



20-YEAR COMMUNITY INVESTMENT PLAN

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DECEMBER
2021

FINAL

20-YEAR COMMUNITY INVESTMENT PLAN

B&V PROJECT NO. 401239

PREPARED FOR



Renewable Water Resources

17 DECEMBER 2021



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Executive Summary

Renewable Water Resources (ReWa) provides a wide range of wastewater capabilities to their service area in the Upstate of South Carolina. This 20-Year Community Investment Plan identifies and addresses community needs as they relate to regional wastewater management by developing implementation strategies for the recommendations provided by the Upstate Roundtable (USRT) and presenting planned wastewater infrastructure investments over the next 20-years. The implementation strategies and investments described in this plan will: 1) establish realistic goals and direction for ReWa to implement the USRT recommendations; 2) summarize ReWa's involvement in regional environmental and wastewater initiatives 3) categorize the identified infrastructure investments in each river basin and water resource recovery facility (WRRF); and, 4) provide a financial summary of comprehensive budgetary needs.

A special focus of the USRT was managing growth, predicting growth, and coordinating with planning entities to accommodate anticipated growth. A "Growth Map" was developed based on current growth trends, accessibility, available utility services and other infrastructure, and general geography to provide insight that will allow ReWa to plan proactively. ReWa's implementation plan for the USRT recommendations utilizes various county and regional planning documents to identify near-term needs of the anticipated growth areas.

A number of programs and initiatives have been identified by ReWa in support of, but separate from, the USRT recommendations, to provide the best possible wastewater service for the community. These programs and initiatives include, but are not limited to, the Wet Weather Program, the 5(r) Program, and offering direct collection service to retail customers. An example of these initiatives, the 5(r) Program, focuses on taking a "bottom-up" approach to clean rivers and lakes. In a collaborative effort between the City of Greenville, Greenville County and ReWa, the Reedy River Water Quality Group (RRWQG) monitors water quality, models the river system, and is working toward the reduction of pollutants like phosphorus and nitrogen to protect the Reedy River's water quality. Findings of studies and water quality monitoring performed by the RRWQG will impact effluent water quality requirements for the two WRRFs that discharge to the Reedy River.

Upstate Roundtable Implementation Plan

The Upstate Roundtable developed 24 recommendations to help guide ReWa forward as a steward of the environment and a regional leader. Each recommendation was developed using a consistent approach and outline, which included committee members identifying the intent, recommendation, and partners. In addition, supporting recommendations that include specific activities intended to be a part of ReWa's implementation plan were provided. Implementation plans for each recommendation provide a 10-year timeline of critical implementation steps, as well as associated budgetary costs.

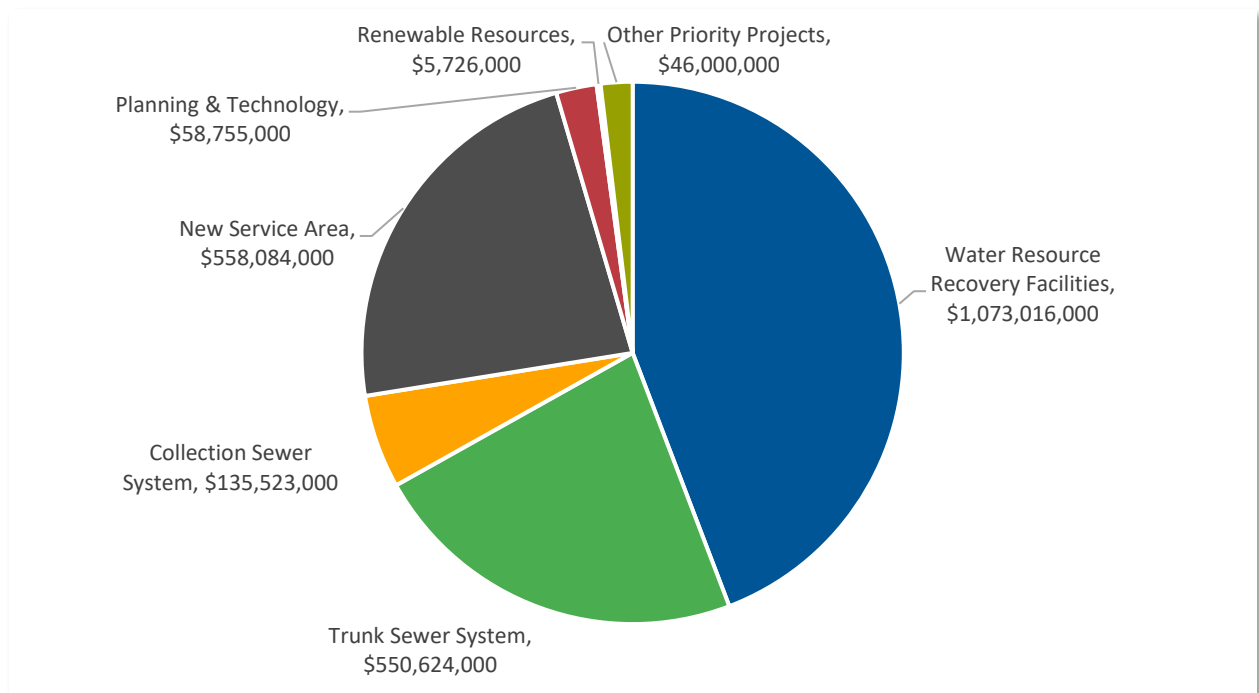
Over the next 10-years ReWa will spend approximately \$16,925,000 in addressing the 24 USRT recommendations discussed in Section 2. They will coordinate with various stakeholders and community

partners, such as local and regional utilities, regulatory agencies, government entities, professional organizations, and other applicable stakeholders, to implement these recommendations.

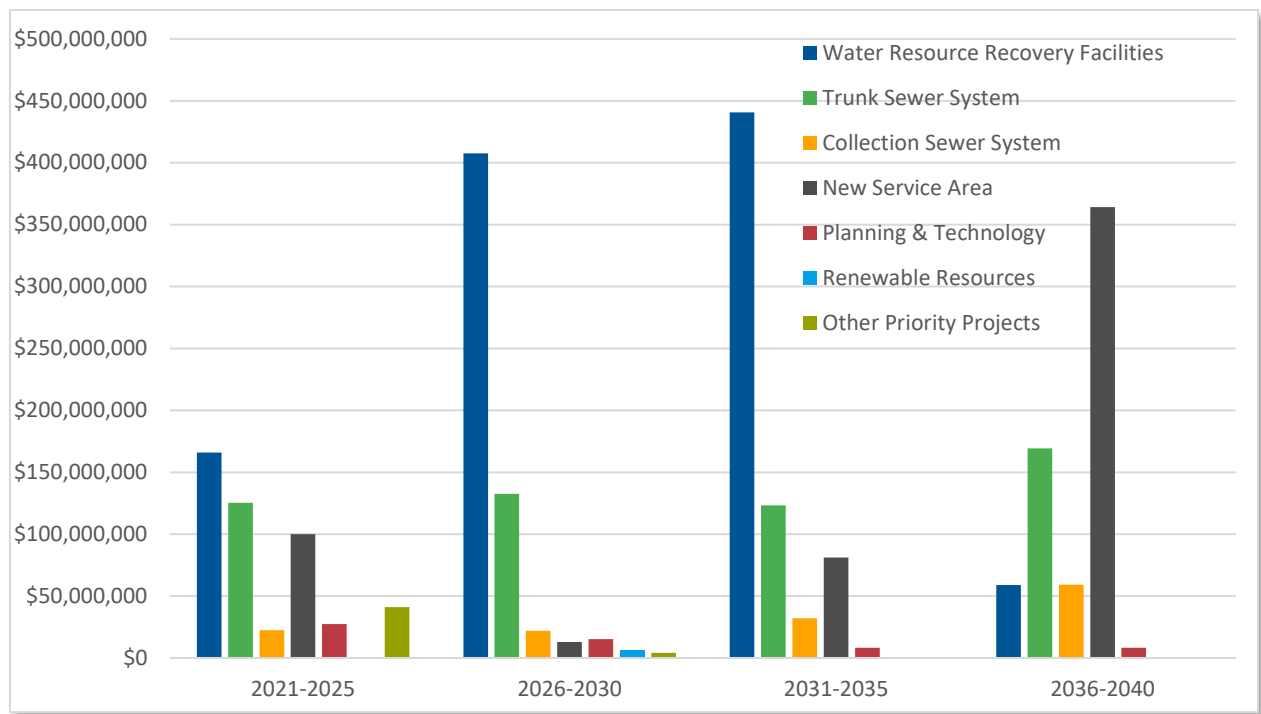
20-Year Infrastructure – Community Investment Plan

ReWa’s service area includes five counties, five river basins, and nine WRRFs. Wastewater infrastructure projects and required financial resources for ReWa’s service area through 2040 have been identified through the use of USRT outcomes and implementation strategies and ReWa’s project planning process. The infrastructure needs are organized by river basin, WRRF basin, and infrastructure category, which includes the WRRFs, trunk sewer system, collection sewer system, new service areas, planning and technology, renewable resources, and other priority projects.

