

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



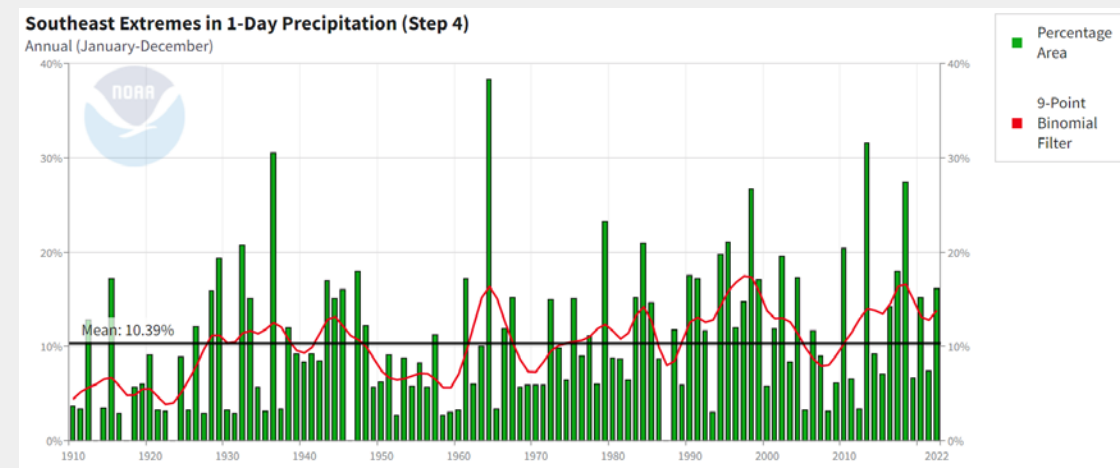


Stormwater Utility – Background (cont.)

- 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
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2022-2023	\$13.50	\$162.00



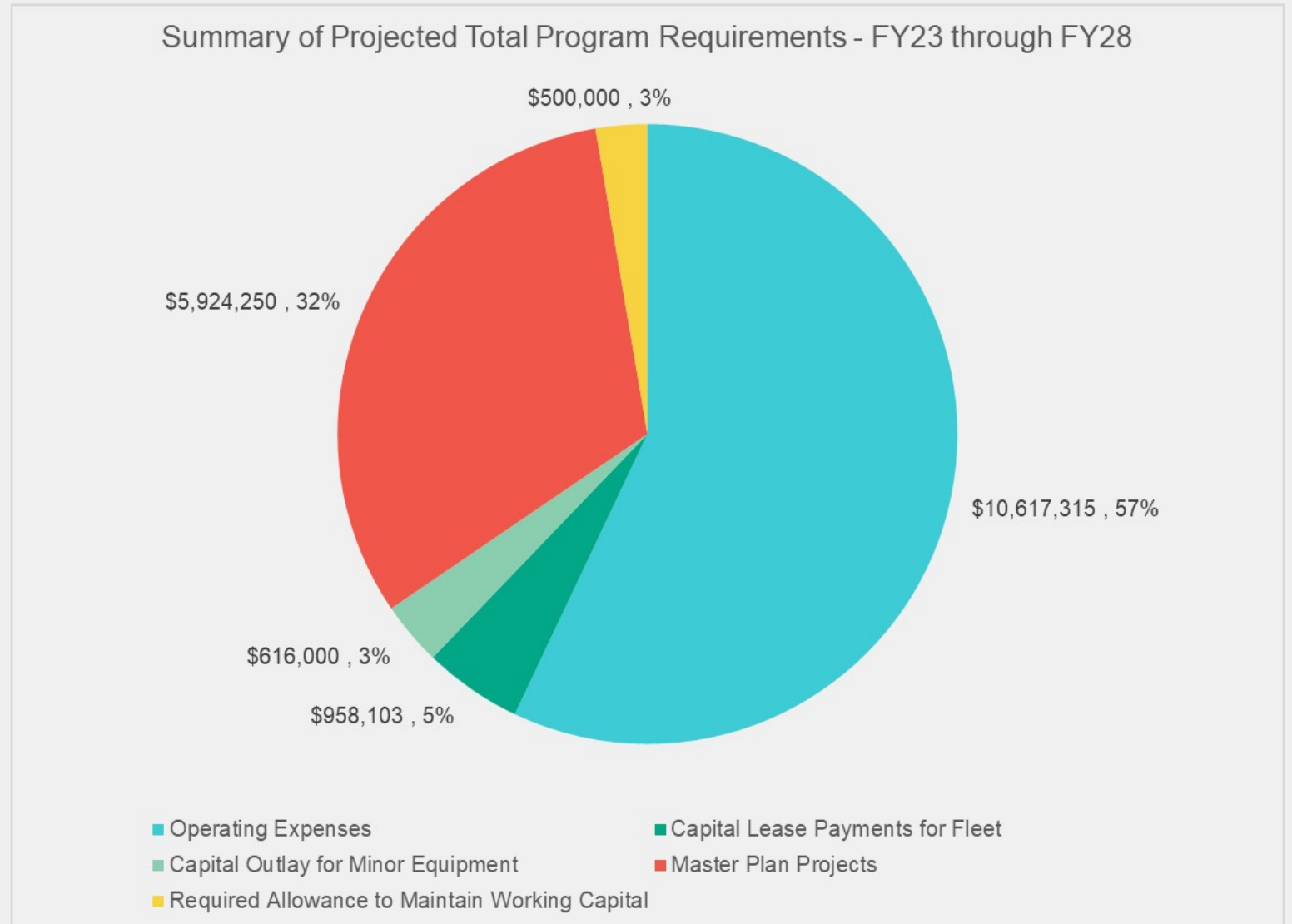
The 2023 Stormwater Utility Rate Study





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



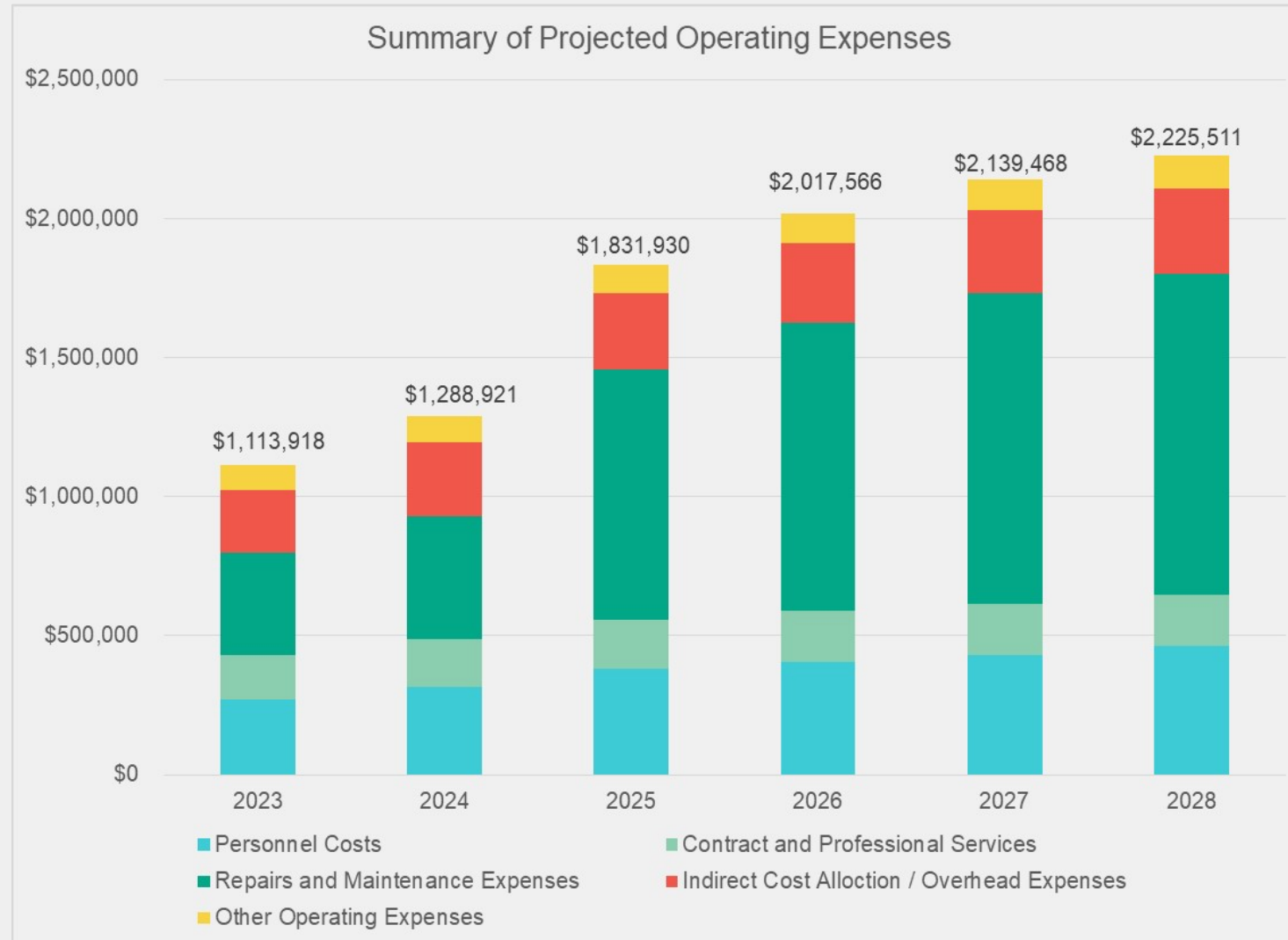
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- Increased infrastructure repairs and maintenance costs
 - › Cure-in-place pipe / pipe replacements
- Newly identified master plan improvement projects
 - › Result of 20-year Needs Assessment, as required by State Law





