

Town of Lake Park Stormwater Utility

The 2023 Rate Study

Public Works Department

June 7, 2023





Project Milestones

- On January 18, 2023, the Town Commission engaged Raftelis to prepare a stormwater rate study
- Town staff held a special workshop for residents and business owners on May 18, 2023
 - › A total of **3,687** Public notices (in three languages) were mailed two weeks prior to event; added to Town's website in April 2023
 - › The agenda and presentation materials were made available on the Town's website on May 17, 2023
 - › The presentation was also recorded for those who could not join the meeting in person



May 18th Workshop – Discussion Topics

1. Introductions
2. Stormwater Utility Background
3. Stormwater Utility Operations
4. The Stormwater Utility Rate Analysis
5. Principal Cost Drivers
6. Study Objectives & Tasks
7. Major Study Assumptions
8. Summary of Current Operations
9. Master Plan Funding Requirements
10. Conclusions and Recommendations
11. Q&A
12. Closing Comments



Executive Summary





Stormwater Utility – Background

- Required to manage stormwater runoff
 - › Improves quality of stormwater discharges by removing pollutants
 - › Protects the environment and wildlife habitat
 - › Protects public/private property from flood damage
- Drainage system consists mostly of grassed swales for conveyance of runoff to catch basins and underground pipes/structures.
- System discharges through 15 major outfalls to the Lake Worth Lagoon and the C-17 Canal.



Stormwater Utility – Background (cont.)

- Utility is permitted/regulated by Florida DEP.
- Aging drainage infrastructure is failing at a faster rate.
 - › An estimated **20%** of the 10.6 miles of pipe infrastructure should be replaced immediately
 - › Remaining pipe will need to be replaced over the next 20 years

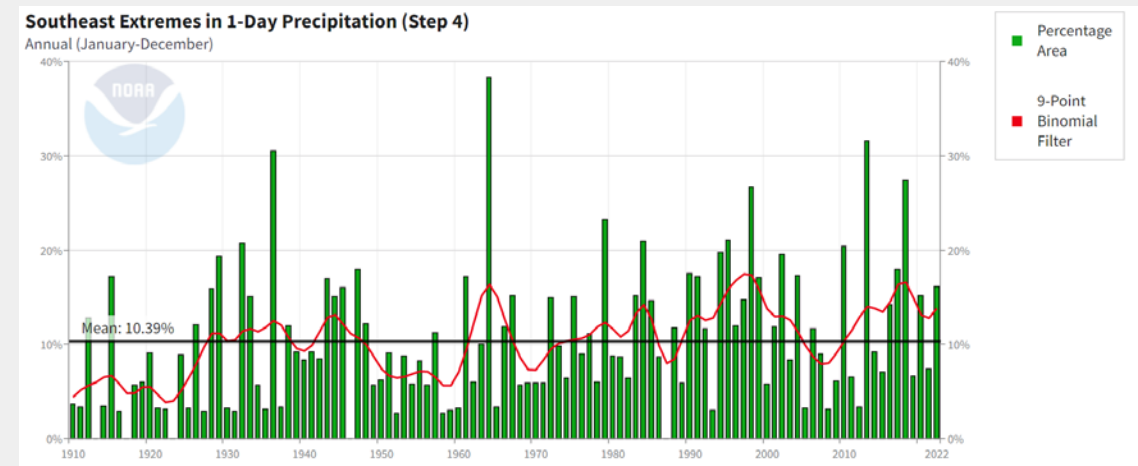


Stormwater Utility – Background (cont.)

- Climate Change and Sea-level Rise
 - › Climate change and environmental stressors pose a challenge to the drainage system's capacity to handle storm events of both small and large magnitude.
 - › **NOAA:** Land/Ocean temperatures have increased an average of 0.14 degrees Fahrenheit per decade since 1880.
 - Predicts a 20-30% increase in extreme precipitation by 2050.



Ft. Lauderdale Int'l Airport, April 2023





Stormwater Utility – Background (cont.)

- Operates as a self-supporting enterprise fund with separate accounting from other Town departments and resources
- Town has historically used operating reserves to cover actual expenses that exceeded the budgeted amounts while phasing in rate adjustments over time

Historical Monthly Rates per Equivalent Stormwater Unit (ESU)		
<u>Assessment Year</u>	<u>Monthly</u>	<u>Annual</u>
2018-2019	\$11.00	\$132.00
2019-2020	\$12.00	\$144.00
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2021-2022	\$12.50	\$150.00
2022-2023	\$13.50	\$162.00



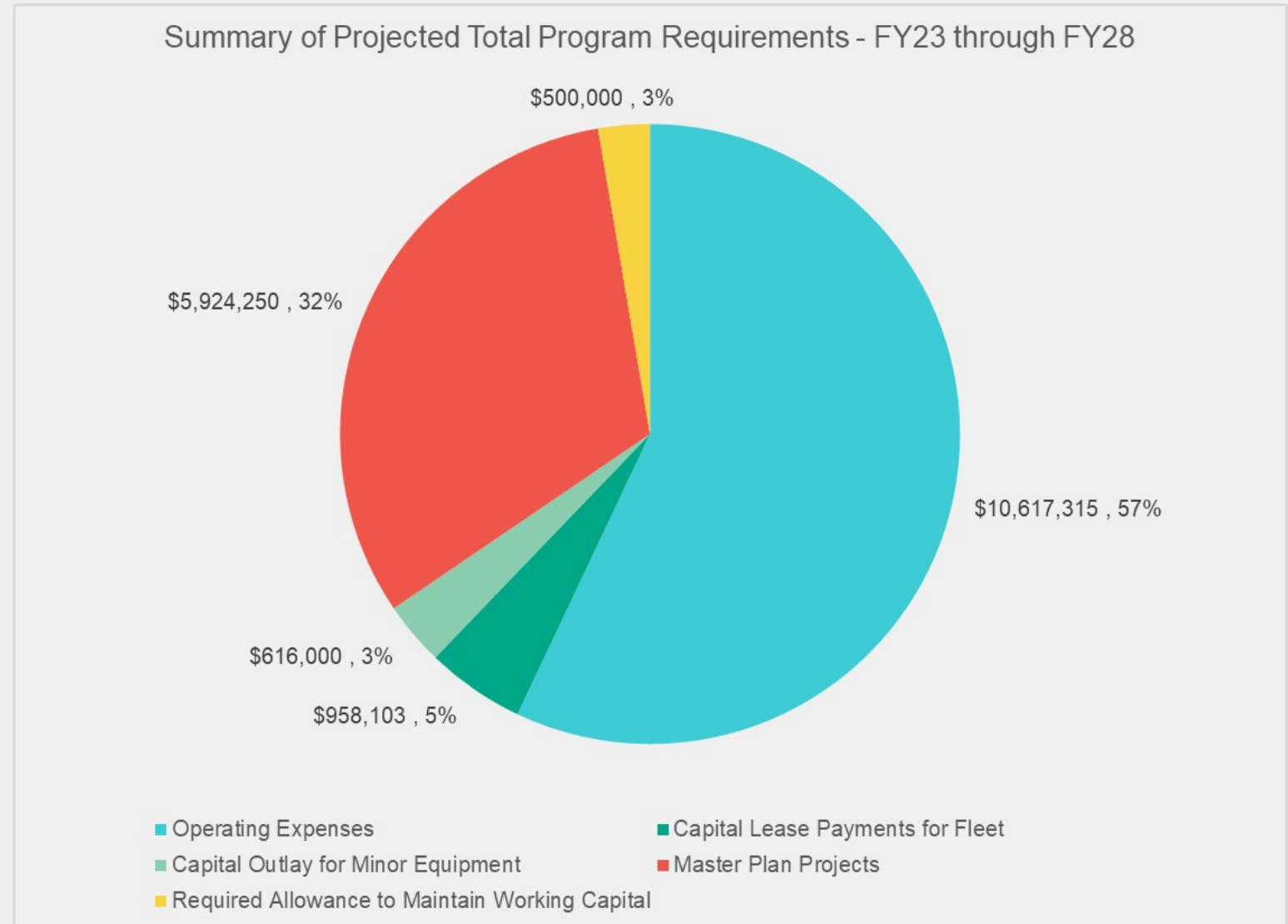
The 2023 Stormwater Utility Rate Study





Stormwater Program Requirements

- Total program needs through FY28 are estimated to exceed \$18.6 million





Projected Revenues

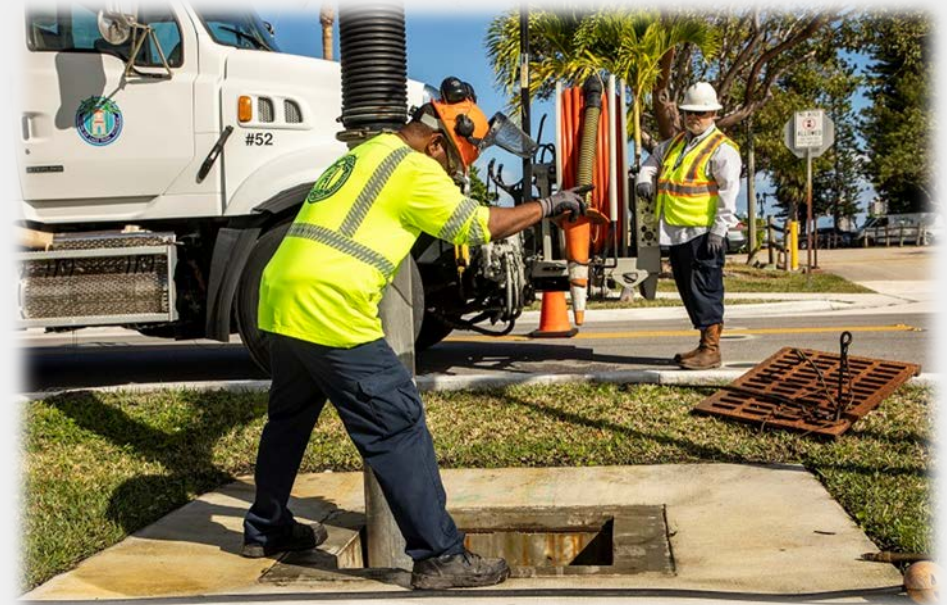
- Annual revenues estimated at \$1.1 million per year
 - › Most property owners take advantage of the 4% discount by paying early
- Due to changes in land use, the overall ESU count has decreased in recent years
- Town's Stormwater Engineer provided a preliminary list of property developments that would add more than 600 new ESUs over study period.