Over the next 20 years ReWa is planning to invest approximately \$2,427,728,000 across all five river basins and nine WRRF basins to address infrastructure needs. A breakdown of the total 20-year investment for each WRRF basin is shown below.



The 20-year investments are broken down into 5-year planning windows beginning in 2021. Five-year system wide planning costs for each infrastructure category are shown in the figure below. In the next five years, ReWa is planning to invest approximately \$482,209,000 to address the wastewater infrastructure needs of the community they serve. In the subsequent 5-year planning windows, ReWa is planning to invest approximately \$600,062,000 from 2026 to 2030, \$685,584,000 from 2031 to 2035, and \$659,873,000 from 2036 to 2040. These infrastructure costs, over 20-years, include approximately \$1,073,016,000 for WRRF improvements, \$550,624,000 for trunk sewer system needs, \$135,523,000 for collection sewer system needs, \$558,083,000 for new service areas, \$58,755,000 for planning and technology, \$5,726,000 for renewable resources, and \$46,000,000 for other priority projects.



1.0 Introduction

1.1 Community Investment Plan Purpose

In 2019, Renewable Water Resources (ReWa) worked with over 100 stakeholders and community leaders to develop a strategic 20-year vision through the Upstate Roundtable (USRT). The outcome resulted in 24 recommendations that will help guide ReWa into the future as a continued steward of the environment and regional leader. ReWa is committed to serving its community by providing the best quality wastewater management service in the region.

To provide this level of service, a proactive approach that identifies goals and community needs accompanied by implementation strategies is essential. The purpose of the Community Investment Plan is to identify and address community needs as they relate to regional wastewater management. Due to the magnitude of typical wastewater infrastructure investments, it is essential that ReWa evaluate 20-year infrastructure needs that will help determine when and where we will need to begin allocating resources.

This plan accomplishes the following:

- Outlines a strategy that establishes realistic goals and direction to implement the Upstate Roundtable recommendations
- Summarizes the identified infrastructure needs of each treatment plant and watershed basin
- Summarizes ReWa's involvement in regional environmental/wastewater initiatives
- Provides a financial analysis that addresses comprehensive budgetary needs.

1.2 Upstate Roundtable Overview & Outcomes

The USRT created a 20-year strategic vision inspired by community leaders and stakeholders to best serve the community and the environment. A paramount goal of the USRT was to account for the experiences and perspectives of regional leaders and stakeholders, as well as those of ReWa staff and consultants. The regional leaders and stakeholders that participated represented various entities ranging from local governments, regulatory agencies, environmental advocacy organizations, various consultants, and other applicable entities. Participants of the USRT can be found listed in the USRT Committee Reports on ReWa's website. For the 2019 USRT effort, more than 100 regional leaders and stakeholders participated, volunteering their time and providing input on topics from improving treatment processes to obtaining financial assistance. USRT members were grouped into six committees that created a total of 24 recommendations that will be used as guidance for ReWa's 20-year vision for the Upstate. Full details of each recommendation can be found in the USRT report.

Each recommendation was developed using a consistent approach and outline. As supplemental guidance for each recommendation, committee members completed a template which included sections on the intent, partners, and supporting recommendations. The "intent" section provides a

broad overview of the vision of the USRT recommendation. The “recommendation” section provides a more specific direction to be undertaken by ReWa. The “partners” section provides a list of coordination partners which includes entities such as utilities, regulatory agencies, government entities, professional organizations, and other applicable stakeholders. The listed partners will have varying degrees of involvement, input, and authority in implementing the recommendation. The “supporting recommendations” section, where appropriate, lists the activities to be performed for a recommendation. These specific activities listed in the supporting recommendations sections are intended to be a part of ReWa’s implementation plan. The implementation plans for each recommendation provide a timeline with steps that outline how each recommendation should be implemented in the proceeding 10 years, as well as associated budgetary costs, if applicable.

1.3 Community Investment Plan Development Overview

Development of the Community Investment Plan consisted of the culmination of several master plans, the USRT Plan, and various financial analyses. The Community Investment Plan (CIP) evaluates the investment needs of each Water Resource Recovery Facility (WRRF) basin, as well as each river basin. The plan breaks up this evaluation by treatment plant needs and collection system needs. With help from various consultants, ReWa compiled and evaluated the products from these plans and analyses to create one, concise plan that will help guide ReWa in identifying capital investment needs and prioritizing community investments.

ReWa performed master planning studies for all nine of their WRRFs in 2019. Master plans included a 20-year look-ahead that identified system replacements, maintenance needs, and future facility upgrades. The master plans classified capital improvement needs for every five-year time period until 2040. The subsequent data from these master plans were then compiled and summarized into the Community Investment Plan, to assist in identifying all the infrastructure needs of each treatment basin.

In addition to ReWa’s WRRFs, the collection systems for each watershed were evaluated to determine priority investments for each. Collection systems include sanitary trunk sewers, pump stations, force mains, and subdistrict collection sewers that feed into ReWa’s trunk sewers. Existing sanitary sewer trunk lines were evaluated for adequate capacity as well as identifying new collection system infrastructure within watersheds within ReWa’s service area that are currently unserved. As the growth occurs within ReWa’s service area, it is vital that investment needs are identified so that adequate wastewater management is in place to help bolster the protection of local waterways.

Development of the Community Investment Plan consisted of identifying an approach for implementing these recommendations over the subsequent 10 years and the estimated costs associated with each. The implementation plan, and associated costs, for each recommendation was developed by multiple ReWa staff.

1.4 Growth Planning & County Comprehensive Plan Overview

Additional wastewater flow is generated with growth. Therefore, it is vital for ReWa to stay proactive and plan accordingly for any growth, and potential growth, within our service area. Although communities can grow without such, the lack of proper wastewater management can result in harmful environmental impacts and unnecessary expenditures. There are some areas within ReWa's service area that are rapidly growing, and this growth is anticipated to continue over the next 20 years.

The USRT placed special focus on managing growth, predicting growth, and coordinating with planning entities, such as Greenville County. Greenville County, as required by state statute, updated their comprehensive plan in 2019. During this process they determined that the population in Greenville County is anticipated to increase by approximately 222,000 residents by 2040, bringing the county's projected population to nearly 750,000 residents. To manage the anticipated influx of residents, Greenville County developed a future land-use map that designates areas with certain types of growth and population densities. These areas were defined as "character areas" and they each establish a distinguishing characteristic for different areas of the county. Examples of these character areas in the county's land-use map include rural, suburban mixed use, and urban core. [Figure 1](#) contains the full land-use map with all the character areas outlined.