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

[*] Lease term assumed to be 4-years at a 5.27% annual interest rate.
[**] One time payment of approximately \$75,000.00.



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

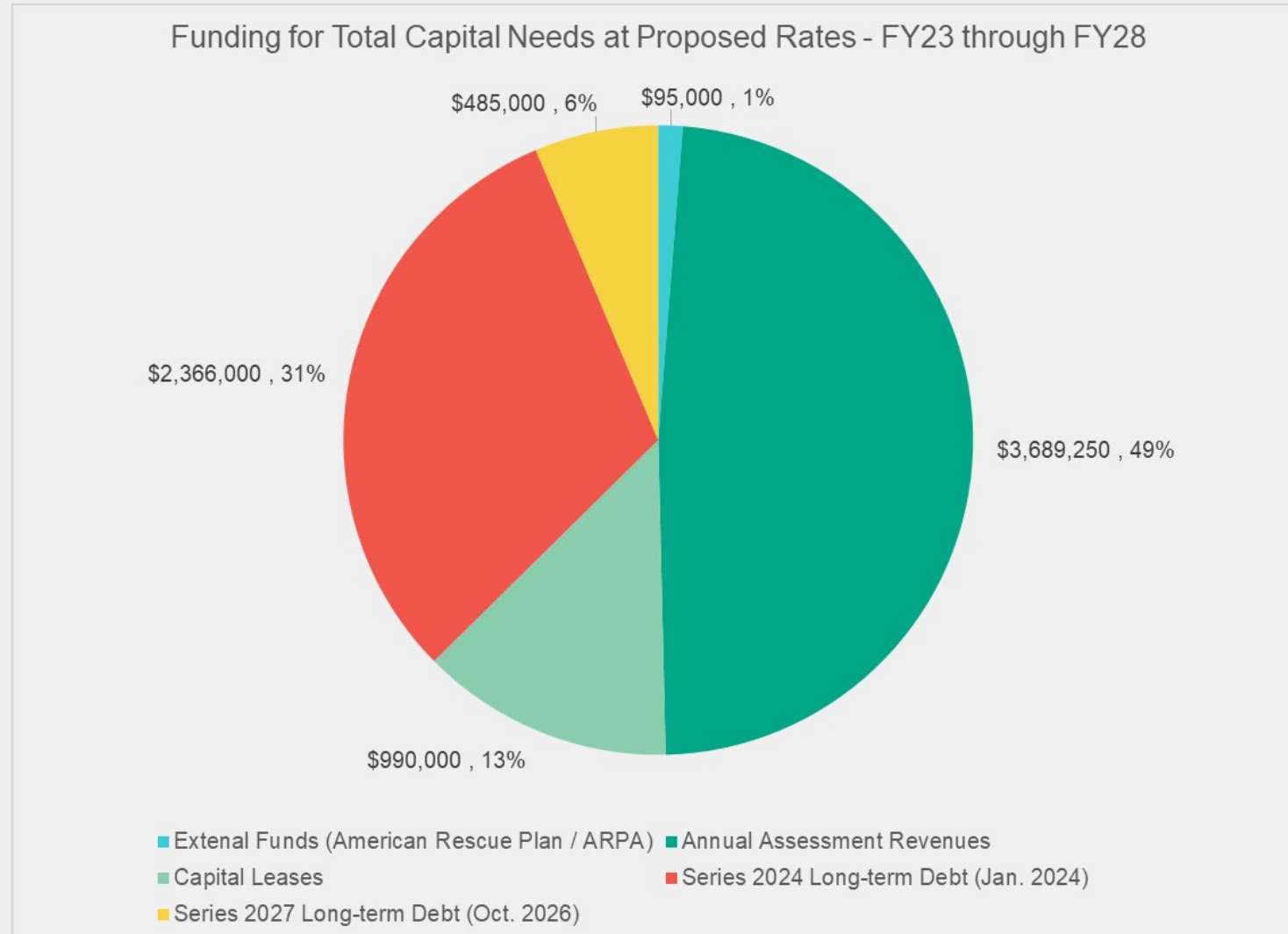


Master Plan Improvement Projects (cont.)

