

September 28, 2020

CITY OF DELTONA, FLORIDA

# **WATER AND WASTEWATER RATE STUDY**

*Preliminary Results*



**GovRates, Inc.**

Utility, Financial, Rate, and Management  
Consultants for Governments

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# Water and Wastewater Utility Overview

- **Utility Provides Essential Service on Continuous Basis**
  - **Public Health and Safety – Primary Objective**
  - **Highly-Regulated (FDEP / SJRWMD / Florida Department of Health / EPA)**
  - **Permits Require Compliance with Regulations**
- **Enterprise Fund: Operations Primarily Funded Through User Rates and Fees**
- **Large "Business" of City**
  - **Over \$100 Million Installed Cost of Utility Assets Under City Management**



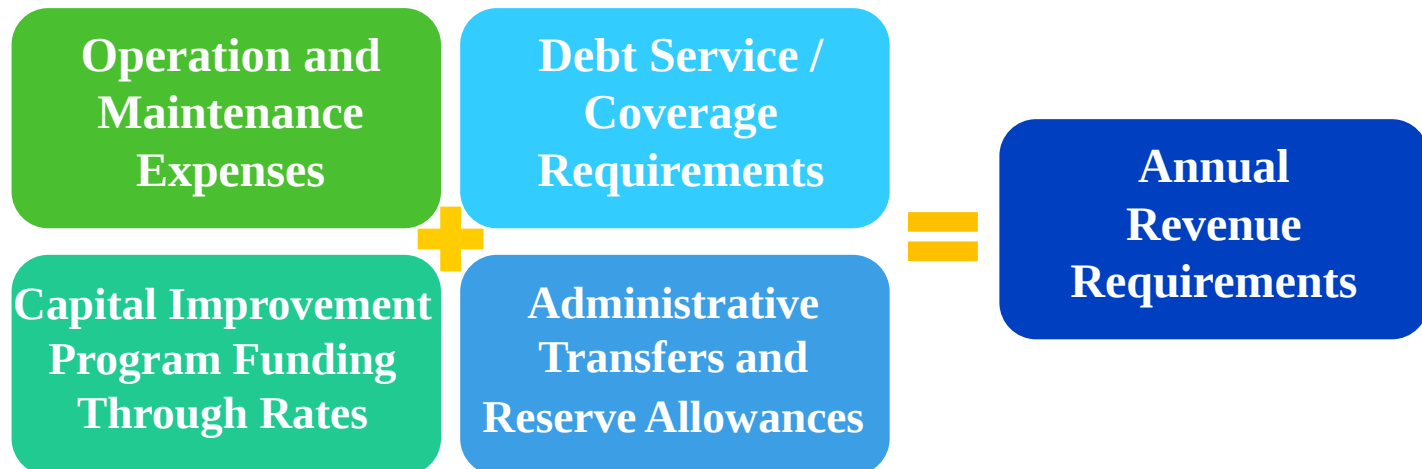
# Primary Objectives of Current Rate Study

- **Update Financial Plan**
  - Financial Forecast Through Fiscal Year 2030
  - Recognize Opportunity to Refund Existing Utility Bonds to Achieve Cost Savings and Rate Relief
- **Review Existing Rate Structures**
- **Review Water and Wastewater Impact Fees**
  - Support Policy of "Growth Paying for Growth"
- **Recommend Automatic Rate Indexing Provision to Help Utility Keep Up With Inflation**
  - Common Among Utilities
  - Favored By Credit Rating Agencies



# Revenue Requirements

- **Projected Through 2030**
- **Include the Following:**





# Major Cost Factors Affecting Water and Sewer Utility System

- **Approximately \$102 Million in Capital Needs Recognized Through Fiscal Year 2030**
  - **Based on Recent Utility Master Plan Findings**

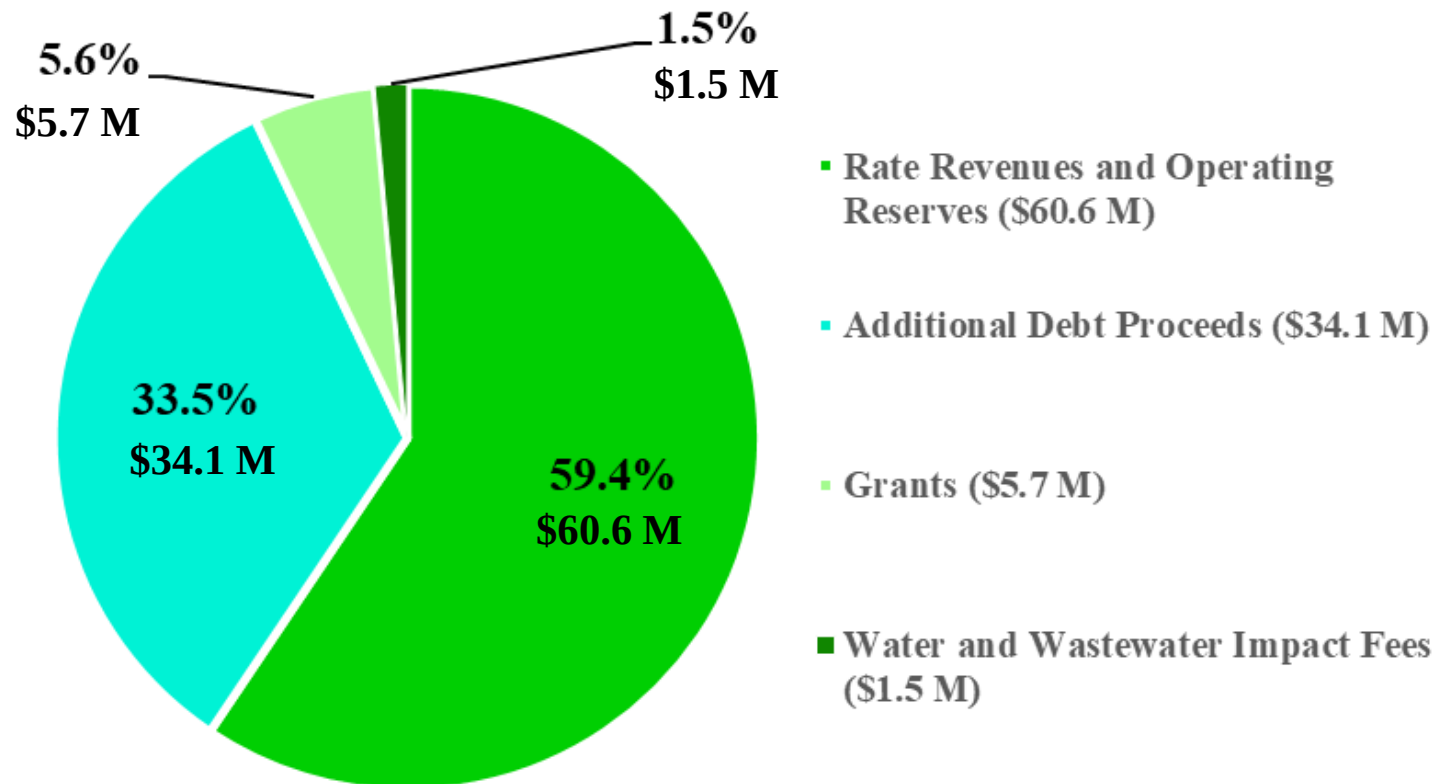
## Summary of Capital Needs Through Fiscal Year 2030