Plan Greenville County Future Land Use Map

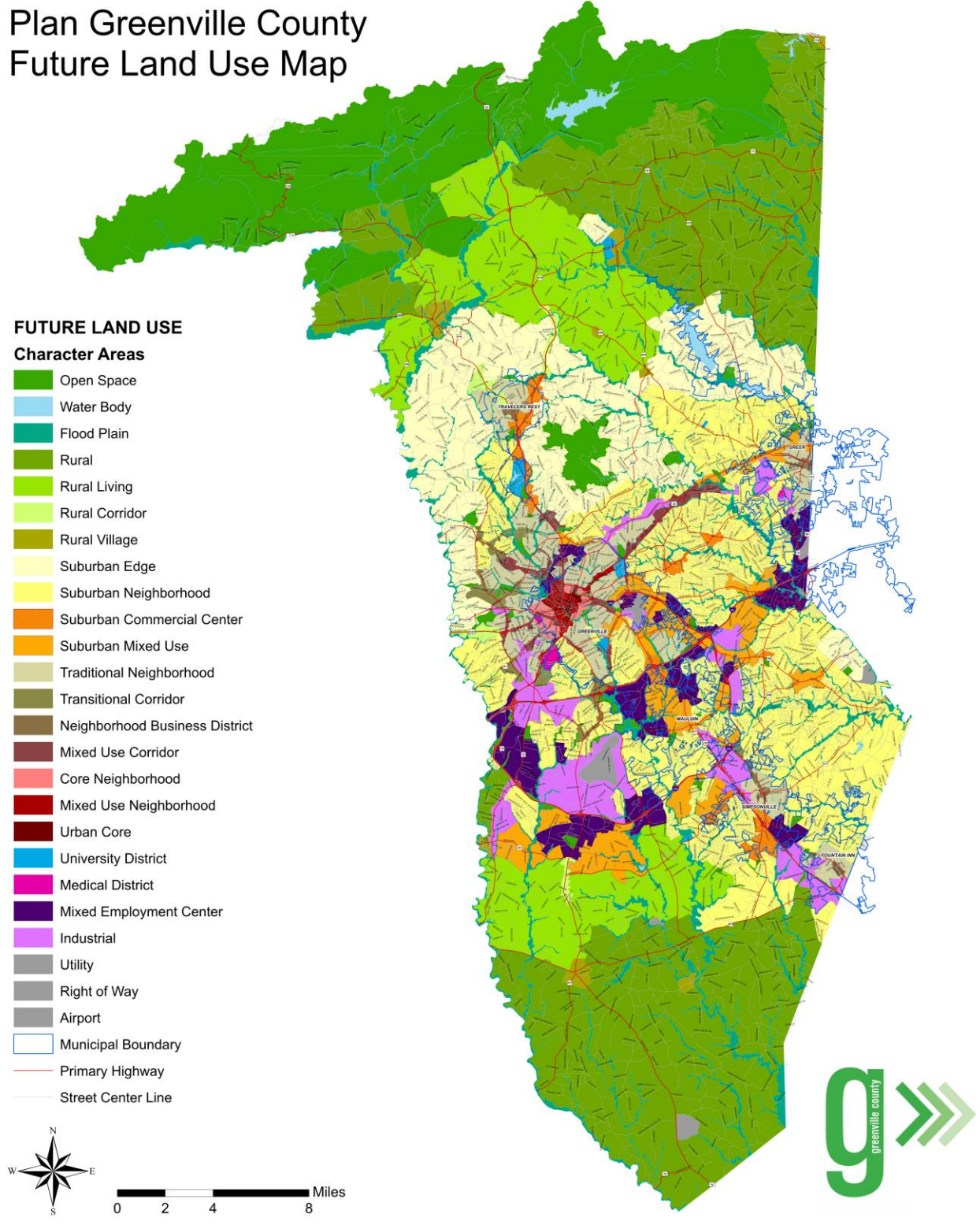


Figure 1. Greenville County Future Land Use Map

In the USRT, the Growth Committee developed a “Growth Map” where committee members provided input on where they saw growth occurring within ReWa’s service area. Committee members consisted of representatives from homebuilder associations, government leaders, regional planners, environmental advocacy groups, utilities, and other stakeholders that are involved with planning growth. Greenville County was one of the entities that provided significant input, but since ReWa’s service area extends beyond Greenville County into four other counties, input from these other communities was also essential. The input provided was based upon current growth trends, accessibility, available utility services and other infrastructure, and general geography. The Growth Committee identified these growth areas on a map and made necessary adjustments to it during several committee meetings. This growth map can be seen in [Figure 2](#).

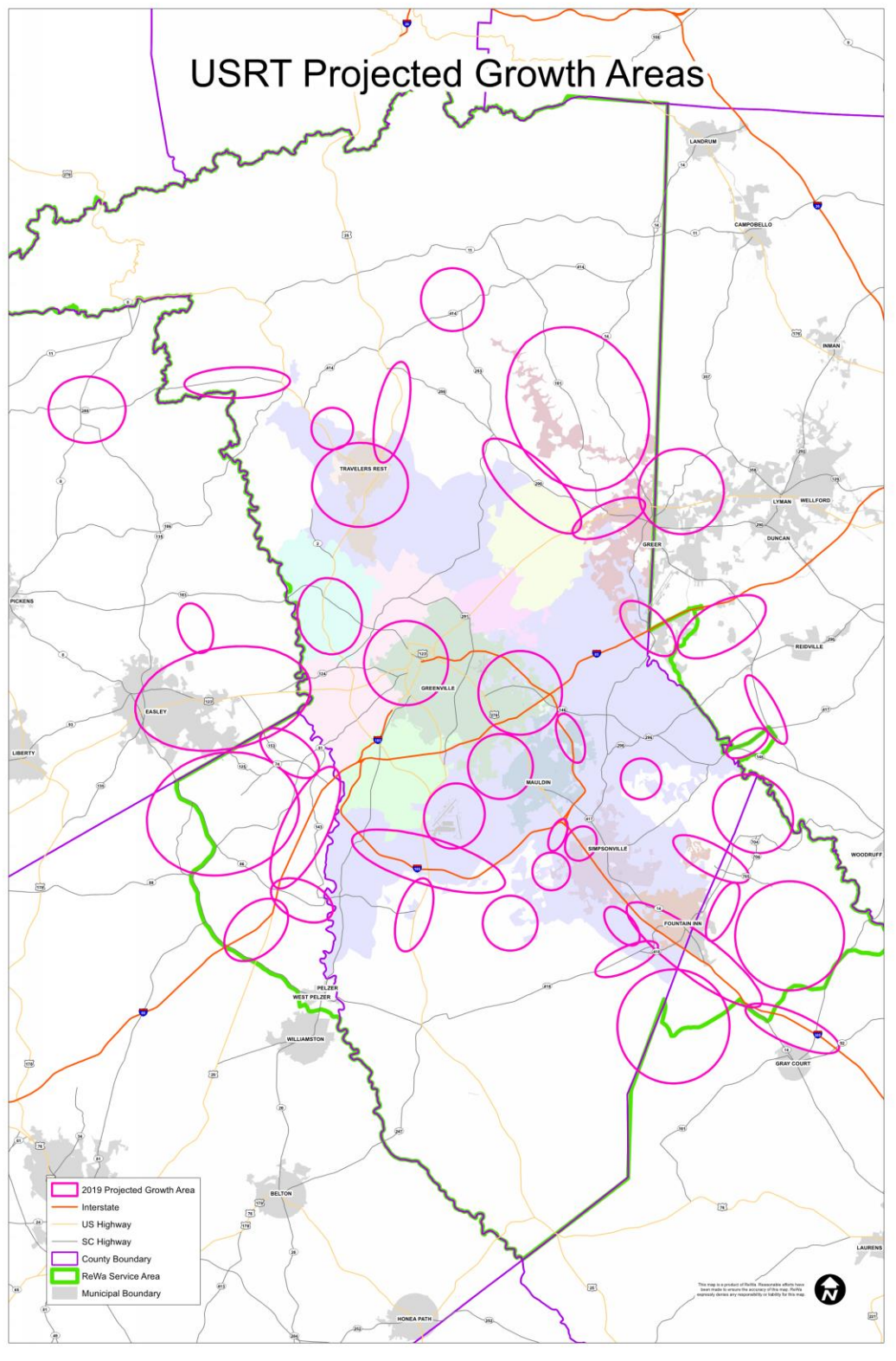


Figure 2. 2019 Upstate Roundtable Growth Map

It is important to note that for this USRT planning effort, ReWa's implementation plan utilized the framework of the various county planning documents to meet the near-term needs of the communities we serve. However, the implementation plan must also keep an eye on the long-term possibilities of the watershed's topography and service availability, as community needs and political desires can change over time. Balancing these two efforts is the challenge of proper wastewater management, which will result in protecting the environment while fiscally managing the timing of needed capital expenditures.

1.5 Implementation & Involvement in Future Programs & Initiatives

ReWa has already started the implementation of several programs and initiatives that will change certain aspects of how ReWa services the community. Some of these programs and initiatives include the Wet Weather Program, the 5(r) Program, and the offering of direct collection service to retail customers. These initiatives each address various challenges and opportunities facing ReWa and have been deemed necessary, as ReWa continues to provide the best possible wastewater service for the community. These programs and initiatives have been identified by ReWa in support of, but separate from, the USRT recommendations. The following is a brief description of the future programs and initiatives and how ReWa intends to be involved in each.

1.5.1 Wet Weather Program

Inflow and Infiltration (I&I) is a challenge faced by many wastewater utilities around the country. For the last 15 years ReWa has been working side by side with the sewer subdistricts to address I&I impacts, but the results have been mixed. Many of the Inflow sources have been addressed over this time period, as this work effort is generally easier to identify and rehabilitate, but significant problems still exist with infiltration sources, especially when groundwater conditions elevate and remain elevated for extended periods of time.

ReWa has diligently serviced and maintained their trunk lines over the last 15 years to protect against I&I by investing over \$100M in pipeline rehabilitation and replacement, as well as capacity upgrades. However, many sources of I&I remain within the sewer system. Since about 85% of the sewer lines and over 98% of the customers are located within the sewer subdistricts in the service area, many of the collection lines that feed into ReWa's trunk still experience significant I&I flows.