Principal Cost Drivers

- Current operating deficiency
 - › FY23 operating expenses exceed current revenues by approximately \$250,000 (24% of existing rates)
- High costs, frequency and severity of mechanical repairs. Replacement of major components due to aging fleet.





Principal Cost Drivers (cont.)

- Compensation and Recruitment:
 - › Highly competitive labor market
 - › Stormwater Technician II positions vacant 18+ months
 - › Recommended changes to operating salaries and associated benefits
- Competition: long lead times for materials, supplies, equipment and vehicles
 - › Inflationary increases on all business expenditures



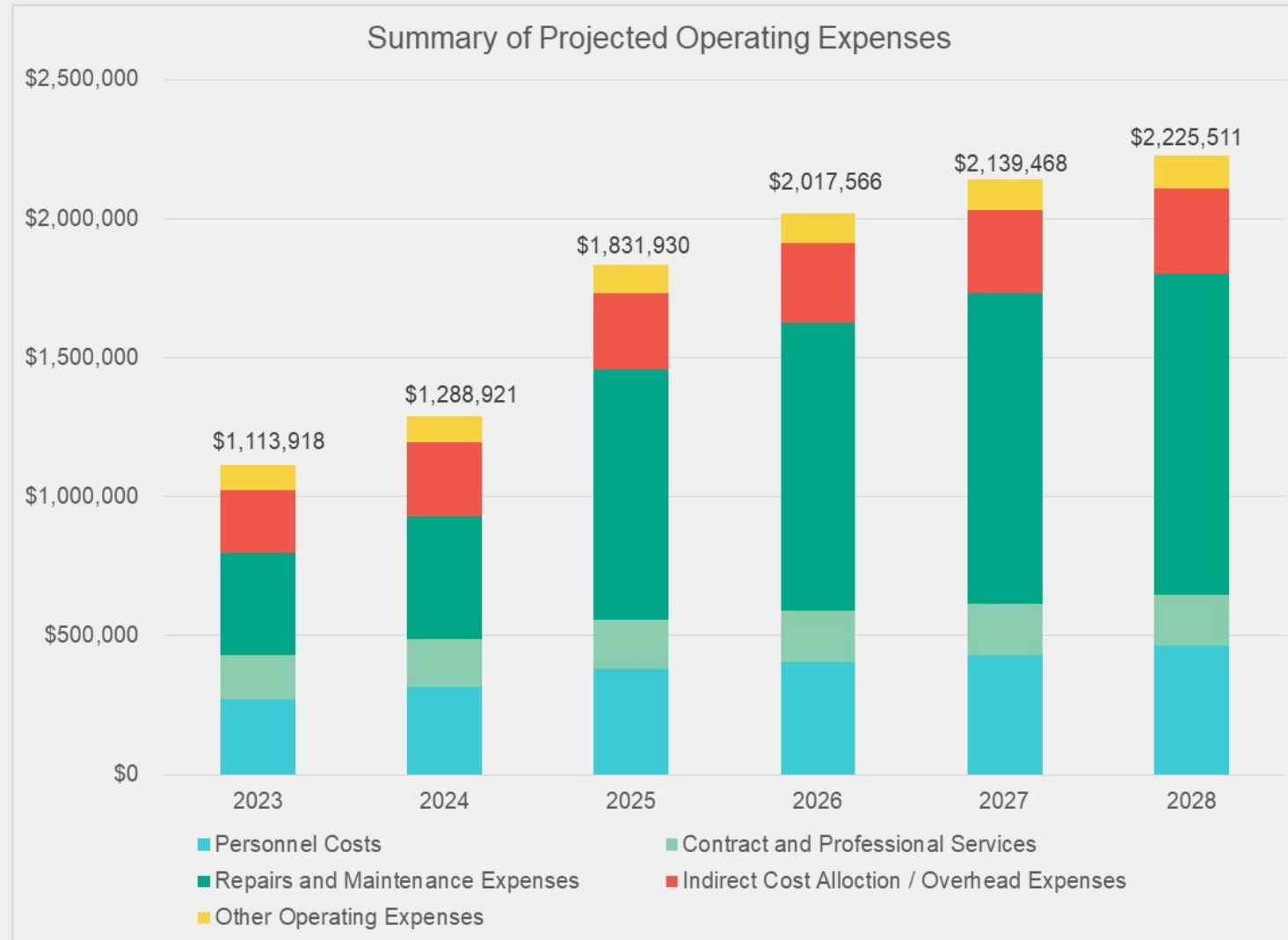
Principal Cost Drivers (cont.)

- Increased infrastructure repairs and maintenance costs
 - › Cure-in-place pipe / pipe replacements
- Newly identified master plan improvement projects
 - › Result of 20-year Needs Assessment, as required by State Law





Projected Operating Expenses





Capital Leases

- Existing Street Sweeper lease of \$55,000 ends in FY24
- Town staff provided a list of vehicle replacements with the following estimated lease payments:

Proposed Vehicle Replacements				
<u>Vehicle Name</u>	<u>Year Acquired</u>	<u>Replacement Year</u>	<u>Lead Time</u>	<u>Lease Payment [*]</u>
New Holland Skid Steer / Loader	2006	2024	2025	\$75,000[**]
Vac-Con Vacuum Truck	2009	2024	2026	\$190,000
Tymco Street Sweeper	2020	2026	2026	\$92,000

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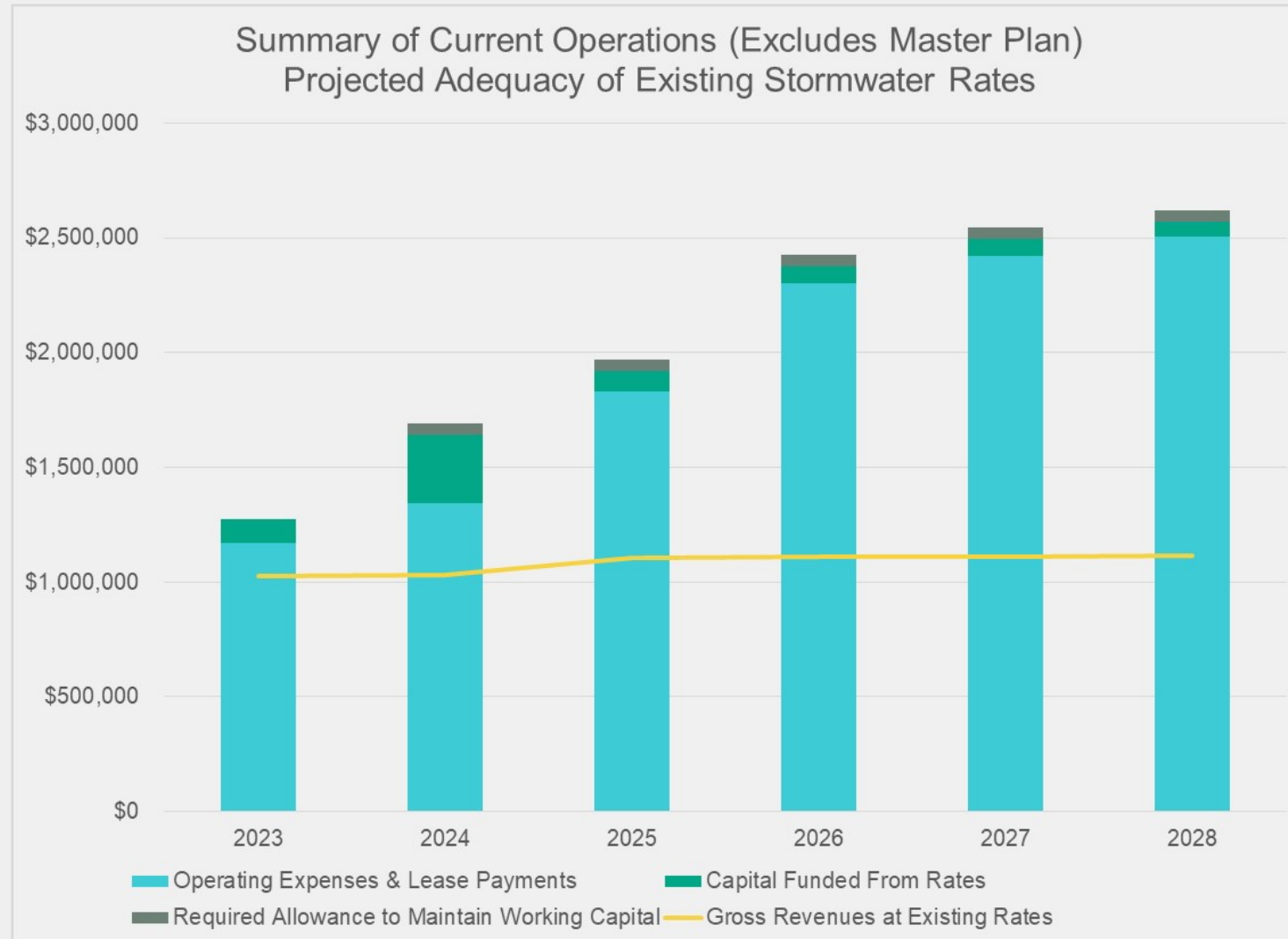


Recurring Capital Outlay

- Town staff provided a list of minor capital outlay and equipment funding of under \$100,000 per year to address the following system needs:
 - › Asset Management
 - › Quick View Camera
 - › Replacement Generator
 - › Stormwater & Grounds Maintenance
 - › Stormwater Heavy Equipment Transport
 - › Stormwater and Equipment Maintenance
 - › Pump Station Monitoring and Maintenance



Summary of Current Operations (Excludes Master Plan Improvement Projects)





Master Plan Improvement Projects

- Town prepared a master plan to address the system's deficiencies that were identified in the 20-year Needs Assessment
 - › The Needs Assessment was prepared as required by State Law
- Project improvements necessary to address system rehabilitation and resiliency total more than \$20 million
 - › Reflects the estimated “present value” expenditures before considering future cost increases resulting from inflation

