



# City of Garden Grove PUBLIC WORKS Water Rate Study

Council Study Session – July 2023



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# Agenda

- 1. Review of June Study Session**
  - A. Water System Overview**
  - B. Five-Year Financial Plan (revised for this July Study Session)**
- 2. Preliminary Water Rate Schedule**
- 3. Request for Council Feedback**
- 4. Next Steps**



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# Why do a Water Rate Study?

- **“The mission of the City of Garden Grove is to provide responsible leadership and quality services as we promote safety, cultural harmony, and life enrichment.”**
  - “The goal of the Water Services Division is to provide sufficient and safe water at the lowest possible cost to the City’s residents.”



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# Description of Water System Facilities

- 85% of water supply is groundwater from Orange County
- 15% of water supply is from the State Water Project
- 433 miles of pipe ~ distance from Garden Grove to San Francisco
- 13 wells and 8 reservoirs
- 34,300 service connections
- Original cost, \$153 million City-owned water infrastructure
  - Between \$400 and \$800 million (estimated replacement cost to replace system in today's dollars)



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# Currently In Progress

- **Magnolia Reservoir and Booster Pump Station Rehabilitation Project**
  - Repair and rehabilitation work for one 5 million-gallon fully buried pre-stressed concrete reservoir and the booster pump station.
- **Supervisory Control & Data Acquisition (SCADA) System**
  - Upgrading and rehabilitating the outdated SCADA System.
  - Gives staff the ability to manage and control the water system remotely.
- **Various Residential Streets Projects N of GG Blvd & E of Dale (120 water services and meter replacements)**
- **Lampson and Trask Reservoirs Rehabilitation**
- **Water Main Replacement (Orangewood Ave. – Dale St.)**



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# Current Issues

- **PFAS**
- **Drought/Water Conservation Objectives**
- **Ongoing Capital Improvement Needs**



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# Projected Water System Expenses

Projected Water System Expenses					
	FY 23/24	FY 24/25	FY 25/26	FY 26/27	FY 27/28
Personnel	\$7,803,861	\$8,176,893	\$8,503,969	\$8,716,568	\$8,934,483
Other O&M	3,379,684	3,272,637	3,347,454	3,396,086	3,445,933
Water Supply	18,091,190	18,138,267	18,150,687	18,234,847	18,277,481
PFAS O&M	2,721,038	3,625,637	4,415,580	9,684,595	9,823,916
Water Use Objectives	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000
Debt Service	3,861,971	2,917,071	2,920,271	2,921,871	2,921,871
Capital and Repair/Replacement	15,751,447	12,478,920	10,160,344	9,990,850	8,556,747
<b>Total</b>	<b>\$53,609,191</b>	<b>\$50,609,426</b>	<b>\$49,498,306</b>	<b>\$54,944,818</b>	<b>\$53,960,431</b>

- **Water supply costs are at today's water purchase costs. Future increases will be recovered through future pass-through adjustments.**
- **PFAS O&M costs increase substantially as new facilities come online in 2026.**
- **Water Use Objectives compliance costs are a new expense.**



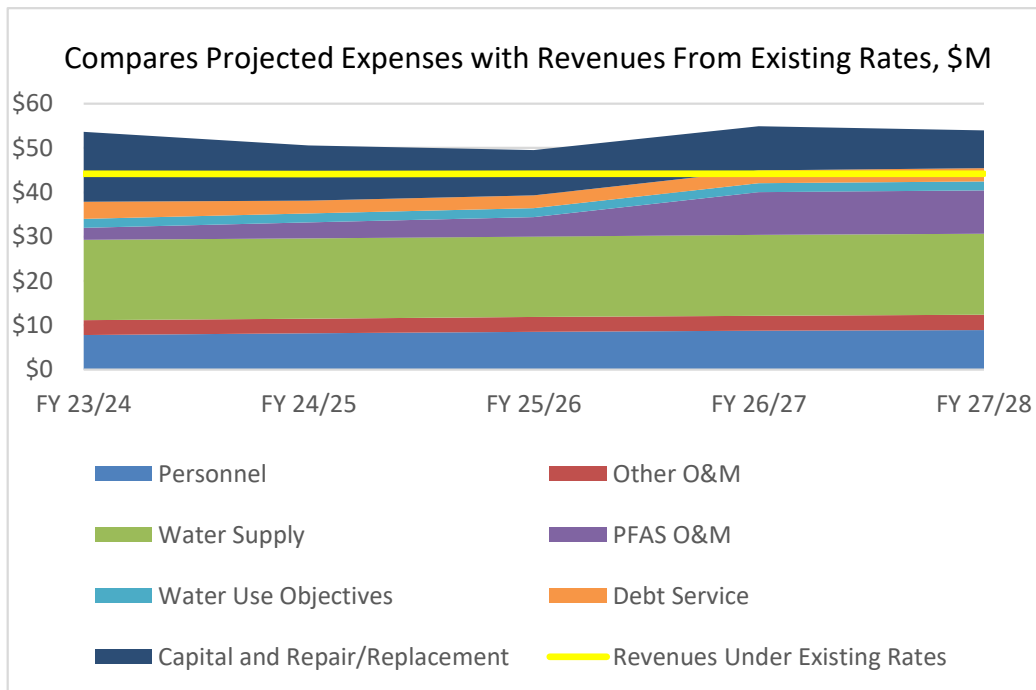
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**Capital Improvement Plan**  
**Estimated Funding, FY 23/24 Dollars**

