82.35	\$113.35	\$144.35	\$175.35
Impact \$	\$3.28	\$3.48	\$3.68	\$3.88	\$4.08
Impact %	6.8%	4.4%	3.4%	2.8%	2.4%



# Proposed *Monthly* Water Fixed Charges

Water Fixed Charges	Current	Proposed FY 2020	Impact \$
5/8-inch	\$17.27	\$20.35	\$3.08
3/4-inch	\$17.27	\$20.35	\$3.08
1-inch	\$28.79	\$31.46	\$2.67
1 ½-inch	\$57.58	\$59.23	\$1.65
2-inch	\$92.12	\$92.54	\$0.42
3-inch	\$172.73	\$245.23	\$72.50
4-inch	\$287.88	\$420.13	\$132.25
6-inch	\$575.76	\$892.11	\$316.35
8-inch	\$921.22	\$1,558.42	\$637.20
10-inch	\$1,655.90	\$2,335.77	\$679.87
12-inch	\$2,663.48	\$2,946.57	\$283.09
Per Dwelling Unit Charge	\$1.00	<b>Eliminate</b>	-\$1.00

# Proposed Water Usage Charge

Water Usage Charges	Current	Proposed FY 2020	Impact \$
Potable Water	\$3.08	\$3.10	\$0.02



# 5-year Proposed Water Rates

## Water Service Monthly Fixed Charges

	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024
Proposed Rate		7.40%	7.40%	7.40%	7.40%	7.40%
Adjustments	Current Rates	Proposed	Proposed	Proposed	Proposed	Proposed
Water Services						
5/8	\$17.27	<b>\$20.35</b>	\$21.86	\$23.48	\$25.22	\$27.09
3/4	\$17.27	<b>\$20.35</b>	\$21.86	\$23.48	\$25.22	\$27.09
1	\$28.79	<b>\$31.46</b>	\$33.79	\$36.30	\$38.99	\$41.88
1 1/2	\$57.58	<b>\$59.23</b>	\$63.62	\$68.33	\$73.39	\$78.83
2	\$92.12	<b>\$92.54</b>	\$99.39	\$106.75	\$114.65	\$123.14
3	\$172.73	<b>\$245.23</b>	\$263.38	\$282.88	\$303.82	\$326.31
4	\$287.88	<b>\$420.13</b>	\$451.22	\$484.62	\$520.49	\$559.01
6	\$575.76	<b>\$892.11</b>	\$958.13	\$1,029.04	\$1,105.11	\$1,186.98
8	\$921.22	<b>\$1,558.42</b>	\$1,673.75	\$1,797.6	\$1,930.64	\$2,073.51
10	\$1,655.90	<b>\$2,335.77</b>	\$2,508.62	\$2,694.26	\$2,893.64	\$3,107.77
12	\$2,663.48	<b>\$2,946.57</b>	\$3,164.62	\$3,398.81	\$3,650.33	\$3,920.46
Per Dwelling Unit Charge	\$1.00	N/A	N/A	N/A	N/A	N/A



# 5-year Proposed Water Rates

## Water Usage Charges

	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024
Proposed Rate Adjustments		7.40%	7.40%	7.40%	7.40%	7.40%
	Current Rates	Proposed	Proposed	Proposed	Proposed	Proposed
Potable Water	\$3.08	<b>\$3.10</b>	\$3.33	\$3.58	\$3.85	\$4.14



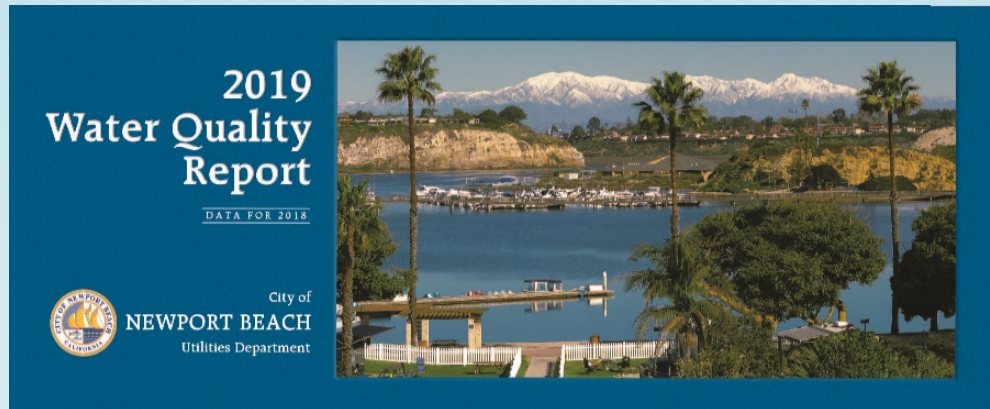
# Next Steps and Timeline:



- August 30<sup>th</sup> – Draft Rate Study Report posted online
- September 10<sup>th</sup> – City Council Meeting
  - Approve Water Rate Study Report
  - Set Public Hearing for rates change for November 5<sup>th</sup>
  - Authorize Mailed Public Notice  
(proposition 218 compliance )
- Public Information and Outreach
  - public notices, direct mailings, utility bill messages & inserts, community meetings, city website
- November 5<sup>th</sup>, Public Hearing on water rates
- November 19<sup>th</sup>, Resolution to amend water rates
- January 1<sup>st</sup>, implement water rate changes



# Additional Information Slides attached:



# Recent General Water Discussions at City Council:

- *Feb. 26, 2019, Water System & Supply Update  
Groundwater Basin Presentation*
- *Apr. 9, 2019, Water Smart (AMI) Grant Application*
- *Apr. 23, 2019, Opposition to State Drinking Water Tax*
- *May 14, 2019, Approval of Water Master Plan*
- *Jul. 23, 2019, Drinking Water Quality Report*



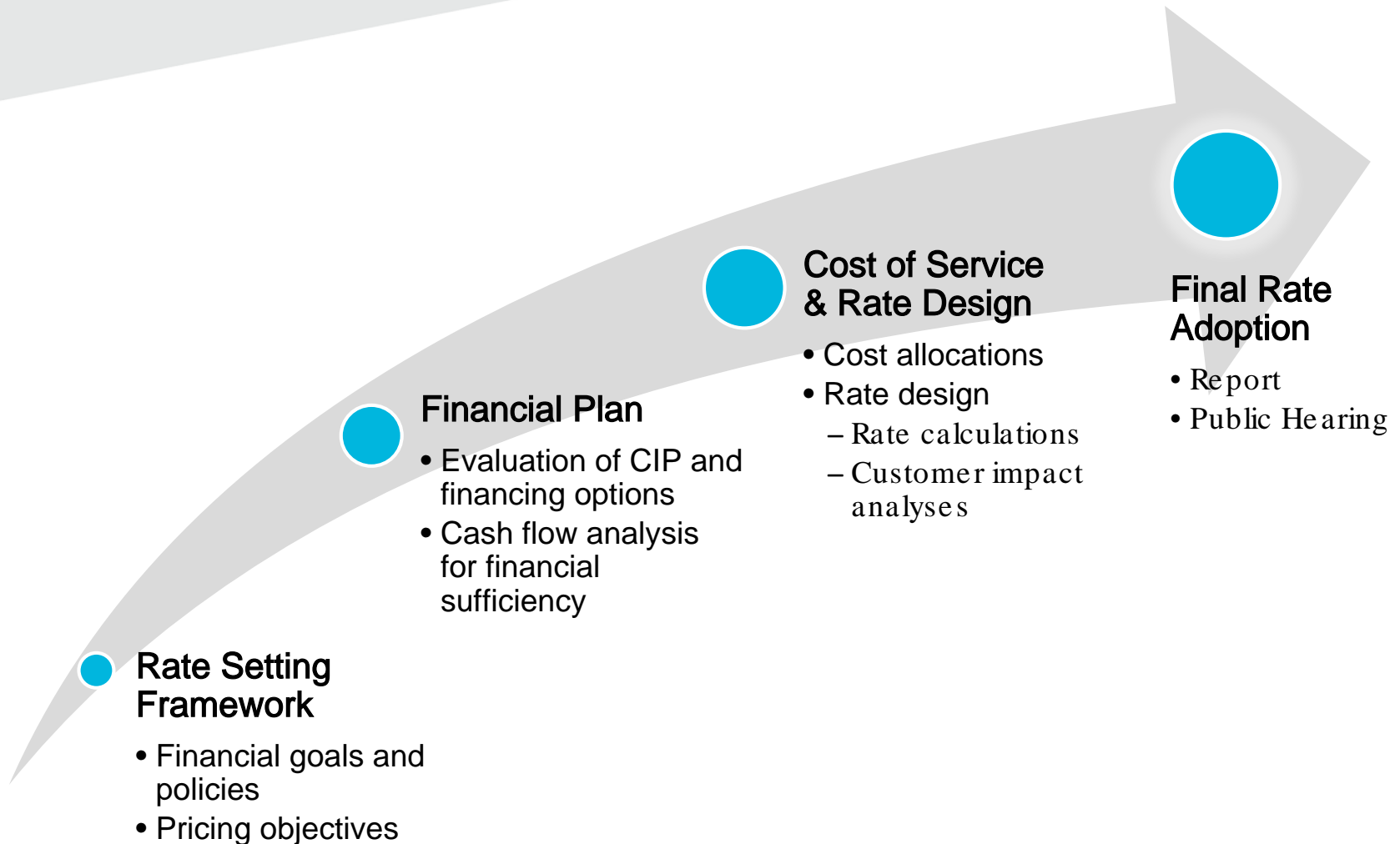


# Recent Water Rate Discussions:

- *Mar. 12, 2019, City Council - Selection of Water Rate Study Consultant*
- *May 14, 2019, City Council - Water Master Plan*
- *May 16, 2019, Finance Committee – Water Enterprise Fund Analysis*
- *Jun. 27, 2019, Finance Committee – Draft Water Rate Study Results*
- *Aug. 13, 2019, City Council – Study Session on Water Rates*



# Rate Study at a Glance



# Overview of Financial Policies

## Goals of Financial/Reserve Policies:

- To mitigate financial risk
  - Rate / revenue instability
  - Emergency with asset failure
  - Volatility in working capital

## Importance of Financial Policies:

- To maintain financial solvency
  - Provide a basis for coping with fiscal emergencies (revenue short-falls, asset failure, emergency, etc ...)
- To provide guidelines for sound financial management with an overall long-range perspective
- To enhance financial management transparency



# Financial Health Indicators

## Healthy Reserves

- Operating Reserve— needed for positive cash flow
- CIP Reserves— can award contracts quickly and speed up projects if necessary
- Rate Stabilization Reserve— funds used during periods of revenue shortage, such as drought (aka, revenue loss reserve)