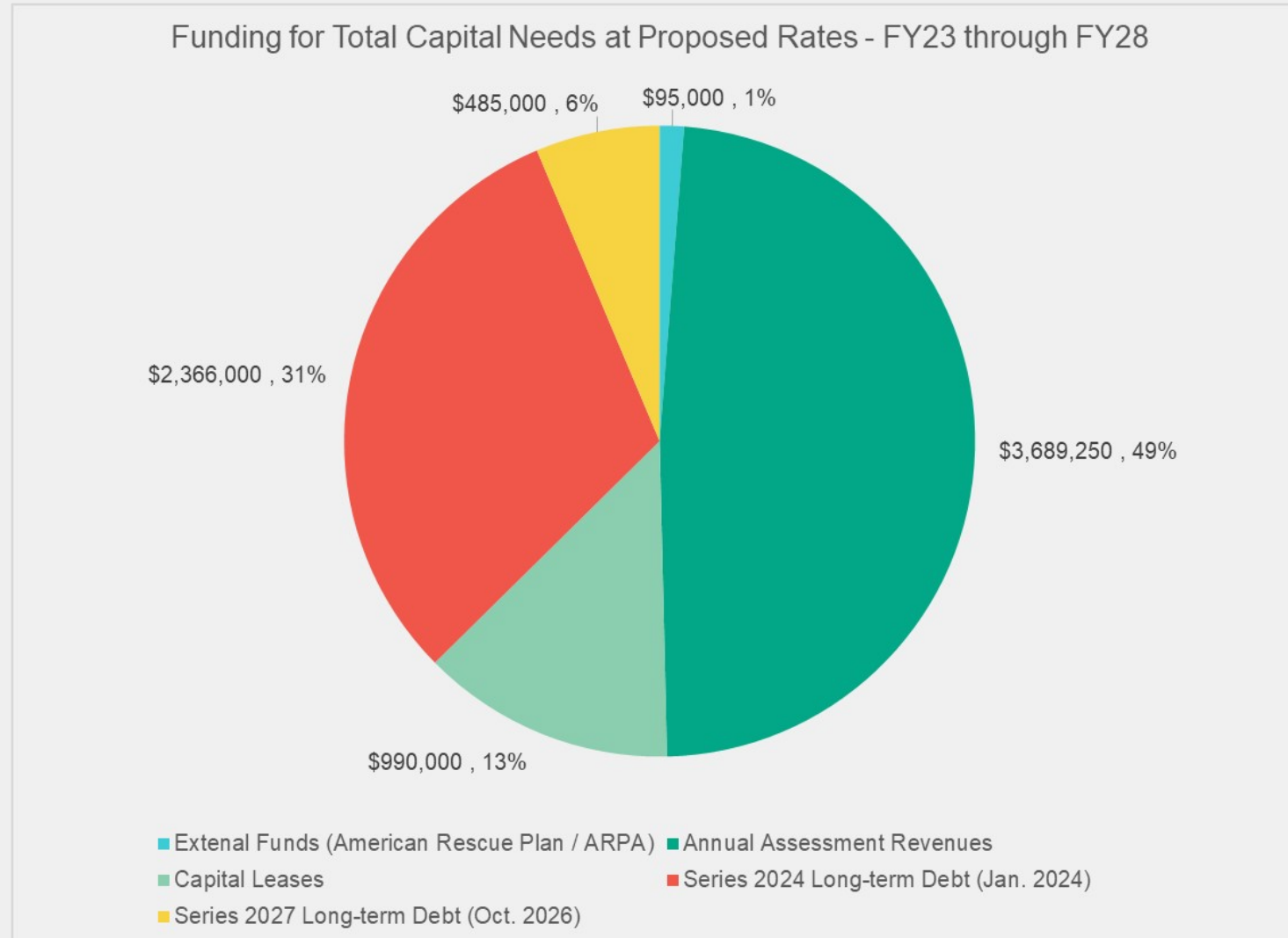


Master Plan Improvement Projects (cont.)

- For the study period, we included an allowance of approximately \$1.2 million per year (FY24-28)
 - › Based on discussions with Town staff, no grant revenues have been assumed in the near-term
 - Future grant awards, if any, must be used for selected improvements and typically require a “match” of utility funds
 - › Town has a hired full-time grant writer who will assist the utility with applying for future grants

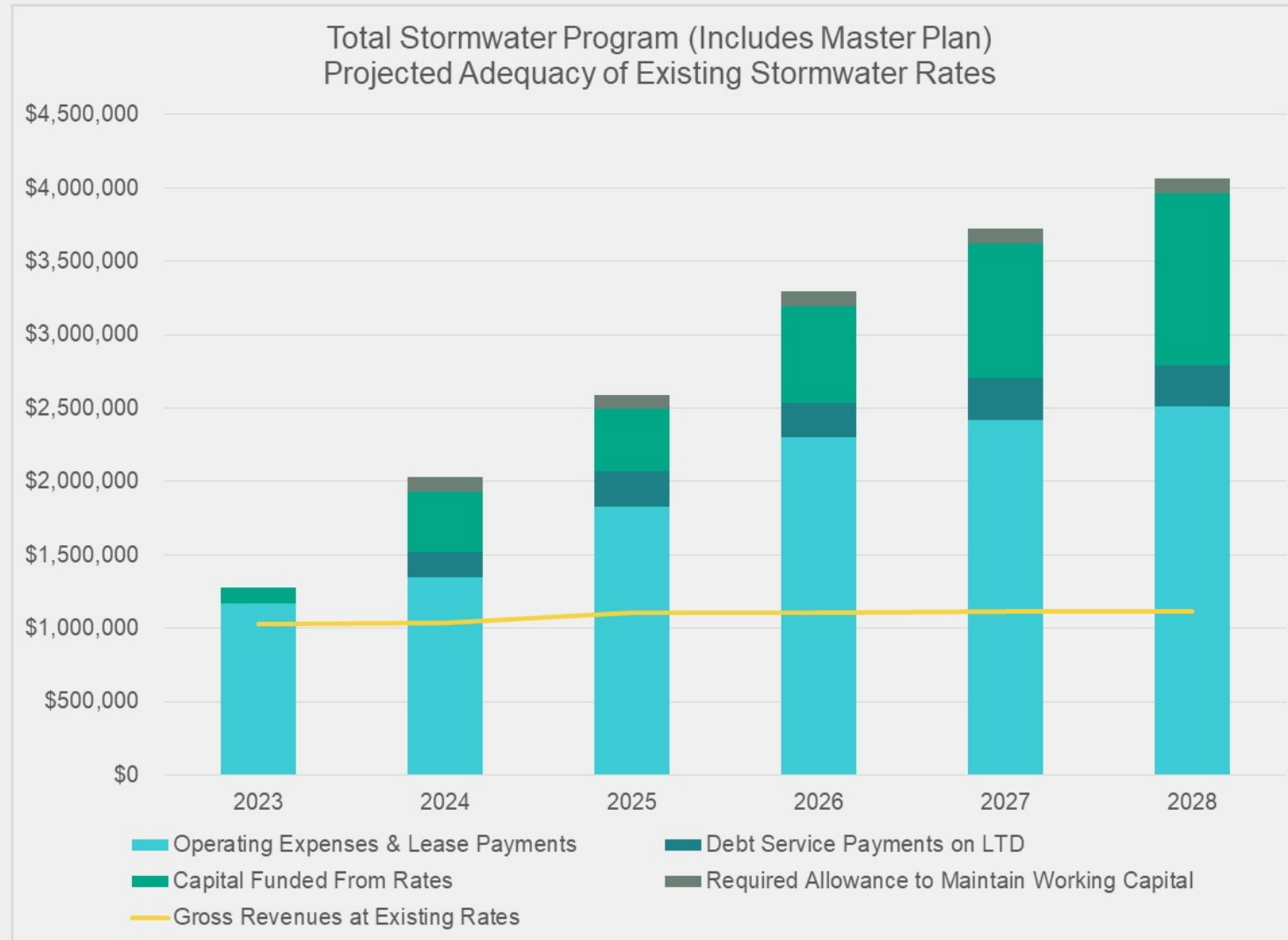


Total Funding for Proposed Capital Needs





Adequacy of Existing Rates





Exclusions: What costs are not captured in the rate study results?

- System expansion into areas that do not have service yet
 - › Town staff will seek grant funding
- Unknown capital maintenance and replacement needs
 - › Town staff only able to inspect up to 10% of the system in any year
 - Major unforeseen failures may be likely
- Funding for emergencies
 - › Study recommendations begin moving the utility to provide some cash reserves to meet minimum operating needs
 - › Proposed rates may do little to create a sustainable, reserve fund to address emergencies



Proposed Stormwater Rates

Description	FY24	FY25	FY26	FY27	FY28
Funds Total Program (Including Master Plan Improvements)					
Percent Rate Increase	89%	26%	26%	13%	9%
Proposed Monthly Charge per ESU (Current Fee \$13.50)	<u>\$25.52</u>	<u>\$32.16</u>	<u>\$40.52</u>	<u>\$45.79</u>	<u>\$49.91</u>
Proposed Annual Assessment per ESU (Current Fee \$162.00)	\$306.24	\$385.92	\$486.24	\$549.48	\$598.92

Key Benefits

- Phased-in approach
- Utility becomes self-sufficient after FY-28
- Builds Reserves over time
- Under certain conditions, rates may be adjusted based on grants revenue



Conclusions & Recommendations

1. The stormwater utility should operate as a self-supporting enterprise fund with separate accounting from other Town departments
 - › Town has consistently used operating reserves to cover actual expenses, but those reserves have been depleted
2. Town Commission should consider adopting a reserve policy for the stormwater utility to provide working capital and to help address unforeseen contingencies
 - › We recommend a target reserve balance of at least 90 days of annual expenditures



Conclusions & Recommendations (cont.)

