City of Garden Grove Public Works Department

Water Rate Study Presentation

Council Study Session August 22, 2017



Why are we here?

- "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 vision of Garden Grove is to be a safe, attractive, and economically vibrant city with an informed and involved public.
 We are a diverse community that promotes our unique attributes and preserves our residential character.
- "The goal of the Water Services Section is to provide sufficient and safe water at the lowest possible cost to the City's residents."

Tonight's Presentation

- 1. Revised Draft Five-Year Financial Plan
- 2. Rate Structure Alternatives
- 3. Low-Income Senior Discount
- 4. Public Engagement
- 5. Next Steps
- 6. Request for Council Feedback





Draft Five-Year Financial Plan: Key Assumptions

- Build Capital Improvement/Facilities Plan projects
- Meet financial performance targets:
 - Reserves > 2 months cash flow + 5% of system value + \$500K
 - Debt service coverage ratio > 1.75
- Includes costs to purchase water
 - Increases in wholesale costs
 - Water demand partially "rebounding" from drought levels
- Inflation included in calculations
- Issue debt of \$15.375M in FY 18/19





Capital Improvement/Facilities Plan: Review Water System Facilities

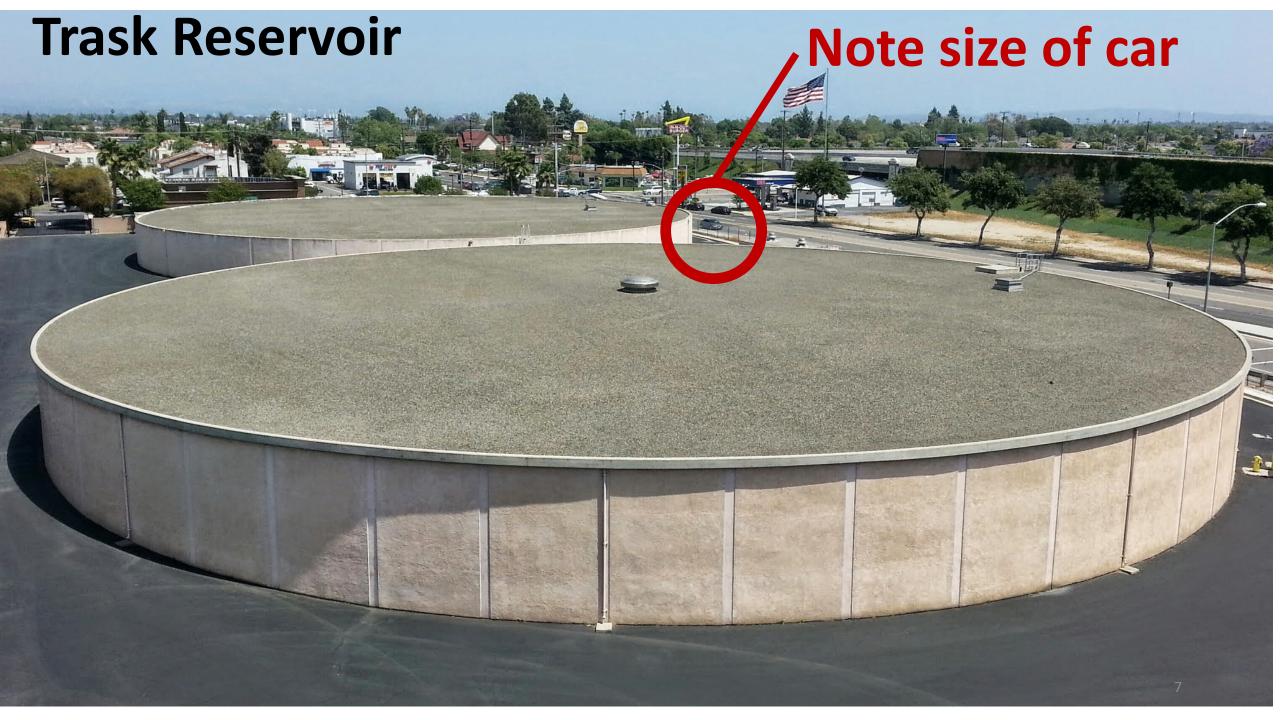
- 8 reservoirs holding 53 million gallons of water
- 433 miles of pipe
 - ~ distance from Garden Grove to San Francisco
 - 40% is over 60 years old
- 13 wells
- 5 pump stations



Capital Improvement/Facilities Plan: Immediate Priority Projects

- Reservoir Rehabilitations Required
 - Condition assessment identified necessary improvements to eight reservoirs
 - Seismic upgrades are needed as noted in condition assessment
 - Must maintain minimum fire flow storage
 - Runoff water from outside the reservoirs percolating into the ground and infiltrating into the reservoirs
- Reservoirs are of vital importance for maintaining reliable water service with the current storage capacity volume
- Storage is integral to the operation of the system, especially during emergencies