Project List	Carry Forward	Budget FY 23/24	Estimated Cost				Total
			FY 24/25	FY 25/26	FY 26/27	FY 27/28	
<b>Fund 602 Water Capital Fund Projects</b>							
1) Magnolia Reservoirs and Booster Pump Station Project	\$0	\$800,000	\$0	\$0	\$0	\$0	\$800,000
2) SCADA Implementation Project	436,956	400,000	1,505,000	800,000	1,500,000	0	4,641,956
3) SCADA -FP2 Pressure Monitoring Improvements	0	419,180	0	0	0	0	419,180
4) SCADA - HP4-5 SCADA - Trask & Westhaven	0	1,450,000	0	0	0	0	650,000
5) SCADA - HP1-3 SCADA - Mag, Lampson, & WGG	0	0	900,000	0	0	0	900,000
6) Water Improvement Project Woodbury Rd and Taft St	0	0	1,200,000	0	0	0	1,200,000
7) Water Improvement Project - Orangewood and Yorkshire Ave (~7,400	3,956,942	0	0	0	0	0	3,956,942
8) Water Improvement Project - Chapman Ave and Dale St (~10,000 ft)	0	5,000,000	0	0	0	0	5,000,000
9) Well assessment (Well 16, 19, 25)	57,142	0	0	0	0	0	57,142
10) Well 19 Construction	0	2,200,000	0	0	0	0	2,200,000
11) Water Improvement Project - Woodbury Ave & Anabel Ave (~3,500 ft)	0	1,680,000	0	0	0	0	1,680,000
12) Water Main Replacement (2 miles each year)	0	0	0	2,084,000	4,000,000	4,000,000	10,084,000
13) Design and Construction of Lampson and Trask Reservoirs Rehabilitatic	0	830,000	3,000,000	3,000,000	0	0	6,830,000
14) Various Residential Streets Projects N of GG Blvd & E of Dale	0	1,200,000	0	0	0	0	1,200,000
15) Water Transmission Line Study	0	0	100,000	0	0	0	100,000
16) Well 26 Property Purchase	0	0	1,643,000	0	0	0	1,643,000
<b>Subtotal</b>	<b>\$4,451,040</b>	<b>\$13,979,180</b>	<b>\$8,348,000</b>	<b>\$5,884,000</b>	<b>\$5,500,000</b>	<b>\$4,000,000</b>	<b>\$41,362,220</b>
<b>Fund 603 Water Replacement Fund Projects</b>							
Water Main Replacement (services, hydrants, meters, valves, etc.)	\$0	\$3,807,227	\$3,500,000	\$3,500,000	\$3,500,000	\$3,500,000	\$17,807,227
<b>Total, Fund 602 and 603 Combined</b>	<b>\$4,451,040</b>	<b>\$17,786,407</b>	<b>\$11,848,000</b>	<b>\$9,384,000</b>	<b>\$9,000,000</b>	<b>\$7,500,000</b>	<b>\$59,169,447</b>