3. Existing rates are not adequate to cover the current operations
 - › Additional adjustments are also needed to adequately fund the Town's master plan improvement projects
4. Town Commission should consider borrowing a portion of the capital improvements in order to phase in the proposed assessments over time
 - › The maximum proposed monthly rate is \$49.91 per ESU or \$598.92 annually for each residential dwelling unit (FY-28)
 - A phase-in schedule is provided on Slide 37
5. This study should be updated within 5-years



Next Steps & Timeline

- **January-May 2023:** Stormwater Rate Analysis
- **May 18, 2023:** Follow-up Meeting on the Stormwater Rate Analysis
- **June 7, 2023:** Presentation to Town Commission on findings and recommendations from Stormwater rate analysis (for discussion only)
- **July 28, 2023:** Town submits maximum proposed Stormwater assessment rates to PB County (TRIM Notice)
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Questions & Comments





Appendix:

May 18, 2023

Workshop Presentation



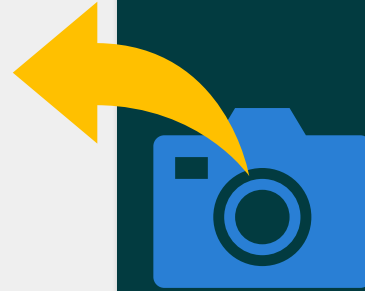
Town of Lake Park Stormwater Utility

Follow-Up Meeting on the 2023 Stormwater Rate Study

Public Works Department

May 18, 2023





**Please Scan to View
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Follow-Up Meeting Agenda

1. Introductions
2. Stormwater Utility Background
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6. Study Objectives & Tasks
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Project Team

- **Members of the Town Commission**
- **John D'Agostino** – Town Manager
- **Roberto Travieso** – Public Works Director
- **Dwayne Bell** – Operations Manager
- **Murray Hamilton** – Vice President, Raftelis
- **John Wylie** – Stormwater Infrastructure Foreman



Stormwater Utility – Background

- Required to manage stormwater runoff
 - › Improves quality of stormwater discharges by removing pollutants
 - › Protects the environment and wildlife habitat
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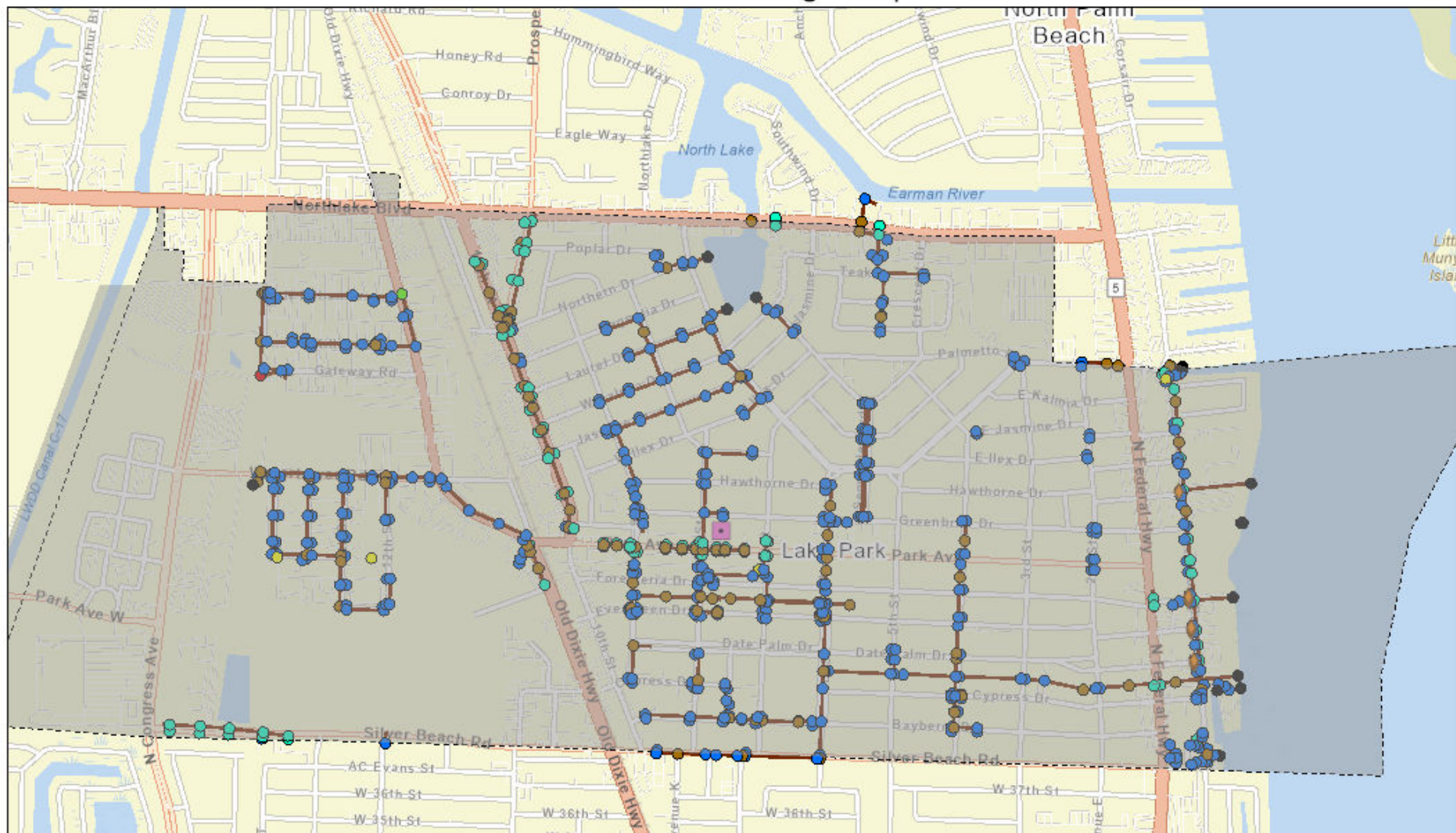


Stormwater Utility – Background (cont.)

- Utility is permitted/regulated by Florida DEP.
- Aging drainage infrastructure is failing at a faster rate.
 - › An estimated **20%** of the 10.6 miles of pipe infrastructure should be replaced immediately
 - › Remaining pipe will need to be replaced over the next 20 years



Lake Park Drainage Map



5/12/2023

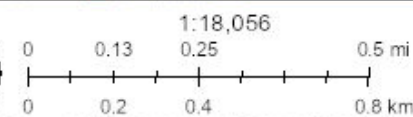
- TOLP Boundary 2020 FL83EF
- Box Culvert
- Pump Station

Structures

- Catch Basin Inlet
- Curb Inlet
- Ditch Bottom Inlet

- French Drain
- Gutter Inlet
- Headwall
- Manhole

- Straight Concrete Endwall
- Yard Drain
- Pipes
- Boundary



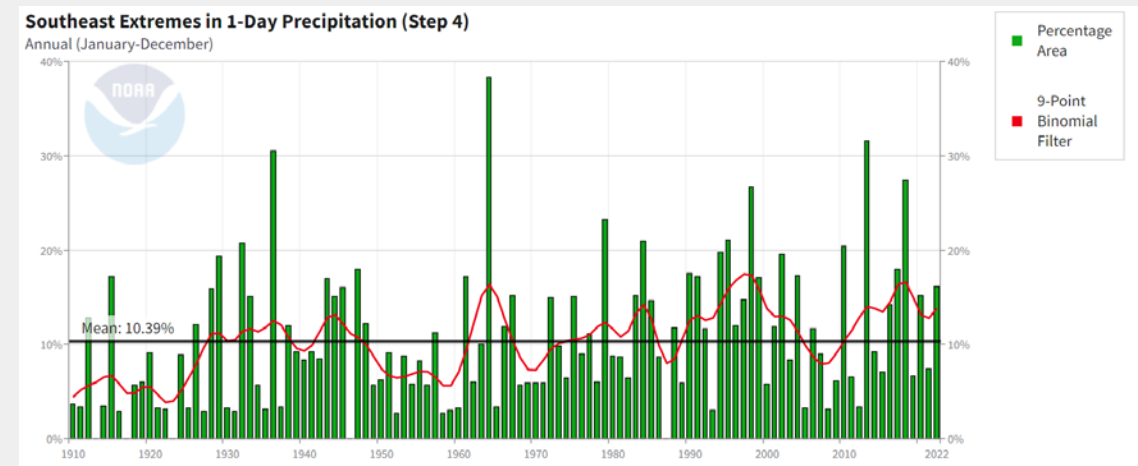
Esri Community Maps Contributors, FDEP, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, MET/NASA, USGS, EPA, NPS, US Census Bureau, USDA

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 - › Climate change and environmental stressors pose a challenge to the drainage system's capacity to handle storm events of both small and large magnitude.
 - › **NOAA:** Land/Ocean temperatures have increased an average of 0.14 degrees Fahrenheit per decade since 1880.
 - Predicts a 20-30% increase in extreme precipitation by 2050.



Ft. Lauderdale Int'l Airport, April 2023





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Stormwater Utility – Background (cont.)

- **Authorized Staff:**

- Stormwater Maintenance Division is assigned four (4) full-time employees:

- › **Supervisor**
- › **Stormwater Technician II**
(vacant 19 months)
- › **Stormwater Technician II**
(vacant 7+ months)
- › **Stormwater Technician I**





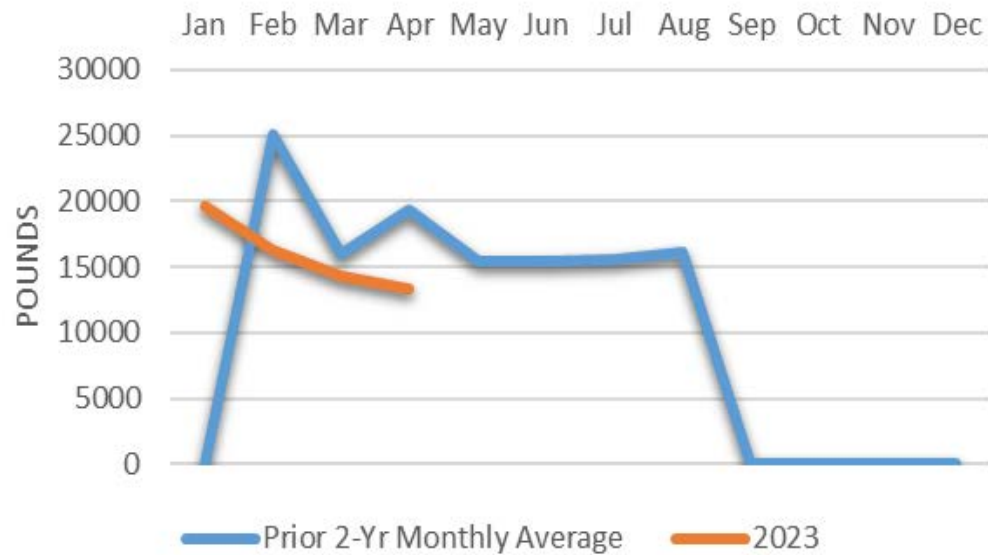
Stormwater Utility – Background (cont.)