| Description                                                      | Amount                |
|------------------------------------------------------------------|-----------------------|
| Wastewater Treatment Plant Upgrades / Expansions                 | \$19,261,100          |
| Alternative / Reclaimed Water System Expansions                  | 17,201,200            |
| Well, Aquifer, and Water Treatment Plant Upgrades / Replacements | 12,956,975            |
| Water Main Rehabilitations and Replacements                      | 11,591,300            |
| Meter Upgrades and Replacements                                  | 9,210,000             |
| Force Main / Sewer Main Rehabilitations and Replacements         | 8,712,630             |
| Vehicles, Equipment, and Minor Capital Outlay                    | 8,028,600             |
| Lift Station Upgrades / Replacements                             | 4,168,300             |
| Development-Driven Projects                                      | 3,100,000             |
| SCADA System Upgrade                                             | 2,495,200             |
| Manhole Replacements                                             | 352,000               |
| Other                                                            | 4,827,425             |
| Total Major Capital Needs                                        | <u>\$ 101,904,730</u> |



# Major Cost Factors Affecting Water and Sewer Utility System (cont.)

## Capital Improvement Program Funding (\$101.9 M)





# **Major Cost Factors Affecting Water and Wastewater Utility System (cont.)**

- **Operating Expenses Projected to Continue Increasing**
  - **Permanent Increases in Costs Must Ultimately Be Passed Through to Ratepayers**
  - **Congressional Budget Office National CPI Projections: 2.2% to 2.6% Increase Per Year Through Forecast Period of Fiscal Year 2020 to 2030**
  - **Due to Regulatory Environment, Capital-Intensive Nature of Utility Operations, and Commodity Cost Increases (Electricity, Chemicals, Fuel, etc.), Utility Costs Typically Increase at Higher Rate Than General Inflation**



# **Major Cost Factors Affecting Water and Wastewater Utility System (cont.)**

- **Need to Maintain Adequate Debt Service Coverage  
(Net Revenues / Annual Debt Services)**
  - **Rate Covenants Are Formal Agreements Between City and Bondholders / FDEP**
  - **Should Target More Than Required Coverage Percentage to Provide More Pay-As-You-Go Funding for Routine / Recurring Capital Needs**



# Projected Need for Revenue Adjustments Assuming Refunding of Utility's Series 2013 and 2014 Bonds with "30-Year Stretch"

## Summary of Projected Water, Wastewater, and Reclaimed Water User Rate Revenue Adjustments

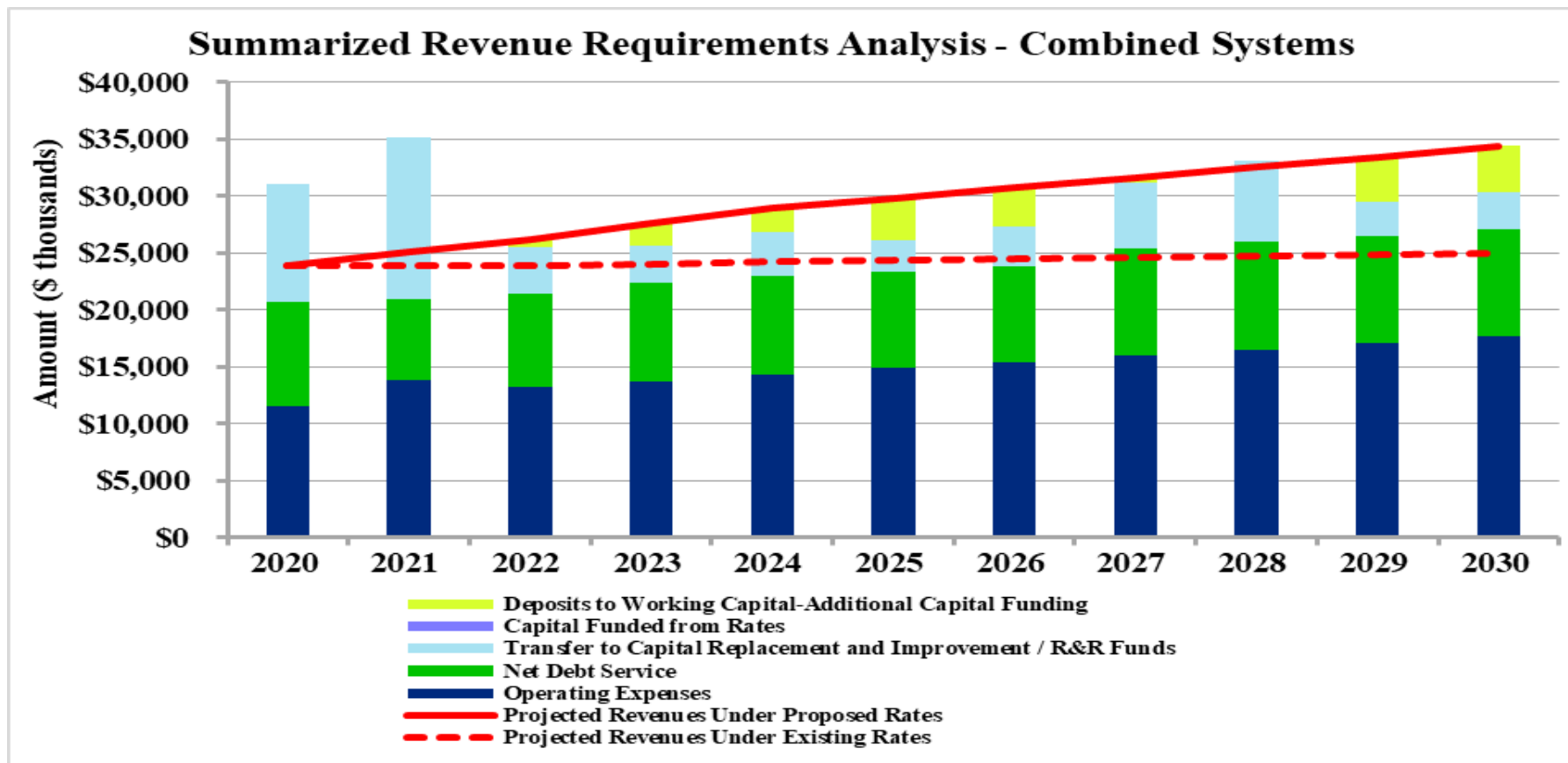
| Fiscal Year | Prior Rate Study | Current Projections with Bond Refunding | Status                                                   |
|-------------|------------------|-----------------------------------------|----------------------------------------------------------|
| 2021        | 5.0%             | 5.0%                                    | Already Adopted                                          |
| 2022        | 5.0%             | 5.0%                                    | Already Adopted                                          |
| 2023        | 5.0%             | 5.0%                                    | Already Adopted                                          |
| 2024        | 5.0%             | 5.0%                                    | Already Adopted                                          |
| 2025        | 5.0%             | 2.5%                                    | Proposed to Be Change in ENR Construction Cost Index [*] |
| 2026        | 5.0%             | 2.5%                                    | Proposed to Be Change in ENR Construction Cost Index [*] |
| 2027        | 5.0%             | 2.5%                                    | Proposed to Be Change in ENR Construction Cost Index [*] |
| 2028        | 5.0%             | 2.5%                                    | Proposed to Be Change in ENR Construction Cost Index [*] |
| 2029        | 5.0%             | 2.5%                                    | Proposed to Be Change in ENR Construction Cost Index [*] |
| 2030        | N/A              | 2.5%                                    | Proposed to Be Change in ENR Construction Cost Index [*] |