- 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

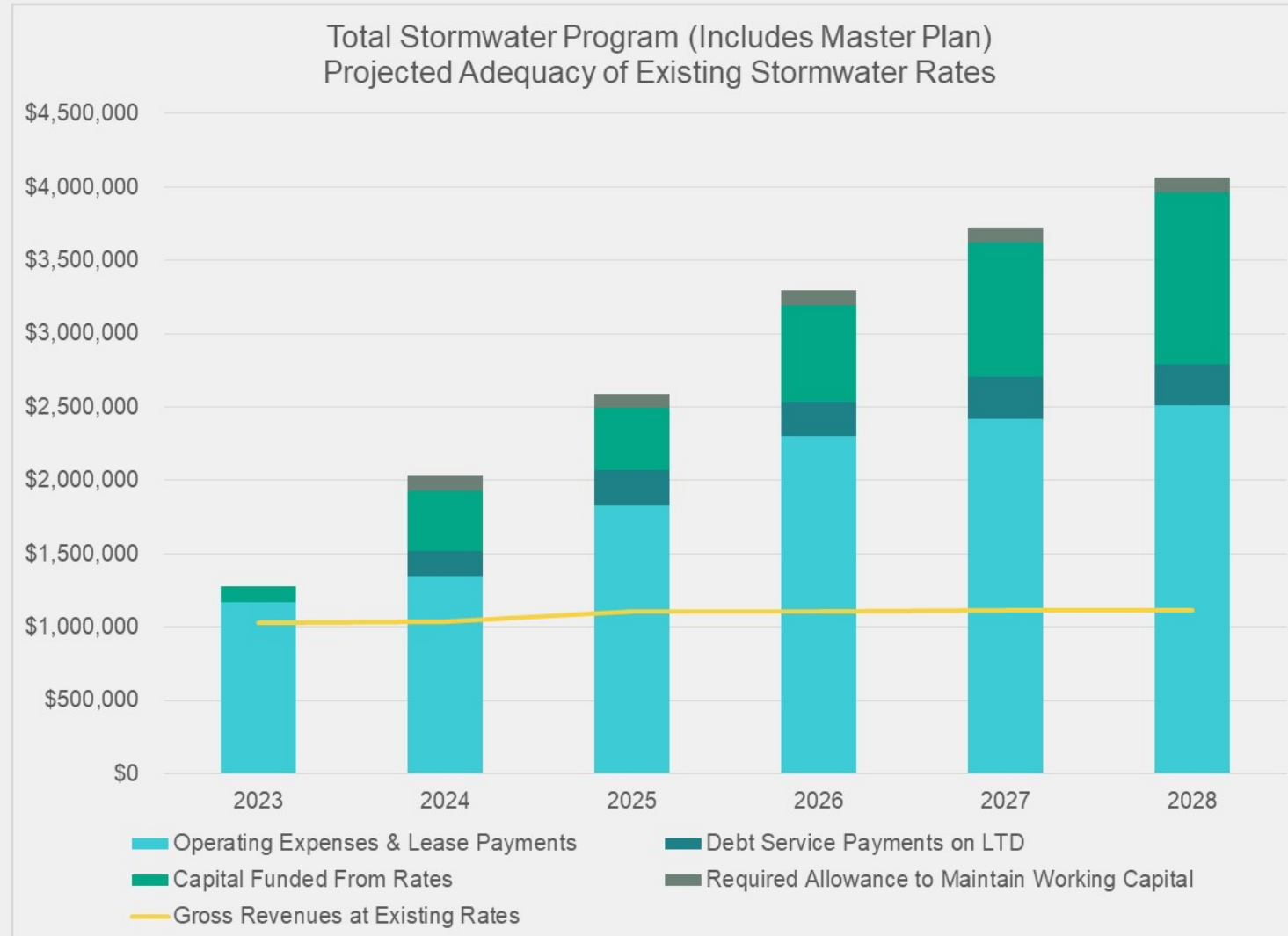


Total Funding for Proposed Capital Needs





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)
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Questions & Comments





Appendix:

May 18, 2023

Workshop Presentation



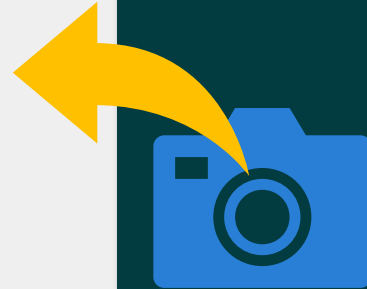
Town of Lake Park Stormwater Utility

Follow-Up Meeting on the 2023 Stormwater Rate Study

Public Works Department

May 18, 2023





**Please Scan to View
this Presentation on
your Device.**



Follow-Up Meeting Agenda

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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

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 - › Improves quality of stormwater discharges by removing pollutants
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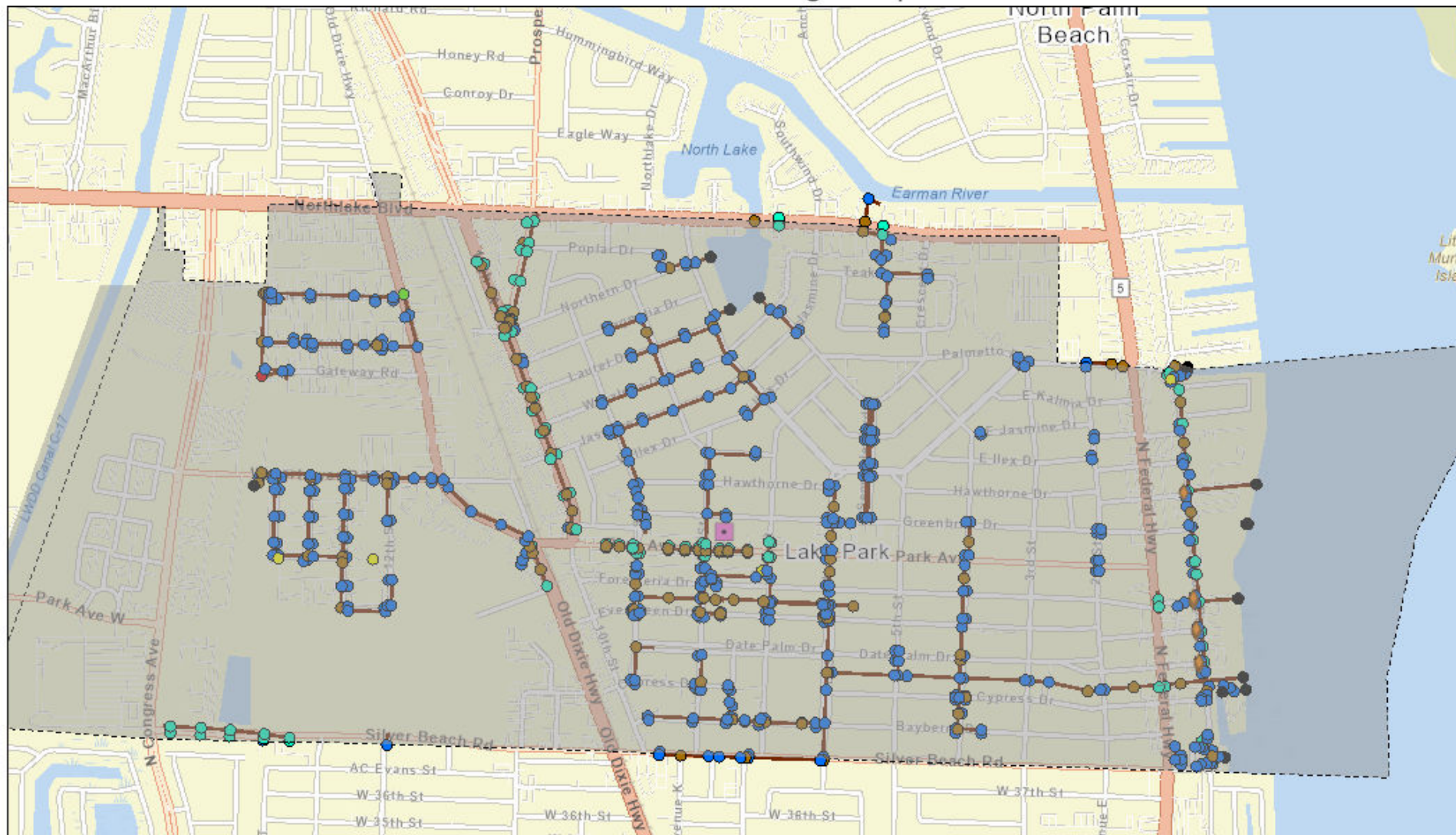


Stormwater Utility – Background (cont.)

- Utility is permitted/regulated by Florida DEP.
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 - › An estimated **20%** of the 10.6 miles of pipe infrastructure should be replaced immediately
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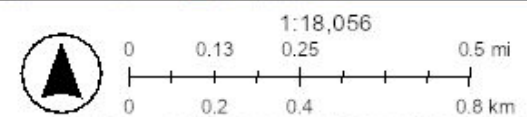


Lake Park Drainage Map



5/12/2023

- | | | | |
|---------------------------|--------------------|--------------|---------------------------|
| TOLP Boundary 2020 FL83EF | Catch Basin Inlet | French Drain | Straight Concrete Endwall |
| Box Culvert | Curb Inlet | Gutter Inlet | Yard Drain |
| Pump Station | Ditch Bottom Inlet | Headwall | Pipes |
| | Manhole | Boundary | |