- Assigned Equipment/Trucks:
 - › Frequent out-of-service periods and operational disruptions
 - › Recommended Service Life: 7 Years (Yrs.)

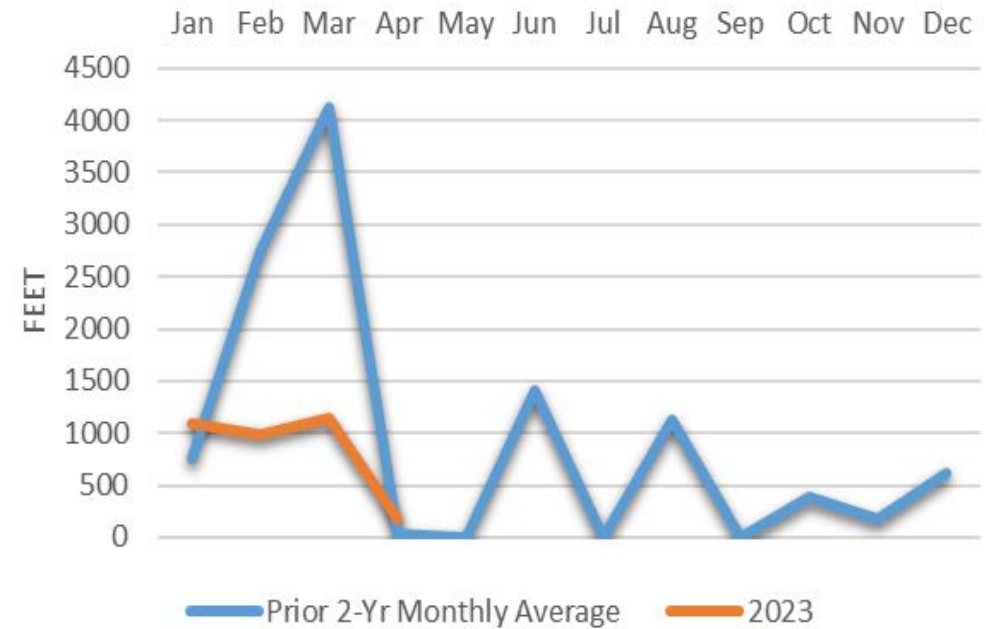
Equipment	Years in Service	Years Past Service Life
Street Sweeper (2020)	3 Yrs.	N/A
Vacuum Truck (2009)	14 Yrs.	7 Yrs.
Backhoe (2008)	15 Yrs.	8 Yrs.
Skid Steer Loader (2006)	17 Yrs.	10 Yrs.
Farm Tractor (2006)	17 Yrs.	10 Yrs.
Mower (2004)	19 Yrs.	12 Yrs.
Average:	14 Yrs.	7 Yrs.

Stormwater Utility – Operations

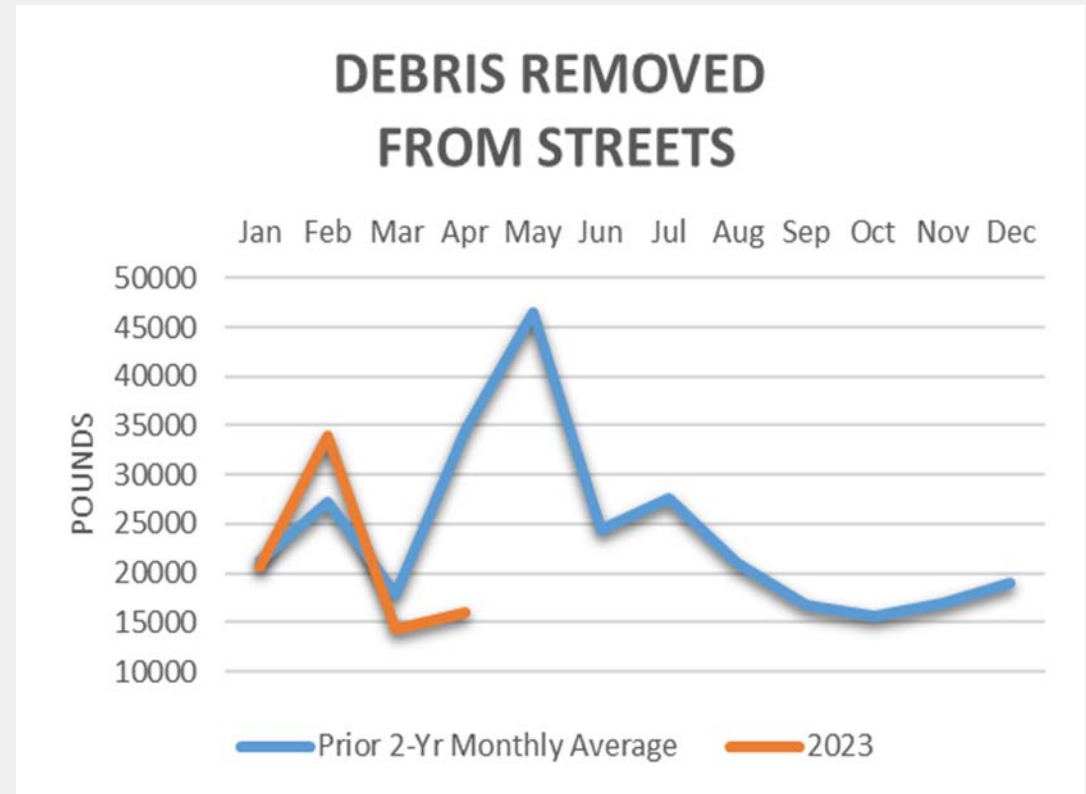
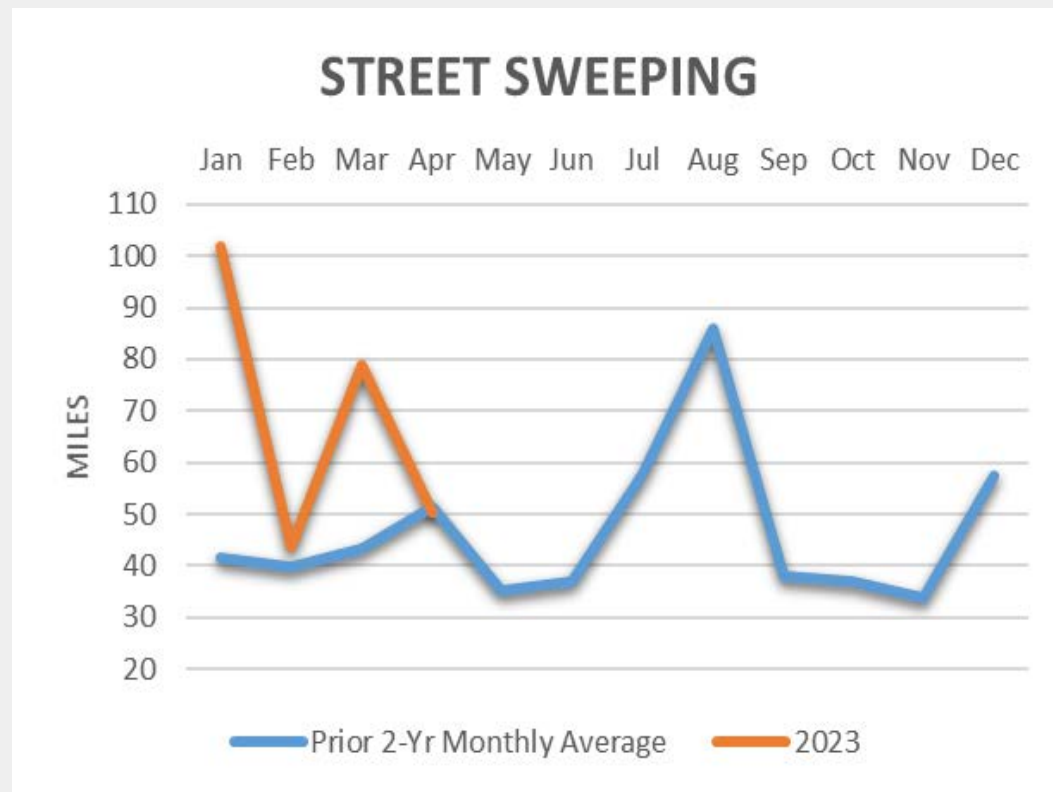
DEBRIS REMOVED FROM STORM DRAINS



PIPELINE INSPECTION



Stormwater Utility – Operations (cont.)