A new Wet Weather Program is currently being developed by ReWa and is intended to help manage the I&I in a "least combined cost to the customer" approach. This program is looking at the combination of targeted public sector I&I removal areas of the "leakiest" collection system sewersheds, combined with transport and treatment capacity upgrades, to result in the lowest combined cost for the customer. The Wet Weather Program will offer a solution that is prioritized and efficient to all parties, as well as environmentally beneficial to our waterways, by outlining a plan for all sewer agencies whose collection lines feed into ReWa's system. The plan will offer an economic solution that considers all implications for rate payers to aid in keeping rates as low as possible.

The current 15-year I&I intergovernmental agreements between ReWa and individual subdistricts are approaching the end of their contract life. The Wet Weather Program implementation is currently underway and should be completed within a year. A key component of the Program for all parties will include a sustainable Capacity Management, Operation and Maintenance (CMOM) program. This CMOM program will both recover past insufficient upkeep and maintenance by the local sewer providers, as well as an investment/management strategy to maintain the integrity of the entire sewer system moving forward.

1.5.2 5(r) Process

The Environmental Protection Agency (EPA) and the South Carolina Department of Health and Environmental Control (DHEC) have established a new process referred to as “5(r)” that takes a “bottom-up” approach to clean rivers and lakes. The term “5(r)” refers to a section of the Clean Water Act that encourages local involvement and citizen action to reduce pollutants in waterways. In Greenville, the Reedy River Water Quality Group (RRWQG) has been established as part of the 5(r) process and is focusing its efforts upon improving the Reedy River water quality impacts from phosphorus and nitrogen sources which will impact ReWa’s nutrient loadings at their WRRFs that discharge in the Reedy River.

The RRWQG is primarily a collaborative effort of the City of Greenville, Greenville County, and ReWa to monitoring water quality, model the river system for a wide variety of growth and flow conditions, and work towards the reduction of these identified pollutants to protect the river’s water quality. The approach has increased public awareness of river water quality and is proving to be both beneficial and supported by the community stakeholders.

The study, performed collaboratively by the RRWQG, is providing data that will influence water quality regulations and nutrient limits. These requirements will need to be met by ReWa’s two WRRFs that discharge into the Reedy River. This information is anticipated to be finalized in 2022.

Although the 5(r) process is currently being conducted for the Reedy River, it is anticipated that this will also be a focus for the Saluda River in the future. ReWa currently operates three WRRFs on the Saluda River. Two of these facilities are partnered in a “bubble permit” for phosphorus loadings with other area treatment providers. ReWa would anticipate using the same approach to partner with Saluda River stakeholders, DHEC, and EPA to implement a 5(r) approach on the Saluda River should future nutrient analysis become warranted.

1.5.3 Collection Sewer Services

ReWa currently provides wastewater treatment and conveyance services to its service area. Wastewater collection service for residential and retail customers is primarily under the jurisdiction of the subdistricts whose sewer lines convey wastewater to ReWa’s trunk sewers. However, within the last 2 years ReWa has added collection sewer services within portions of our service area. ReWa is working

directly with developers and potential customers in these areas to increase the size of the collection system as needed to support growth.

Working with existing sewer utilities in our service area, ReWa has recently taken ownership and operation of two existing collection systems. In addition, ReWa is studying three current sewer subdistrict systems who are interested in evaluating such a transition. ReWa is also directly providing collection system services within ReWa's recently designated Spartanburg County sewer service area south of Highway 417.

ReWa is developing financial and technical evaluation templates through an ongoing feasibility study that will outline a process by which ReWa could offer collection services to sewer subdistricts directly. The templates will deliver a financial plan that provides a framework for how ReWa could potentially absorb the sewer infrastructure and customer bases of the existing sewer subdistricts in the most economical and sustainable way. In doing this, ReWa will be able to assist the communities served with an option to ensure that the pressures of maintaining a sewer system while meeting growth needs are being done efficiently, cost effectively, and are environmentally sound.

2.0 Upstate Roundtable Implementation Plan

The 24 recommendations developed by the USRT are detailed in this section.

2.1 Alternative Collection & Treatment

INTENT	RECOMMENDATION	PARTNERS
To support development and protect the environment through sustainable wastewater alternative systems.	ReWa should evaluate and develop optimum alternative sewer collection and treatment systems for unsewered areas.	<ul style="list-style-type: none"> • SCDHEC • Counties • Cities • Subdistricts • Developers

Supporting Recommendations

- ReWa should consider developing standards for planning, design, and operation of optimum alternative collection and treatment technologies.
- ReWa should consider piloting alternative collection and treatment technologies.

Implementation Plan

10-YEAR TIMELINE		
1-3 YEARS	4-6 YEARS	6-10 YEARS
<ul style="list-style-type: none"> • Research alternative collection and treatment opportunities and perform a feasibility and alternatives analysis study for each. • Investigate similar cities, counties, and utilities that have successfully implemented alternative collection and treatment initiatives for unsewered areas. • Identify ways in which ReWa could implement these within its service area. 	<ul style="list-style-type: none"> • Consider piloting an alternative collection and treatment system in a currently unsewered area. • Identify a proposed development where a pilot program could be feasible and coordinate with the developer to implement. 	<ul style="list-style-type: none"> • Evaluate the effectiveness of the piloting program and investigate any opportunities for improvement. • Develop a standard for planning, design, and operation of optimum alternative collection treatment technologies for developer and planner usage. • Work with city, county, and planning officials to implement these standards into future land-use planning.
<i>Estimated Cost: \$200,000</i>	<i>Estimated Cost: Max. \$3,000,000</i>	<i>Estimated Cost: \$100,000</i>

2.2 Alternative Funding

INTENT	RECOMMENDATION	PARTNERS
To seek alternative funding sources for future wastewater capital improvement projects.	ReWa should continue to seek the lowest capital funding sources, including SRF funding and government grants that are offered to water/wastewater projects, when feasible.	<ul style="list-style-type: none"> State Agencies Counties SCDHEC

Supporting Recommendation

- County officials should work with State and Federal Agencies to provide financially viable utilities access to grant opportunities and financial incentives for wastewater infrastructure projects.

Implementation Plan

10-YEAR TIMELINE	
ANNUALLY	1-10 YEARS
<ul style="list-style-type: none"> Investigate and consider alternative funding opportunities through government grants and other federal/state funding sources as well as private capital contributions. Scope out any potential funding sources on ria.sc.gov that could apply to ReWa. Support county officials in working with state and federal agencies to offer funding to wastewater infrastructure projects to financially viable utilities. 	<ul style="list-style-type: none"> Evaluate the incorporation, usage, and effectiveness of alternative funding sources to determine if any adjustments should be made, such as allocating resources to specific funding opportunities over others.
<i>Estimated Cost: Internal Resources</i>	<i>Estimated Cost: Internal Resources</i>

2.3 Biosolids Solutions: Landfill Operations

INTENT	RECOMMENDATION	PARTNERS
To ensure that landfills remain a long-term, viable alternative for solids disposal.	ReWa should become an active participant in the ongoing development of new landfill operating policies and procedures in support of alternatives for solids and leachate disposal.	<ul style="list-style-type: none"> Local Landfills Counties SCDHEC Solid Waste Association of North America (SWANA)

Implementation Plan

10-YEAR TIMELINE	
ANNUALLY	1-4 YEARS
<ul style="list-style-type: none"> Work with SCDHEC, counties, and local landfills to assist in the development of new landfill operating policies and procedures. Work with responsible entities to promote and develop a coordinated solution where landfills are still a viable alternative for ReWa and other regional wastewater utilities to dispose of solids. 	<ul style="list-style-type: none"> Attend SWANA meetings and conferences to gain knowledge about the challenges and industry trends of the solid waste management industry. Work with local SWANA members to identify ways to be involved with SWANA.
<i>Estimated Cost: Internal Resources</i>	<i>Estimated Cost: Internal Resources</i>

2.4 Biosolids Solutions: Regionalization

INTENT	RECOMMENDATION	PARTNERS
To evaluate and coordinate the regionalization of biosolids management for enhanced nutrient management and resource recovery.	ReWa should explore regional solutions for biosolids management within Greenville, Anderson, Laurens, and Spartanburg Counties that are focused on nutrient management, resource recovery, and energy optimization.	<ul style="list-style-type: none"> Regional Wastewater Utilities SCDHEC North Carolina Department of Environmental Quality (NCDEQ)

Implementation Plan

10-YEAR TIMELINE	
1-5 YEARS	6-10 YEARS
<ul style="list-style-type: none"> Conduct a biosolids regionalization feasibility study that identifies alternative solutions for nutrient management and resource recovery. Partner with other regional wastewater utilities in the development of the feasibility study to determine any opportunities of coordination and biosolids management consolidation. Perform an alternatives analysis and work with SCDHEC and other regional wastewater utilities to identify a preferred solution. 	<ul style="list-style-type: none"> Partner with regional wastewater utilities to develop an implementation plan for the selected solution. Partner with SCDHEC, NCDEQ, and other regional wastewater utilities to seek funding opportunities for the selected solution, if funding is required. Develop timelines and costs for agreements and land acquisitions for potential partnerships.
<i>Estimated Cost: \$300,000</i>	<i>Estimated Cost: \$2,000,000</i>

2.5 Community Onsite Wastewater Systems

INTENT	RECOMMENDATION	PARTNERS
To support development and protect the environment through sustainable management of community onsite wastewater systems.	ReWa should evaluate becoming the owner and operator of community onsite wastewater systems.	<ul style="list-style-type: none"> Counties Cities SCDHEC Appalachian Council of Governments (ACOG)

Supporting Recommendations

- ReWa should perform a feasibility study for owning and operating community onsite wastewater systems.
- ReWa should consider developing standards for the planning and operation of community onsite wastewater systems.
- ReWa should consider piloting the design and operation of community onsite wastewater systems.