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

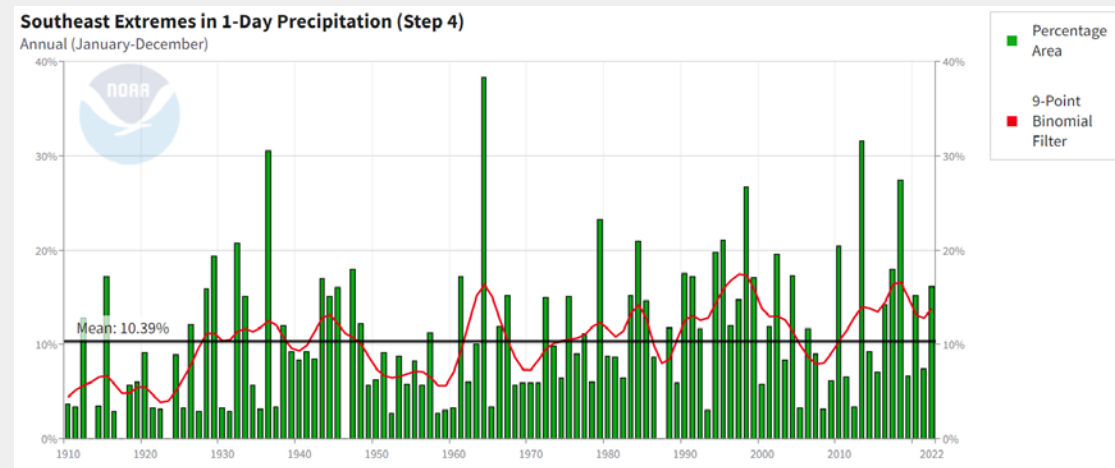


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Ft. Lauderdale Int'l Airport, April 2023





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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**





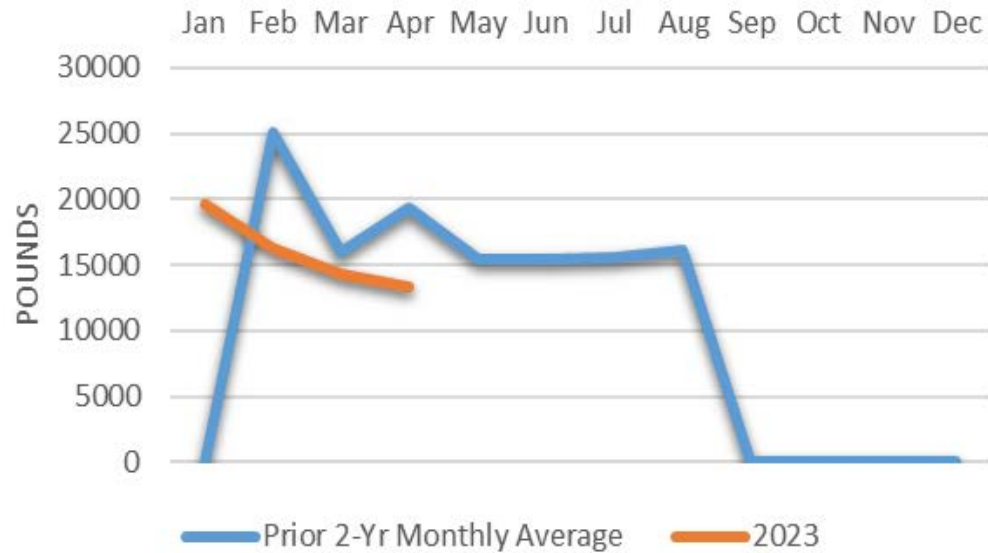
Stormwater Utility – Background (cont.)

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

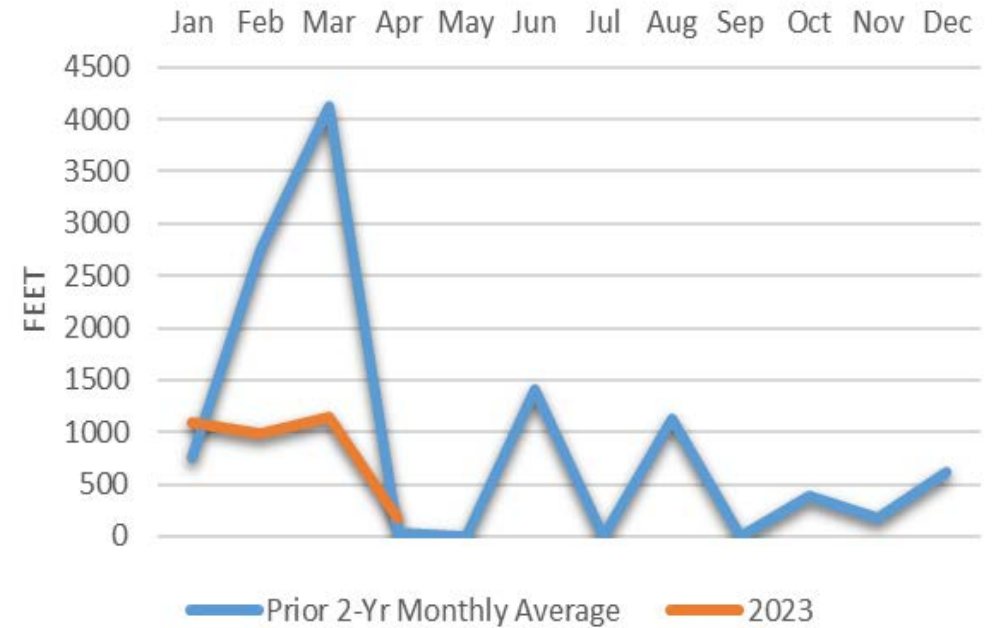
Equipment	Years in Service	Years Past Service Life
Street Sweeper (2020)	3 Yrs.	N/A
Vacuum Truck (2009)	14 Yrs.	7 Yrs.
Backhoe (2008)	15 Yrs.	8 Yrs.
Skid Steer Loader (2006)	17 Yrs.	10 Yrs.
Farm Tractor (2006)	17 Yrs.	10 Yrs.
Mower (2004)	19 Yrs.	12 Yrs.
Average:	14 Yrs.	7 Yrs.

Stormwater Utility – Operations

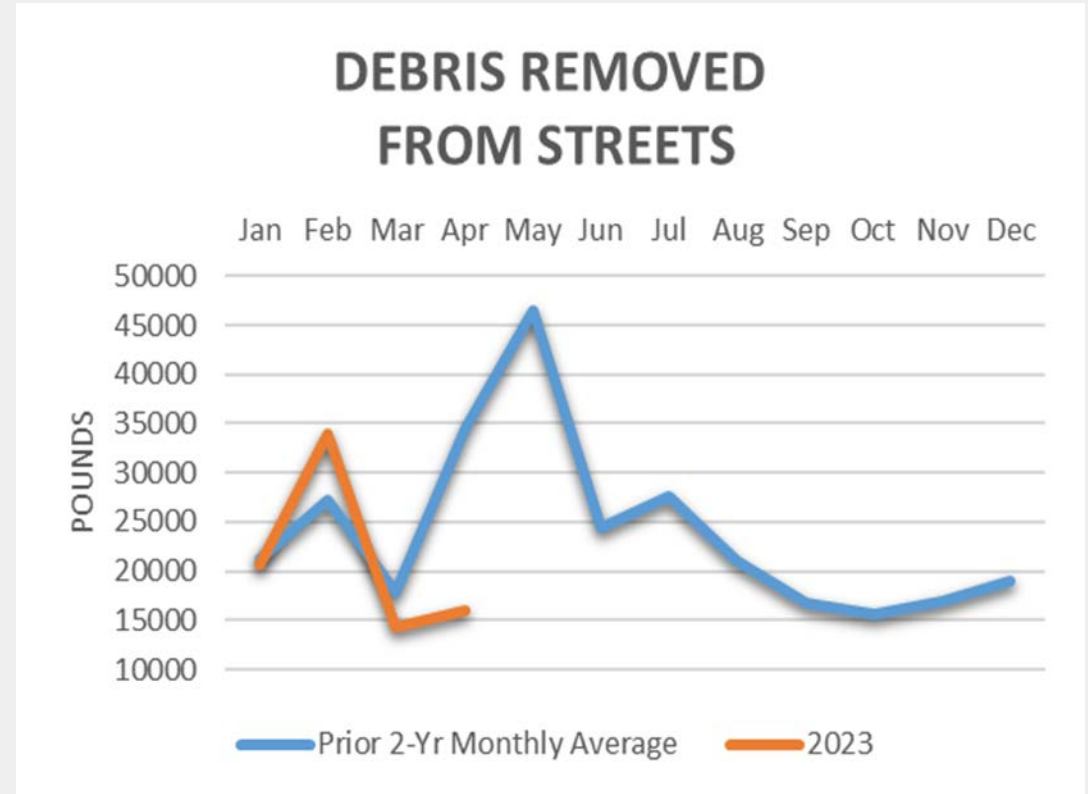
DEBRIS REMOVED FROM STORM DRAINS



PIPELINE INSPECTION



Stormwater Utility – Operations (cont.)