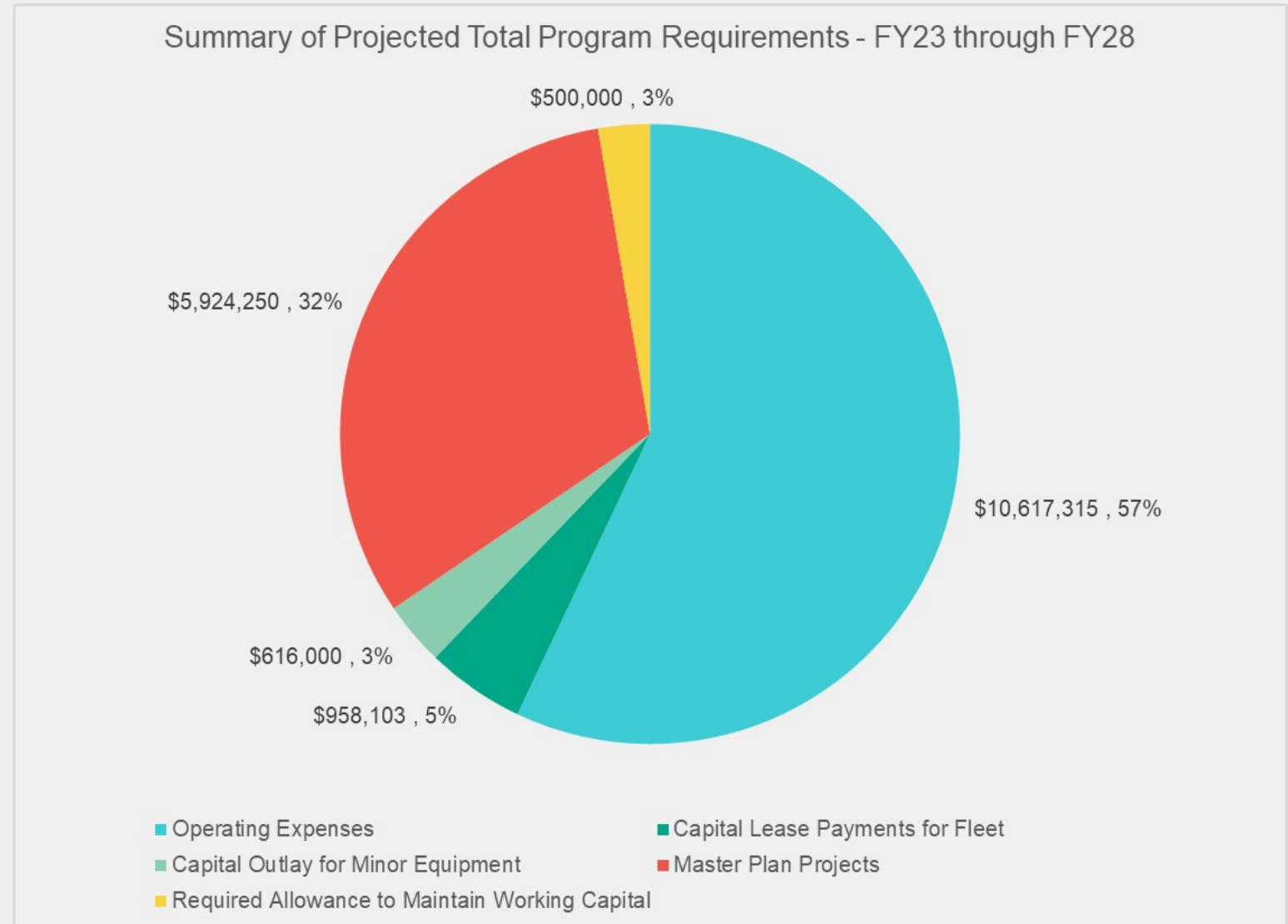
The 2023 Stormwater Utility Rate Analysis





Stormwater Program Requirements

- Total program needs through FY28 are estimated to exceed \$18.6 million





Principal Cost Drivers

- Current operating deficiency
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Principal Cost Drivers (cont.)

- Increased infrastructure repairs and maintenance costs
 - › Cure-in-place pipe / pipe replacements
- Newly identified master plan improvement projects
 - › Result of 20-year Needs Assessment, as required by State Law





Authorization

- The stormwater utility has exhausted its reserve funds
 - › Unappropriated reserve fund balance at the end of FY23 is estimated to be less than \$100,000
- On January 18, 2023, the Town Commission engaged Raftelis to prepare a Stormwater Utility Rate Analysis



Study Objectives

- Develop a funding strategy to pay for stormwater system operations, maintenance and capital repairs & upgrades
 - › Emphasis on replacement of aging fleet and funding capital improvements to meet the drainage needs of the service area
 - Historically, stormwater rates were only established to recover operating expenses without any additional revenues for capital improvements
- Estimate revenue requirements to be recovered from stormwater rates
- Identify the need for future rate adjustments



Study Tasks

- Prepare a financial forecast
 - › Fiscal years 2023 through 2028
- Develop projections of:
 - › Stormwater revenues
 - › Operating expenses and capital lease payments
 - › Capital improvement requirements & funding
 - › Cash reserve requirements
 - › Adequacy of revenues at existing rates

Discussion Topics

Major Study Assumptions

Revenues and Expenses

Capital Leases and Minor Equipment

Summary of Current Operations

Evaluation of Master Plan Funding Requirements

Conclusions & Recommendations



Stormwater Drainage Demographics

- Over 10.65 miles of stormwater pipe
- Serves approximately 3,000 properties or 6,600 equivalent stormwater units (ESUs) including all (developed) real property throughout the service area
 - › Residential Properties – 1.0 ESU per dwelling unit
 - › Non-residential Properties
 - ESU calculation for each property based on the impervious area of the property after considering applicable stormwater mitigation credits, if any
 - 1.0 ESU equals 5,202 square feet of impervious area



Projected Revenues

- Annual revenues estimated at \$1.1 million per year
 - › Most property owners take advantage of the 4% discount by paying early
- Due to changes in land use, the overall ESU count has decreased in recent years
- Town's Stormwater Engineer provided a preliminary list of property developments that would add more than 600 new ESUs over study period.





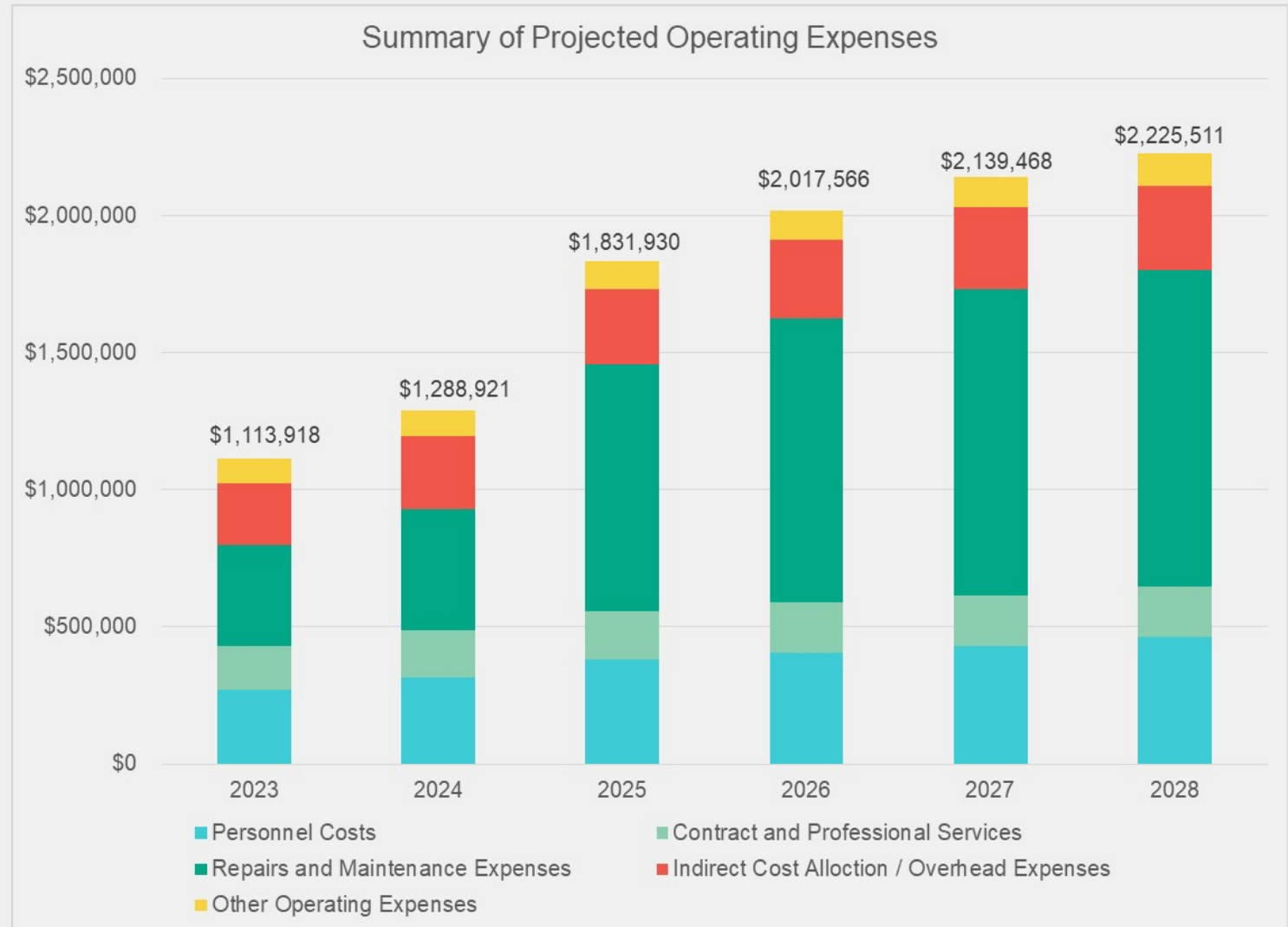
Projected Operating Expenses

- Based on the adopted FY23 budget
 - › Minor adjustments were also made to account for recent increases in utility costs and operating lease payments
- (1) Additional Stormwater Technician II assumed to be hired in FY25
- Projections include a detailed plan to conduct operating repairs and maintenance over the study period
 - › Significant investments in cure-in-place pipe / pipe replacements
- Town plans to enter into an agreement to provide remote (SCADA) monitoring services for Lake Shore Drive Pump Station



Projected Operating Expenses (cont.)

