2019
Department of
Water Resources

Business Plan Presentation

Wednesday, August 29, 2018

Mission

- To Provide Superior Water Services at an Excellent Value

Vision

- To be widely recognized as a leader in the water industry

DWR Responsibility Breakdown

Water Treatment

Water Distribution

Stormwater Services

Wastewater Collection

Wastewater Reclamation

936,307 Residents served by 567 DWR Staff

Board of Commissioners Priorities

Providing a

Safe & Healthy Community

using a

Smart & Sustainable Government

enabling a

Strong & Vibrant Local Economy

Gwinnett Water Resources

DWR Key Focus Areas

Gwinnett Water Resources

Outstanding Workforce

Governance (BOC/CA)

- Staff
- Assets
- Customers
- Finance

Gwinnett Water Resources

Outstanding Workforce

- Safety
- Skill development
- Innovation

Safety

Skill development

Innovation

Gwinnett Water Resources

Safety

Safety Advancements

Positions Hired

- ☑ Safety Section Manager
- ☑ Safety Officer

Safety Protocols

- ☑ Confined Space
- ☑ Chemical Handling
- ☑ Training Materials

2017
20 Incidents

2018
6 Incidents through June

Water Resources Emergencies

- Water main breaks
- Force main breaks
- Facility emergencies
  - Chemical leaks
- Stormwater structure failures

Position Request:
Emergency Services Coordinator

Gwinnett Water Resources

Cost: $117,230

Develop

- Site and role specific plans and protocols for DWR emergencies

Perform

- Training, drills, and equipment deployment exercises

Manage

- Updates of emergency procedures
- Emergency operations
- Incident debriefs

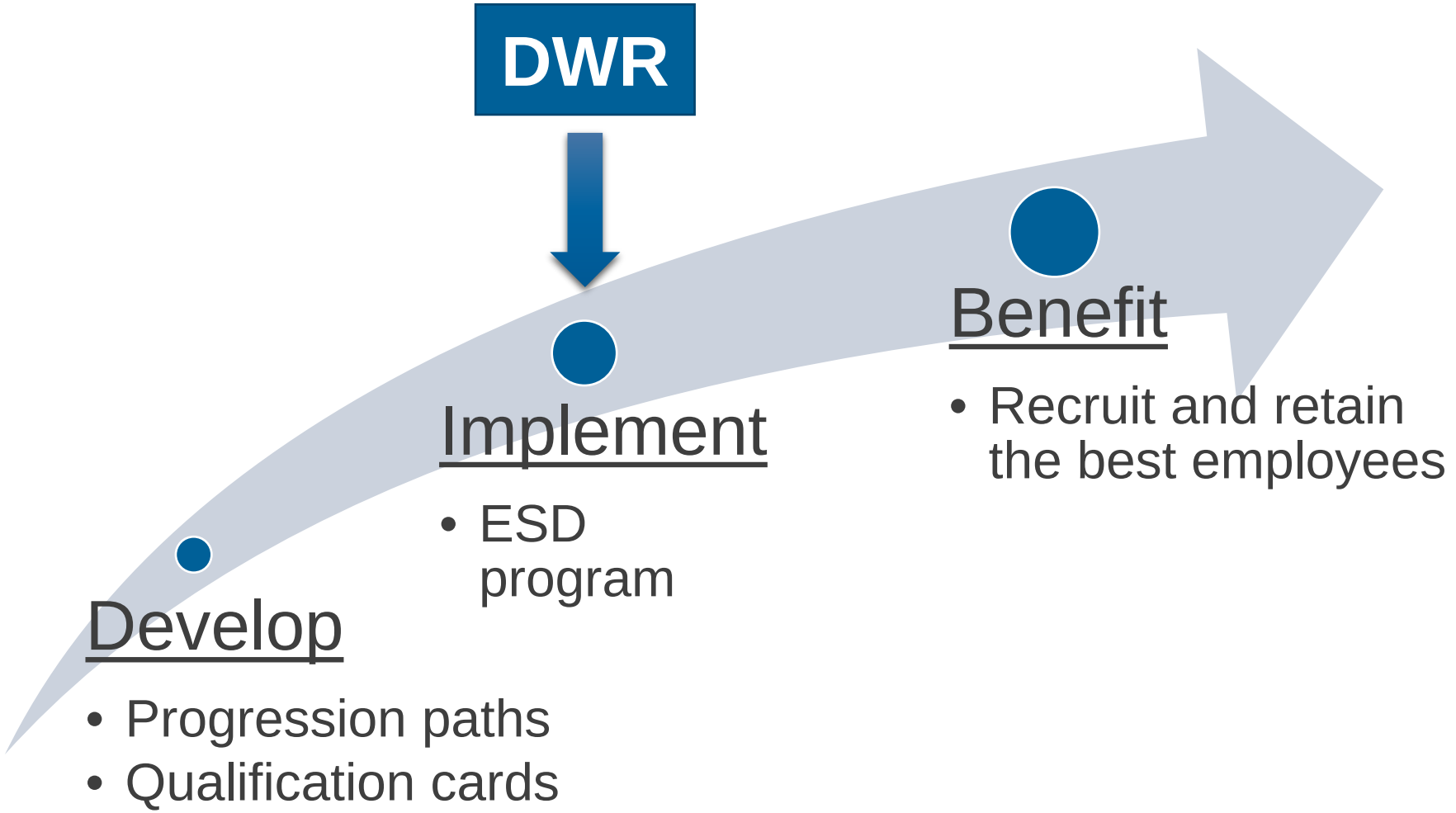
Position Request:
Emergency Services Coordinator

Gwinnett Water Resources

P	**Priority**	Safe & Healthy Community
S	**Strategy**	Effectively respond to threats
T	**Tactic**	Ensure staff respond effectively to emergencies
P/I	**Project or Initiative**	Develop and implement DWR Emergency Response Program **$117,230**

Skill Development

Employee Skills Development Program



Employee Skills Development Program

Gwinnett Water Resources

2015

Classroom

- Add leadership & management

Qual Cards

- Structured on the job training

Utilize technology

- SAP Integration
- uPerform courses

2021

Water Innovation Center

- Combine all training methods
- Simulated work environment scenarios

Innovation

Water Innovation Center

Education & Training

Economic Growth

- Partnerships
- New water technology incubator
- Increased visibility of County

Research

- Improve efficiency
- Meet future demands for clean water

Estimated completion date:
October 2021

Current Water Research

28 research projects in last 5 years

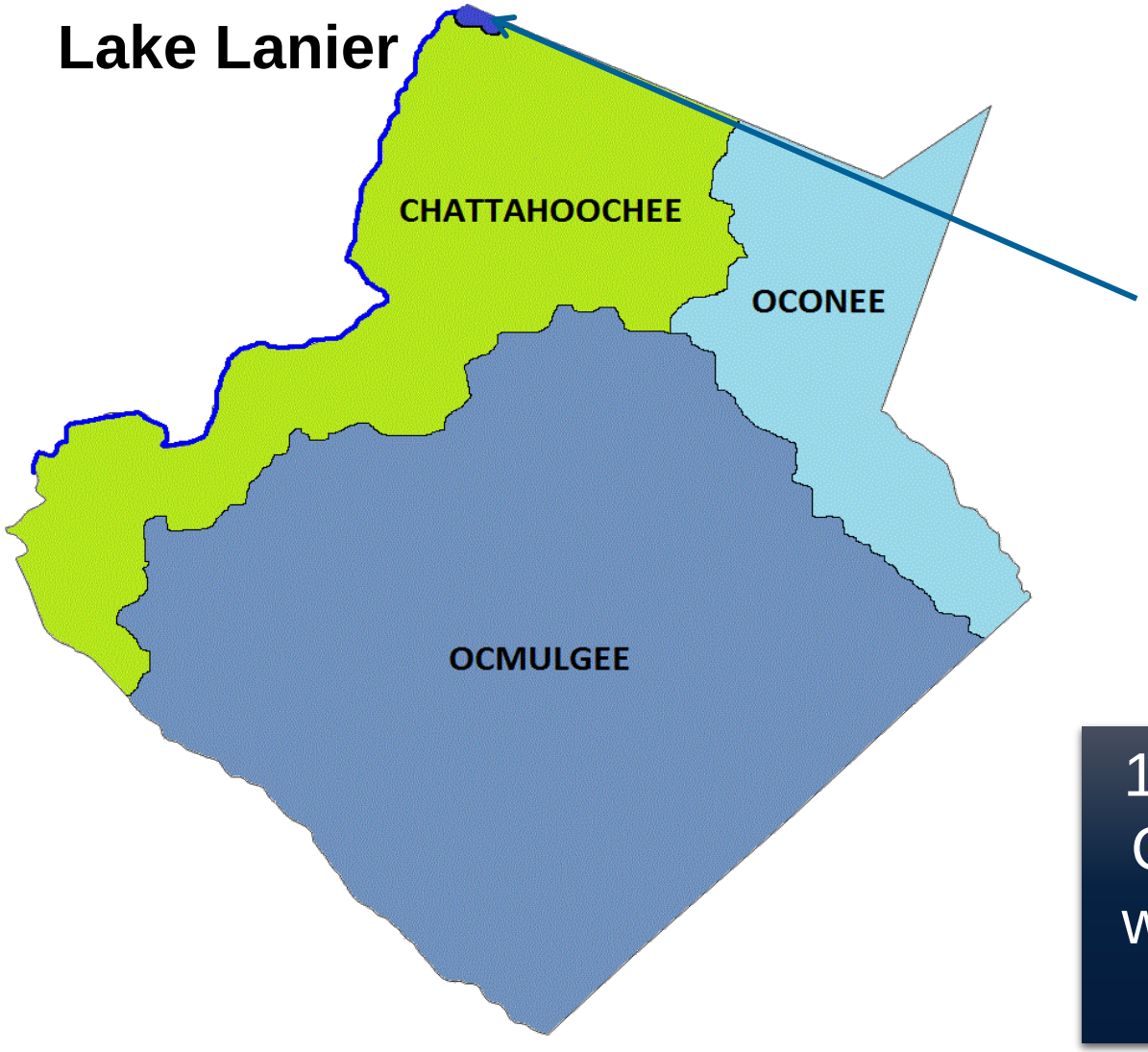
Partners

- Universities
- Research foundations

AAEES Grand Prize for Research in 2018

Lake Lanier Research Program

The Importance of Lake Lanier



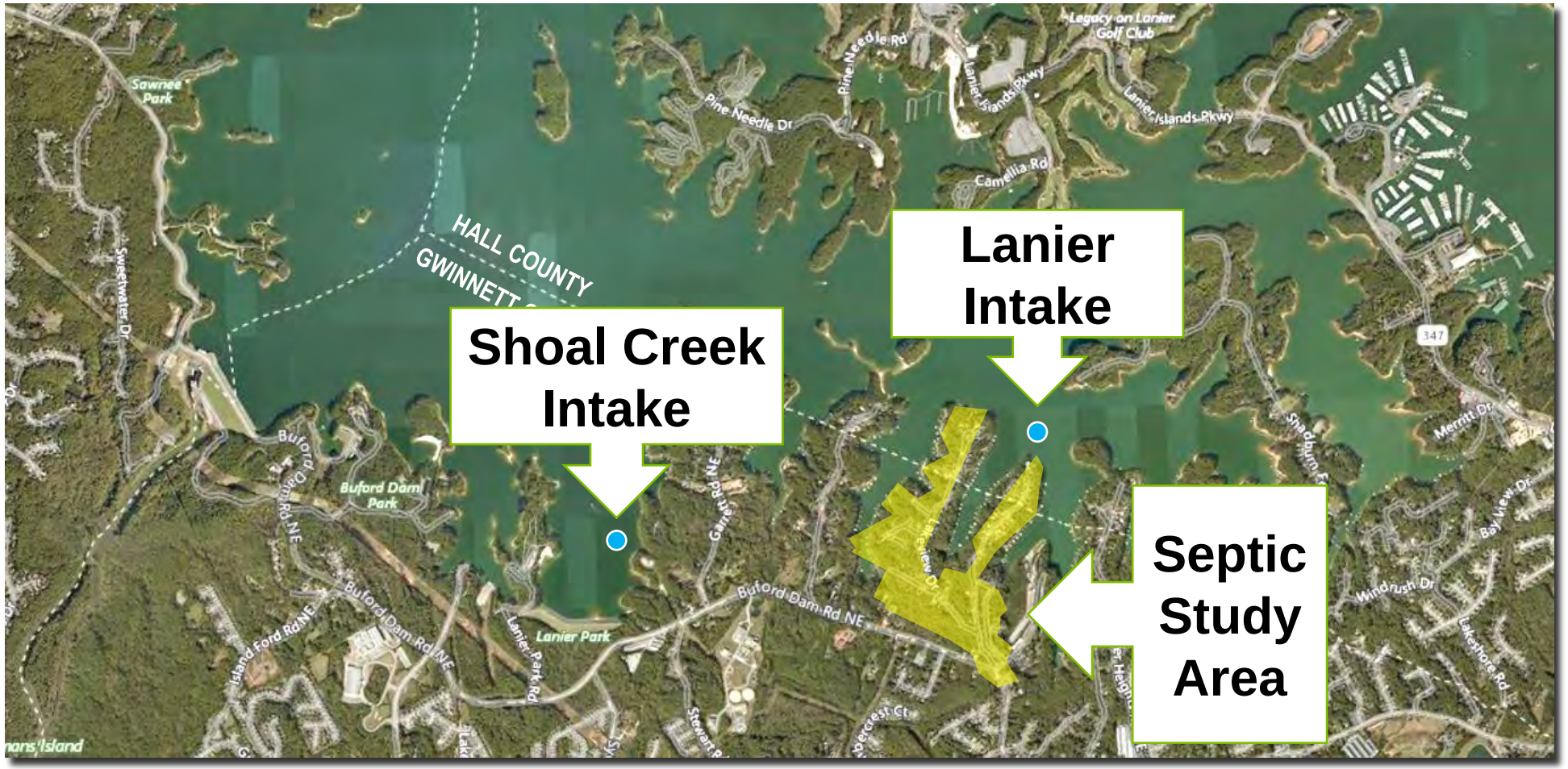
100% of Gwinnett County's drinking water comes from Lake Lanier

Gwinnett County's reclaimed water is returned to Lake Lanier

Lake Lanier Research Program

Gwinnett Water Resources

What is the Impact of Septic Systems on Lake Lanier Water Quality?