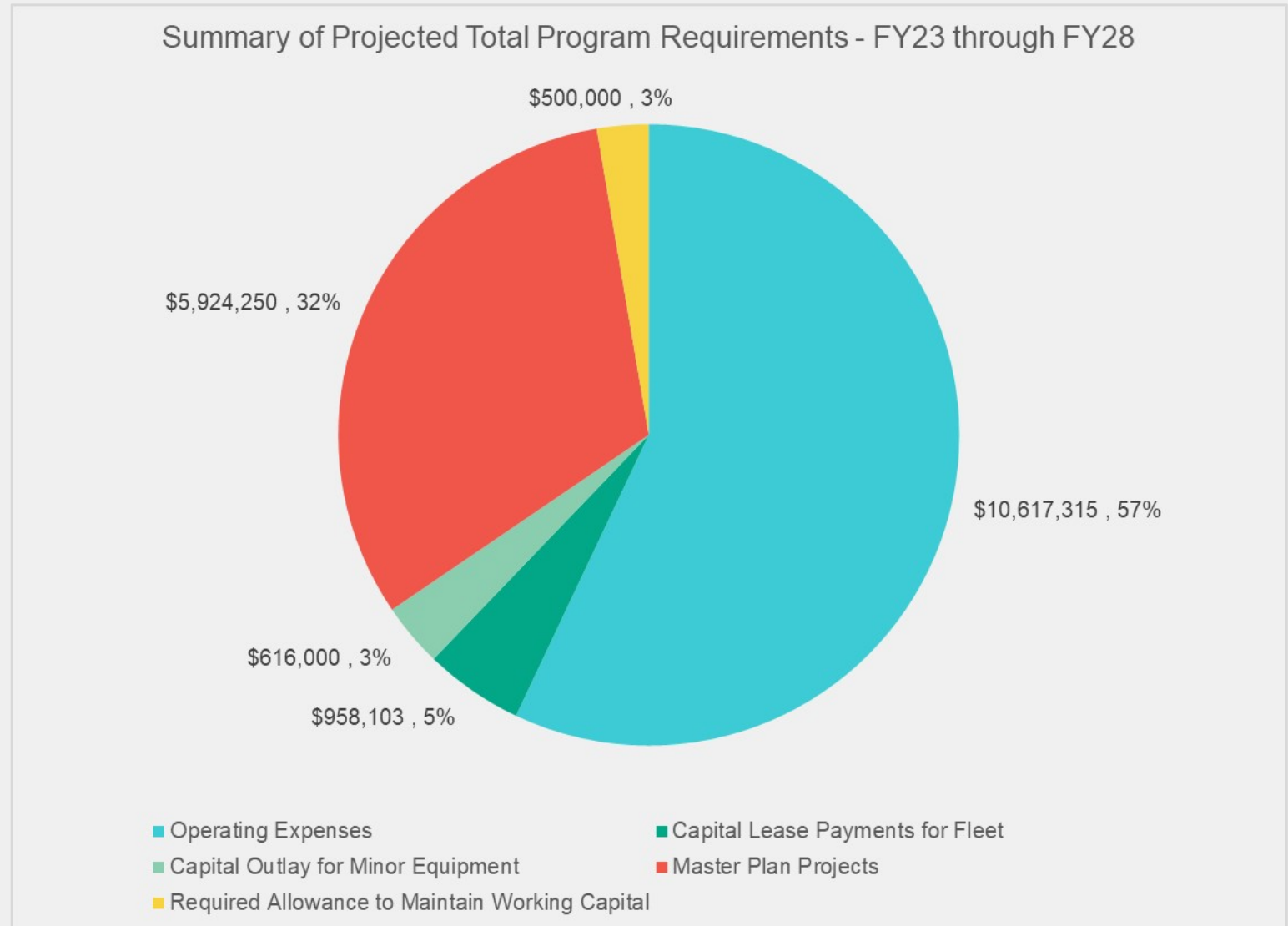
The 2023 Stormwater Utility Rate Analysis





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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- High costs, frequency and severity of mechanical repairs. Replacement of major components due to aging fleet.





Principal Cost Drivers (cont.)

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 - › Highly competitive labor market
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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



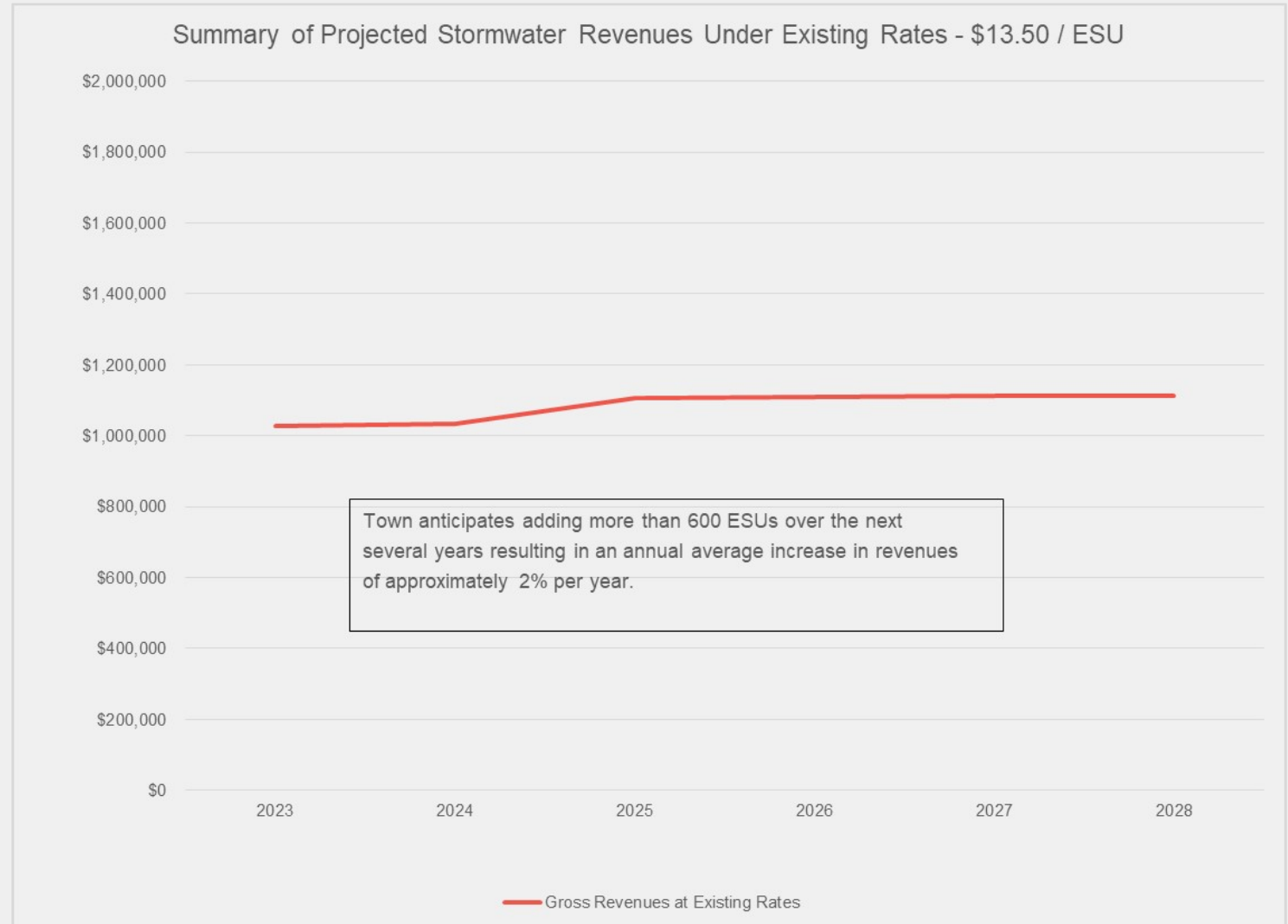
Stormwater Drainage Demographics

- 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.