# Comparison of Expenses and Revenues with Existing Rates

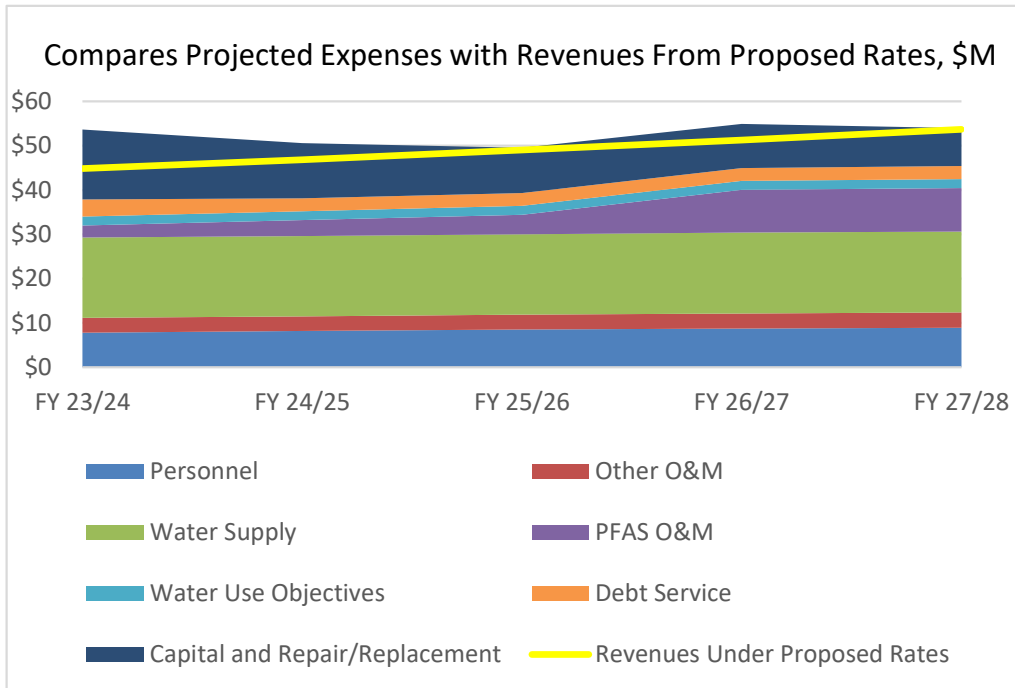


- **Yellow line: revenues from existing rates**
- **Area above yellow line: use of existing reserves to pay for capital projects and system replacement**
- **Existing rates do not collect enough to pay expenses and maintain system reserves.**



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# Comparison of Expenses and Revenues with Proposed Rates



- Revenues are sufficient to fund system expenses, replacement and capital.
- System reserves meet City’s reserve balance criteria through FY 27/28



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# Rate Structure: Key Issues to Discuss

- Review current rate structure and rate schedule
- Review current rate discount programs
- Staff recommendation: no changes to the rate structure
- Preliminary rate structure
- Rate structure next steps:
  - Feedback from Council
  - Rate transitioning
  - Revisions to be presented at August Study Session



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# Projected Revenue Increases

	Projected Revenue Increases				
	FY 23/24	FY 24/25	FY 25/26	FY 26/27	FY 27/28
Projected Revenue Increases Not Including Future Pass Through Adjustments	4.70%	4.70%	4.70%	4.70%	4.70%
Projected Pass Through Adjustments, \$/ccf	\$0.00	\$0.12	\$0.23	\$0.35	\$0.47

- **Table shows projected revenue increases, not a proposed rate schedule.**
- **Proposed rates to collect this revenue will be shown later in this Study Session.**
- **Revised since June 2023 Study Session.**
- **Pass-Through Adjustments are calculated annually. Council considers these Adjustments every year.**



# Preliminary Water Rate Schedule

- A. Review Current Rate Structure**
- B. Methodology**
- C. Proposed Commodity Delivery Charges**
- D. Proposed Capital Improvement Charge**
- E. Proposed Bi-Monthly Minimum Charge**
- F. Proposed Fire Service Rates**
- G. Example Bi-Monthly Water Bill Under Proposed Rates**



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# Current Rate Structure

- **Water rates consist of the following charges:**
  - **Commodity Delivery Charge**
  - **Bi-Monthly Minimum Service Charge**
  - **Bi-Monthly Capital Improvement Charge**
  - **Fire Service Rates**
- **The City has two discount programs**
  - **Senior Care Discount**
  - **Low Water Use Discount**



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# Current Commodity Delivery Charge