Equipment Request:
Lake Monitoring Equipment - Boat

Gwinnett Water Resources

Conduct lake monitoring program

- Regulatory monitoring
- Water quality for treatment operations

Cost:	Prof Services:	Net Cost:
$62,500	-$24,000	$38,500

Equipment Request:
Lake Monitoring Equipment - Boat

Gwinnett Water Resources

P	**Priority**	Safe & Healthy Community	Safe & Healthy Community
S	**Strategy**		Limit exposure to risk
T	**Tactic**		Reduce risk to Gwinnett County citizens
P/I	**Project or Initiative**		Monitor Gwinnett County drinking water supply **$38,500**

Superior Asset Management

Governance (BOC/CA)

- Staff
- Assets
- Customers
- Finance

Gwinnett Water Resources

Superior Asset Management

- Asset Reliability Program
- Process Operations

Gwinnett
Water Resources

Asset Reliability Program

Reliability Engineers - Current

2 Reliability Engineers that cover 21,000 critical assets

- Root cause failure analyses
- Reliability analyses
- Optimize maintenance strategies

Position Request:
Engineer IV – Reliability Engineer

Cost: $100,395

Dedicated to the F. Wayne Hill Water Resources Center

- 62% of all critical assets for facilities

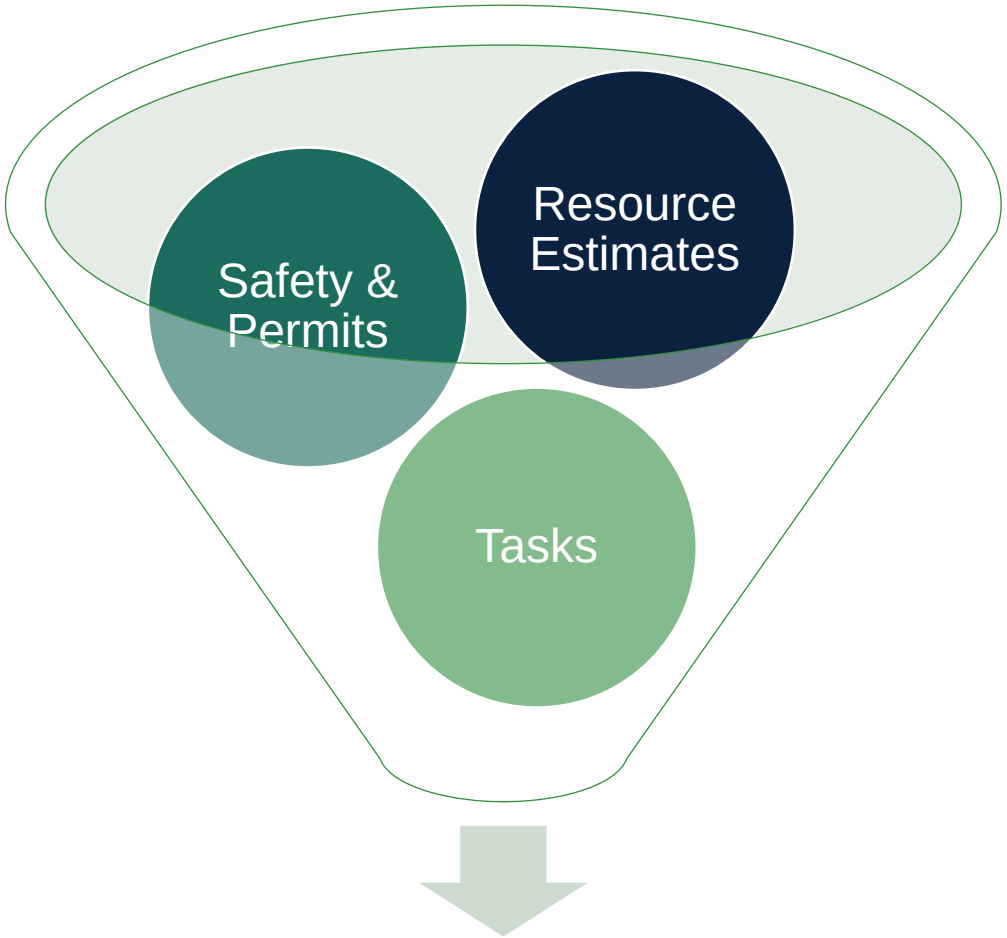
Support 13,000 critical assets

Develop reliability strategies for new assets

Position Request:
Engineer IV – Reliability Engineer

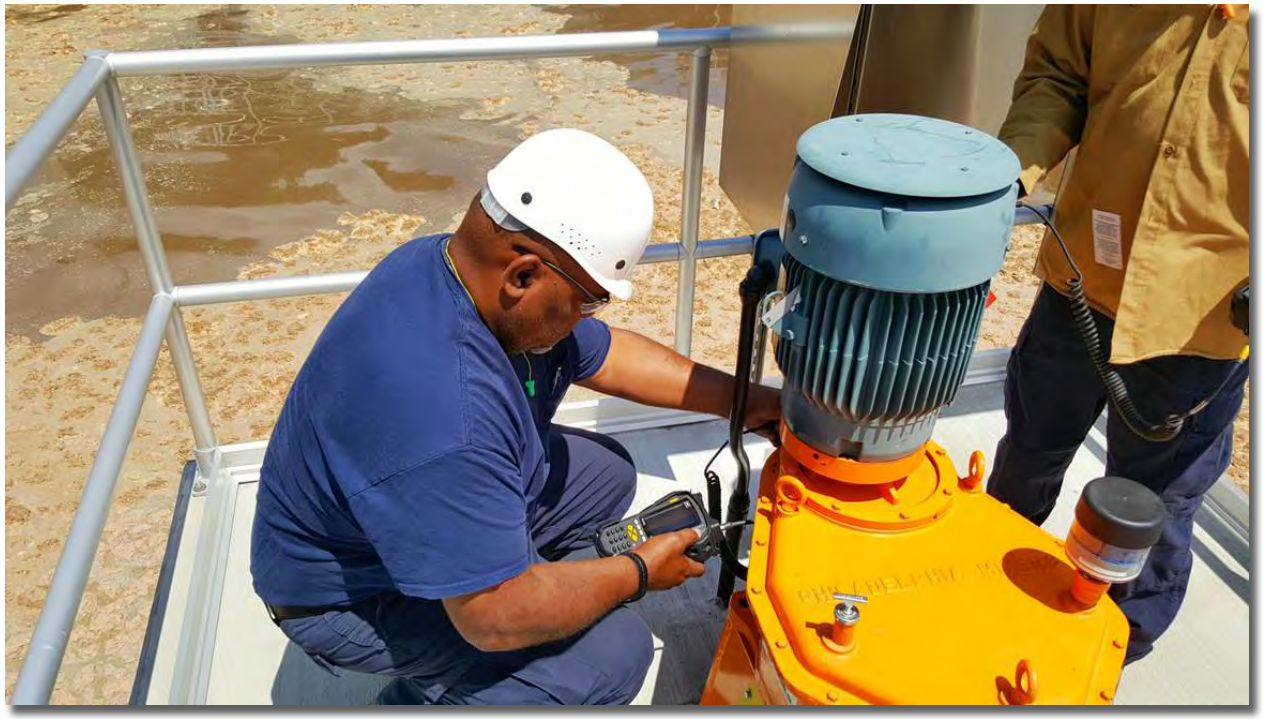
P	**Priority**	Smart & Sustainable Government
S	**Strategy**	Establish and maintain the Gwinnett County Standard
T	**Tactic**	Ensure viability and longevity of assets
P/I	**Project or Initiative**	Improve reliability of critical assets **$100,395**

Current:
Maintenance Planner Schedulers



- 4 Maintenance Planner Schedulers
- 5 facilities
- 218 pump stations
- Schedule 68,000 work orders
- Update more than 7,000 job plans

Position Request:
Maintenance Planner Scheduler



Cost: $63,441

Dedicated Yellow River Facility Planner

- Eliminate travel time
- Eliminate planning backlog
- Improve Operation & Maintenance

Position Request:
Maintenance Planner Scheduler

Gwinnett Water Resources

P	**Priority**	Smart & Sustainable Government
S	**Strategy**	Establish and maintain the Gwinnett County Standard
T	**Tactic**	Ensure viability and longevity of assets
P/I	**Project or Initiative**	Improve maintenance program **$63,441**

Equipment Request:
Dodge 550 with aerial lift platform

Gwinnett Water Resources

29 large storage tanks

Safely inspect, maintain and repair tanks and other structures

- Currently rent lift or use ladders to inspect and repair

Quickly perform minor repairs

Maintain regulatory compliance

Cost: $155,500

Equipment Request:
Water Storage Tank Maintenance

Gwinnett Water Resources

P	**Priority**	Smart & Sustainable Government
S	**Strategy**	Establish and maintain the Gwinnett County Standard
T	**Tactic**	Ensure viability and longevity of Gwinnett County assets
P/I	**Project or Initiative**	Ensure critical asset availability for tanks and structures **$155,500**

Process Operations

F. Wayne Hill Water Resources Center

Gwinnett Water Resources

60 MGD capacity

One of the world's largest membrane and ozone facilities

Provides wastewater treatment for over 50% of Gwinnett County's residents

F. Wayne Hill WRC
Wastewater Process Operations

Gwinnett Water Resources

Staffing level 2011 – 2018

- 5 – 6 Operators on day shift
- 4 Operators on night shift

Staff Duties

- Monitor and make process changes
- 2000 item plant checklist per shift
- Check 600 pieces of equipment through 32 buildings per shift
- Analyze 340 process samples per day

Position Request:
2 Water/Wastewater Tech IVs

Gwinnett Water Resources

Cost: $118,780

Expand F. Wayne Hill WRC staff for:

Recently added systems

- FOG Receiving Station (2012)
- Thickeners and Scum Concentrators (2013)
- Ostara Nutrient Recovery (2015)

Increased monitoring of equipment and processes

- 350 additional items checked per shift

Position Request:
2 Water/Wastewater Tech IVs

Gwinnett Water Resources

P	**Priority**	Safe & Healthy Community
S	**Strategy**	Limit exposure to risk
T	**Tactic**	Advance community risk reduction
P/I	**Project or Initiative**	Ensure continued operations of critical processes **$118,780**

Excellent Customer Care

Governance (BOC/CA)