Implementation Plan

10-YEAR TIMELINE		
1-2 YEARS	3-5 YEARS	6-10 YEARS
<ul style="list-style-type: none"> Perform a feasibility study for owning and operating community onsite wastewater systems. If applicable, outline an implementation plan for community onsite wastewater system usage. Seek opportunities and willing developers to pilot the design and operation of a community onsite wastewater system. 	<ul style="list-style-type: none"> Pilot the design and operation of a community onsite wastewater system. Evaluate the pilot program and seek opportunities for improvement and implementation within ReWa's service area. Work with counties, cities, SCDHEC, and ACOG to develop standards for the planning and operation of community onsite wastewater systems. 	<ul style="list-style-type: none"> Identify any potential future opportunities for expanded use of community onsite wastewater systems and modify standards for planning and operation based on pilot results.
<i>Estimated Cost: \$75,000</i>	<i>Estimated Cost: \$500,000</i>	<i>Estimated Cost (planning/standards): \$50,000</i> <i>Estimated Cost (construction): TBD</i>

2.6 Conestee Dam

INTENT	RECOMMENDATION	PARTNERS
To help support entities in the Conestee Dam cleanup and repair efforts so as to minimize environmental risks from a potential dam failure.	ReWa should be an active stakeholder in efforts regarding a sustainable solution for stabilization of the Conestee Dam.	<ul style="list-style-type: none"> Stakeholders

Supporting Recommendation

- ReWa should advocate and consider providing assistance to involved entities in a plan for the protection of downstream watersheds from adverse impacts to the environment, future economic development, and increased regulation resulting from contaminants released from an upstream dam failure event.

Implementation Plan

10-YEAR TIMELINE
1-10 YEARS
<ul style="list-style-type: none"> • Work with the Conestee Foundation to seek opportunities to join other stakeholders in discussions regarding the Conestee Dam and any potential solutions. • Evaluate ways to provide assistance to involved entities in the development of potential solutions and coordination opportunities. • Support stakeholders in advocating for federal or state assistance. • Evaluate the risks associated with dam failure and its impact on water quality and future development opportunities.
<i>Estimated Cost: \$200,000 (studies/evaluations)</i>
<i>Long Term Solution: TBD</i>

2.7 Contaminants of Emerging Concern

INTENT	RECOMMENDATION	PARTNERS
To ensure that future regulations associated with Contaminants of Emerging Concern (e.g., per- and polyfluoroalkyl substances or PFAS) are developed with defensible science and policy.	ReWa should advocate for the application of sound science and health/environmental risk assessments to support the development of future regulations associated with Contaminants of Emerging Concern (e.g., PFAS).	<ul style="list-style-type: none"> • EPA • SCDHEC • South Carolina Water Quality Association (SCWQA) • National Association of Clean Water Agencies (NACWA) • Water Environment Federation (WEF) • American Water Works Association (AWWA)

Supporting Recommendation

- ReWa should monitor WRRFs and their products for the presence of contaminants of emerging concern.

Implementation Plan

10-YEAR TIMELINE	
1-5 YEARS	6-10 YEARS
<ul style="list-style-type: none"> • Work with industry and regulatory partners to advocate for the application of sound science risk assessments associated with Contaminants of Emerging Concern. • Investigate the implications of stricter regulatory requirements in relation to Contaminants of Emerging Concern to help educate industry of the ways in which it could be impacted. • Continue monitoring any Contaminants of Emerging Concern to determine where, if any, treatment modifications need to be made within ReWa's systems. 	<ul style="list-style-type: none"> • Continue monitoring WRRFs and perform a study that will address how ReWa should address the treatment and management of Contaminants of Emerging Concern. Continue advocating for sound science and risk assessments that will help industry understand the implications of these contaminants.
<i>Estimated Costs: \$250,000 (Consultant Facilitation)</i>	<i>Estimated Cost: Internal Resources (Monitoring)</i>
<i>Internal Resources (Monitoring)</i>	<i>External Study: \$100,000</i>

2.8 Economic Development

INTENT	RECOMMENDATION	PARTNERS
To be an active participant in economic development efforts being pursued by planning agencies.	ReWa should participate and investigate opportunities to assist in the coordinated planning and implementation of regional economic development efforts.	<ul style="list-style-type: none"> Counties Cities Regional Economic Development Entities Sewer Service Providers

Supporting Recommendation

- ReWa should investigate regional economic development strategies and initiatives to prioritize investments.

Implementation Plan

10-YEAR TIMELINE	
ANNUALLY	1-10 YEARS
<ul style="list-style-type: none"> Work with county officials to identify long-term wastewater management needs according to future land-use plans to determine where resources need to be allocated and to help promote economic development opportunities. Develop and provide county and planning officials feasibility studies that provide the level of effort and financial resources required for proposed economic development opportunities. Work with applicable sewer service providers in promoting participation with potential economic development opportunities in their service areas. 	<ul style="list-style-type: none"> Work with regional economic development entities to investigate ways in which ReWa can assist in economic development efforts within its service area. Work with county and planning officials to determine wastewater management needs and allocate funding and resources accordingly to ensure reasonable rates of return.
<i>Estimated Cost: \$100,000</i>	<i>Estimated Cost: \$5,000,000</i>

2.9 Effluent Reuse

INTENT	RECOMMENDATION	PARTNERS
To remove barriers and encourage utilization of effluent reuse initiatives throughout the state as a water conservation method and source for groundwater recharge.	ReWa should work with SCDHEC to both revise current regulations and provide incentives to fund and implement effluent reuse systems into future wastewater planning initiatives.	<ul style="list-style-type: none"> • SCDHEC • State Legislature • SCWQA • Water Reuse Association

Supporting Recommendation

- ReWa should create a technical committee through the SCWQA to work directly with SCDHEC to develop reasonable approaches to and support of such discharges.

Implementation Plan

10-YEAR TIMELINE	
ANNUALLY	1-5 YEARS
<ul style="list-style-type: none"> • Work with SCDHEC, SCWQA, and other reuse stakeholders to investigate effluent reuse opportunities and ways in which regulations can be edited. • Advocate and promote revisions to regulations that would permit the implementation of effluent reuse initiatives. 	<ul style="list-style-type: none"> • Perform a feasibility study that explores effluent reuse initiatives that could be implemented within ReWa's service area. • Work with SCDHEC to promote the implementation of the initiative and seek regulatory support. • Work with SCDHEC, SCWQA, and other reuse stakeholders to investigate effluent reuse opportunities and ways regulations can be modified to promote more reasonable opportunities for reuse applications. • Advocate for forgivable loans or grant rebate opportunities.
<i>Estimated Cost: Internal Resources</i>	<i>Estimated Cost: \$100,000</i>

2.10 Eminent Domain

INTENT	RECOMMENDATION	PARTNERS
To encourage entities that are capable of utilizing eminent domain to use this tool when necessary in planning efforts to ensure efficiency and environmental water quality protection.	The use of eminent domain is encouraged for use by all sewer service providers to assist in sewer planning and construction to bolster environmental water quality protection efforts and better serve the community.	<ul style="list-style-type: none"> State Legislature Counties Sewer Service Providers

Supporting Recommendations

- Counties/State Legislature should work to keep current law and regulations from becoming more restrictive in the use of eminent domain.
- ReWa should develop a standard agreement for use by developers and sewer service providers to acquire and cost share necessary sewer rights-of-way.