Adopted Commodity Delivery Charge, \$/ccf 1/1/2023	
Tier	
Tier 1	\$3.26
Tier 2	\$4.80

Meter Size (inches)	Ccf per Billing Period Included in Tier 1
5/8 x 3/4"	33
1"	83
1-1/2"	165
2"	264
3"	528
4"	825
6"	1,650
8"	2,640
10"	3,960



# Current Bi-Monthly Minimum Charge and Bi-Monthly Capital Improvement Charge

Meter Size (inches)	Adopted Bi-Monthly Minimum Charge 1/1/23	Adopted Bi-Monthly Capital Improvement Charge 1/1/23
5/8 x 3/4"	\$33.85	\$7.00
1"	\$50.48	\$17.50
1-1/2"	\$78.20	\$35.00
2"	\$111.45	\$56.00
3"	\$200.15	\$112.00
4"	\$299.92	\$175.00
6"	\$577.08	\$350.00
8"	\$909.67	\$560.00
10"	\$1,353.12	\$840.00





# Current Fire Service Rates

Meter Size (inches)	Adopted Bi-Monthly Fire Service Charge 1/1/23
1-1/2"	\$2.99
2"	\$6.38
3"	\$18.55
4"	\$39.51
6"	\$114.76
8"	\$244.55
10"	\$439.79



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# Current Rate Discount Programs: CARE Senior Discount

- **Eligibility:**
  - Must be enrolled in Southern California Edison's CARE program
  - Must live at the billing address
  - Water bill must be in resident's name
  - Resident must be 65 years of age or older
- **Amount:** \$10 discount per billing period
- **Staff recommendation:**
  - Keep program with no changes



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# Current Rate Discount Programs: Low Water User Discount

- **Eligibility:**
  - Any customer using less than 6 ccf in a bi-monthly billing period
- **Amount:**
  - Customer does not pay the Commodity Delivery Charge for any water use in that billing period.
- **Staff recommendation:**
  - Discontinue program to ensure water rates are equitable among all ratepayers.



# Proposed Rate Schedule: Introduction and Methodology

- **Methodology:**
  - Industry standard water rate setting methodology
  - American Water Works Association M1 Manual
  - Cost-of-Service Analysis
- **Today's Study Session:**
  - Cost-of-Service based rates
- **Possible Revisions:**
  - Rate transitioning to phase into cost-of-service based rates (future Study Session)



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# Commodity Delivery Charges: How They Were Calculated

- **Tier 1**

- Water source: local groundwater
- Tier 1 rate based on the cost of local groundwater production
- ccf included in Tier 1 is based on average water use

- **Tier 2**

- Water source: local groundwater (60%) and imported water (40%)
- Tier 2 rate based on the cost of imported water and the cost of local groundwater
- Tier 2 rate also includes the cost of conservation programs, including the City's cost to comply with State Water Use Objectives legislation.



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# Proposed Commodity Delivery Charges

	Current	Proposed				
		1/1/2024	1/1/2025	1/1/2026	1/1/2027	1/1/2028
Tier 1	\$3.26	\$3.34	\$3.53	\$3.75	\$3.97	\$4.21
Tier 2	\$4.80	\$5.29	\$5.37	\$5.46	\$5.59	\$5.70

- **Tier 1**
  - Increases in next five years as PFAS O&M cost increases make the expenses to produce local groundwater higher.
- **Tier 2**
  - Increases in 2024 as costs of Water Use Objectives legislation are included.
  - Increases in next five years as PFAS O&M cost increases make the expenses to provide local groundwater higher.



# Proposed Bi-Monthly Minimum Charge

Meter Size	Current	Proposed				
		1/1/2024	1/1/2025	1/1/2026	1/1/2027	1/1/2028
5/8 x 3/4"	\$33.85	\$35.50	\$37.04	\$38.71	\$40.45	\$41.88
1"	\$50.48	\$54.79	\$57.30	\$60.05	\$62.93	\$66.50
1-1/2"	\$78.20	\$86.95	\$91.06	\$95.61	\$100.39	\$107.54
2"	\$111.45	\$125.54	\$131.58	\$138.29	\$145.35	\$156.79
3"	\$200.15	\$228.44	\$239.61	\$252.11	\$265.25	\$288.13
4"	\$299.92	\$344.20	\$361.16	\$380.15	\$400.12	\$435.88
6"	\$577.08	\$665.77	\$698.77	\$735.81	\$774.79	\$846.30
8"	\$909.67	\$1,051.66	\$1,103.92	\$1,162.61	\$1,224.39	\$1,338.81
10"	\$1,353.12	\$1,566.17	\$1,644.10	\$1,731.68	\$1,823.86	\$1,995.48