- Staff
- Assets
- Customers
- Finance

Gwinnett Water Resources

Excellent Customer Care

- Customer Care Representatives

Gwinnett
Water Resources

Customer Care Representatives

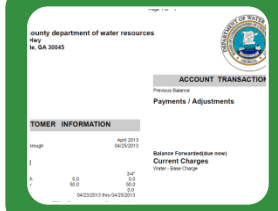
Water Resources Customer Care

Gwinnett Water Resources

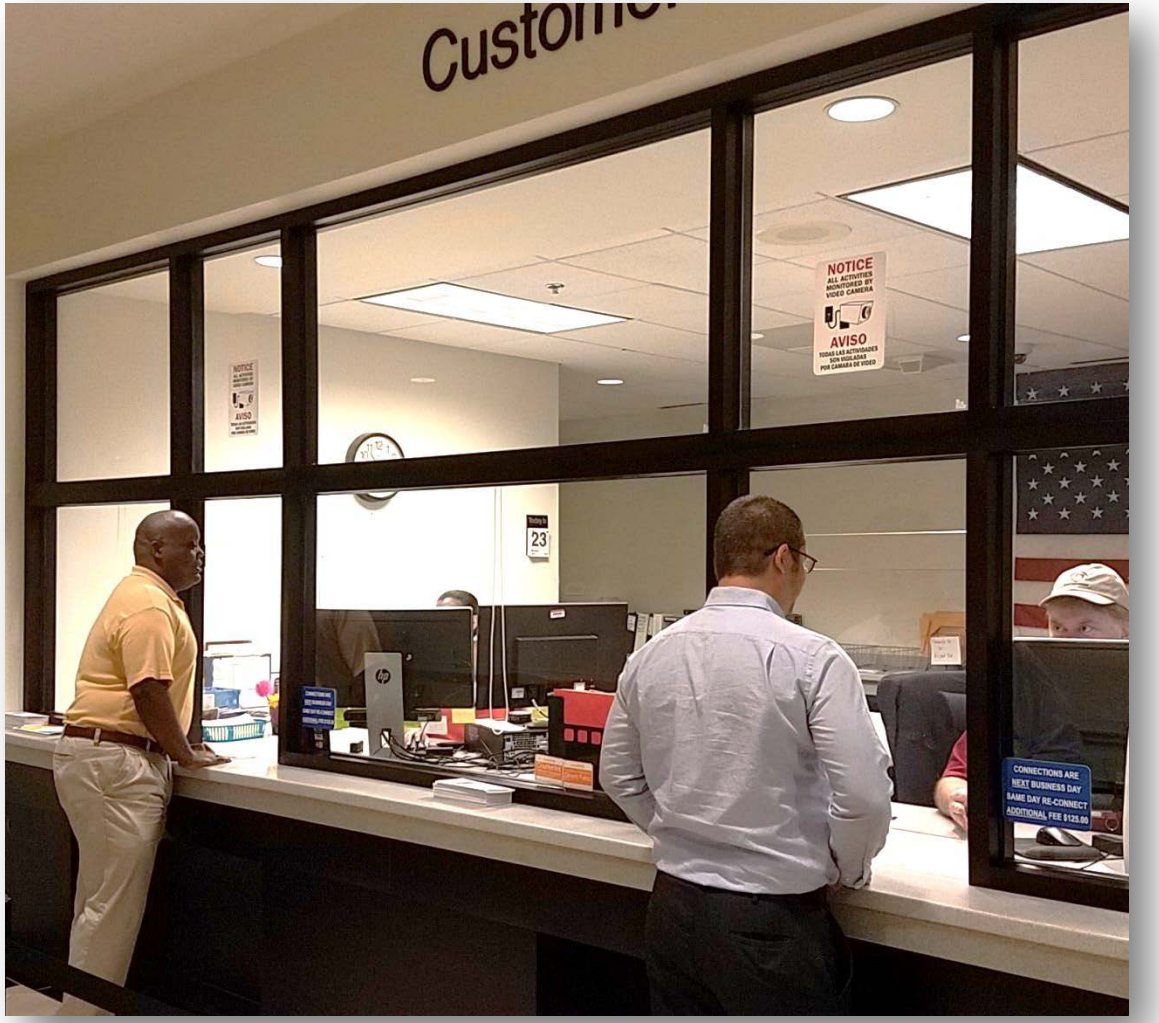
245,840 water meter accounts

172,300 sewer accounts

50,000 customer contacts monthly



253,500 bills sent out monthly



Customer Care Background

Increased training and customer skills development

- 4 weeks of classroom
- 2 weeks of monitored on-phone

Implemented more customer friendly policies

- Time with each customer has increased by 26%

Increased on-line customer service options

- Reduced Customer Service Agents from 60 to 50

2018 JD Power Award Winner:
#1 in the nation for customer service for water utilities

Customer Care Need

Currently 36 full-time CSAs and 14 temporary positions

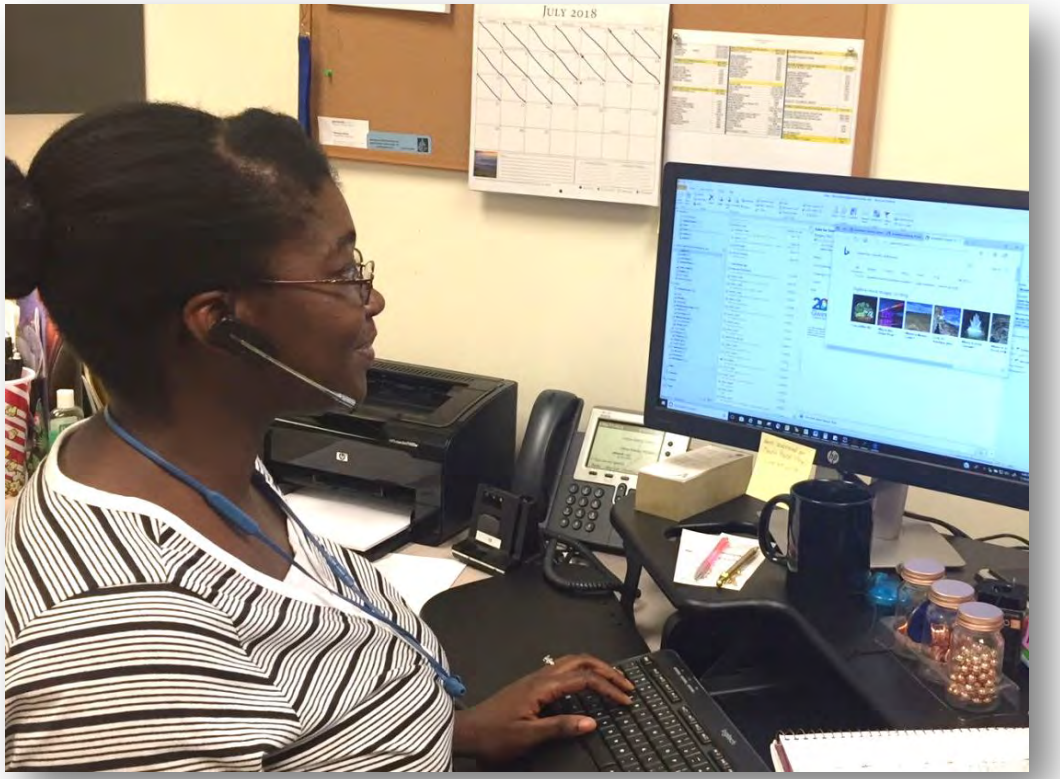
75% turnover rate for temp staff

16% for full-time employees

Convert 6 temporary positions to full-time employees

- Retain 8 temp staff for flexibility

Position Request:
6 Customer Care Associates



Reduced turnover

Annual training labor savings of 1,440 hours - $31,300

Enhanced customer service

- Increased quality assurance
- More highly trained CSAs

Cost:	Prof Services:	Net Cost:
$264,247	-$175,468	$88,779

Position Request:
6 Customer Care Associates

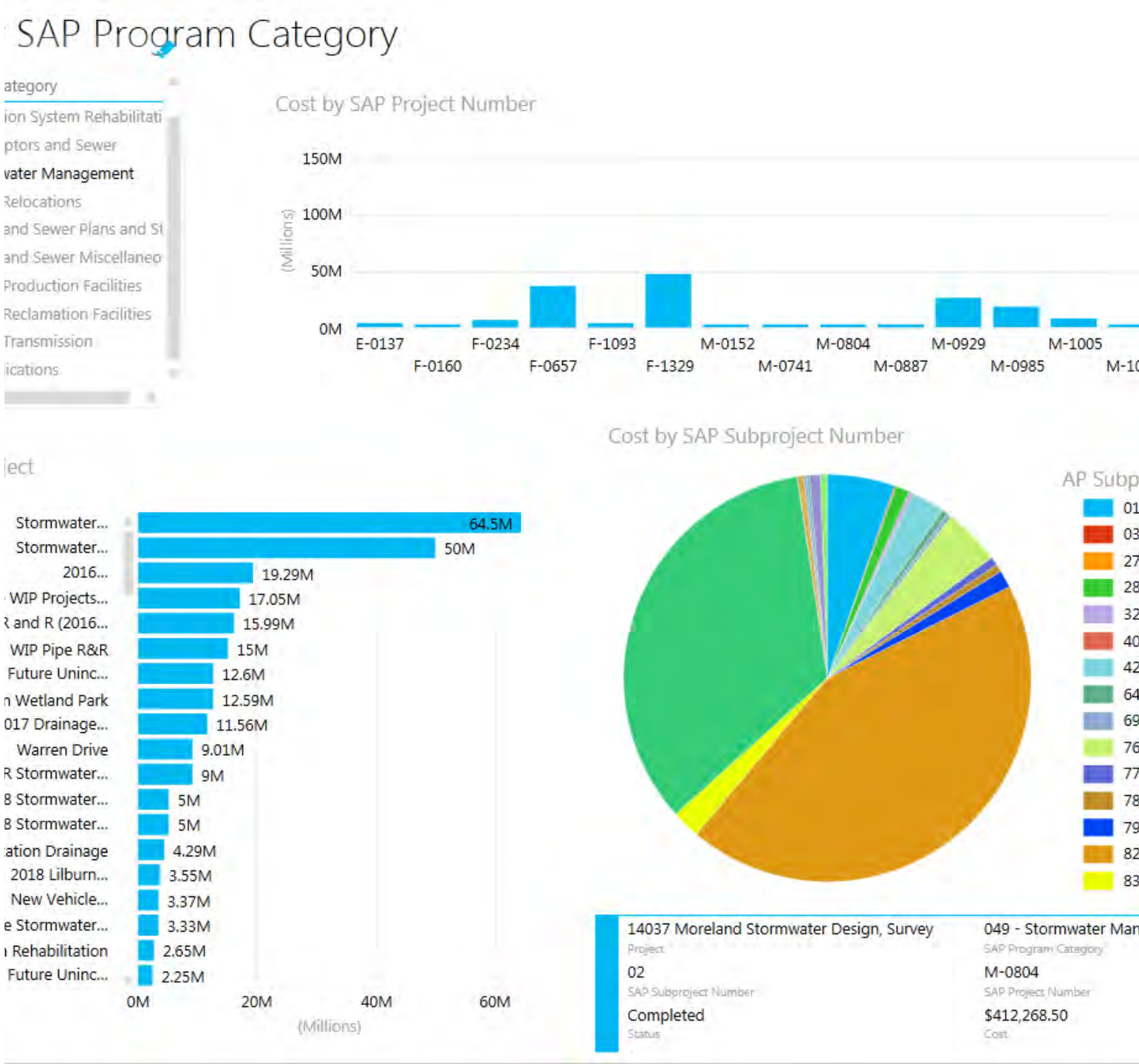
P	**Priority**	Smart & Sustainable Government
S	**Strategy**	Make it easier to do business with the County
T	**Tactic**	Enhance GC as a place to live and do business
P/I	**Project or Initiative**	Enrich the customer experience **$88,779**

Financial Sustainability

Governance (BOC/CA)

- Staff
- Assets
- Customers
- Finance

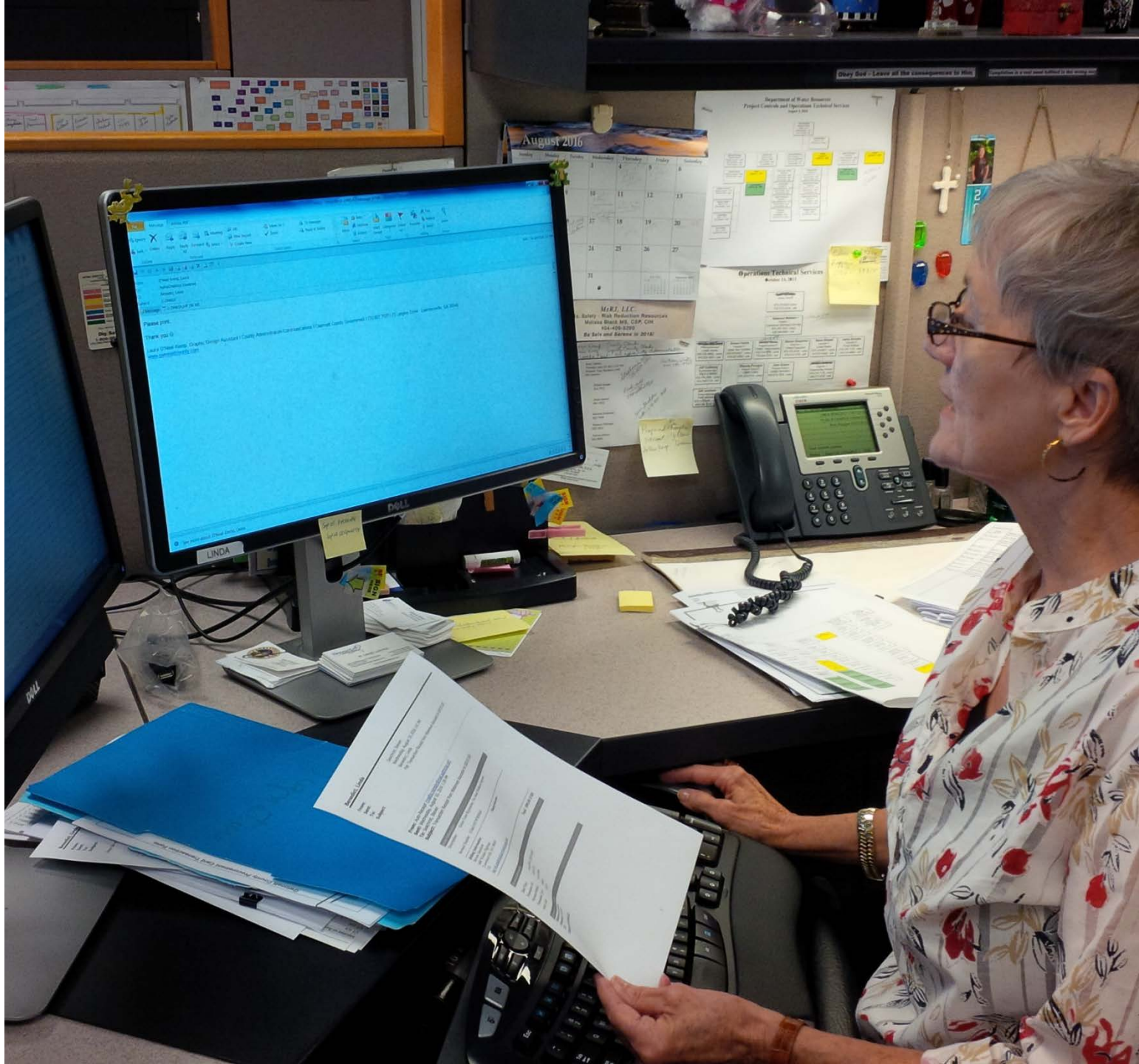
Gwinnett Water Resources



Financial Sustainability

- 2019 Budget
- 30 Year Financial Forecast
- Business Services Need

Gwinnett Water Resources



2019 Budget

2019 **Stormwater** Estimated Revenues

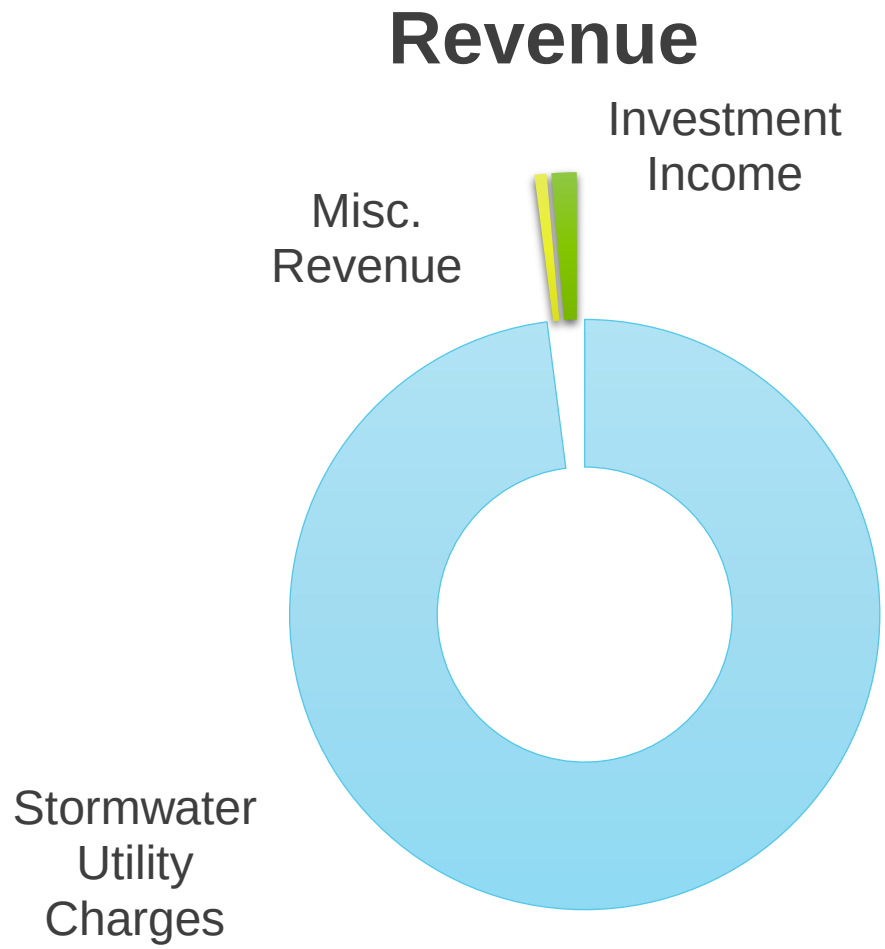
Total 2019 Revenue:
$30,095,000

99% Stormwater Utility Charges

1% Investment Income

<1% Misc. Revenue

1.0% Annual Impervious Surface Increase



2019 **Stormwater** Estimated Expenditures

Total 2019 Expenditures: $41,410,675

79% Transfer to R&E (Capital)