[\*] Recent increases in the *Engineering News-Record* (ENR) Construction Cost Index have averaged between 2.5% and 3.0% per year.

- **Best Financial Management Practices: Smaller, Incremental Increases Over Time Help to Avoid Future “Rate Shock” and Higher “Catch Up” Rate Increases**
- **Other Bond Refunding Alternatives May Require Higher Rate Adjustments**

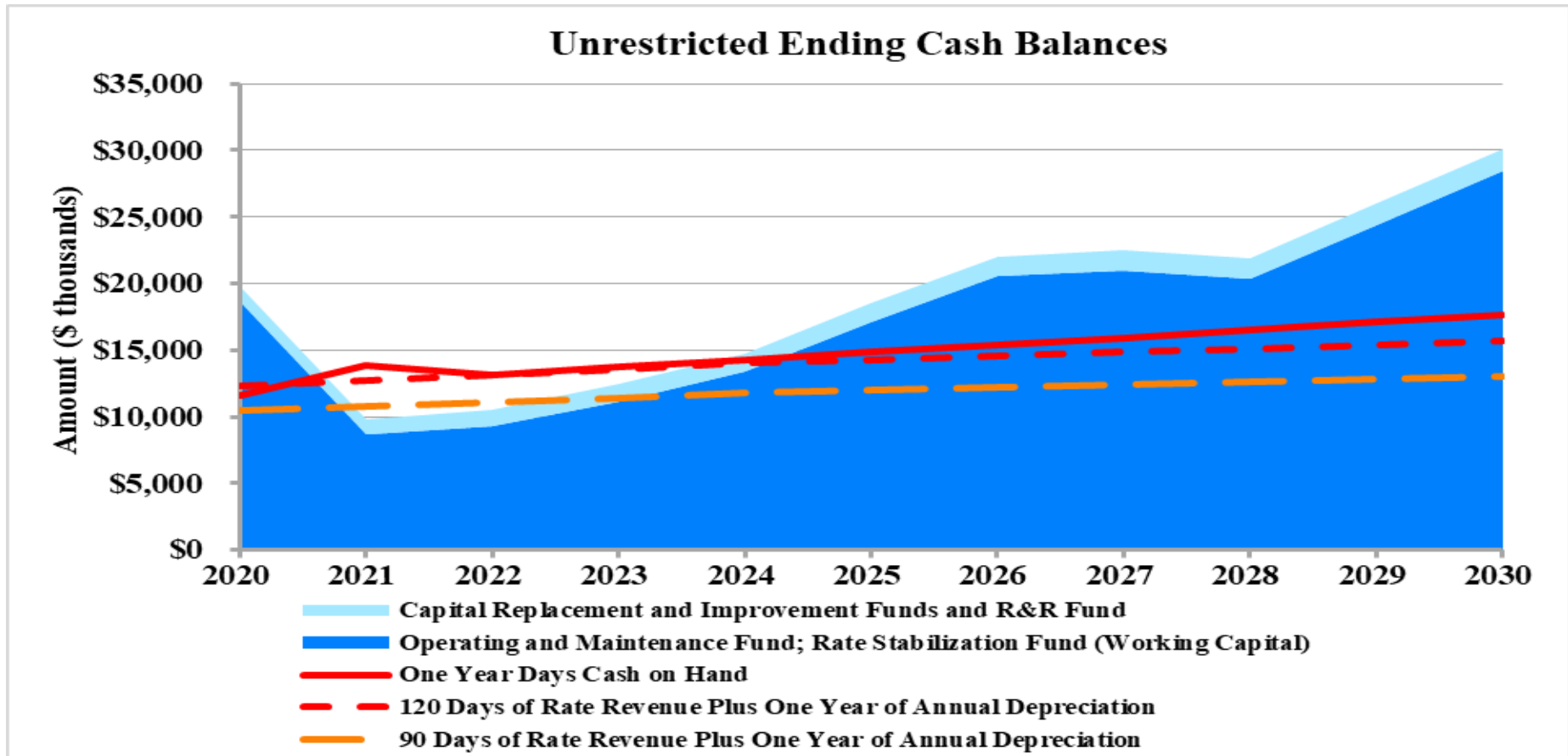


# Projected Financial Position Should Enable Utility to Accomplish Multiple Key Objectives





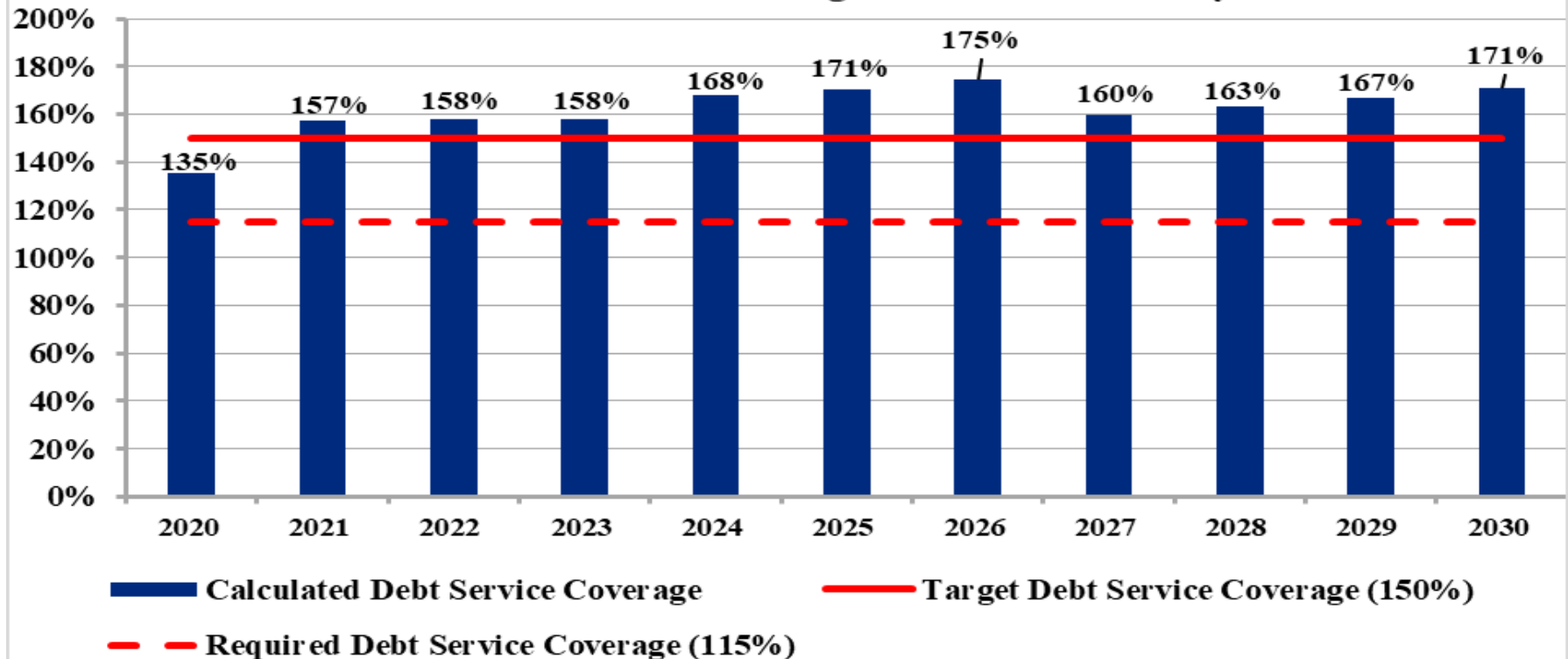
# Projected Financial Position Should Enable Utility to Accomplish Multiple Key Objectives





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**All-In Debt Service Coverage - Net Revenues Only**