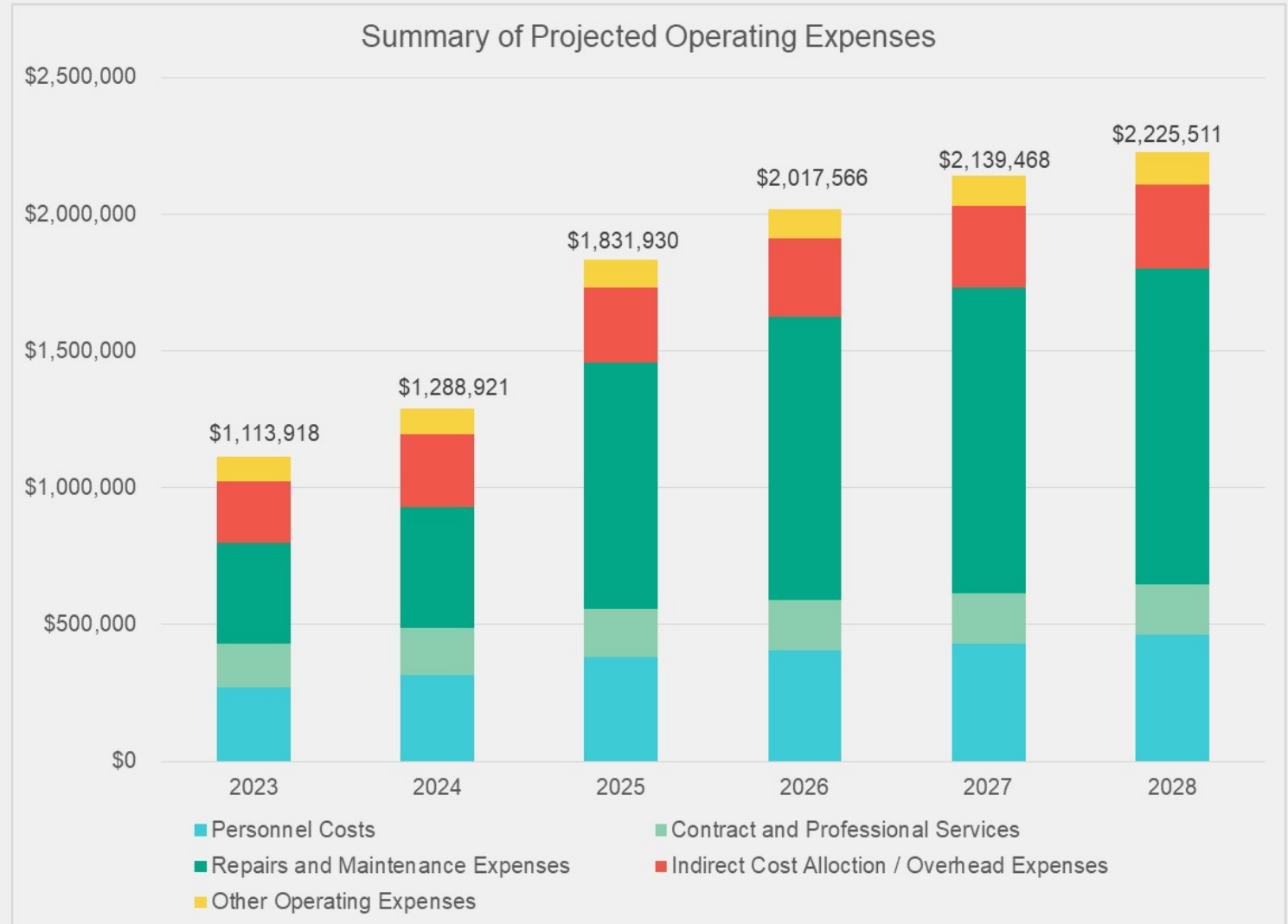
Projected Operating Expenses

- 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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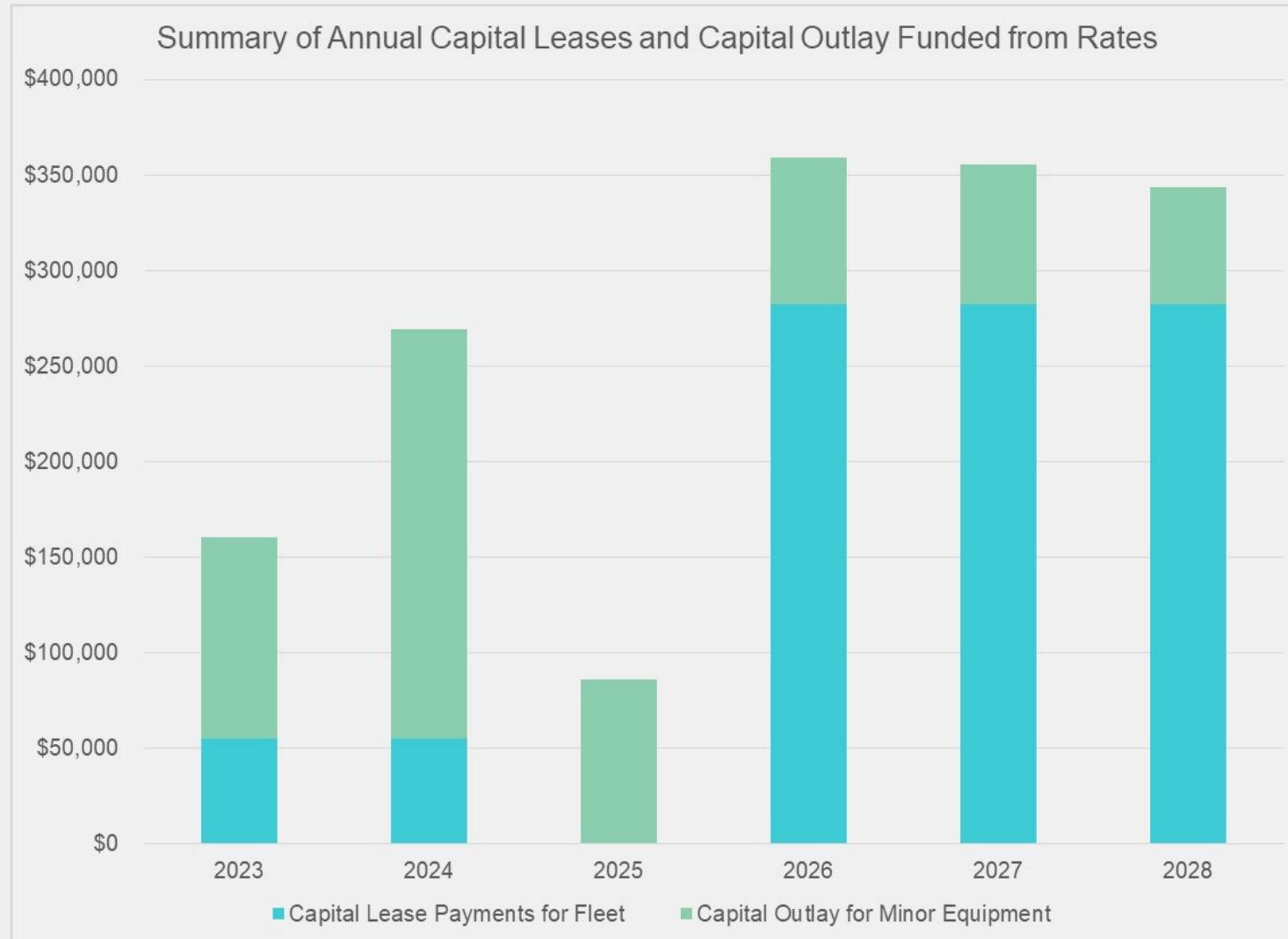