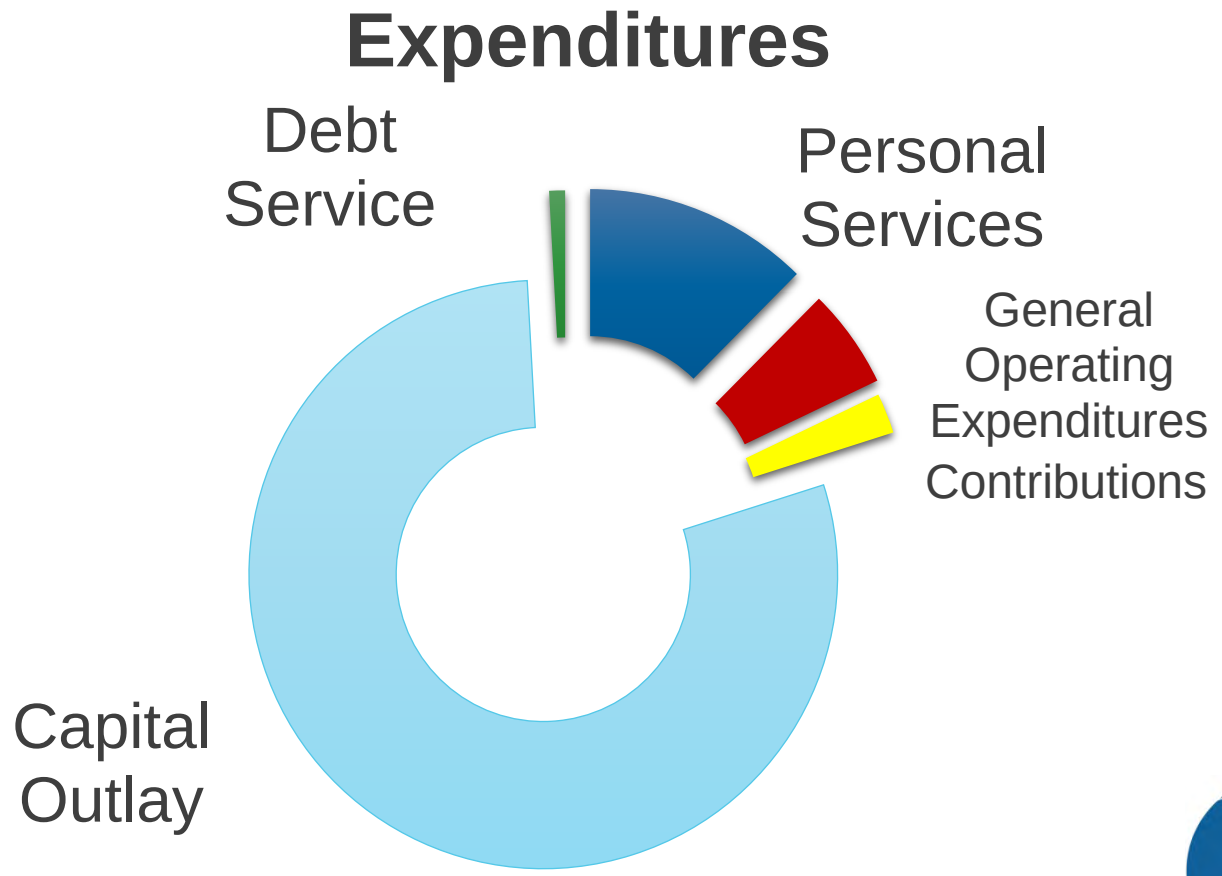
12% Personal Services

6% General Operating Expenditures

2% Contributions

1% Debt Service

2.1% Inflation Increase Annually



2019 **Water and Sewer** Estimated Revenues

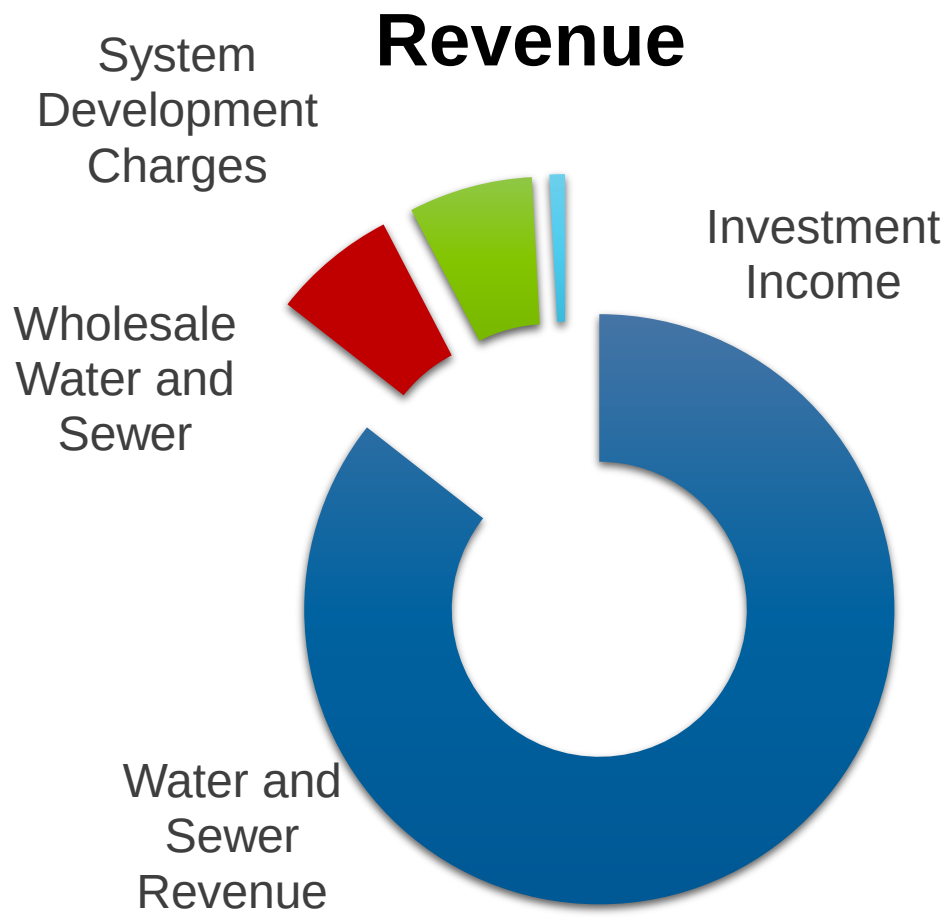
Total 2019 Revenue: $353,757,000

86% Water and Sewer Charges

7% System Development Charges

7% Wholesale Water and Sewer Charges

<1% Investment Income



Revenue Assumptions

Approved Rate Increase

2019

- $0.07 Water Per 1000 gallons
- $0.16 Sewer Per 1000 gallons
- 1.4% Water 2.0% Sewer

2019 **Water and Sewer** Estimated Expenditures

Total 2019 Expenditures: $396,790,266

45% Transfer to R&E (Capital)