# Projected Financial Position Should Enable Utility to Accomplish Multiple Key Objectives

## **Key Objectives:**

- **Fund Projected Operating Expenses and Capital Needs Identified in Recent Utility Master Plan**
- **Lock-In Debt Service Savings Through Refunding of Series 2013 and 2014 Bonds**
- **Enable Utility to Secure State Revolving Fund (SRF) and Bank Loans to Finance Major Capital Projects**
- **Maintain Affordable Rates**

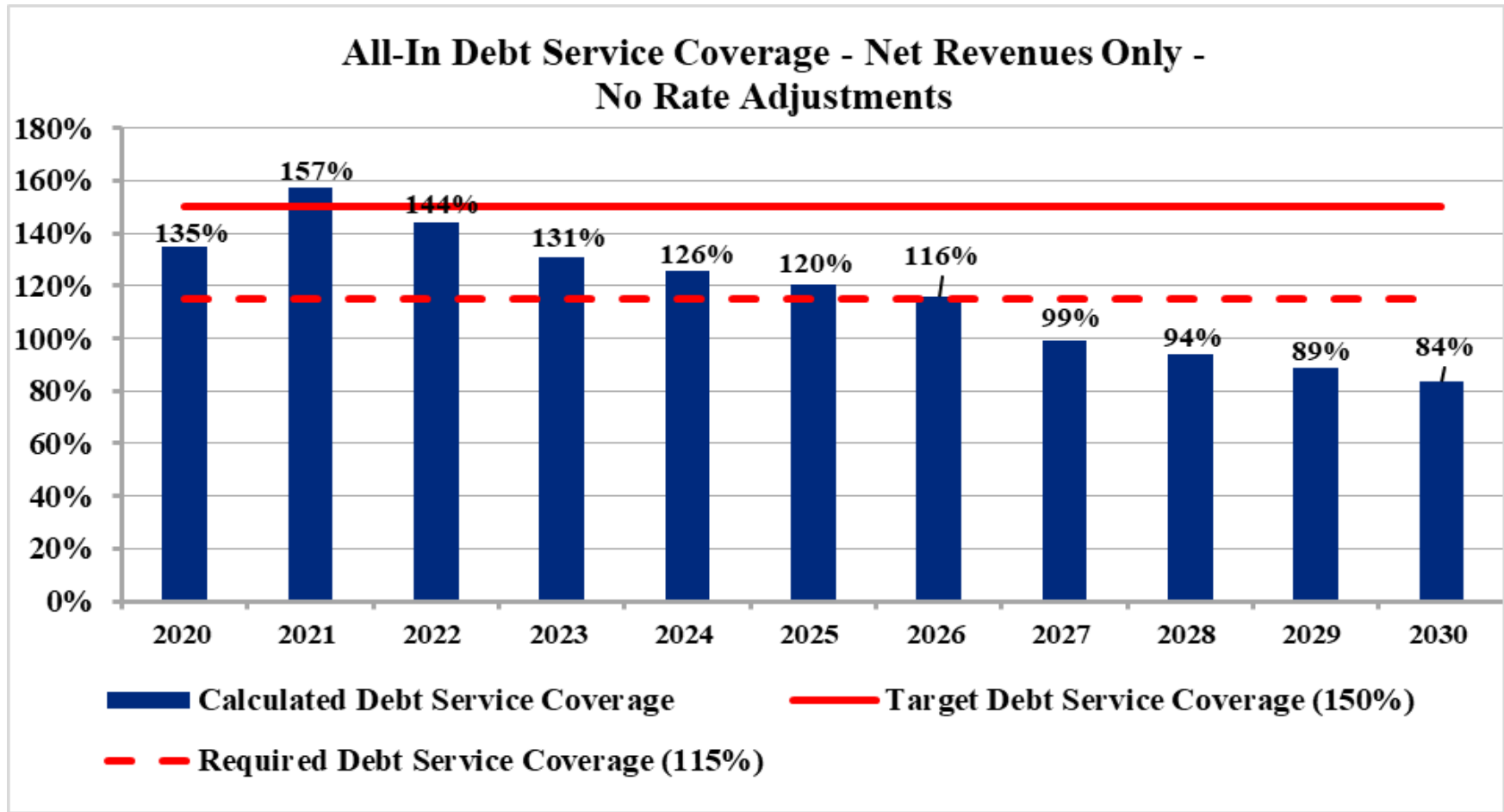


## **Financial Risks of Not Adjusting Rates**

- **Inability to Fund All Revenue Requirements, Fund Capital Program, Meet Debt Service Coverage Requirements, and Meet Financial Targets**
- **User Rates May Be Even Higher in the Future**
  - **Capital Needs for System Will Not Go Away, But Will Most Likely Be More Expensive to Address in the Future**
  - **Inflation and Costs of Construction Continue to Affect System Costs**