- Budgeted expenses beyond FY23 were increased based on estimated inflationary allowances as follows:
 - › Labor: 15% (FY24); then 4% per year
 - › Health & Liability Insurance: 15% per year
 - › Fuel & Utilities: 5% per year
 - › General Inflation: 3% per year





Capital Leases

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Proposed Vehicle Replacements				
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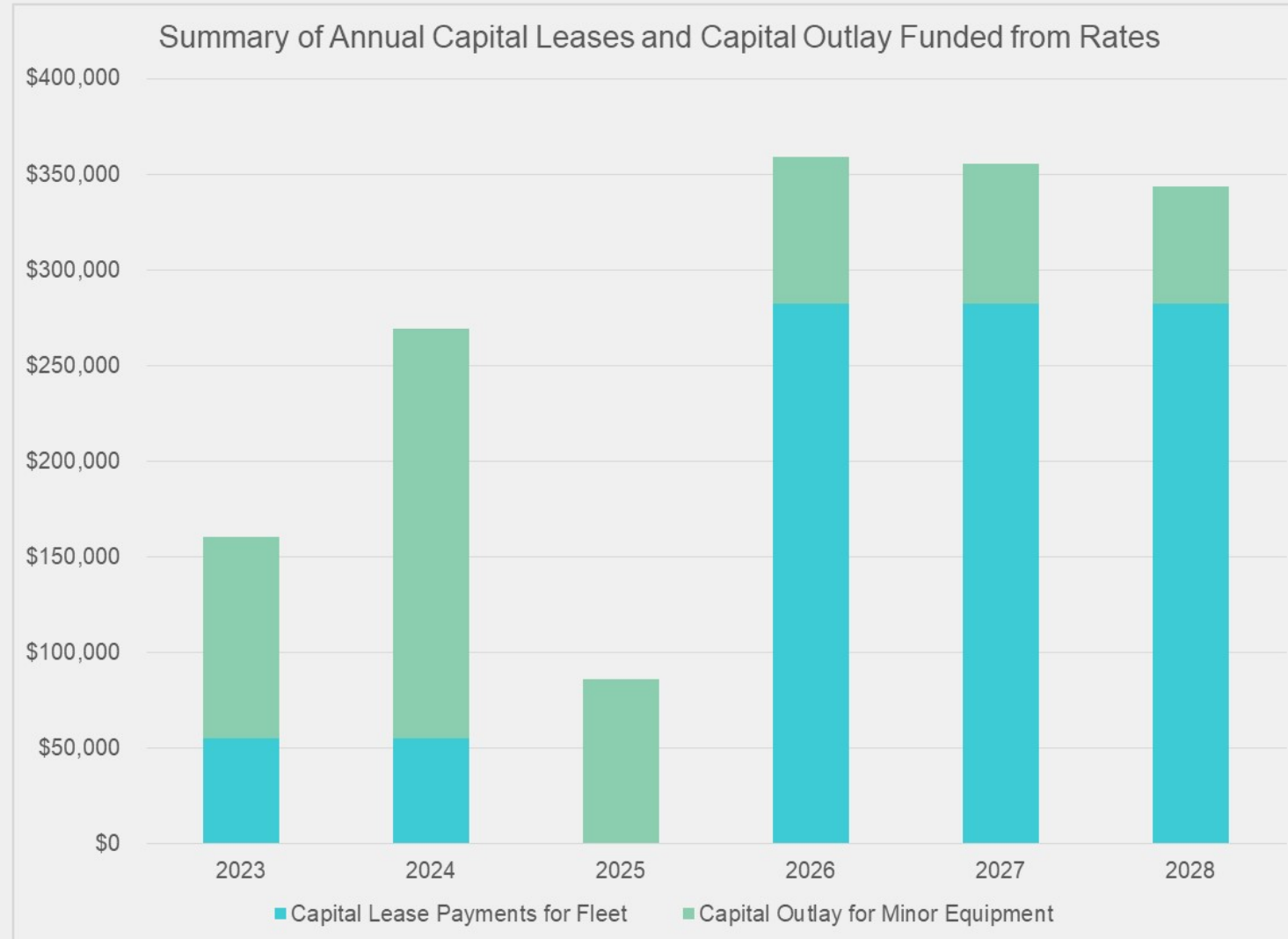


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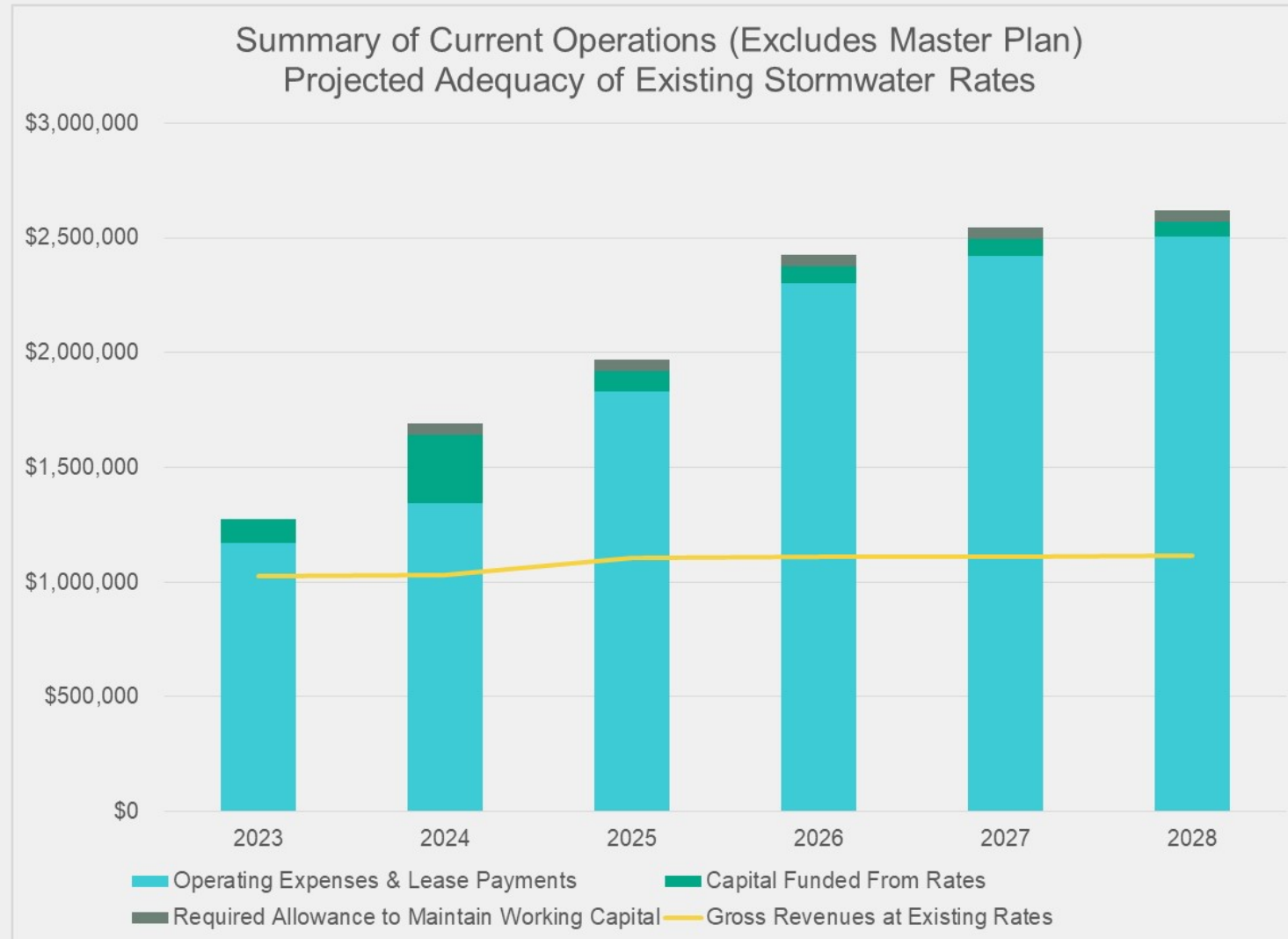


Projected Lease Payments & Capital Outlay





Summary of Current Operations (Excludes Master Plan Improvement Projects)





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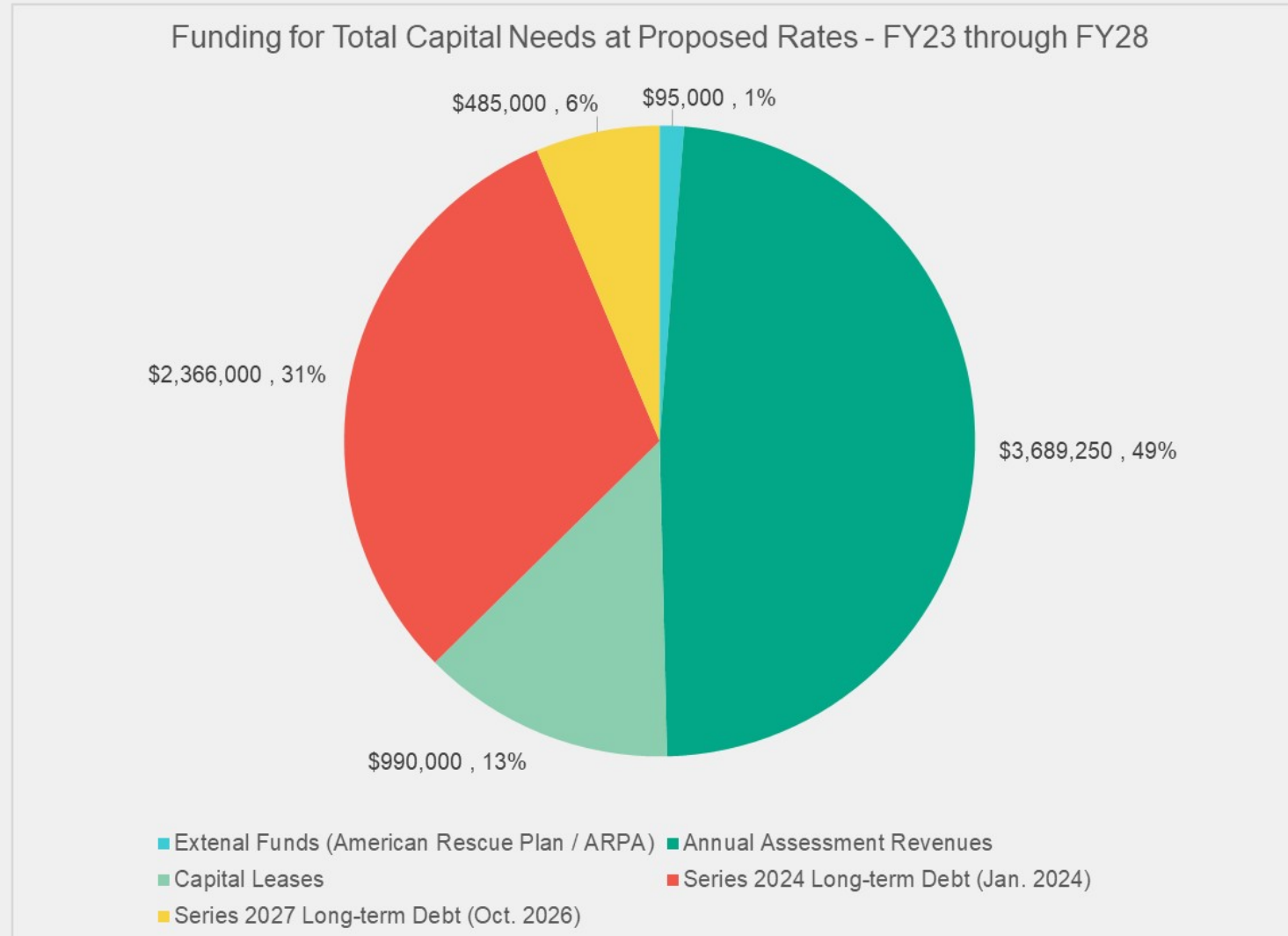