20% Debt Service

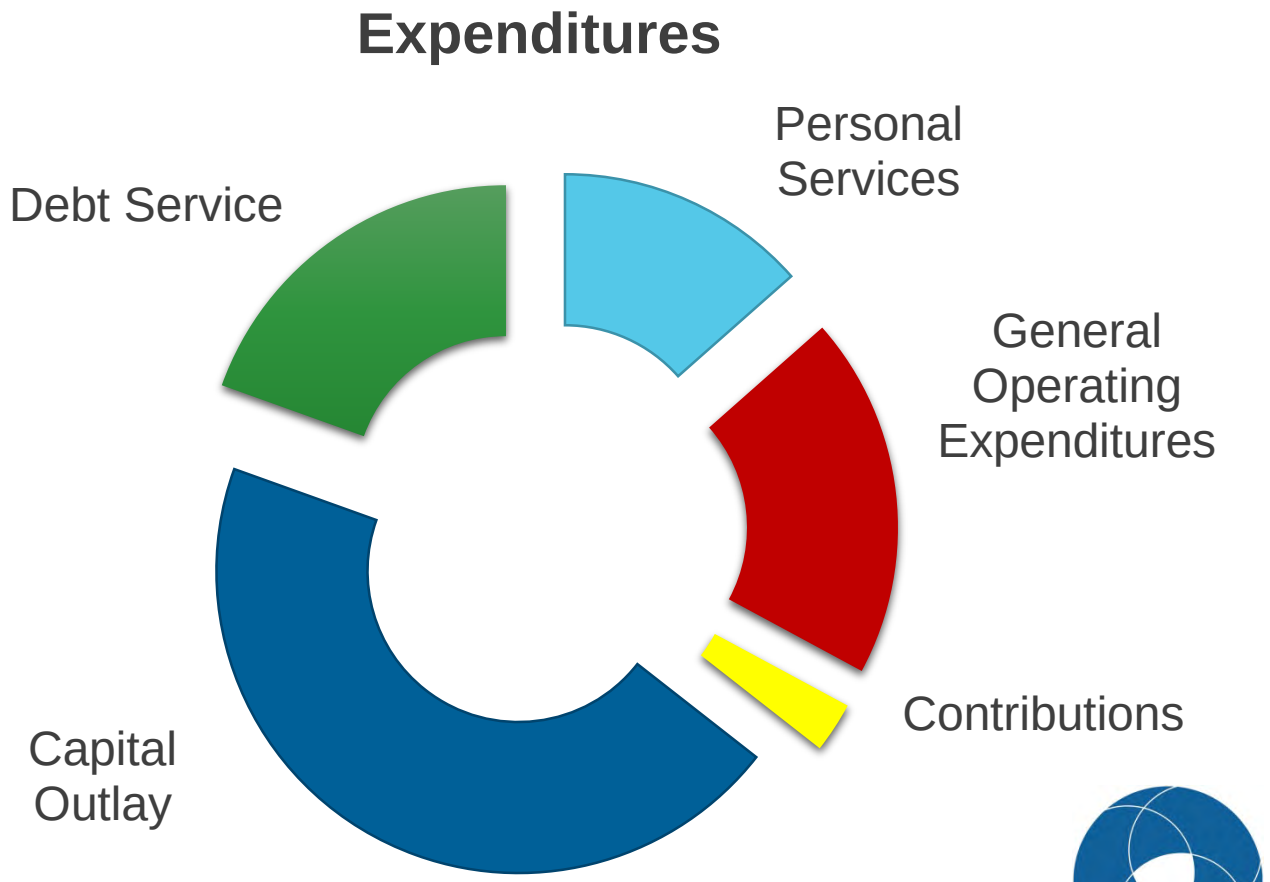
19% General Operating Expenditures

13% Personal Services

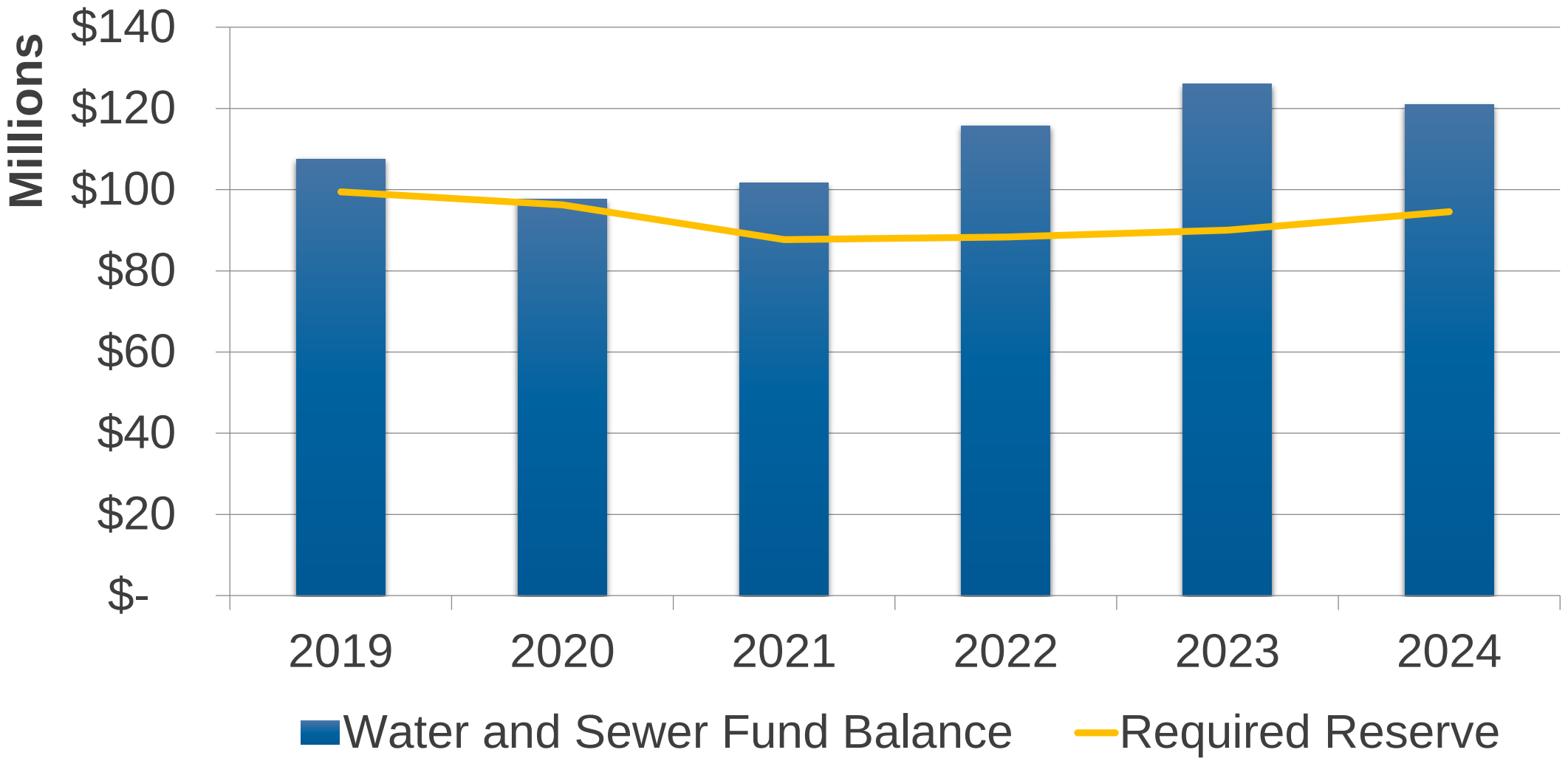
3% Contributions

2.1% Inflation Increase Annually

1.0% Annual Account Growth Expense



Water and Sewer Operating Fund Balance



Water and Sewer Annual CIP

2019	2020	2021	2022	2023	2024
• $236M	• $189M	• $151M	• $151M	• $152M	• $166M

$196M New R&E

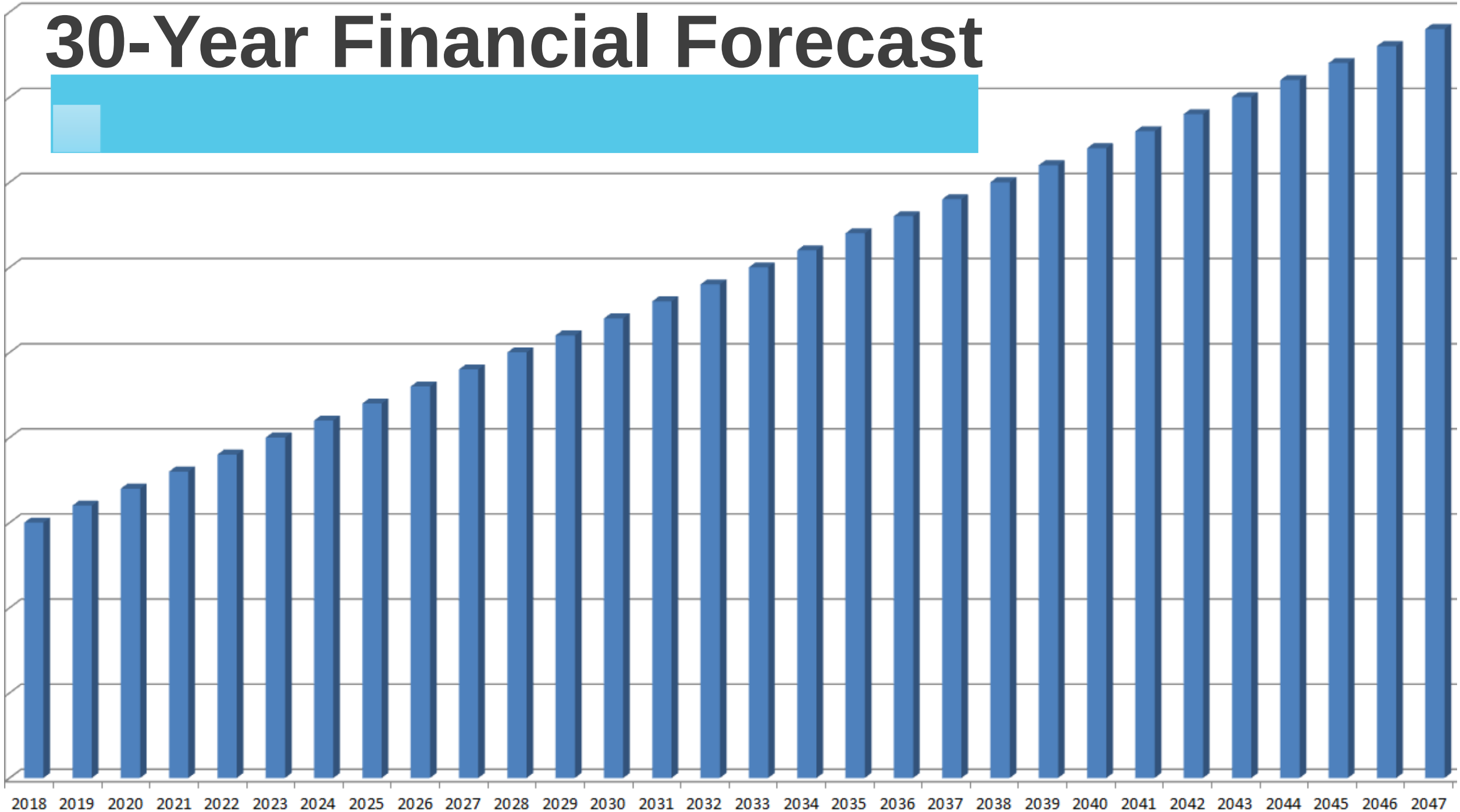
$40M Rollover

Total 6-Year Program

$1.045 Billion

100% self-funded from W&S Fund

30-Year Financial Forecast



30-Year Forecast Breakdown

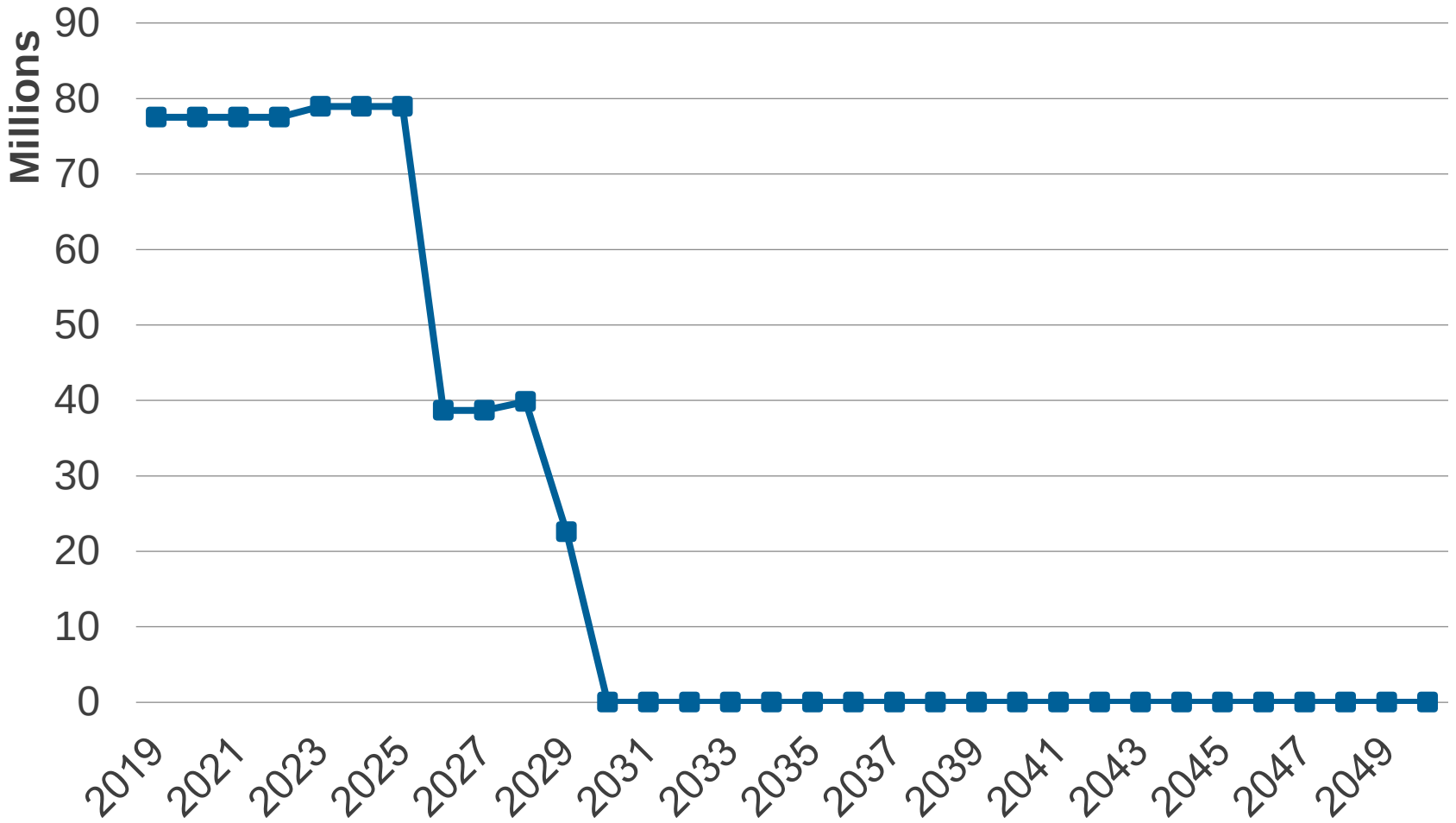
Gwinnett Water Resources

Debt

Revenue

Expenditures

Debt

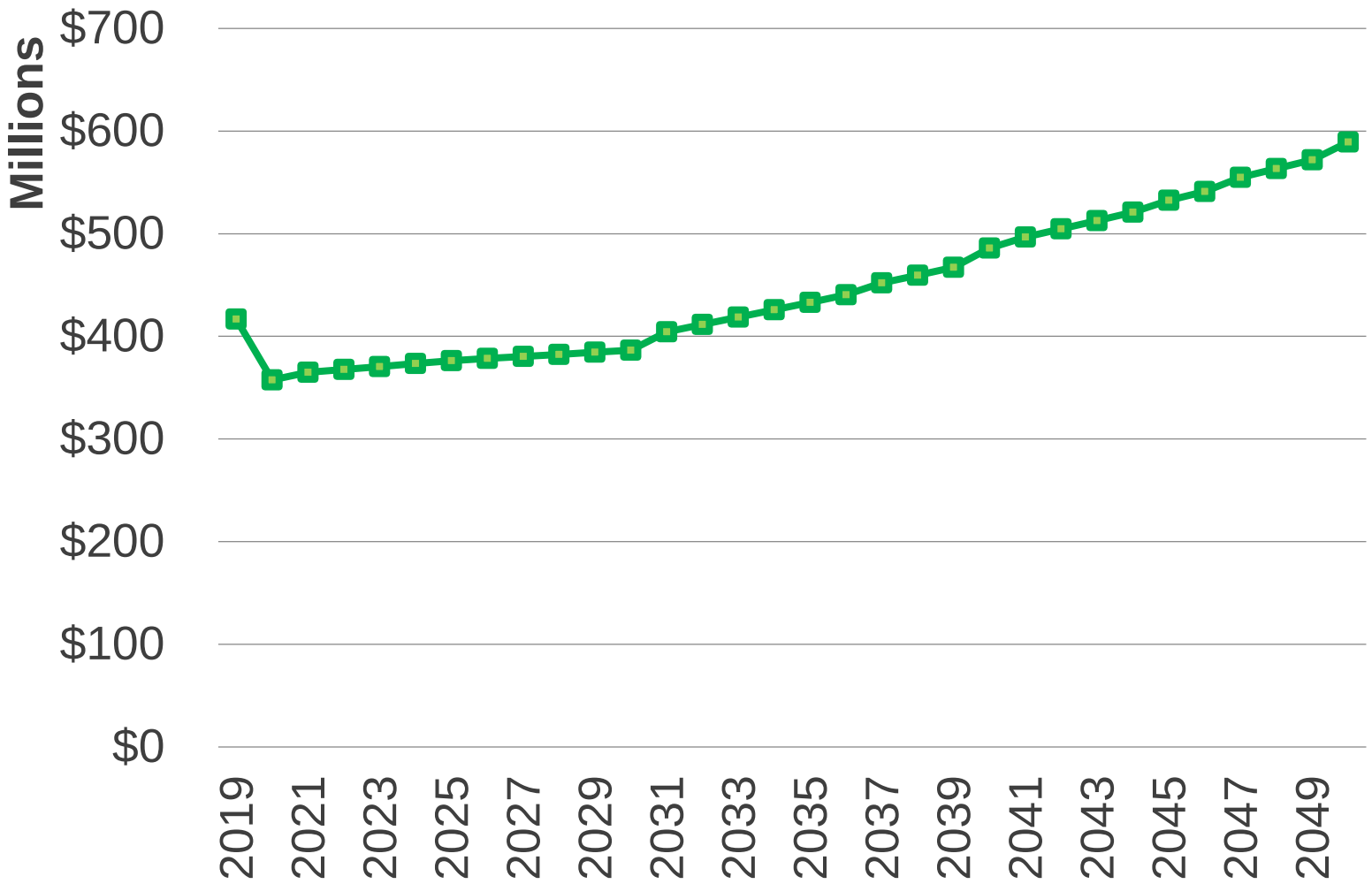


$40M
Decrease in 2026

$17M
Decrease in 2029

Debt Free in 2030

Revenues



- 1.5% W&S rate increase annually beginning in 2031
- SDC Increase in 2037 and 2047 with construction of new capacity
- 1% annual customer account increases (growth)
- $2 W&S base charge increase in 2031, 2040, 2050