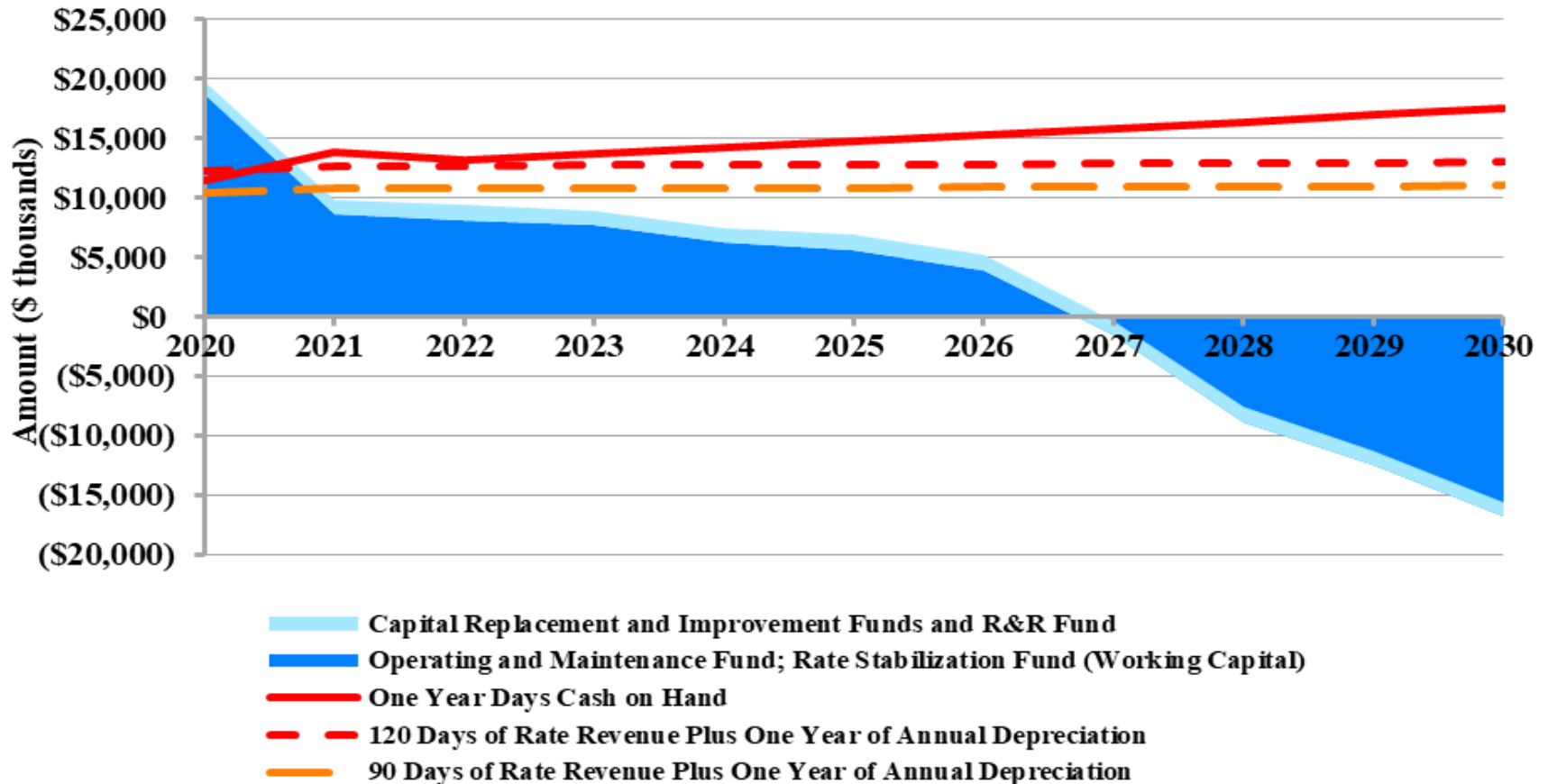
# Financial Risks of Not Adjusting Rates





# Financial Risks of Not Adjusting Rates

## Unrestricted Ending Cash Balances - No Rate Adjustments





# Rate Structure Recommendations

- **Recommend Maintaining Existing Water Rate Structure and Applying Uniform / Across-the-Board Increases**
  - Over 80% of Utility Customers Have Only Water Service
- **Recommend Gradually Increasing Base Charge Recovery for Wastewater System and Reclaimed Water System to Promote Revenue Stability**
  - Most Operating Expenses and All Debt Service Are Fixed
  - Effects of COVID-19 and Anticipated Additional Debt Financing (Fixed Costs) Support Increasing Base Charge Recovery
  - Current Base Charge Recovery: 22% Wastewater, 24% Reclaimed Water; Utility Industry Recommended: Minimum 30%
  - For Wastewater, Recommend Including First 2,000 Gallons of Usage in Residential Base Charge
  - For Reclaimed Water, Recommend Increasing Monthly Base Charge for Fiscal Year 2021 at Higher Rate Than Volumetric Charge to Achieve Overall 5% Increase in Reclaimed Water User Rate Revenue



# Rate Structure Recommendations (cont.)

- **Recommend Eliminating 10,000-Gallon Residential Wastewater Billing Cap**
  - **Would Provide Rate Relief to Users of 2,000 to 10,000 Gallons Per Month**
  - **Shifts Cost Recovery to Larger Users**
  - **"Neighboring" Utilities with No Residential Wastewater Billing Cap: City of Casselberry, City of Longwood, City of Maitland, City of St. Cloud**

## Proposed Wastewater Rates for Single Family Residential Customer with Typical 5/8" Meter

| Rate Component                          | Existing<br>Fiscal Year<br>2020 Rates | Proposed<br>Fiscal Year<br>2021 Rates [*] |
|-----------------------------------------|---------------------------------------|-------------------------------------------|
| Base Rate                               | \$20.67                               | \$53.92                                   |
| Usage / Volume Charge Per 1,000 Gallons |                                       |                                           |
| 0 to 2,000 Gallons                      | \$17.30                               | \$0.00                                    |
| 2,001 to 5,000 Gallons                  | 17.30                                 | 16.11                                     |
| 5,001 to 10,000 Gallons                 | 22.50                                 | 20.95                                     |
| Over 10,000 Gallons                     | 0.00                                  | 20.95                                     |
| Bill for 2,000 Gallons of Usage         | \$55.27                               | \$53.92                                   |
| Difference                              |                                       | (1.35)                                    |

[\*] (\$20.67 Base Charge in FY 2020 \* 1.05) + (\$16.11 \* 2 kgal) = \$53.92



# Rate Structure Recommendations (cont.)

- **Maintained 25% Outside-City Surcharge as Allowed Per Florida Statute 180.191**
- **Effect of Rate Recommendations on Single Family Residential Customer with Average Usage**
  - **Single Family Residential Customers Comprise Over 95% of Water Customer Base and About 90% of Wastewater Customer Base**

## Effect of User Rate Recommendations on Single Family Residential Customer with Average Usage of 5,000 Gallons

|               | Water Bill [1]<br>(Already Adopted) | Wastewater Bill [2]<br>(Proposed) | Combined Bill [2]               |                 |                                                                        |
|---------------|-------------------------------------|-----------------------------------|---------------------------------|-----------------|------------------------------------------------------------------------|
|               |                                     |                                   | Combined Bill [2]<br>(Proposed) | Cost Per Gallon | % of Median Household Income [3]<br>(EPA: <4.5% Considered Affordable) |
| FY 2020 Rates | \$24.97                             | \$107.17                          | \$132.14                        | 2.64¢           | 3.25%                                                                  |
| FY 2021 Rates | \$26.21                             | \$102.25                          | \$128.46                        | 2.57¢           | 3.16%                                                                  |
| Difference    | \$1.24                              | (\$4.92)                          | (\$3.68)                        | -0.07¢          |                                                                        |

[1] Over 80% of customer base has only water service.