Implementation Plan

10-YEAR TIMELINE	
ANNUALLY	1-3 YEARS
<ul style="list-style-type: none"> Advocate and promote the use of eminent domain with necessary planning officials and sewer service providers, when applicable. Work with state legislature and county officials to promote protection of current laws and regulations regarding eminent domain. 	<ul style="list-style-type: none"> Develop a standard agreement for developers and sewer service providers to acquire and cost share necessary sewer rights-of-way.
<i>Estimated Cost: Internal Resources</i>	<i>Estimated Cost: Internal Resources</i>

2.11 Existing Septic Systems

INTENT	RECOMMENDATION	PARTNERS
To protect downstream water quality from adverse impacts due to continued operation of failed septic systems.	ReWa should work with stakeholders to encourage and support efforts to identify failed septic system operations.	<ul style="list-style-type: none"> • SCDHEC • Local Governments

Supporting Recommendations

- Local governments and SCDHEC should create and enforce regulations that require septic system inspection when a property on septic is transferred to a new owner.
- ReWa should partner with Greenville County and other counties to pilot an evaluation of a suspected failed septic development.
- ReWa and counties should work with SCDHEC to require routine septic system maintenance, such as pumping septic systems every five years.

Implementation Plan

10-YEAR TIMELINE	
ANNUALLY	1-5 YEARS
<ul style="list-style-type: none"> • Seek ways to work with stakeholders to identify failed septic system operations. • Promote and advocate that local governments and SCDHEC create and enforce regulations regarding septic system inspections when a property on septic is transferred to a new owner. • Promote and advocate that counties and SCDHEC require routine septic system maintenance, such as pumping septic systems every five years. 	<ul style="list-style-type: none"> • Partner with Greenville County and other counties to pilot an evaluation of suspected failed septic developments. Evaluate the outcomes of the pilot and present the findings to county officials. • Work with Greenville County and other counties to identify any regulatory opportunities that could be enforced for to help mitigate any environmental consequences from septic system failures.
<i>Estimated Cost: Internal Resources</i>	<i>Estimated Cost: \$200,000</i>

2.12 Future Septic System Planning

INTENT	RECOMMENDATION	PARTNERS
To better plan and control proposed locations of septic developments and establish requirements for future sanitary sewer connections and easement corridors.	New septic developments should provide for future sanitary sewer service that may be required in the area.	<ul style="list-style-type: none"> Counties Cities SCDHEC ACOG

Supporting Recommendation

- Local governments should coordinate and plan approved locations of future sewer and sewer rights-of-way within approved septic developments.

Implementation Plan

10-YEAR TIMELINE	
ANNUALLY	1-3 YEARS
<ul style="list-style-type: none"> Work with county and city planning staff to coordinate, plan, and require approved locations of future sewer and rights-of-way within approved septic development areas. Promote and advocate to counties and cities to require that all new septic developments provide future sanitary sewer service in order to connect into future collection lines. 	<ul style="list-style-type: none"> Identify stakeholders that could provide input in a summit regarding septic system regulations within ReWa's service area. Develop a process and procedure by which ReWa can coordinate with developers to establish future rights-of-way prior to septic development approval.
<i>Estimated Cost: Internal Resources</i>	<i>Estimated Cost: Internal Resources</i>

2.13 Future Upstate Roundtable Planning

INTENT	RECOMMENDATION	PARTNERS
To review the implementation status of the Upstate Roundtable to ensure progress is being made on ReWa's strategic plan.	ReWa should provide an implementation status update of the Upstate Roundtable every five years and formalize an Upstate Roundtable schedule and process.	<ul style="list-style-type: none"> Surrounding Counties

Supporting Recommendations

- ReWa should continue a 10-year update of the Upstate Roundtable with a 20-year vision in conjunction with Greenville County's future land-use and comprehensive planning updates.
- ReWa should develop a 20-year implementation plan for each Upstate Roundtable update.
- ReWa should continue annual five-year Capital forecasts of their Community Investment Plan (CIP).
- ReWa should continue Rate Structure Reviews on a three-year interval based upon the latest CIP forecasts.

Implementation Plan

10-YEAR TIMELINE		
ANNUALLY	4-5 YEARS	8-10 YEARS
<ul style="list-style-type: none"> Continue to develop a CIP annually that addresses improvement needs within ReWa's system in the subsequent five years. Use the CIP to review ReWa's rate structure every three years to ensure budgetary and project funding needs are being met. Investigate ways to incorporate any outstanding Upstate Roundtable recommendations into the CIP. Engage when necessary in each county's comprehensive planning process. 	<ul style="list-style-type: none"> Prepare and deliver an implementation status update of the Upstate Roundtable every five years. Evaluate the implementation statuses of the Upstate Roundtable recommendations and assess their applicability to ReWa's latest wastewater needs. 	<ul style="list-style-type: none"> Develop new Upstate Roundtable plan with stakeholder involvement every 10 years in parallel to Greenville County's comprehensive plan development. Assess the results of the previous Upstate Roundtable of implementation outcomes and identify any continuing needs.
<i>Estimated Cost: Internal Resources</i>	<i>Estimated Cost: \$100,000</i>	<i>Estimated Cost: \$300,000</i>

2.14 Groundwater Replenishment

INTENT	RECOMMENDATION	PARTNERS
To replenish groundwater to sustain stream flows that maintain reasonable and affordable NPDES permit limits.	ReWa should work with stakeholders to encourage and support the use of groundwater replenishment facilities for stormwater runoff control.	<ul style="list-style-type: none"> • SCDHEC • Local Governments

Supporting Recommendations

- ReWa should look to develop groundwater recharge systems for stormwater runoff at plant and pump station facilities where applicable.
- ReWa should encourage and support urban green space concepts to reduce peak runoffs and increase recharge.

Implementation Plan

10-YEAR TIMELINE		
ANNUALLY	1-3 Years	4-6 YEARS
<ul style="list-style-type: none"> • Promote the use of groundwater recharge systems to local governments and stakeholders. • Work with local governments to educate and promote the incorporation of urban green space concepts to regional land-use plans. 	<ul style="list-style-type: none"> • Investigate groundwater recharge systems and evaluate the feasibility for use at ReWa facilities. • Develop groundwater recharge systems for stormwater runoff at plant and pump station facilities, where applicable. • Work with local governments to create a baseline study of regional groundwater replenishment initiatives and their impact to local waterways. 	<ul style="list-style-type: none"> • Investigate other similar counties that have successfully implemented groundwater replenishment initiatives to determine if there are opportunities for regional policy changes. • Work with SCDHEC to promote the implementation of necessary regional policy changes that would allow the utilization of groundwater replenishment systems.
<i>Estimated Cost: Internal Resources</i>	<i>Estimated Cost: \$50,000</i>	<i>Estimated Cost: Internal Resources</i>

2.15 New Septic System Planning

INTENT	RECOMMENDATION	PARTNERS
To require developers, property owners, and engineers to contact ReWa first when considering the use of septic systems.	Local governments should require new septic developments to be reviewed by ReWa and aligned with ReWa's master planning to minimize negative impacts of future septic developments.	<ul style="list-style-type: none"> • SCDHEC • Local Governments • ACOG

Supporting Recommendations

- Local governments should require DHEC approval of septic system locations prior to subdivision development approval.
- New septic systems should be minimized in areas of planned sewer service in support of local government comprehensive plans and sewer master plans.

Implementation Plan

10-YEAR TIMELINE	
ANNUALLY	1-5 YEARS
<ul style="list-style-type: none"> • Work with local governments to require that all developments be reviewed by ReWa to ensure alignment with ReWa's master planning. • Promote and advocate to local governments for ReWa to have a more significant role in the approval process of septic development locations within ReWa's service area. Examples include workshops or public education seminars. • Promote and advocate that SCDHEC approve all septic system locations prior to development approvals. 	<ul style="list-style-type: none"> • Identify stakeholders that could provide input in a summit regarding septic system regulations within ReWa's service area. • Work with SCDHEC to explore modifying current regulations that would defer the review process of septic development locations to willing sewer service providers under the 208 Plan.
<i>Estimated Cost: Internal Resources</i>	<i>Estimated Cost: Internal Resources</i>

2.16 Nutrient Planning

INTENT	RECOMMENDATION	PARTNERS
To protect, preserve, and improve water quality in ReWa's service area watersheds.	ReWa should continue to partner in the development of efficient, equitable, and effective Watershed Based Plans.	<ul style="list-style-type: none"> 26 local, state, and regional stakeholders currently involved in the Reedy River Water Quality Group SCWQA NACWA WEF AWWA EPA

Supporting Recommendations

- ReWa should pursue site specific nutrient standards development through the 5R process.
- ReWa should ensure that basin water quality trading policies and practices are maintained and enhanced as technology advances.
- ReWa should advocate for state and federal water quality trading policies and practices that support enhanced water quality, resource recovery, and sustainable financial investments in water infrastructure.
- ReWa should ensure that monitoring data exists to form the foundation of watershed management plans and emerging water quality standards (e.g. Lake Greenwood monitoring).