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Total Funding for Proposed Capital Needs





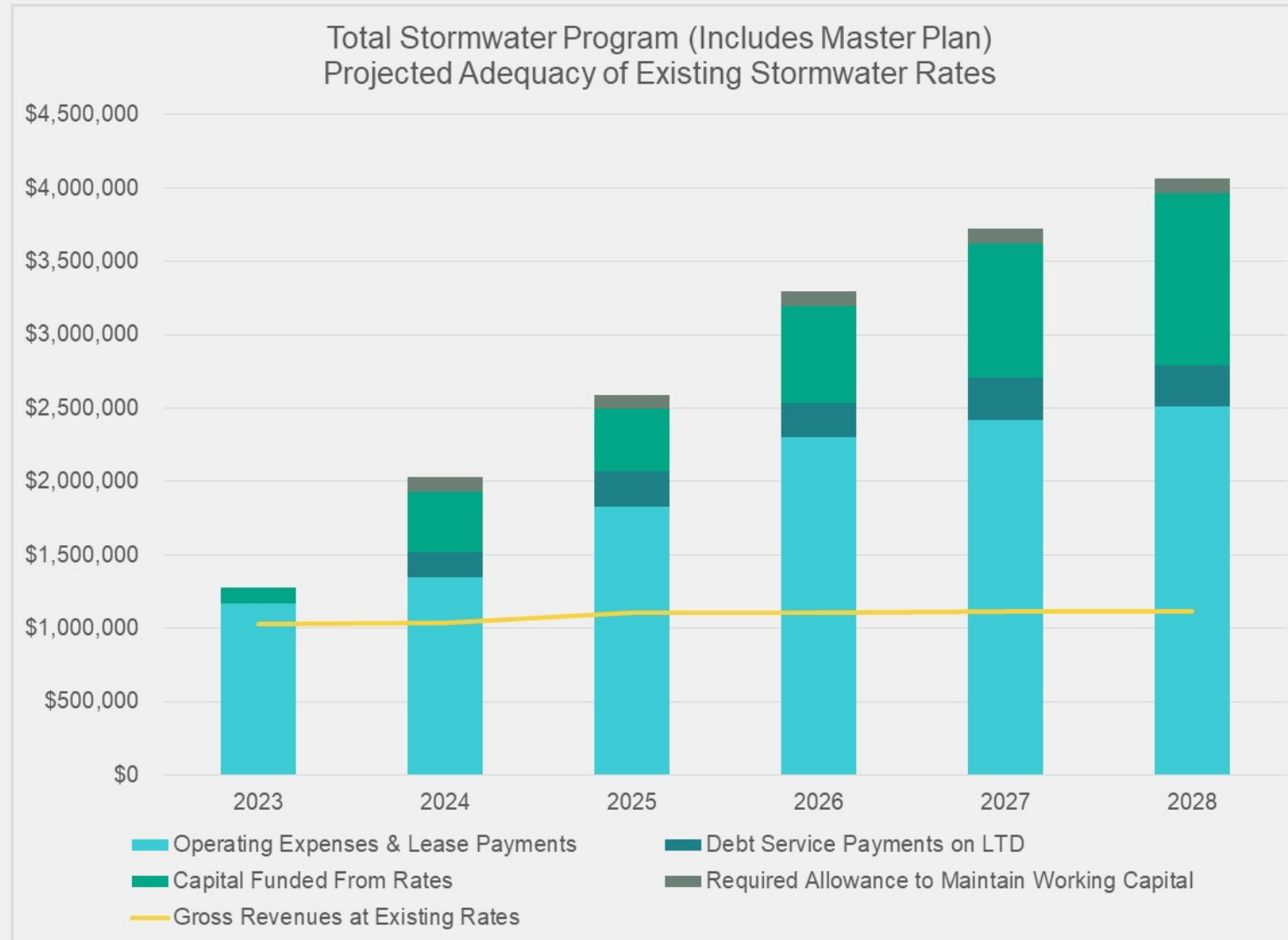
Financing Assumptions

- Based on discussion with Town staff, we assumed the following borrowing terms:
 - › 15 years at 5% annual interest cost
 - Included a 3% allowance for financing costs
 - › Series 2024 Long-term Debt assumed issued Jan. 2024
 - \$2.4 million loan / \$235,000 annual payment
 - › Series 2027 Long-term Debt assumed issued Oct. 2026
 - \$0.5 million loan / \$50,000 annual payment

NOTE: Actual terms will be negotiated at the time the loan is issued.



Adequacy of Existing Rates





Exclusions: What costs are not captured in the rate study results?

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Proposed Stormwater Rates

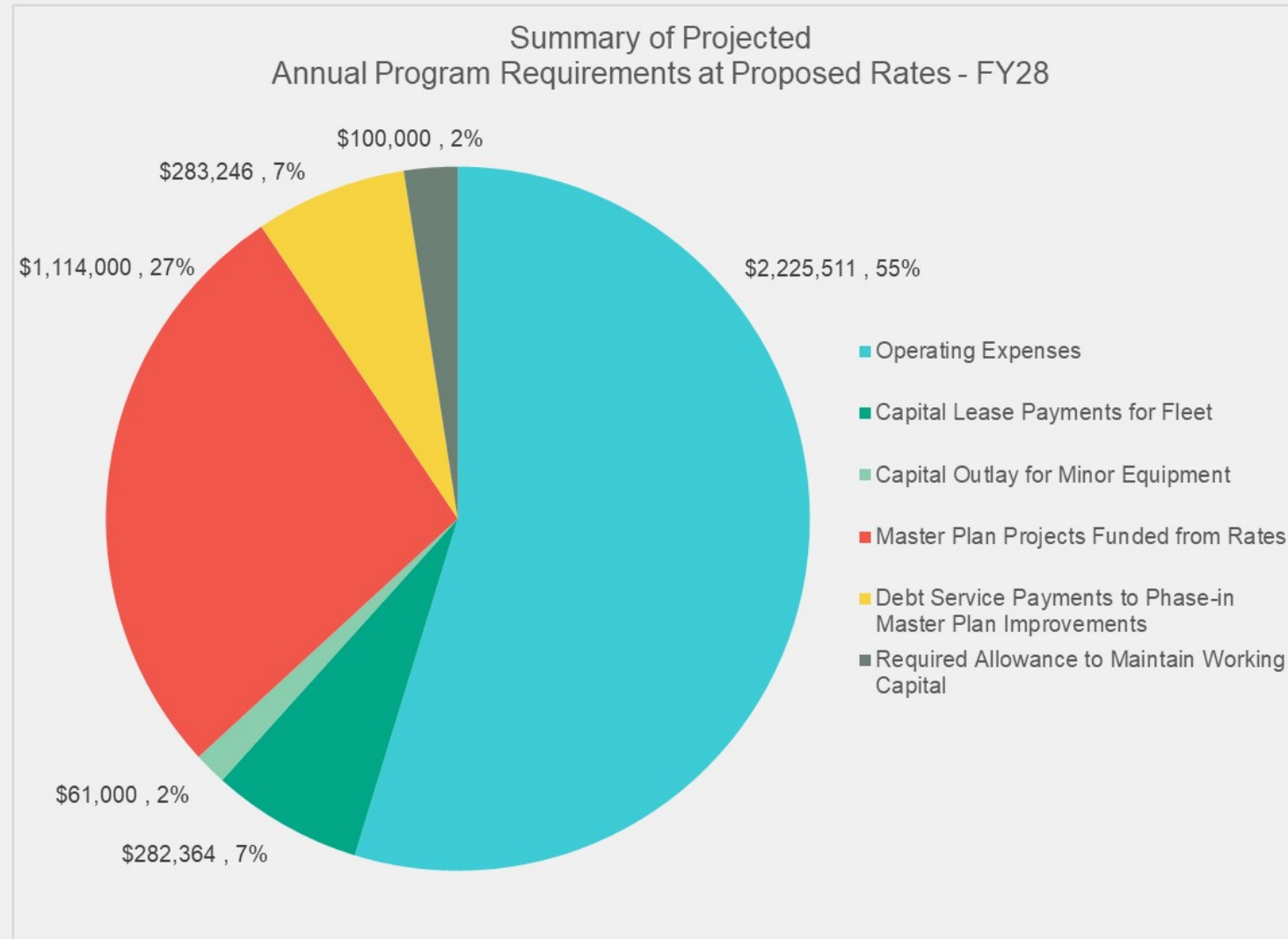
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- Utility becomes self-sufficient after FY-28
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Summary of Program Requirements (FY28)





Conclusions & Recommendations

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Q&A



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Mitigating Stormwater Impacts


- **Implement Green Infrastructure on your property**
 - › Rain Gardens: Direct downspout stormwater runoff from roads into rain gardens prior to discharge into stormwater system
 - › Rain Barrels: Collect rain for irrigation and other uses
 - › Permeable pavers
 - › Other strategies
 - › Qualify for stormwater assessment credits



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