Expenditures

Gwinnett Water Resources

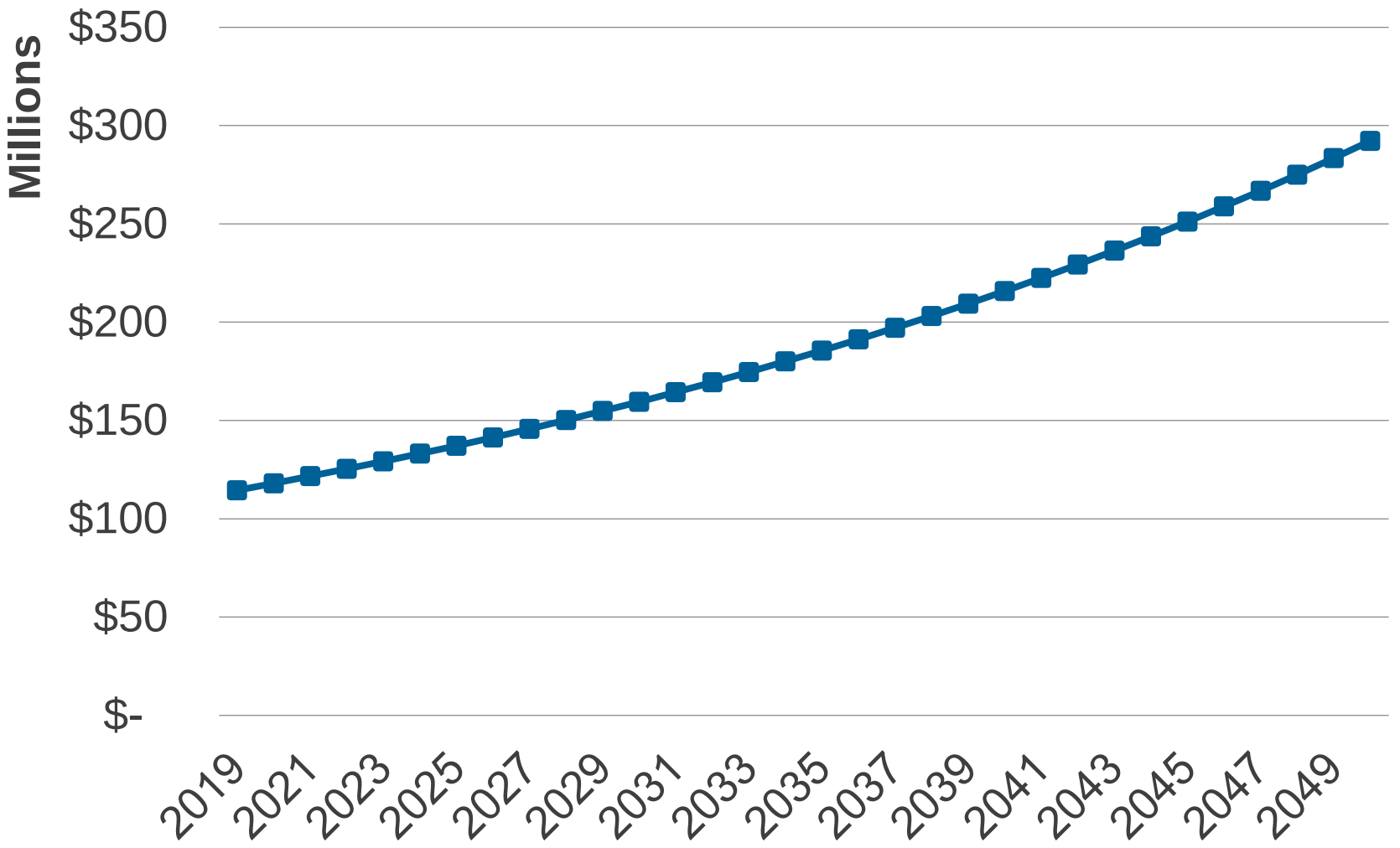
Operations

- Chemicals
- Power
- Personnel

Capital

- New Assets
- Asset Renewal

Operations Expenditures



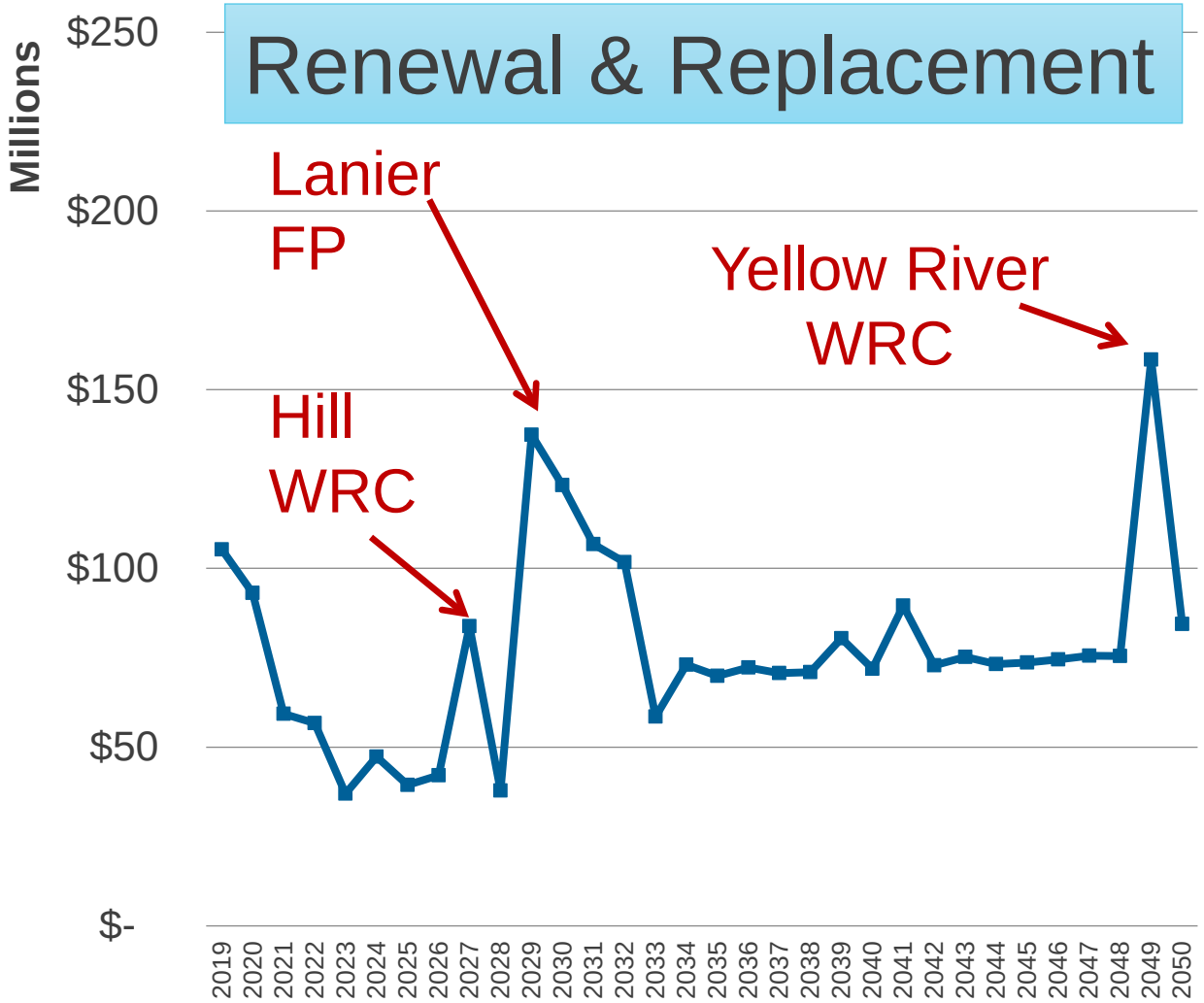
2% Inflation increase annually

1% Expense increase based on account growth

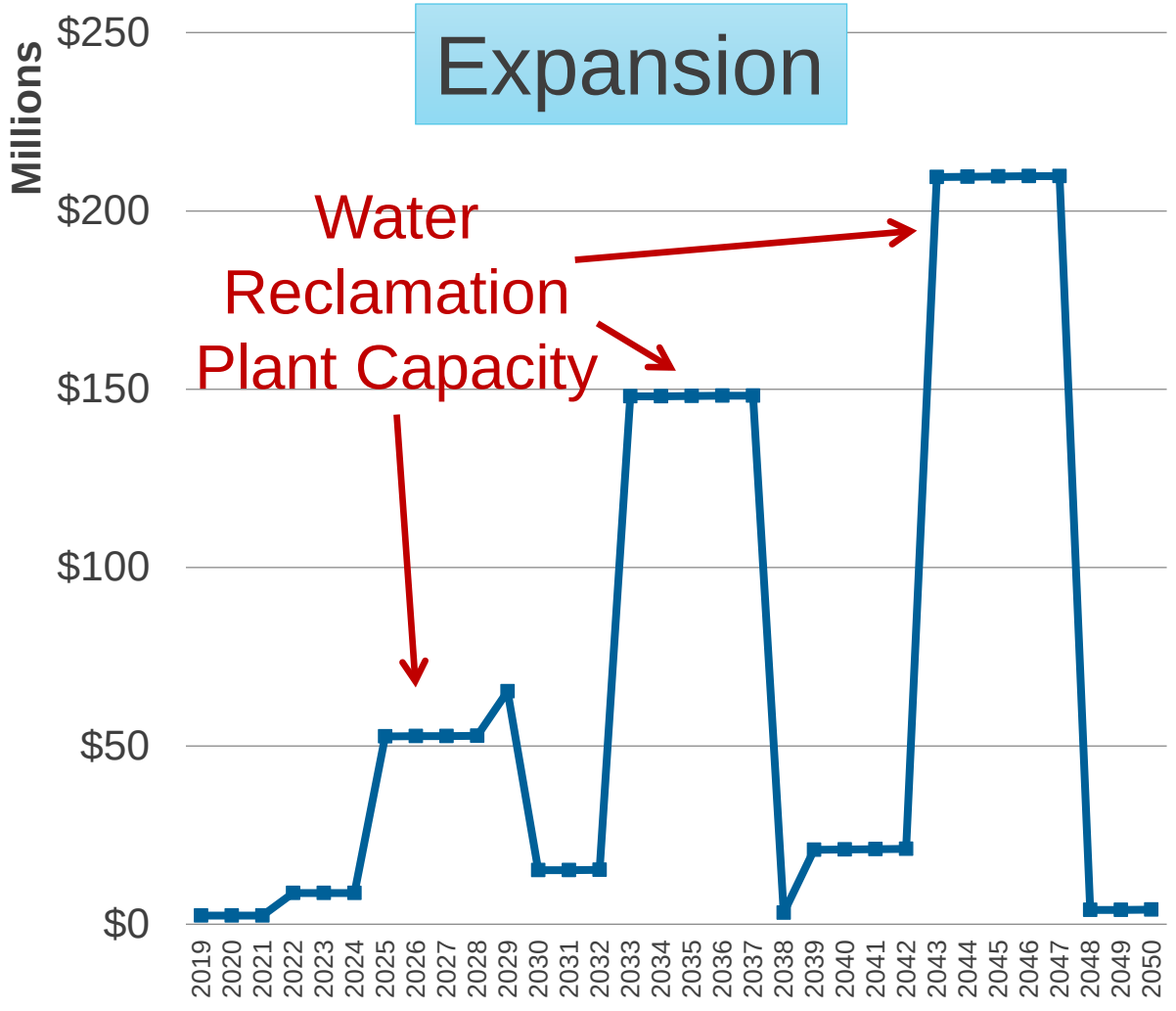
Capital Expenditure
Vertical (Plants and Pump Stations)

Gwinnett Water Resources

Renewal & Replacement



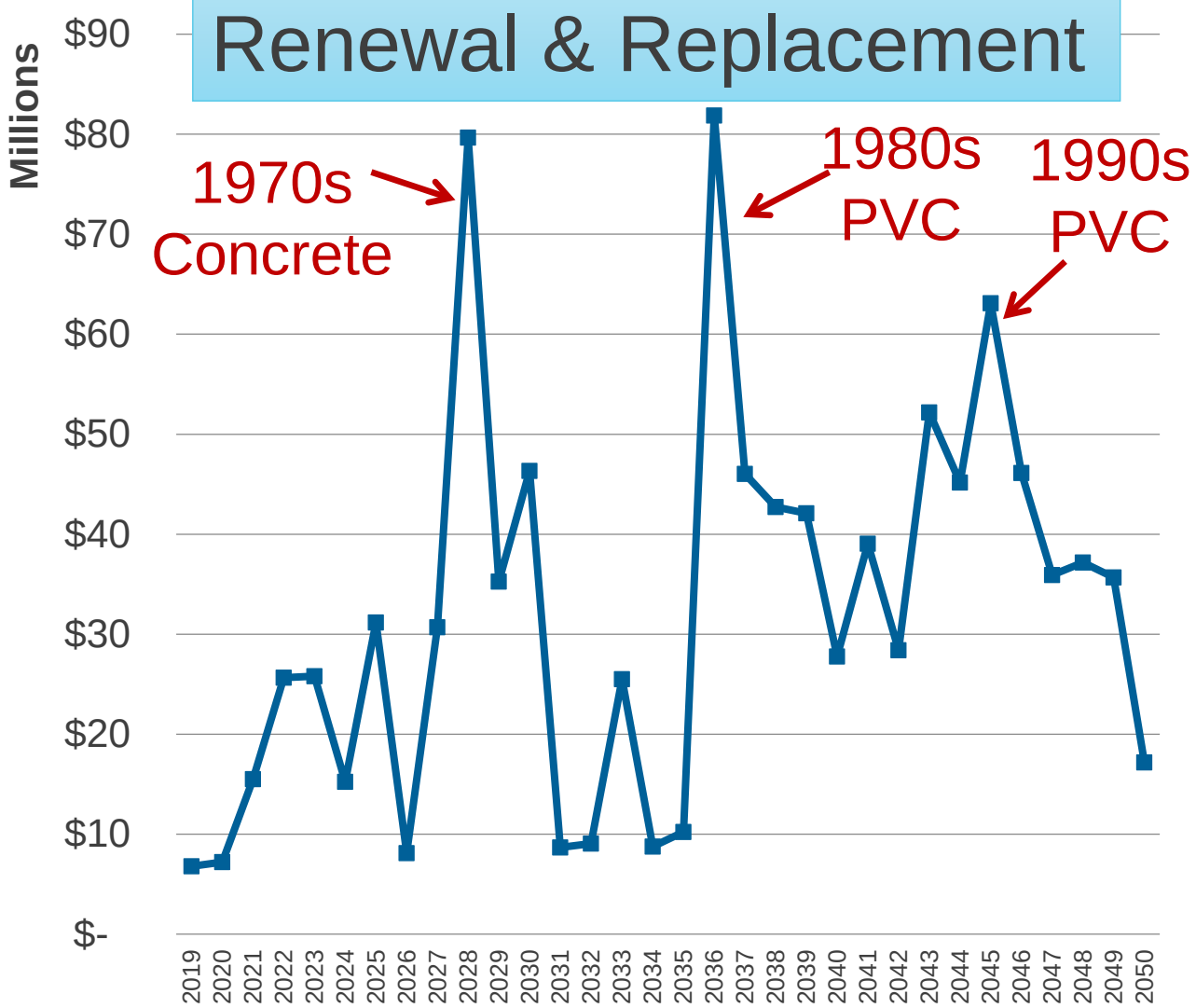
Expansion



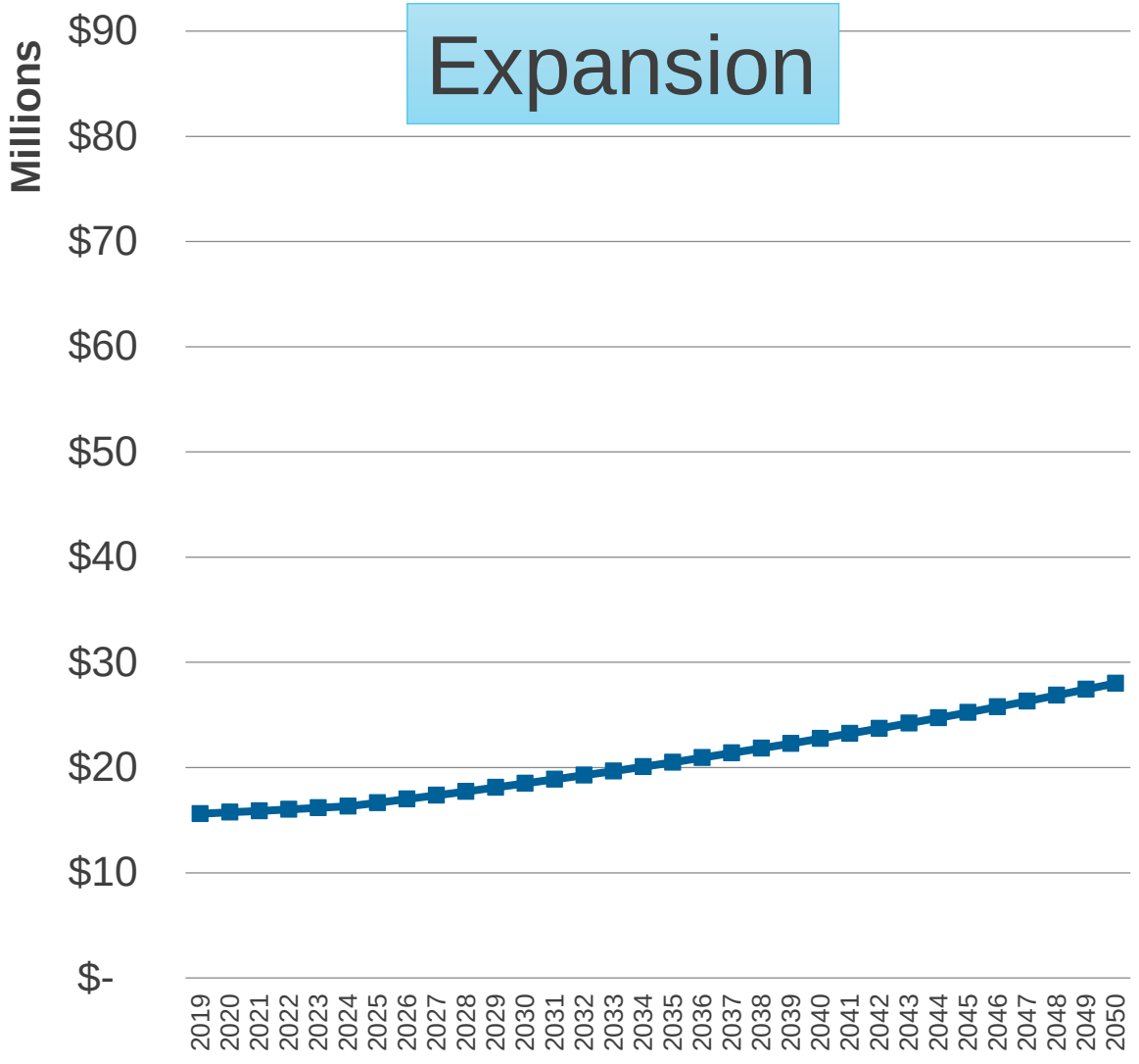
Capital Expenditure Linear Assets (Pipes)