Recurring Capital Outlay

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Projected Lease Payments & Capital Outlay





Summary of Current Operations (Excludes Master Plan Improvement Projects)





Master Plan Improvement Projects

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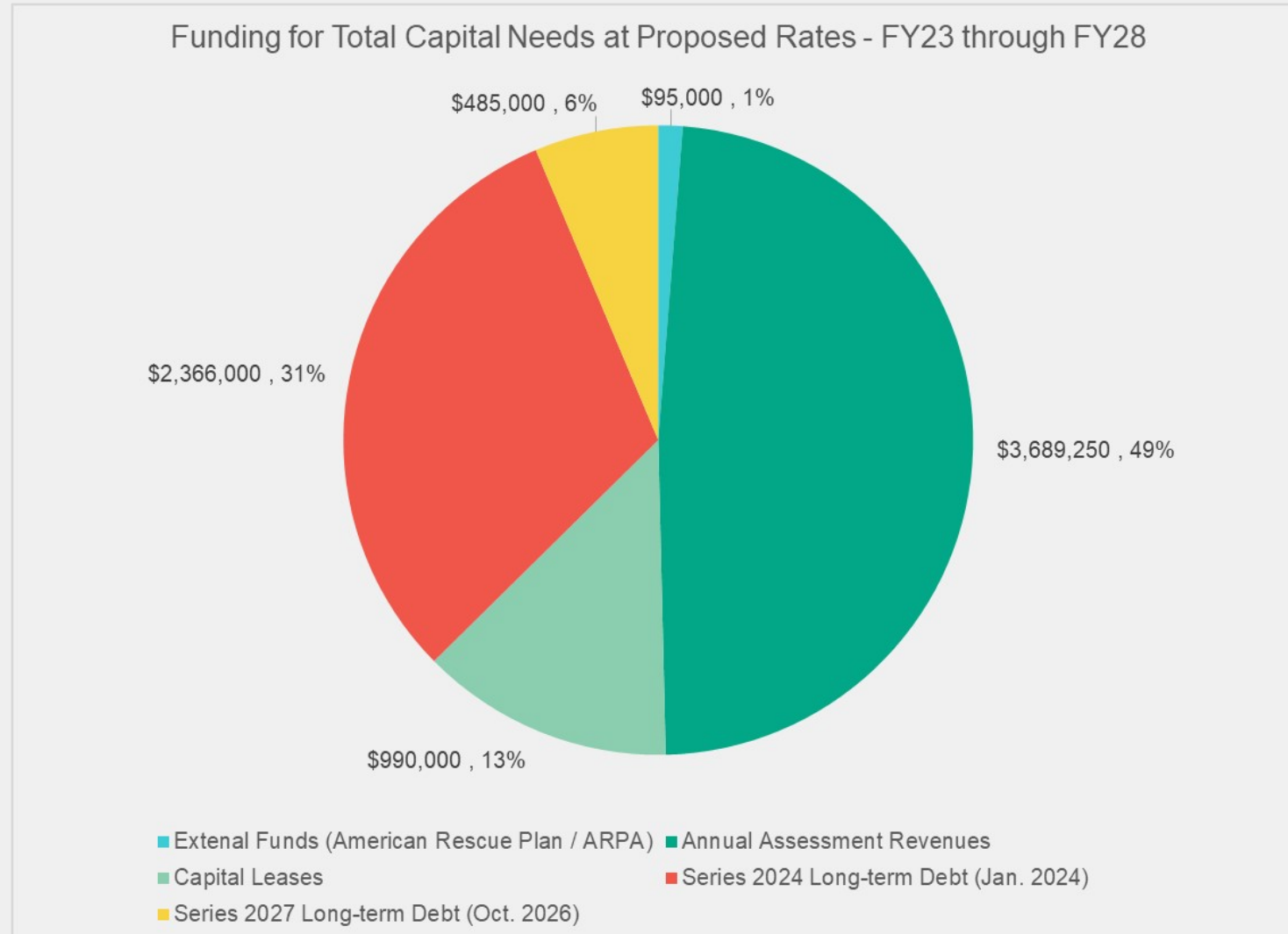


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Total Funding for Proposed Capital Needs