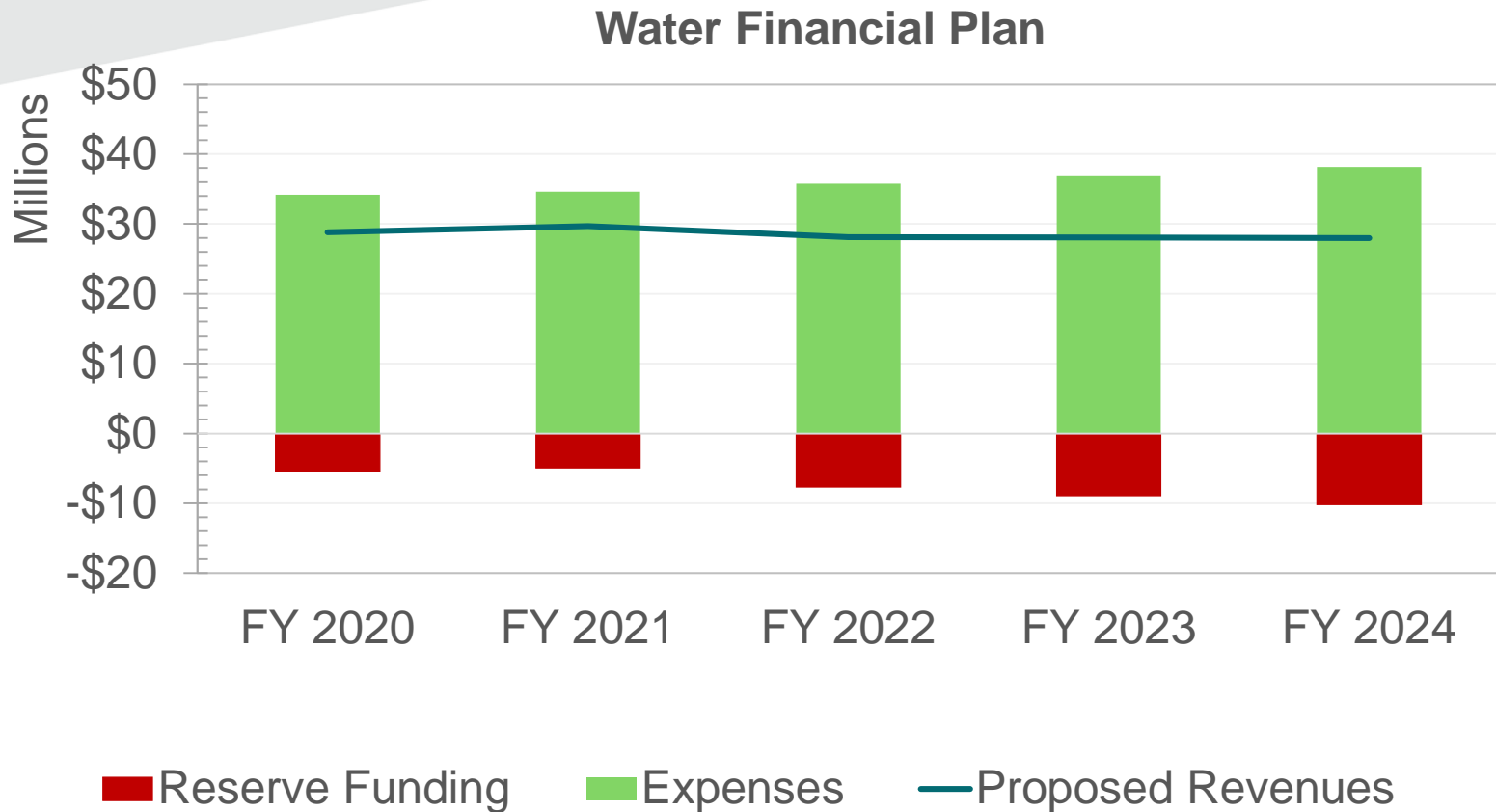
# Reserve Targets

Target Reserves			FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
O&M	33%	of operating expenses	\$8,326,572	\$8,903,507	\$9,043,914	\$9,427,501	\$9,811,567
Capital	75%	of 5-year average CIP	\$5,708,400	\$5,400,000	\$5,400,000	\$5,400,000	\$5,400,000
Stabilization Reserve	\$2,700,000		\$2,700,000	\$2,700,000	\$2,786,914	\$2,876,809	\$2,969,795
<b>Total Target Reserves</b>			<b>\$16,734,972</b>	<b>\$17,003,507</b>	<b>\$17,230,828</b>	<b>\$17,704,311</b>	<b>\$18,181,362</b>