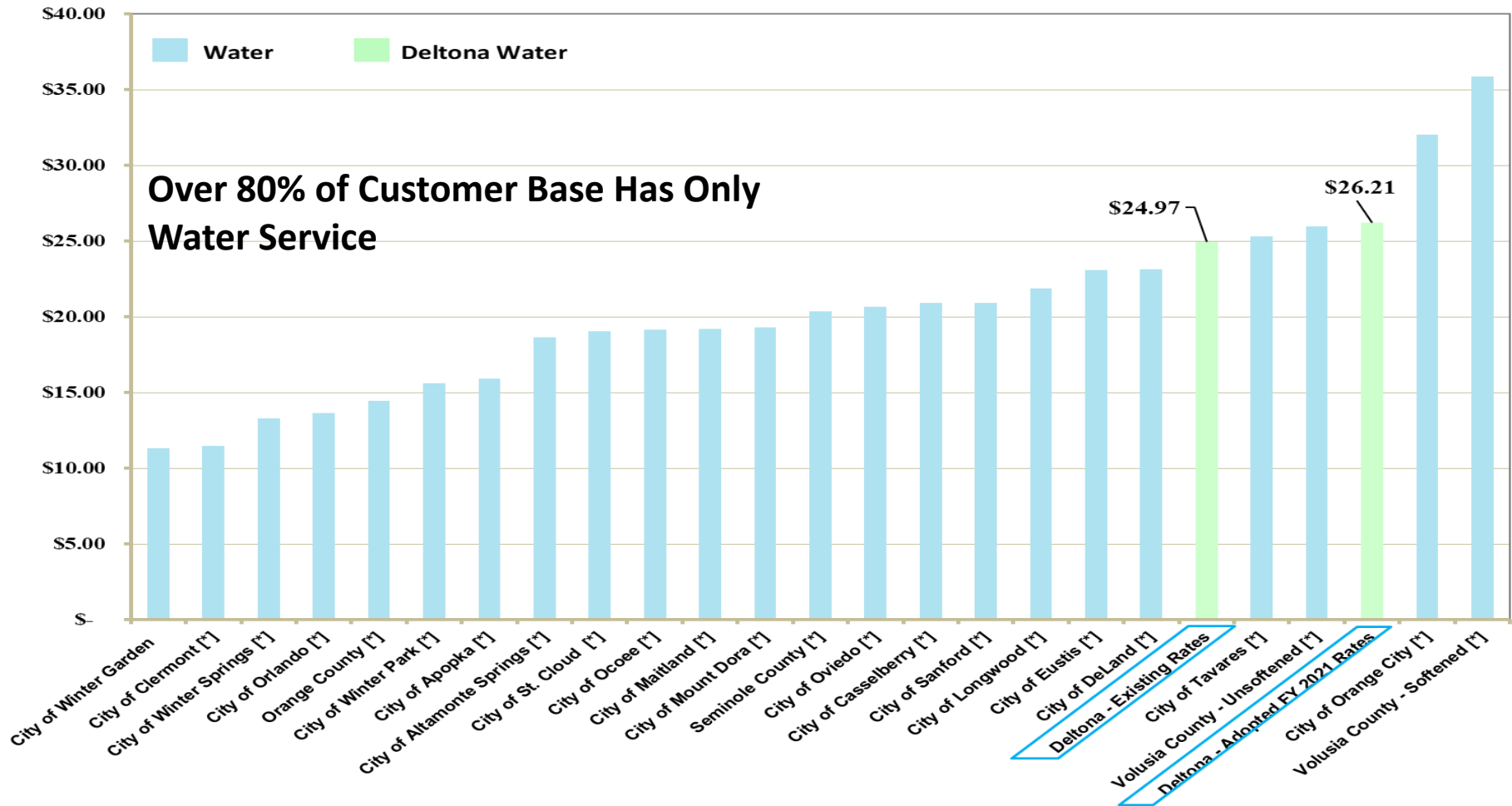
[2] Less than 20% of customer base has both water and wastewater service.

[3] United States Census Bureau: Median Household Income for Deltona = \$48,839 per year or \$4,070 per month.



# Comparison of Monthly Charges

For Water Service with Monthly Usage of 5,000 Gallons  
(Historical Average Usage of Single Family Residential Customer in System)