Gwinnett Water Resources

Renewal & Replacement

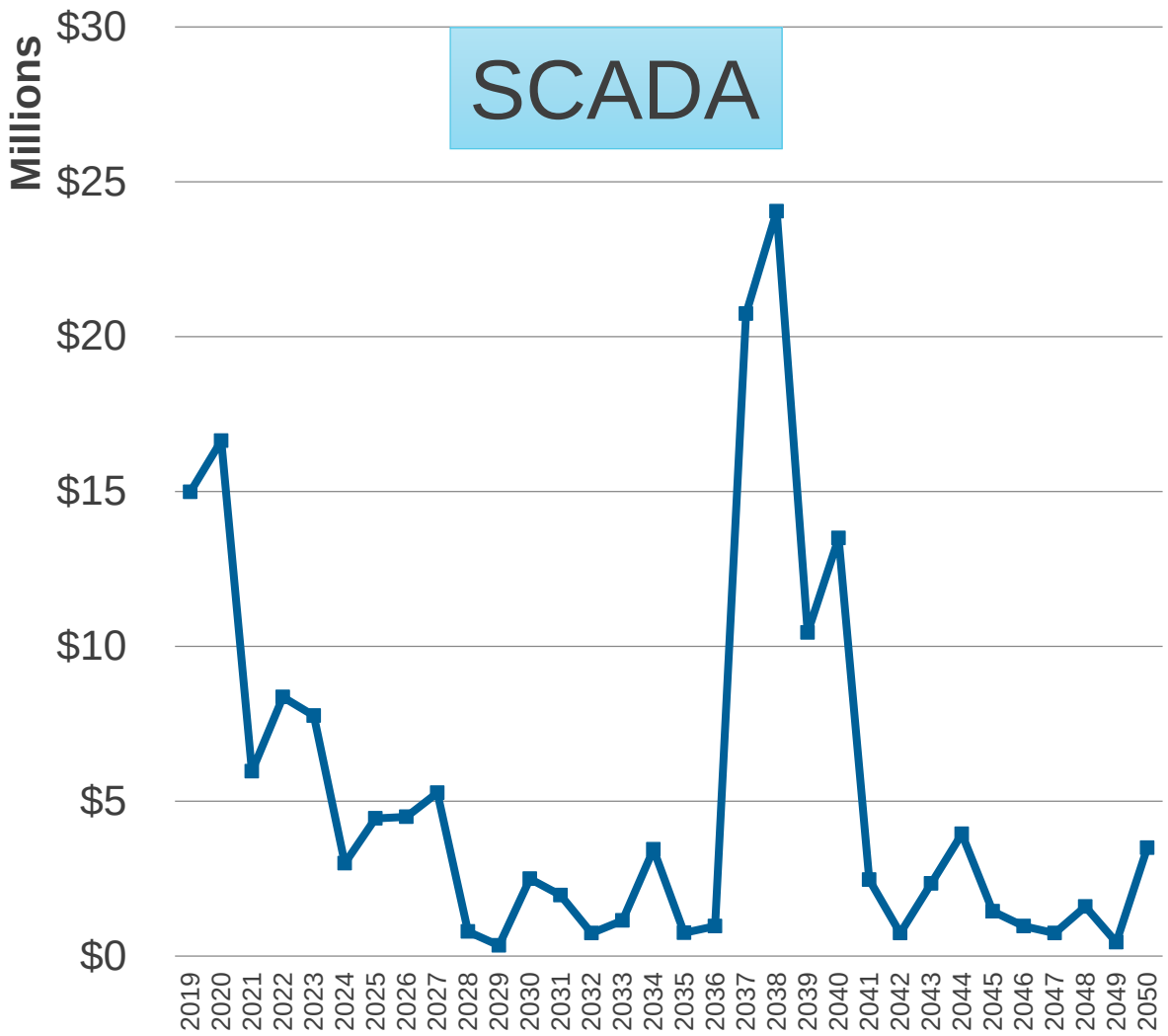


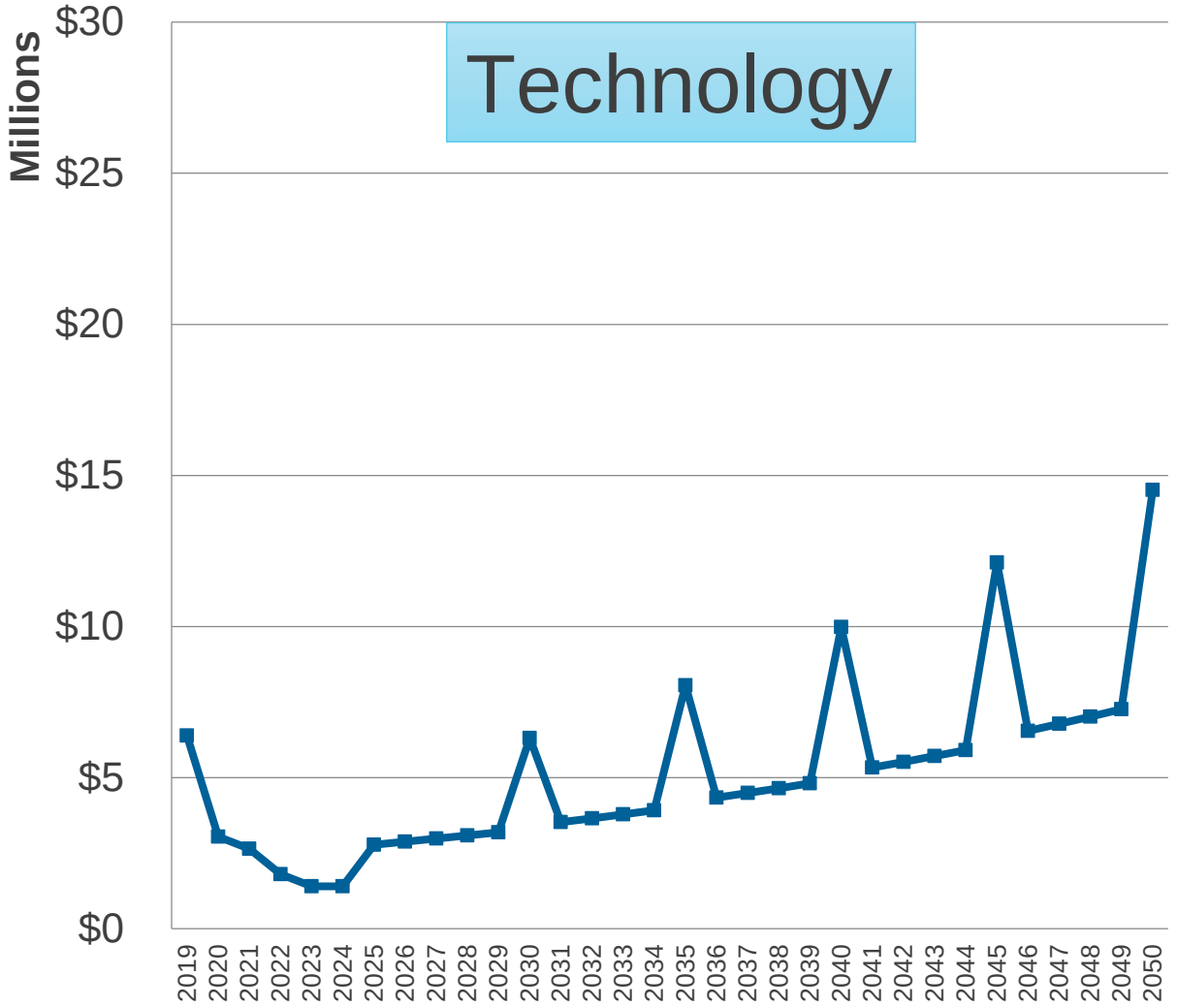
Expansion



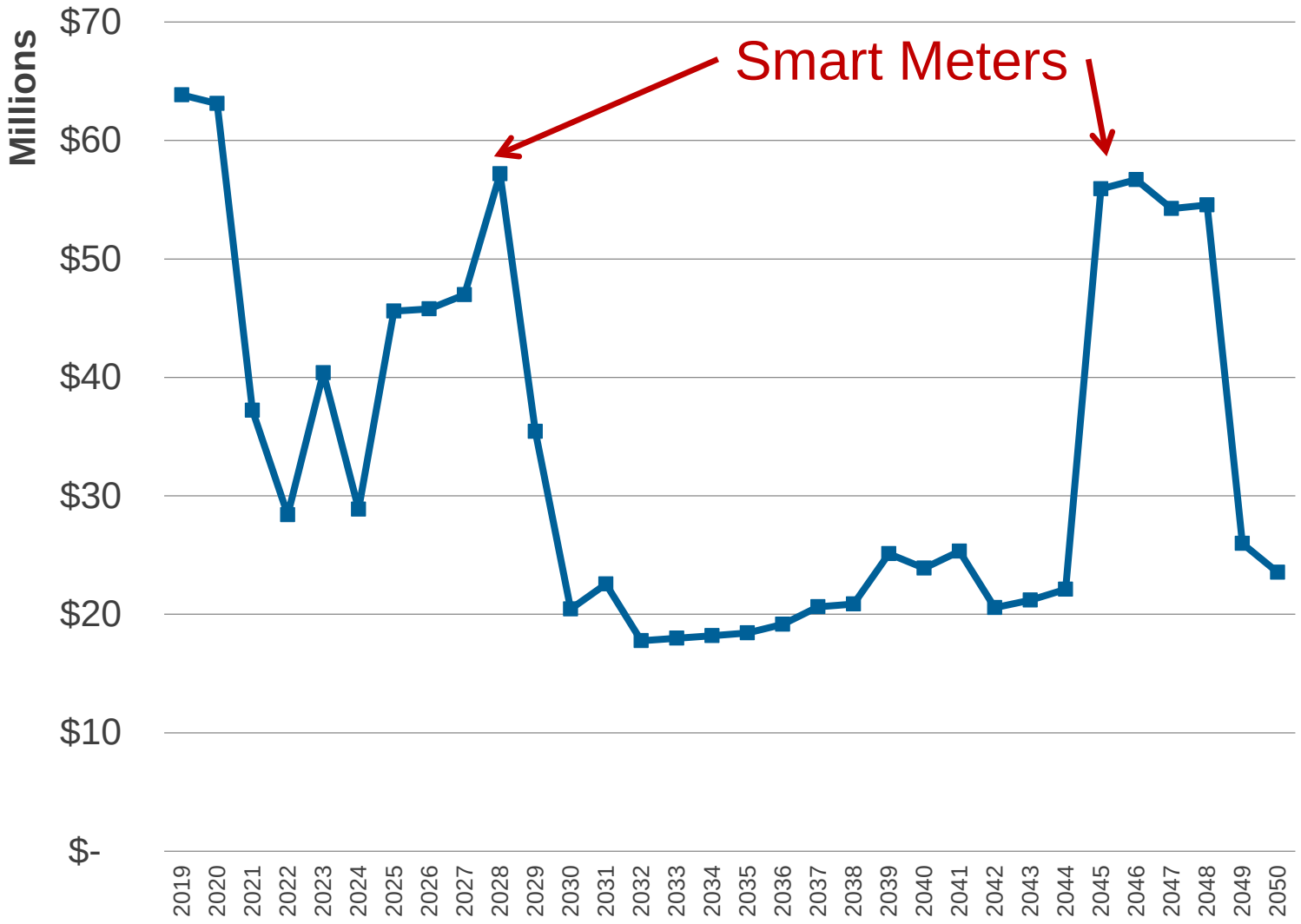
Capital Expenditure
SCADA and Technology