Implementation Plan

10-YEAR TIMELINE		
ANNUALLY	1-3 YEARS	4-6 YEARS
<ul style="list-style-type: none"> Continue working with partners and stakeholders in the development of Watershed Based Plans. Work with necessary stakeholders and environmental agencies to advocate and ensure that basin water quality trading policies and practices are maintained and enhanced as technology advances. 	<ul style="list-style-type: none"> Work with the EPA and stakeholders to ensure that monitoring data exists to form the foundation of watershed management plans and emerging water quality standards. Pursue the development of site-specific nutrient standards through the 5R process for the Reedy River. 	<ul style="list-style-type: none"> Pursue the development of site-specific nutrient standards through the 5R process for the Saluda River, as potentially applicable.
Estimated Cost: Internal Resources	Estimated Cost: Internal Resources Estimated Cost (consulting services): \$250,000	Estimated Cost: Internal Resources Estimated Cost (consulting services): TBD

2.17 Nutrient Source Control

INTENT	RECOMMENDATION	PARTNERS
To reduce WRRF influent nutrient loads.	ReWa should quantify and benchmark nutrient loading to identify reduction opportunities, inform pretreatment program controls, and rate policy.	<ul style="list-style-type: none"> Regional Water Utilities Industrial & Institutional Customers Hauled Waste Customers

Supporting Recommendations

- ReWa should continue to work with regional water utilities to quantify loading to WRRFs from potable water corrosion inhibitors.
- ReWa should benchmark nutrient loading from industrial discharge sources and work to identify and incentivize nutrient load reduction.
- ReWa should benchmark nutrient loads from hauled waste sources, such as leachate.
- ReWa should use data collected to determine the development of local nutrient limits and industrial surcharges.

Implementation Plan

10-YEAR TIMELINE		
ANNUALLY	1-3 YEARS	4-6 YEARS
<ul style="list-style-type: none"> Seek and identify nutrient loading reduction opportunities, inform pretreatment controls, and review rate policy impacts, as necessary. Identify necessary parameters and benchmark nutrient loadings from various ReWa sources. 	<ul style="list-style-type: none"> Continue working with regional water utilities to quantify loading to ReWa WRRFs from potable water corrosion inhibitors. Work with industrial customers to benchmark nutrient loading from industrial discharge sources and work to identify and incentivize nutrient load reduction. Perform a study that benchmarks nutrient loadings from hauled waste sources and typical industrial discharge sources. 	<ul style="list-style-type: none"> Use data collected to determine the development of local nutrient limits and industrial surcharges. Implement the new nutrient limits and industrial surcharges. Coordinate benchmarking data with other similar sized South Carolina utilities to gain knowledge and operational perspective on ReWa's system.
<i>Estimated Cost: Internal Resources</i>	<i>Estimated Cost: \$50,000</i>	<i>Estimated Cost: Internal Resources</i>
		<i>Estimated Cost (consulting services): \$50,000</i>

2.18 Nutrient Treatment Optimization

INTENT	RECOMMENDATION	PARTNERS
To ensure that ReWa's water resource recovery facilities are optimized for nutrient treatment and recovery in advance of future nutrient regulations.	ReWa should continue WRRF optimization studies so that capabilities and costs are known when future regulations and watershed management plans emerge.	<ul style="list-style-type: none"> • Clemson University • Water Environment Research Foundation • Engineering Consultants • Industry

Supporting Recommendations

- ReWa should develop process models for all significant WRRFs to assist in nutrient optimization studies.
- ReWa should develop a financially sustainable Nutrient Management Roadmap that considers nutrient recovery and resource reuse for the WRRFs.
- ReWa should review and pilot, where cost-effective, sustainable solutions for side-stream treatment, such as potentially harvesting struvite as fertilizer pellets.

Implementation Plan

10-YEAR TIMELINE		
ANNUALLY	1-3 YEARS	4-6 YEARS
<ul style="list-style-type: none"> • Seek opportunities to perform optimization studies to prepare for any potential future regulations. 	<ul style="list-style-type: none"> • Develop process models for all significant WRRFs to assist in nutrient optimization studies. • Develop a financially sustainable Nutrient Management Roadmap. • Review and pilot sustainable solutions for side-stream and/or main stream treatment. 	<ul style="list-style-type: none"> • Evaluate the usefulness of the sidestream treatment pilot study data to determine any opportunities for improvement or implementation in other areas of ReWa's service area. • Partner with WERF and/or Clemson University to perform a study on nutrient recovery and plant optimization.
<i>Estimated Cost: Internal Resources</i>	<i>Estimated Cost: \$500,000</i>	<i>Estimated Cost: \$100,000</i>

2.19 Public Awareness

INTENT	RECOMMENDATION	PARTNERS
To continue raising public awareness about providing wastewater services and ReWa's role in the community.	ReWa should continue to increase public awareness about the importance of wastewater planning, community development, and sustainability initiatives.	<ul style="list-style-type: none"> • Utility Providers • The Conestee Foundation • Environmental Advocacy Organizations • National Water/Wastewater Associations

Supporting Recommendation

- ReWa should continue with redeveloping the Mauldin Road Campus for increased public awareness.
- ReWa should continue to review current and new programs and refine/enhance such for increased public awareness.

Implementation Plan

10-YEAR TIMELINE		
ANNUALLY	4-7 YEARS	8-10 YEARS
<ul style="list-style-type: none"> • Investigate and consider ways to increase public awareness about ReWa, its services within the community, and the importance of wastewater planning. • Continue redeveloping the Mauldin Road Campus and advertise the learning opportunities of the Campus to the community. • Consider new ways to convey messaging about projects and wastewater planning initiatives. • Establish a consistent social media presence among commonly-used social media platforms (i.e. Instagram) to reach new audiences. 	<ul style="list-style-type: none"> • Evaluate the effectiveness of each public awareness method to determine areas of improvement and adjustment. • Seek ways to utilize and advertise the Mauldin Road Campus for public education and awareness purposes. • Evaluate the relevance of each social media platform to determine if adjustments need to be made to ReWa's social media presence. • Seek ways to collaborate with other utilities and organizations to spread a message of community collaboration and environmental advocacy. 	<ul style="list-style-type: none"> • Evaluate the state of ReWa's public education initiatives and their community impact. • Consider implementing a benchmark study of effectiveness of ReWa's public awareness initiatives and identify any areas for improvement.
<i>Estimated Cost: \$200,000</i>	<i>Estimated Cost: TBD</i>	<i>Estimated Cost: TBD</i>

2.20 Right-of-Way Usage

INTENT	RECOMMENDATION	PARTNERS
To help minimize land disturbance by coordinating with local entities and incorporating multiple uses of ReWa's rights-of-way.	ReWa should continue to seek ways to facilitate multiple uses of their sewer rights-of-way.	<ul style="list-style-type: none"> Counties Cities Utility Providers Environmental Advocacy Organizations

Supporting Recommendations

- ReWa should coordinate with other entities on future ReWa projects for multiple uses in the project area.
- ReWa should continue to evaluate and facilitate, where practical, multiple uses within their rights-of-way, such as other utility infrastructure, public trails and public parks.

Implementation Plan

10-YEAR TIMELINE		
ANNUALLY	1-5 YEARS	6-10 YEARS
<ul style="list-style-type: none"> Evaluate capital improvement projects, including infill and greenfield projects, to identify any opportunities to coordinate with other utilities and planning entities for shared right-of-way usage. Investigate alternative sanitary sewer routes with city, county, and planning officials that could compliment future land-use plans within public spaces. Update GIS overlays to reflect public right-of-way partnership opportunities 	<ul style="list-style-type: none"> Research similar cities, counties, and utilities that have integrated a shared right-of-way approach in their comprehensive land-use planning and determine and applicable take-aways that could be implemented in ReWa's service area. Begin coordination with applicable entities to determine methods of utility and right-of-way integration. 	<ul style="list-style-type: none"> Evaluate ways in which utility and public right-of-way usage can be better integrated into ReWa's capital improvement projects. Identify any lessons learned with utilities and city, county, and planning officials.
<i>Estimated Cost: Internal Resources</i>	<i>Estimated Cost: Internal Resources</i>	<i>Estimated Cost: Internal Resources</i>

2.21 Sewer Affordability

INTENT	RECOMMENDATION	PARTNERS
To create and implement a program to ReWa's customers who are in need of financial assistance.	ReWa should seek and work to partner with entities that can assist in implementing a financial assistance program to ReWa's customers who are in financial need.	<ul style="list-style-type: none"> Counties Cities Non-profit Agencies

Supporting Recommendation

- ReWa should seek input from County and City officials to develop a financial assistance program and seek opportunities where this program would be best implemented within each County of ReWa's service territory.