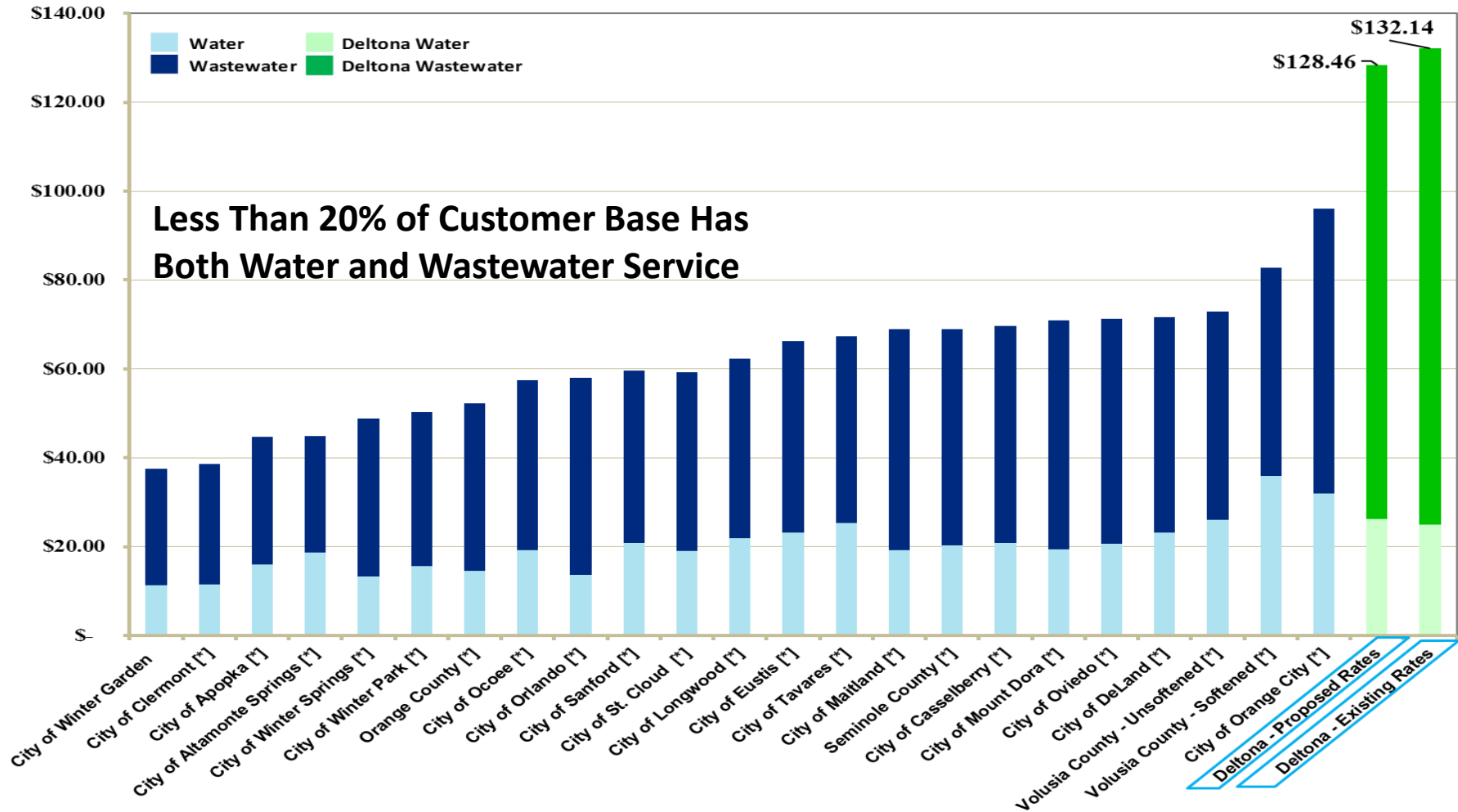


[\*] Utility is currently involved in a rate study, is planning to conduct a rate study, or plans to implement a rate revision or price index / pass-through adjustment within the next twelve months following the comparison preparation date



# Comparison of Monthly Charges

For Combined Water and Sewer Service with Monthly Usage of 5,000 Gallons  
(Historical Average Usage of Single Family Residential Customer in System)



[\*] Utility is currently involved in a rate study, is planning to conduct a rate study, or plans to implement a rate revision or price index / pass-through adjustment within the next twelve months following the comparison preparation date



# **Rate Comparison Not a "Report Card" on How Well Utility Is Performing**

- **Some Reasons Why User Rates Differ Among Utilities**
  - **Size of Existing Customer Base / Available System Growth**
  - **Demographics (e.g., Customers Spread Out vs. Close Together, Types of Customers Served)**
  - **Level of Capital Improvements to Meet Service Area Growth**
  - **Amount of Needed Renewals and Replacements / Remaining Service Life of Assets**
  - **Differences in Bond Covenants**
  - **Source of Water Supply and Treatment Process Costs**
  - **Plant Capacity Utilization and Assistance in Funding of Such Capacity (e.g., Grants, Impact Fees)**
  - **Time of Last Rate Review**
  - **Amount of General Fund and Administrative Fee Transfers**



# Water and Wastewater Impact Fees

- **Charged to Development to "Buy-In" to Proportionate Share of System Capacity**
  - Support Policy of "Growth Paying for Growth"
  - Reduce Cost Burdens on Monthly User Rates (Help to Reduce Need for User Rate Increases)
  - Last Reviewed in 2015
  
- **Calculated Based on:**
  - Cost of Installed Assets Available to Serve New Growth
  - Multi-Year Capital Program
  - Utilized Level of Service (LOS) Standards Based on Per Capita Usage Assumptions Reflected in Most Recent Utility Master Plan
    - Water LOS = 270 gpd per ERC
    - Wastewater LOS = 215 gpd per ERC



# Water and Wastewater Impact Fees (cont.)

- **Recommend That Financing Portion (Interest Associated With Debt) Be a Separate "Capital Financing Recovery Fee" (CFRF)**
  - **Prior Impact Fee Analysis Included This Component as Part of Fees**
  - **CFRF (Sometimes Known as "Accrued Guaranteed Revenue Charge" and Other Names) Charged By Some Utilities as Reimbursement to Existing User Rate Payers for "Carrying" Capacity in Advance of Growth**
  - **CFRF Considered to Be Operating Revenue and Helps Utility Meet Net Revenues Debt Service Coverage Requirement**



# Water and Wastewater Impact Fees (cont.)

## Existing and Proposed Water and Wastewater Impact fees Fees Per ERC

| System     | Fees Currently Charged [1] | Previous Study Calculation [2] | Current Study Calculation [3] | Difference from Previous Study Calculations |              |
|------------|----------------------------|--------------------------------|-------------------------------|---------------------------------------------|--------------|
|            |                            |                                |                               | Amount                                      | Percent      |
| Water      | \$1,872                    | \$1,872                        | \$1,944                       | \$72                                        | 3.8%         |
| Wastewater | 3,817                      | 5,090                          | 4,531                         | (559)                                       | -11.0%       |
| Total      | <u>\$5,689</u>             | <u>\$6,962</u>                 | <u>\$6,475</u>                | <u>(\$487)</u>                              | <u>-7.0%</u> |

ERC = Equivalent Residential Connection

[1] Only 75% of calculated wastewater impact fee was adopted.

[2] Includes carrying (interest) cost component. Based on 350 gpd per water ERC and 300 gpd per wastewater ERC.