Gwinnett Water Resources





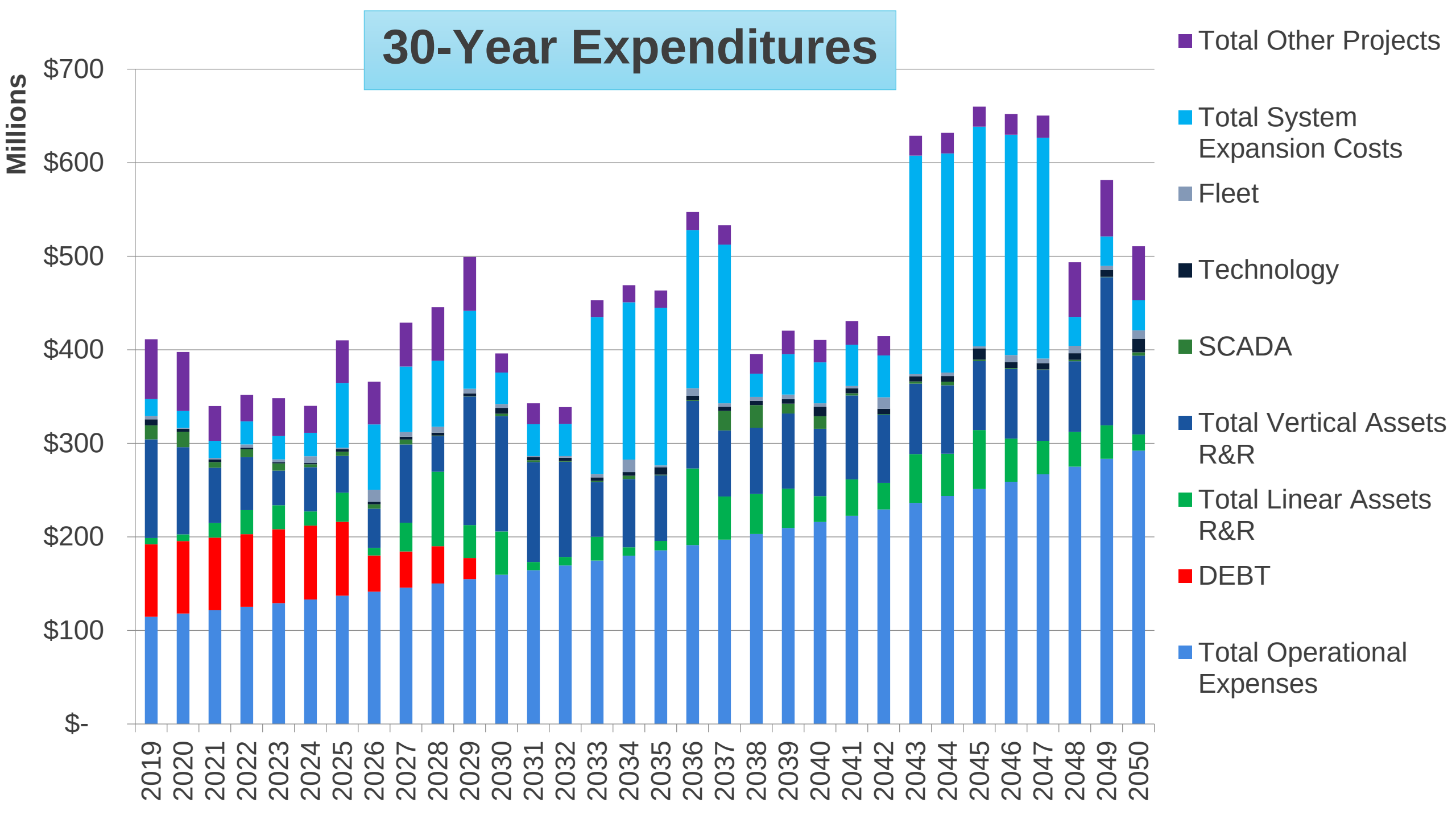
Capital Expenditure Other



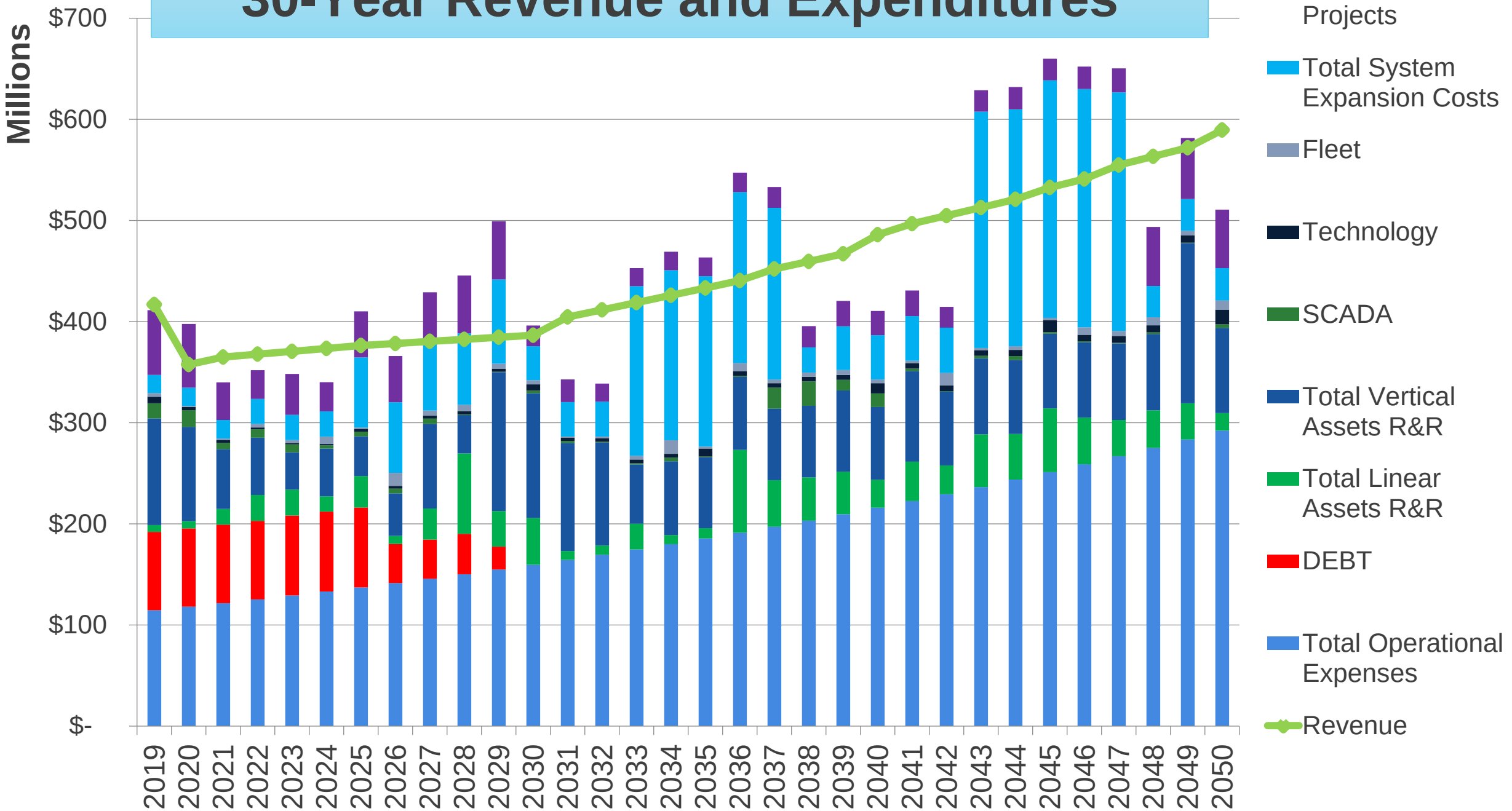
Other Projects Include

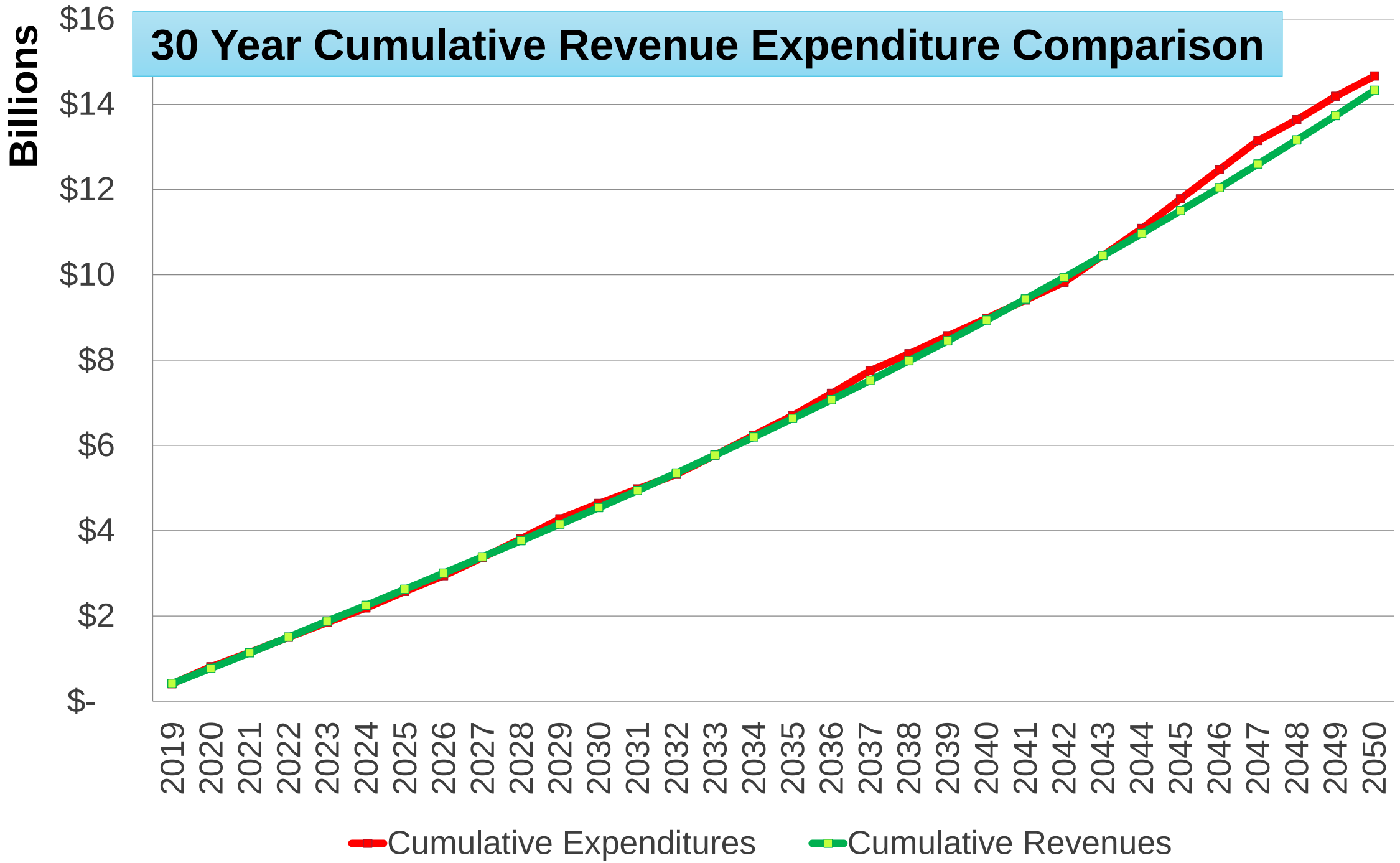
- Special Projects (DWR Campus, WIC)
- Research Projects
- Watershed Improvement
- Pressure Management
- Smart Meters (2025,2047)
- Utility Relocation
- Sewer Assessment
- Master Planning

30-Year Expenditures



30-Year Revenue and Expenditures




30 Year Cumulative Revenue Expenditure Comparison
Billions
$16
$14
$12
$10
$8
$6
$4
$2
$-
2019
2020
2021
2022
2023
2024
2025
2026
2027
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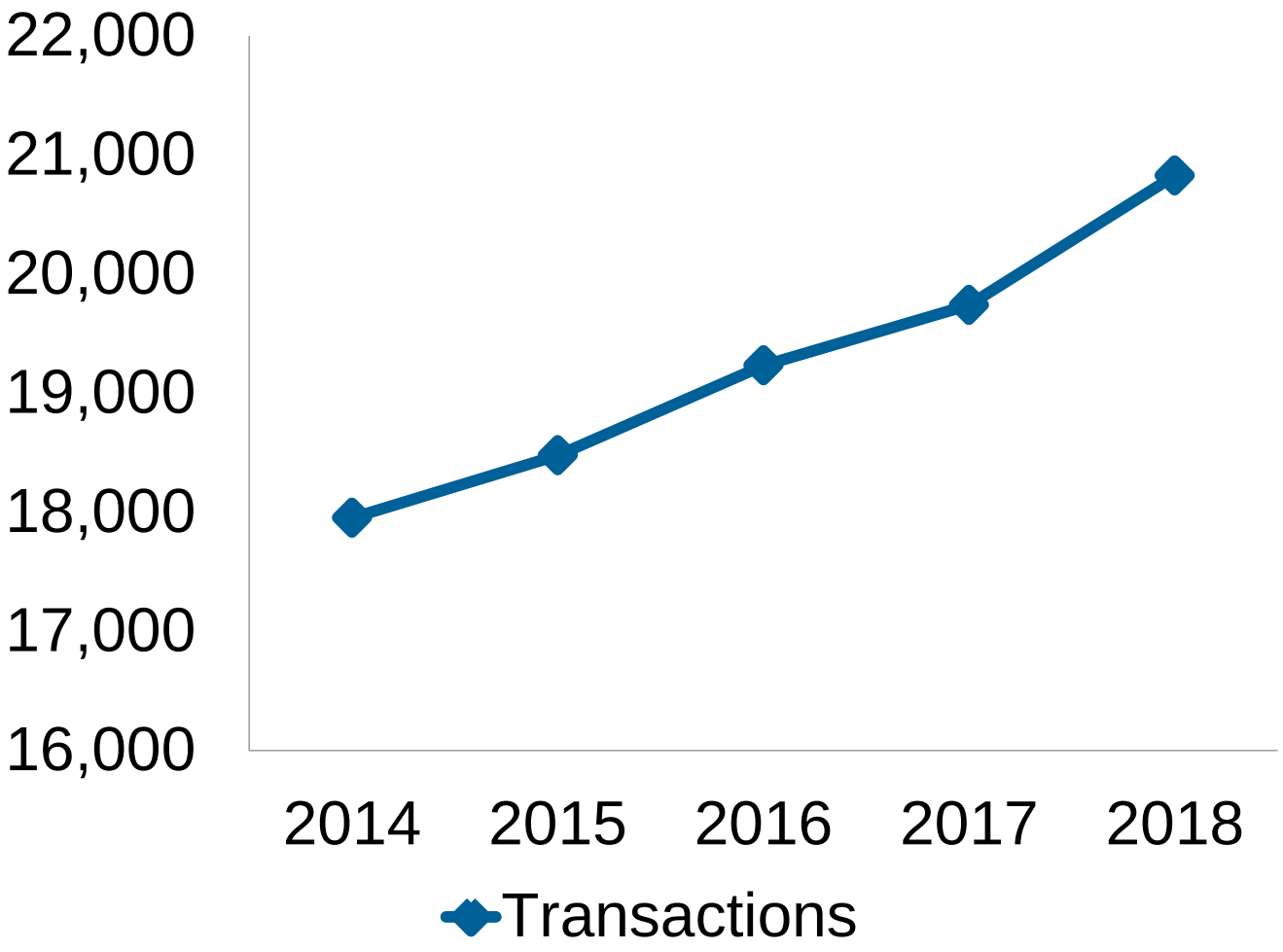
2050
Cumulative Expenditures
Cumulative Revenues

Business Services



Processing over 20,000 transactions per year

- 4 Business Service Associates
- 2 part-time temp staff

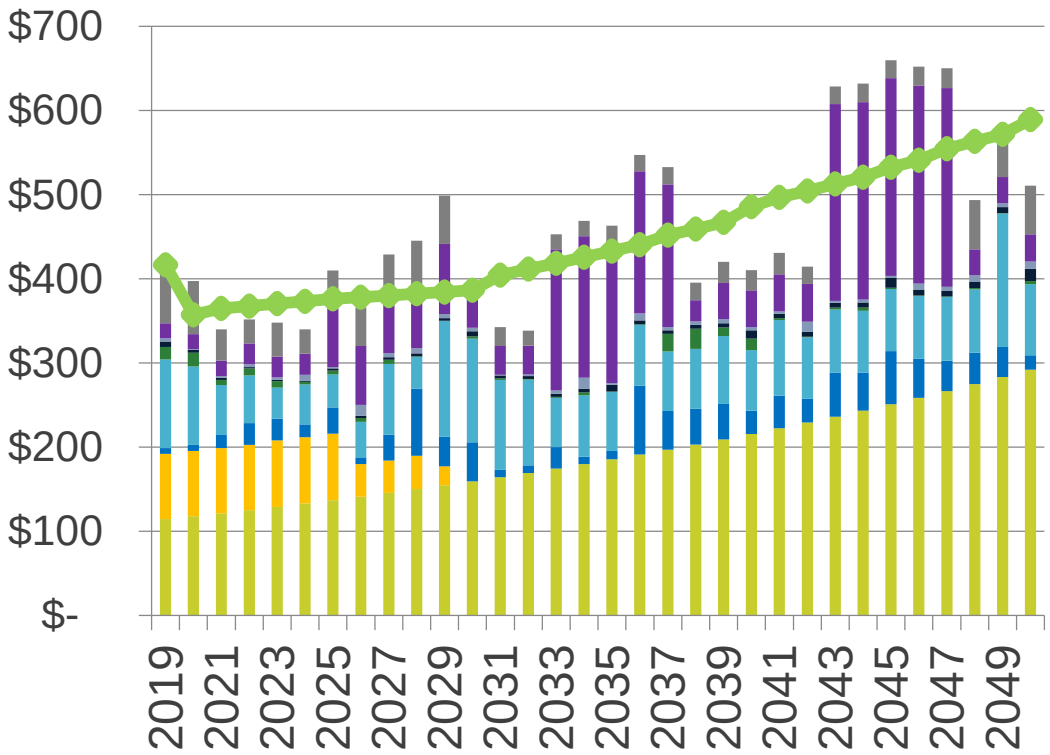
Transactions continuing to increase

Not achieving industry standard of 96%

- 79% processed within 30 days

Position Request

2 Business Service Associate III's



Two full-time staff to replace temp staff

- 22 additional work hours per week

Achieve County financial standards

Cost:	Prof Services:	Net Cost:
$93,168	-$58,531	$34,637

Position Request

2 Business Service Associate III's

Gwinnett Water Resources

P	**Priority**	Smart & Sustainable Government
S	**Strategy**	Establish and maintain the Gwinnett County Standard
T	**Tactic**	Maintain and improve upon financial best practices
P/I	**Project or Initiative**	Improve operations and capital financial support **$34,637**

DWR Recap

Gwinnett Water Resources

Presenting the Numbers

FUND	2018 Adopted	2019 Requested	% Change
Water and Sewer	$372,941,013	$396,790,266	6.4%
Stormwater	$37,096,827	$41,410,675	11.6%
Total Base Requests	**$410,037,840**	**$438,200,941**	**6.5%**
Total Decision Package Requests		**$**	**717,262**
TOTAL 2019 BUDGET REQUEST		**$**	**438,918,203**

Decision Package Summary

Gwinnett Water Resources

13 Requested Positions

Total Decision Package Cost $717,262

Decision Packages 0.18% of budget

2018 Adopted	Changes to Base	Decision Packages	2019 Proposed
$410,037,840	$28,163,101	$717,262	$438,918,203

Questions?

Gwinnett