Capital Improvement/Facilities Plan: Immediate Priority Projects

- Well Evaluation and SCADA Improvements Needed
 - Determine life expectancy and identify required improvements.
 - Supervisory Control and Data Acquisition (SCADA) System
 - Portable Back-up Power Generators
- Water Master Plan Update
- Asset Management Study
- Recurring Replacements
 - Service lines
 - Fire hydrants
 - Flow meters, valves, system appurtenances





Capital Improvement/Facilities Plan: Immediate Priority Cost Summary (2017-2022)

CATEGORY	PROJECT	COST \$
Reservoirs	Reservoir Rehabilitations	\$16,272,538
Recurring Replacements	Service lines, Fire Hydrants, Meters,	
	Valves, Appurtenances	\$17,537,415
Boosters	Portable Back-up Generators	\$1,047,510
Wells	Well Condition Assessment	\$733,257
Studies	Master Plan Update	\$550,000
Studies	Asset Management Study	\$327,347
Studies	Cyber Security	\$175,000
TOTAL		\$36,643,067



Capital Improvement/Facilities Plan: Benefits of Immediate Priority Projects

- Reliable 24/7 Water Supply
 - Reservoir Rehab: Seismic upgrades for continued water service after an earthquake
 - Hydrants and Reservoirs: Fire fighting capability and sufficient water in storage during fires
 - Meters: Accurate measurement of water use provides equity
 - Valves: Maintenance that disrupts service to as few customers as possible
 - Service Lines: Reduces water loss, saves \$ on purchased water

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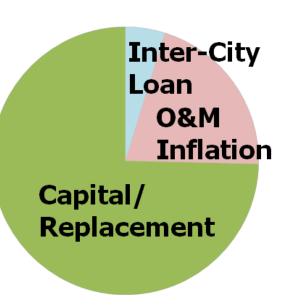


Draft Five-Year Financial Plan:

(Excluding Future Pass-Through of Increased Water Costs)

Current Annual Revenues (estimate, FY 17/18) \$ 30 M <u>Funds Required, FY 21/22</u> \$ 38 M Deficit

From the \$8 M:





Inter-City Loan

- Prior to annual payments beginning, a one-time retroactive charge for past street damages was assessed
- This retroactive charge is called the "Inter-City Loan"
 - Outstanding balance is \$13.4 million
 - Interest rate of 6.5%
- Currently: Interest-only payments, \$830,000 per year
- Repayment Alternatives

	15 years	20 years	No Principal
Annual Payment	\$1,420,000	\$1,210,000	\$830,000
Compared with 20 Year Repayment:			
Financial Impact to Typical Single-	plus		minus
Family Residence	\$1/month		\$1.50/month



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Rate Structure Alternatives: Key Issues to Discuss

- How much should the Fixed Charges be?
- Commodity charges: Two Alternatives
 - Budget-Based alternative
 - Increasing Block alternative
- Effect on customers
 - Customer water use
 - Financial impacts





Current Fixed Charges: Average Single Family Residential Customer

	Monthly	Bi-Monthly
Minimum Charge	\$6.37	\$12.74
Capital Improvement Charge	\$0.73	\$1.47

Only 15% of water rate revenue is from fixed charges



Fixed Charges: Effect of Low Fixed Charges

- Current Capital Improvement Charge
 - Current charge collects \$350,000 per year
 - Phase 1 CFP: Annual capital + replacement of \$7.3 million per year
- Unstable revenue for utility
 - Conservation: revenues decrease more than costs decrease
 - City has deferred capital upgrades and replacements since 2015
- Does not address fixed costs to maintain water system
- Keeps water bills low for customers that do not use much water



Proposed Fixed Charges:

- Increased Minimum Charge and Capital Improvement Charges
- Phased in over five-year period
- Provides funds to build reservoir improvements and ongoing system repairs
- Increased Costs for all water customers
 - Mitigated by proposed Low Income Senior Discount
- Specific proposed charges shown later



Budget-Based Rates:Introduction

- Encourages water conservation
- Three Tiers
 - Indoor allocation least expensive
 - Outdoor allocation
 - Excessive tier most expensive



Budget-Based Rates:Residential Allocations

- Indoor allocation assumes four people per household
- Outdoor allocation: landscape and weather
- Excessive tier

Indoor Allocation = 55 gallons/day X people per household



Outdoor Allocation =
Irrigable Area X
Evapotranspiration X
80%



Budget-Based Rates:Proposed Rate Structure, Average SFR Customer

	Existing Rates		Proposed Rates
	Existing Nates	January 2018	January 2022
Minimum Charge	\$12.74	\$17.88	\$33.31
Capital Improvement Charge	\$1.47	\$3.00	\$7.00
Current Commodity Charge \$/ccf	\$3.07		
Indoor Tier, \$/ccf		\$2.89	\$2.89
Outdoor Tier, \$/ccf		\$3.45	\$3.91
Excessive Tier, \$/ccf		\$3.66	\$4.44