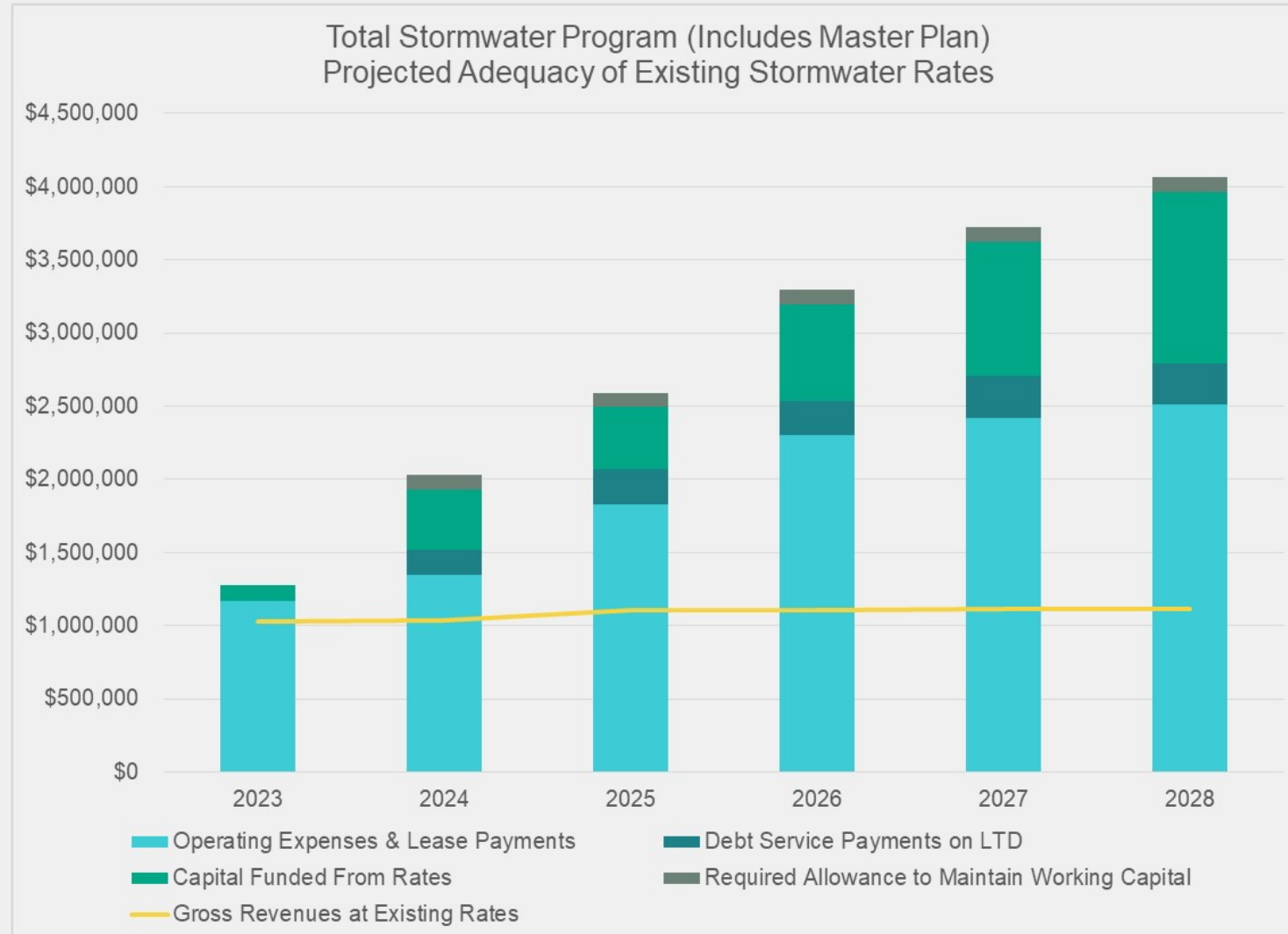
Financing Assumptions

- 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

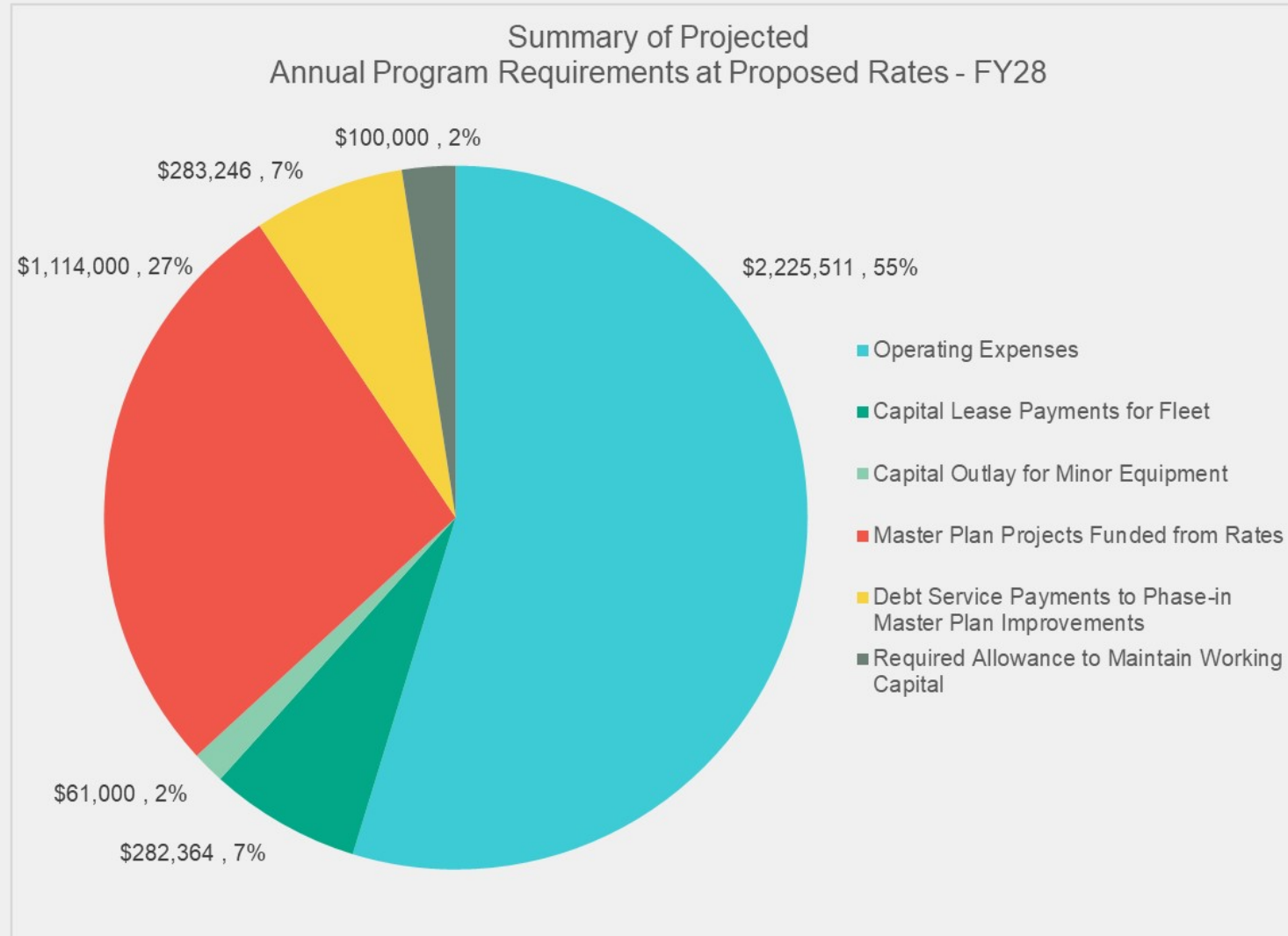
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Key Benefits

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Summary of Program Requirements (FY28)





Conclusions & Recommendations

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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



Connect with Us!



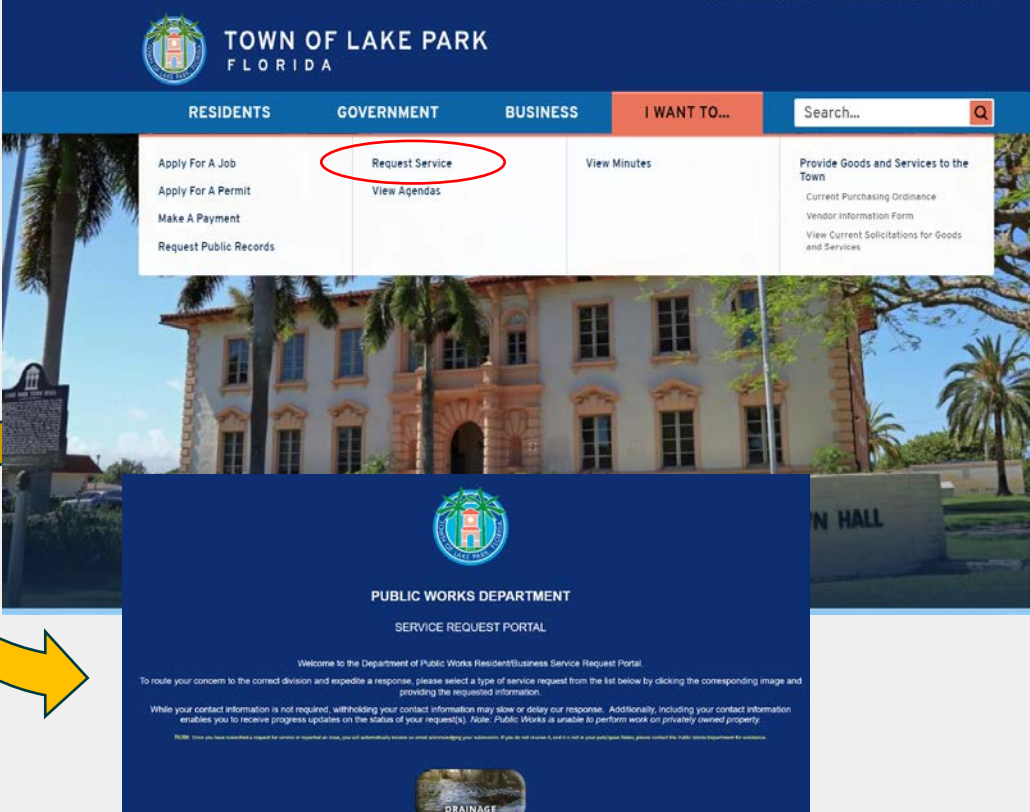
- New Service Request Portal
 - › Request Service
 - › Report Issues

 (561) 881-3345

 publicworks@lakeparkflorida.gov



SCAN AND
BOOKMARK
ME!



The screenshot shows the Town of Lake Park Florida website. The navigation bar includes 'RESIDENTS', 'GOVERNMENT', 'BUSINESS', and 'I WANT TO...'. Under 'I WANT TO...', the 'Request Service' link is circled in red. Below the navigation bar, there are several service request categories: 'Apply For A Job', 'Apply For A Permit', 'Make A Payment', 'Request Public Records', 'Request Service' (circled), 'View Agendas', 'View Minutes', and 'Provide Goods and Services to the Town'. The background of the website shows a large, ornate building, likely the Town Hall.