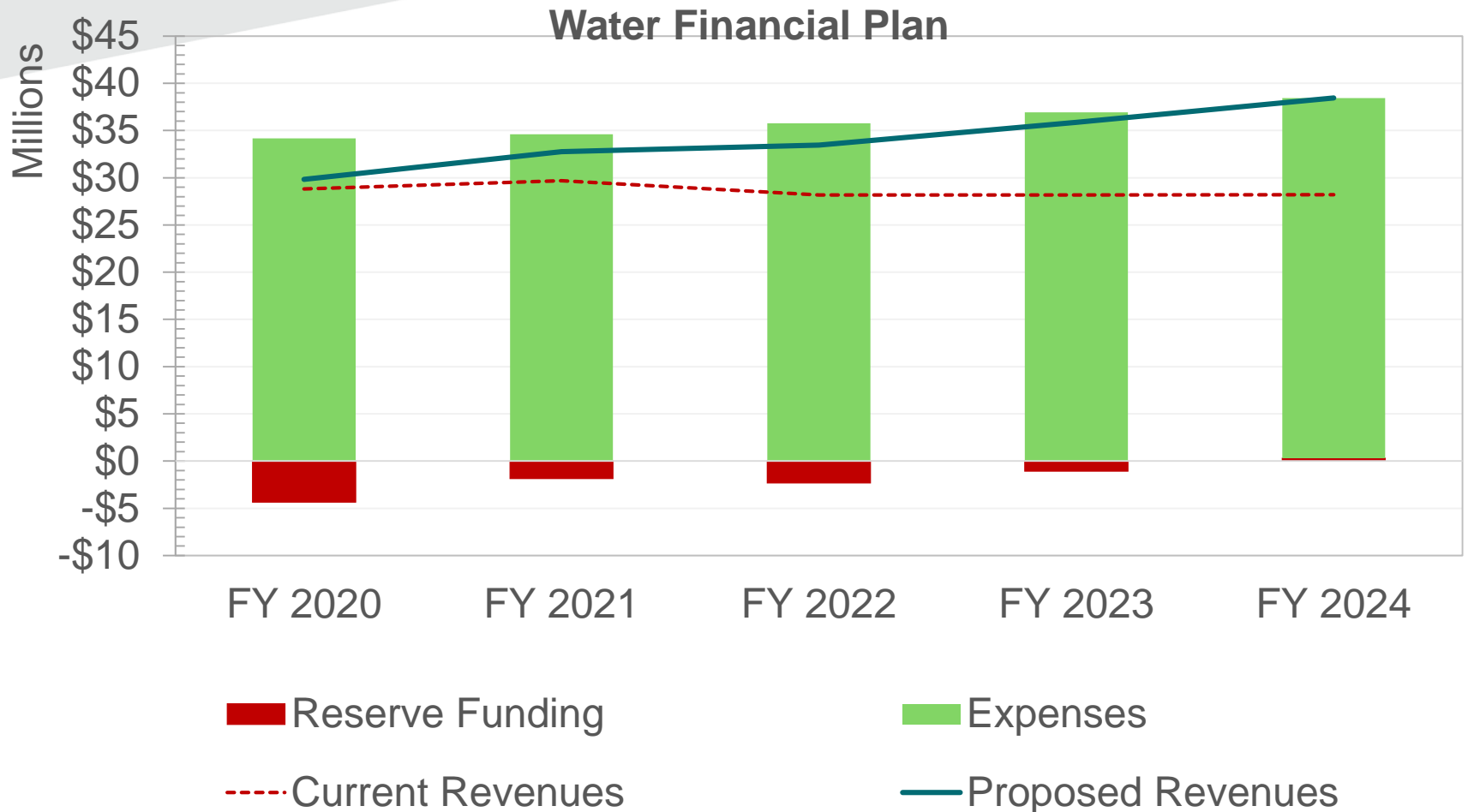
# Status Quo Financial Plan

If water rates remain unchanged



# Proposed Financial Plan

7.4% increase per year for the next 5 years (\$3.28/month avg. for 1<sup>st</sup> year)



# Proposed Water Rate Design

## Fixed Charges Components

- Billing & Customer Services— uniform according to meter size
- Meter Related Costs— increasing with meter capacity ratios
- Capacity Costs— increasing with meter capacity ratios

## Water Usage Rates

- Supply Rate
- Unrecovered fixed costs

## Recycled Water Usage Rates

- Recycled Water Supply Rate





# 5-year Proposed Fire Service Water Rates

## Fire Protection *Monthly* Fixed Charges

	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024
Proposed Rate Adjustments		7.40%	7.40%	7.40%	7.40%	7.40%
	Current Rates	Proposed	Proposed	Proposed	Proposed	Proposed
Fire Protection Services						
5/8	\$3.13	<b>\$10.72</b>	\$11.52	\$12.38	\$13.30	\$14.29
1	\$5.00	<b>\$10.90</b>	\$11.71	\$12.58	\$13.52	\$14.53
1 1/2	\$7.50	<b>\$11.38</b>	\$12.23	\$13.14	\$14.12	\$15.17
2	\$10.00	<b>\$12.21</b>	\$13.12	\$14.10	\$15.15	\$16.28
2 1/2	\$12.50	<b>\$13.44</b>	\$14.44	\$15.51	\$16.66	\$17.90
3	\$15.00	<b>\$15.16</b>	\$16.29	\$17.50	\$18.80	\$20.20