# Proposed Bi-Monthly Capital Improvement Charge

Meter Size	Current	Proposed				
		1/1/2024	1/1/2025	1/1/2026	1/1/2027	1/1/2028
5/8 x 3/4"	\$7.00	\$7.33	\$7.67	\$8.03	\$8.41	\$8.81
1"	\$17.50	\$18.32	\$19.18	\$20.08	\$21.03	\$22.02
1-1/2"	\$35.00	\$36.64	\$38.36	\$40.17	\$42.06	\$44.03
2"	\$56.00	\$58.63	\$61.38	\$64.27	\$67.29	\$70.45
3"	\$112.00	\$117.26	\$122.77	\$128.54	\$134.58	\$140.90
4"	\$175.00	\$183.21	\$191.82	\$200.84	\$210.28	\$220.16
6"	\$350.00	\$366.42	\$383.65	\$401.68	\$420.56	\$440.32
8"	\$560.00	\$586.28	\$613.83	\$642.68	\$672.89	\$704.51
10"	\$840.00	\$879.42	\$920.75	\$964.02	\$1,009.33	\$1,056.77



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# Proposed Fire Service Rates

Meter Size	Current	Proposed				
		1/1/2024	1/1/2025	1/1/2026	1/1/2027	1/1/2028
1-1/2"	\$2.99	\$3.79	\$3.97	\$4.16	\$4.36	\$4.56
2"	\$6.38	\$8.09	\$8.47	\$8.87	\$9.29	\$9.73
3"	\$18.55	\$23.49	\$24.59	\$25.75	\$26.96	\$28.23
4"	\$39.51	\$50.05	\$52.40	\$54.86	\$57.44	\$60.14
6"	\$114.76	\$145.39	\$152.22	\$159.37	\$166.86	\$174.70
8"	\$244.55	\$309.82	\$324.38	\$339.63	\$355.59	\$372.30
10"	\$439.79	\$557.17	\$583.36	\$610.78	\$639.49	\$669.55

- Fire Service Rates are applicable to private fire service connections
- Fire Service Rates recover the costs of providing and maintaining infrastructure that provides fire protection services (portions of reservoirs and water lines).



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# Example Bi-Monthly Residential Water Bill

- Preliminary rates shown tonight: bi-monthly water bill for an example residential customer:
  - 22 ccf per billing period (calendar year 2022 average)
  - 5/8x3/4" water meter
  - Does not include increases from future pass-through adjustments

	Current	Proposed				
		1/1/2024	1/1/2025	1/1/2026	1/1/2027	1/1/2028
Bi-Monthly Minimum Charge	\$33.85	\$35.50	\$37.04	\$38.71	\$40.45	\$41.88
Commodity Delivery Charge	\$71.72	\$73.48	\$77.66	\$82.50	\$87.34	\$92.62
Capital Improvement Charge	\$7.00	\$7.33	\$7.67	\$8.03	\$8.41	\$8.81
<b>Total</b>	<b>\$112.57</b>	<b>\$116.30</b>	<b>\$122.38</b>	<b>\$129.24</b>	<b>\$136.20</b>	<b>\$143.30</b>
% Increase		3.3%	5.2%	5.6%	5.4%	5.2%

# Next Steps

- **Receive Council feedback.**
- **Modify Revenue Requirement analysis and/or preliminary Rate Schedule per Council feedback.**
- **Develop “Rate Transitioning” rate schedule.**
- **Present revised Rate Structure at an August Study Session.**
- **If acceptable to Council, proceed with Public Engagement.**



# Proposed Schedule

- **Draft Rate Study Results: August 2023**
- **Future Council Study Sessions:**
  - August – Draft Rate Schedule
- **Public Engagement: September 2023**
- **Prop 218 Notification, if approved: Fall 2023**
- **Adoption, if approved: December 2023**
- **Rate changes go into effect, if any: January 2024**



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Feedback, Questions, Comments?

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Est. 1874  
HISTORIC  
MAIN STREET  
County of Orange

Thank you for your time.

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