Excludes Future Pass-Through of Increased Water Supply Costs; Future Pass-Throughs will be Developed on an Annual Basis by City Staff



Budget-Based Rates:Pros and Cons for Other Agencies That Have Implemented Budget-Based Rates

Pros

- Customers see Budget-Based Rates as fair and easy to understand
- Encourages Conservation
- Price signal is customized to each customer

Cons

- Takes more time and resources to implement and administer
- Customers may seek lower water rates through appeal process



Budget-Based Rates:Pros and Cons for Garden Grove

Pros

- Customers see Budget-Based Rates as fair and easy to understand
- Encourages Conservation
- Price signal is customized to each customer

Cons

- Takes more time and resources to implement and administer
- Residents more apt to contest data used for calculation
- Garden Grove residents use less outdoor water than in other jurisdictions with Budget-Based Rates
- Most summer water use falls within Indoor and Outdoor Allocations
- Excessive water use peaks in winter



Increasing Block Alternative Comparison with current rate structure

- Similarities
 - Tiered Commodity Charge
 - Higher Tier is more expensive
- Differences
 - Two tiers instead of four
 - \$/ccf between tiers is greater
 - Sends conservation signal
 - Amount of water in the first tier varies with meter size



Increasing Block Alternative Pros and Cons

- Pros
 - Similar to existing rate structure, easy for customers to understand
 - Encourages Conservation
 - Easy for City to implement and administer
- Cons
 - Price signal is not customized to each customer



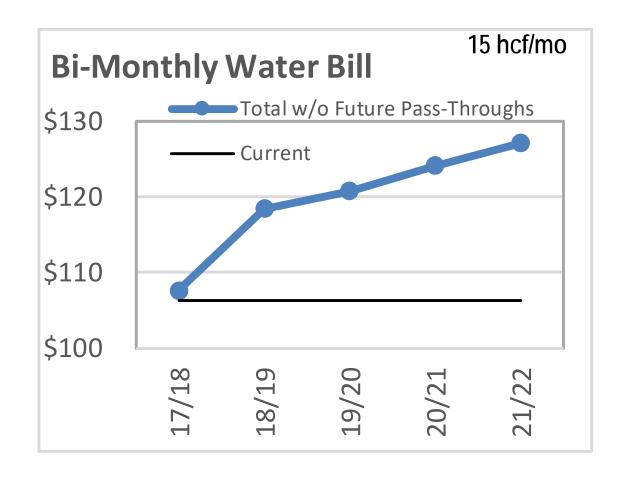
Increasing Block Alternative Proposed Rate Structure, Average SFR Customer

	Cylinting Dates	Proposed Rates	Proposed Rates
	Existing Rates	January 2018	January 2022
Minimum Charge	\$12.74	\$17.88	\$33.31
Capital Improvement Charge	\$1.47	\$3.00	\$7.00
Current Commodity Charge \$/ccf	\$3.07		
Tier 1, \$/ccf		\$2.89	\$2.89
Tier 2, \$/ccf		\$3.66	\$4.44

- Tier 1 includes 33 ccf per billing period
- Excludes Future Pass-Through of Increased Water Supply Costs; Future Pass-Throughs will be Developed on an Annual Basis by City Staff

GARDEN GROVE

Increasing Block Alternative Example Bi-Monthly Bill, Average SFR Customer



Current Bi-Monthly Water Bill is \$106.31



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Proposed Low-Income Senior Discount

- Proposed Eligibility Criteria:
 - Resident that lives at the billing address
 - 65 years or older
 - Qualifies for SCE's CARE Program
- Why Low-Income and Senior?
 - 33,000 out of 44,000 Garden Grove SCE Customers qualify for CARE



Low-Income Senior Discount Proposed Implementation

- Use Water Utility Non-Rate Revenues
 - Estimated at \$350,000 per year from late fees
- Initially offer \$2/month, (\$4/billing period) discount
- Evaluate during first year:
 - How many customers sign up
 - Whether discount can be increased in subsequent years



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Public Engagement

- Public Workshop
- Rate Study Hotline
- Contact Most Affected Customers
- Contact Top Water Users
- Website / Water Bill Inserts
- Presentation to Community Groups



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Next Steps:

- Develop Final Draft Rate Structure Alternatives
 - Based on Your Feedback
 - Additional Study Sessions as Requested by Council
- Public Engagement
- Billing System Software Modifications
- Schedule to be developed based on tonight's Council feedback



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Request for Council Feedback:

- Rate structure alternatives
 - Budget-Based Rates
 - Increasing Block Rate
- Inter-City Loan Repayment
 - Begin making payments to principal?
 - Repayment schedule: 15 or 20 years



Feedback, Questions, Comments?

Thank you for your time.