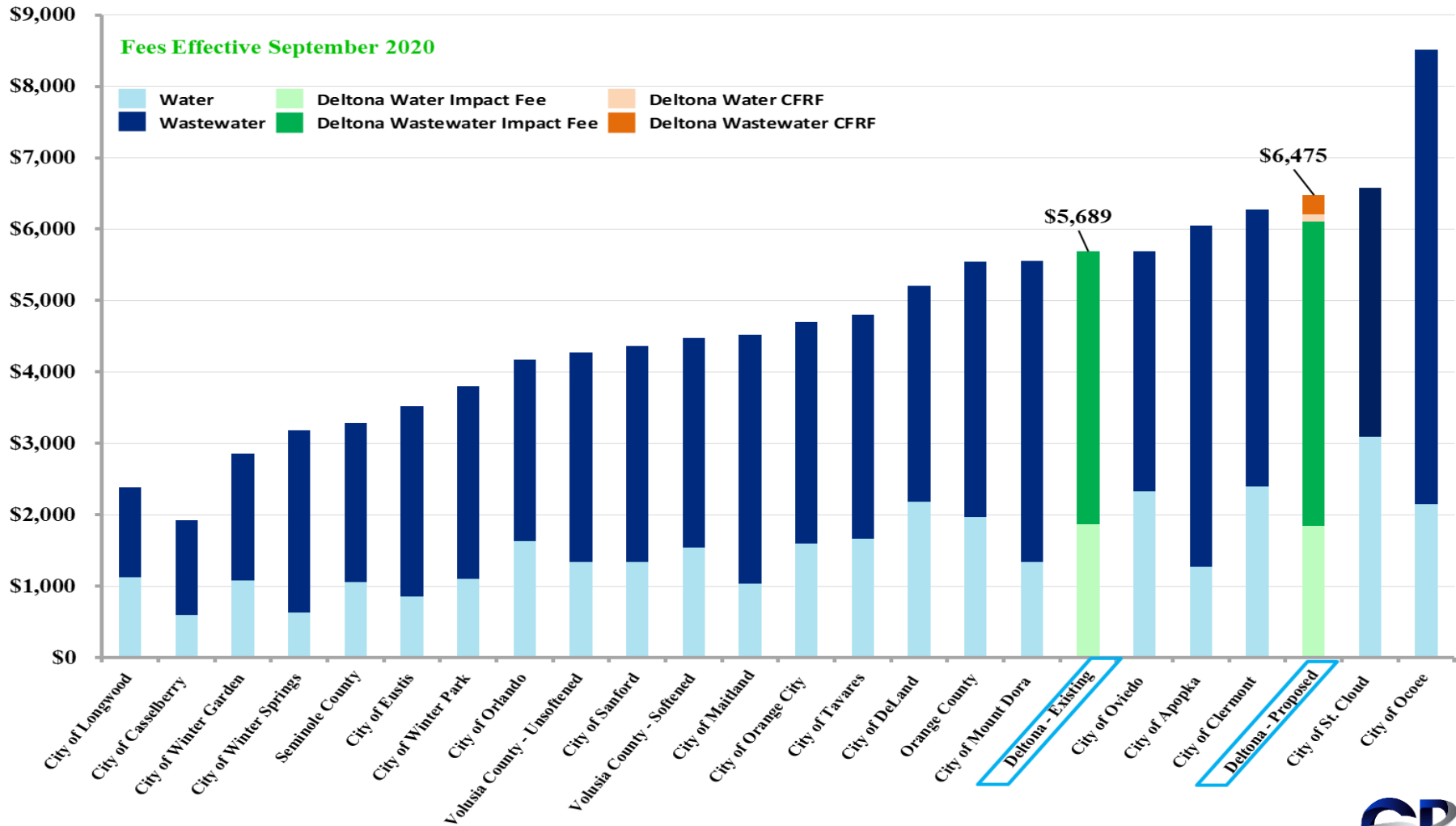
[3] Breakdown as follows:

| Component  | Water             | Wastewater        | Combined          |
|------------|-------------------|-------------------|-------------------|
| Impact Fee | \$1,846.00        | \$4,262.00        | \$6,108.00        |
| CFRF       | 98.00             | 269.00            | 367.00            |
| Total      | <u>\$1,944.00</u> | <u>\$4,531.00</u> | <u>\$6,475.00</u> |

- **Calculated Cost Per Gallon of Capacity Is Higher, But Lower Level of Service Per ERC Results in Lower Calculated Wastewater Fee**



# Water and Wastewater Impact Fees (cont.)





# Rate Indexing Adjustment Clause

- **In Absence of Formal Rate Study Recommendation or Council Action, Recommend Automatic Rate Increases for Inflationary Effects on Costs of Operation**
  - **Recommended Index: ENR Construction Cost Index, Which Links More Closely to Utility Cost Increases Than Other Alternatives**
  - **Implemented Without Formal Public Hearing or Analysis**
  - **Effective October 1st of Each Applicable Fiscal Years**
  - **Help to Prevent Future Rate Shock and Catch Up Rate Increases**
- **Favored By Credit Rating Agencies**
  - **More Assurance That Rates Will Keep Up With Inflation**
  - **Less Implied Risk of Default on Debt Service Payments**
- **Smaller, Incremental Rate Increases Over Time Are a Utility Best Management Practice**



# Rate Indexing Adjustment Clause (cont.)



## Florida Local Governments with Rate Indexing Provisions:

(Also Allowed By the Public Service Commission in the Regulation of Private Utilities)

City of Apopka  
City of Chipley  
City of Coconut Creek  
City of Daytona Beach  
  
City of Eustis

Florida Keys Aqueduct  
Authority  
Hillsborough County  
Town of Jupiter  
Town of Lantana  
City of Margate  
City of Mount Dora  
City of North Port  
City of Ocoee  
City of Palatka  
City of Pembroke Pines  
City of Port St. Lucie  
City of South Daytona  
City of Tamarac  
Volusia County  
City of Winter Haven

City of Boca Raton  
Citrus County  
City of Cooper City  
City of DeLand  
  
City of Fellsmere  
  
City of Fort Lauderdale  
  
City of Homestead  
Town of Jupiter Island  
Town of Mangonia Park  
City of Miami  
City of Naples  
City of Oakland  
City of Oldsmar  
City of Palm Bay  
City of Plant City  
City of St. Augustine  
City of Stuart  
City of Tarpon Springs  
City of West Palm Beach  
City of Winter Park

Charlotte County  
City of Clearwater  
Town of Davie  
City of Dunedin  
Florida Governmental Utility  
Authority  
  
City of Fort Myers  
  
City of Jacksonville Beach  
City of Lake City  
City of Marco Island  
City of Miami Beach  
City of New Port Richey  
City of Oakland Park  
City of Orange City  
City of Palmetto  
City of Plantation  
Seminole County  
City of Tallahassee  
Village of Tequesta  
City of Winter Garden



# Requested Council Action

- **Approve Updated Financial Plan**
  - **Smaller, Incremental Rate Increases Over Time Help to Avoid Future "Rate Shock" and "Catch Up" Increases**
  - **Rates Considered Competitive and Affordable**
    - **In All Fiscal Years, Combined Water and Sewer Bill for Average Usage of Single-Family Residential Customer Is Below 4.5% of Median Household Income – Historical Affordability Metric Used By Utility Industry**
- **Recommendation to Approve Refunding of Series 2013 and 2014 Bonds to Achieve Debt Service Savings and Rate Relief**
- **Recommendation to Approve Restructuring of Residential Wastewater Rates to Provide Rate Relief to Smaller Users and Promote Revenue Stability**



# **Requested Council Action (cont.)**

- **Recommendation to Adopt Proposed Impact Fees and Capital Financing Recovery Fees to Fairly Shift Cost Recovery to Development and Reduce Cost Burden on Monthly User Rates**
- **Recommendation to Adopt Automatic Rate Indexing Provision Based on ENR Construction Cost Index in Absence of Formal Rate Study Recommendation or Council Action**
  - Automatic Rate Indexing Is Common Among Utilities
  - Third-Party Evaluators Such as Credit Rating Agencies and Lenders Want to See That All Increases Needed to Support Debt Have Already Been Adopted
- **Monitor Actual Vs. Projected Financial Results**
  - Effects of COVID-19 as Well as Changes in Economic Conditions, Customer Usage Trends, Regulatory Environment, Capital Needs, Etc.
  - Update Financial and Rate Plan as Needed