4	\$20.00	<b>\$20.26</b>	\$21.76	\$23.38	\$25.12	\$26.98
6	\$30.00	<b>\$38.58</b>	\$41.44	\$44.51	\$47.81	\$51.35
8	\$40.00	<b>\$70.19</b>	\$75.39	\$80.97	\$86.97	\$93.41
10	\$50.00	<b>\$117.72</b>	\$126.44	\$135.80	\$145.85	\$156.65
12	\$60.00	<b>\$183.58</b>	\$197.17	\$211.77	\$227.45	\$244.29

# 5-year Proposed Recycled Water Rates

Recycled Water Monthly Fixed Charges

	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024
Proposed Revenue Adjustments		7.40%	7.40%	7.40%	7.40%	7.40%
	Current Rates	Proposed	Proposed	Proposed	Proposed	Proposed
RW Services						
5/8	\$20.47	<b>\$10.64</b>	\$11.43	\$12.28	\$13.19	\$14.17
3/4	\$20.47	<b>\$10.64</b>	\$11.43	\$12.28	\$13.19	\$14.17
1	\$34.13	<b>\$15.28</b>	\$16.42	\$17.64	\$18.95	\$20.36
1 1/2	\$68.25	<b>\$26.85</b>	\$28.84	\$30.98	\$33.28	\$35.75
2	\$109.19	<b>\$40.75</b>	\$43.77	\$47.01	\$50.49	\$54.23
3	\$204.75	<b>\$104.45</b>	\$112.18	\$120.49	\$129.41	\$138.99
4	\$341.24	<b>\$177.41</b>	\$190.54	\$204.64	\$219.79	\$236.06
6	\$682.48	<b>\$374.29</b>	\$401.99	\$431.74	\$463.69	\$498.01
8	\$1,091.97	<b>\$652.25</b>	\$700.52	\$752.36	\$808.04	\$867.84
RW Usage Charge	\$1.92	<b>\$2.05</b>	\$2.12	\$2.13	\$2.21	\$2.29
Pump Station Charge	\$0.39	Under review	Under review	Under review	Under review	Under review