Implementation Plan

10-YEAR TIMELINE	
1-5 YEARS	6-10 YEARS
<ul style="list-style-type: none"> Seek input from county and city officials to identify where a sewer affordability program would be best implemented within ReWa's service area. Promote the sewer affordability program to the public to ensure that ReWa's rate payers understand the opportunity. Seek support from additional non-profit agency partners to expand the program as necessary. 	<ul style="list-style-type: none"> Evaluate the effectiveness of the sewer affordability program to identify any opportunities for improvement. Seek input from rate payers, including those who participated in the sewer affordability program and those who did not, regarding opportunities to improve the program. Evaluate the financial implications of expanding the sewer affordability program.
<i>Estimated Cost: Internal Resources</i>	<i>Estimated Cost: Internal Resources</i>

2.22 Statewide Watershed Planning

INTENT	RECOMMENDATION	PARTNERS
To be an active participant in the regional river basin councils and other regional watershed planning efforts.	ReWa should participate and provide input to appropriate regulatory agencies and other stakeholders involving regional watershed planning efforts.	<ul style="list-style-type: none"> All Applicable Regulatory Organizations Regional Stakeholders Environmental Advocacy Organizations

Implementation Plan

10-YEAR TIMELINE	
1-3 YEARS	4-10 YEARS
<ul style="list-style-type: none"> Observe the format and implementation of the new South Carolina State Water Planning Framework on the Edisto River Basin to determine any future opportunities to become involved in local water planning processes. Attend a meeting of the Edisto River Basin Plan. 	<ul style="list-style-type: none"> Take note of any potential water basin planning in the Upstate for which ReWa could provide input. Coordinate with the Department of Natural Resources (DNR) and other applicable regulatory organizations to seek ways to be involved in the water planning for the Saluda and Broad River Basins.
<i>Estimated Cost: Internal Resources</i>	<i>Estimated Cost: \$100,000</i>

2.23 Streambank Stabilization

INTENT	RECOMMENDATION	PARTNERS
To protect downstream water quality from nutrients contained within eroded streambank sediment.	ReWa should support the use of sustainable vegetative stream bank stabilization measures to protect downstream water quality.	<ul style="list-style-type: none"> • SCDHEC • Counties • Cities • Specialty Contractors • Subdistricts

Supporting Recommendations

- ReWa should develop a streambank and stream crossing condition assessment and remediation program for all applicable ReWa facilities near water bodies.
- ReWa should demonstrate use of vegetative buffers at their facilities as a means to control overland flows, enhance vegetative nutrient uptake and prevent streambank erosion.
- ReWa should partner with other stakeholders where streambank remediation is mutually beneficial.
- ReWa should advocate for stormwater management agencies to prioritize streambank stabilization.

Implementation Plan

10-YEAR TIMELINE		
ANNUALLY	1-5 YEARS	8-10 YEARS
<ul style="list-style-type: none"> • Promote the use of sustainable vegetative streambank stabilization measures to city and county officials. • Seek ways to partner with stakeholders and local governments to implement streambank stabilization initiatives. • Advocate the prioritization of streambank stabilization to regional stormwater management agencies. 	<ul style="list-style-type: none"> • Develop a streambank and stream crossing condition assessment and remediation program for all applicable ReWa facilities near water bodies. • Incorporate the use of vegetative buffers at ReWa facilities. • Identify a budget for streambank stabilization initiatives. 	<ul style="list-style-type: none"> • Evaluate the implementation of the streambank stabilization initiatives to determine any opportunities for improvement. • Seek ways to demonstrate the initiatives to stakeholders and the community to educate the public on methods to protect downstream water quality.
<i>Estimated Cost: Internal Resources</i>	<i>Estimated Cost: \$100,000</i>	<i>Estimated Cost: \$100,000</i>

2.24 Unification

INTENT	RECOMMENDATION	PARTNERS
To consolidate and regionalize entities that provide sewer service in Greenville County under one authority to promote and implement environmental protection efforts, seamless wastewater planning coordination, and cost-effective sewer service to the customer.	The State Legislature and County Councils should work together to administer and promote regional sewer service consolidation among all sewer utilities under one sewer agency.	<ul style="list-style-type: none"> State Legislature Counties Cities Sewer Subdistricts

Supporting Recommendations

- ReWa should explore opportunities to study unifying sewer collection services with willing entities to provide more efficient services to customers.
- ReWa should explore and utilize financial feasibility analysis tools to help guide all entities involved in potential regional unification efforts of sewer services.

Implementation Plan

10-YEAR TIMELINE	
ANNUALLY	1-5 YEARS
<ul style="list-style-type: none"> Explore opportunities to study unifying sewer collection services with willing entities to provide more efficient services to customers. 	<ul style="list-style-type: none"> Partner and assist in the development of a financial feasibility analysis tools to help guide all entities involved in potential regional unification efforts of sewer services.
<i>Estimated Cost: TBD</i>	<i>Estimated Cost: Internal Resources</i> <i>Estimated Cost (consulting services): \$150,000</i>

3.0 20-Year Infrastructure – Community Investment Plan

ReWa provides a wide range of wastewater capabilities to their service area in the Upstate of South Carolina. ReWa's service area is in five counties, six river basins, and contains nine WRRFs. Of the six river basins served, only four currently have WRRFs, with multiple WRRFs in three of those river basins. In addition to the nine WRRFs, ReWa operates and maintains approximately 351 miles of sewer interceptors and force mains that collect wastewater from collection lines maintained by sewer subdistricts which is conveyed to ReWa's WRRFs. Due to the extent of ReWa's services and service area, the use of careful and thoughtful planning is of the utmost importance. With wastewater infrastructure, financial and technical planning should be done far in advance to ensure that resources are allocated adequately and efficiently to deliver the best possible service to the community.

This section outlines a 20-year community investment plan that identifies the wastewater infrastructure needs within ReWa's service area as well as the financial resources needed to satisfy them. This section is organized by river basin and evaluates the infrastructure needs of each through 2040; including the following budget categories:

- **WRRF Facilities:** Wastewater plant improvements including equipment and piping renewal/replacement, capacity increases, process improvements and regulatory requirements.
- **Trunk Sewer System:** 18" and greater diameter gravity sewer interceptor improvements that convey flow to the WRRFs involving point repairs, sewer linings, and pipe replacements/upsizing; similarly larger sized pump station and force main improvements including equipment and piping renewal/replacement, capacity increases and existing station eliminations.
- **Collection Sewer System:** Less than 15" diameter gravity sewer interceptor improvements involving point repairs, sewer linings, and pipe replacements/upsizing where ReWa owns and directly provides the collection sewer service to the customer; similarly smaller sized pump station and force main improvements including equipment and piping renewal/replacement, capacity increases and existing station eliminations.
- **New Service Area:** New sewer infrastructure systems to provide service to currently unserved areas with the current ReWa service territory.
- **Renewable Resources:** Projects involving solar energy, gas energy, reclaimed water, biosolids and other renewable energy resources.
- **Planning and Technology:** Studies, modeling, programs and planning efforts to support the ReWa's sewer service mission; as well as, information technology systems, programs, hardware and software to support utility operations.
- **Other Priority Projects:** Miscellaneous improvements projects that benefit the utility operations, programs and customer service as well as needed tools, equipment and vehicles necessary for operation, maintenance and management of the utility.

A summary of the WRRFs that ReWa currently manages and the river basins in which they are located can be seen in [Figure 3](#). The river basins in Greenville County, as well as ReWa's WRRFs, can be seen in [Figure 4](#).

Reedy River Basin	Saluda River Basin	Enoree River Basin	Tyger River Basin	Upper Broad River Basin	Rabon Creek Basin
<ul style="list-style-type: none">• Mauldin Road WRRF• Lower Reedy WRRF	<ul style="list-style-type: none">• Slater Marietta WRRF• Georges Creek WRRF• Piedmont Regional WRRF	<ul style="list-style-type: none">• Pelham WRRF• Gilder Creek WRRF• Durbin Creek WRRF• Altamont Forest WRRF• Dildine Creek WRRF	<ul style="list-style-type: none">• North Greenville University WRRF	<ul style="list-style-type: none">• None	<ul style="list-style-type: none">• None

Figure 3. ReWa WRRF and River Basin Summary

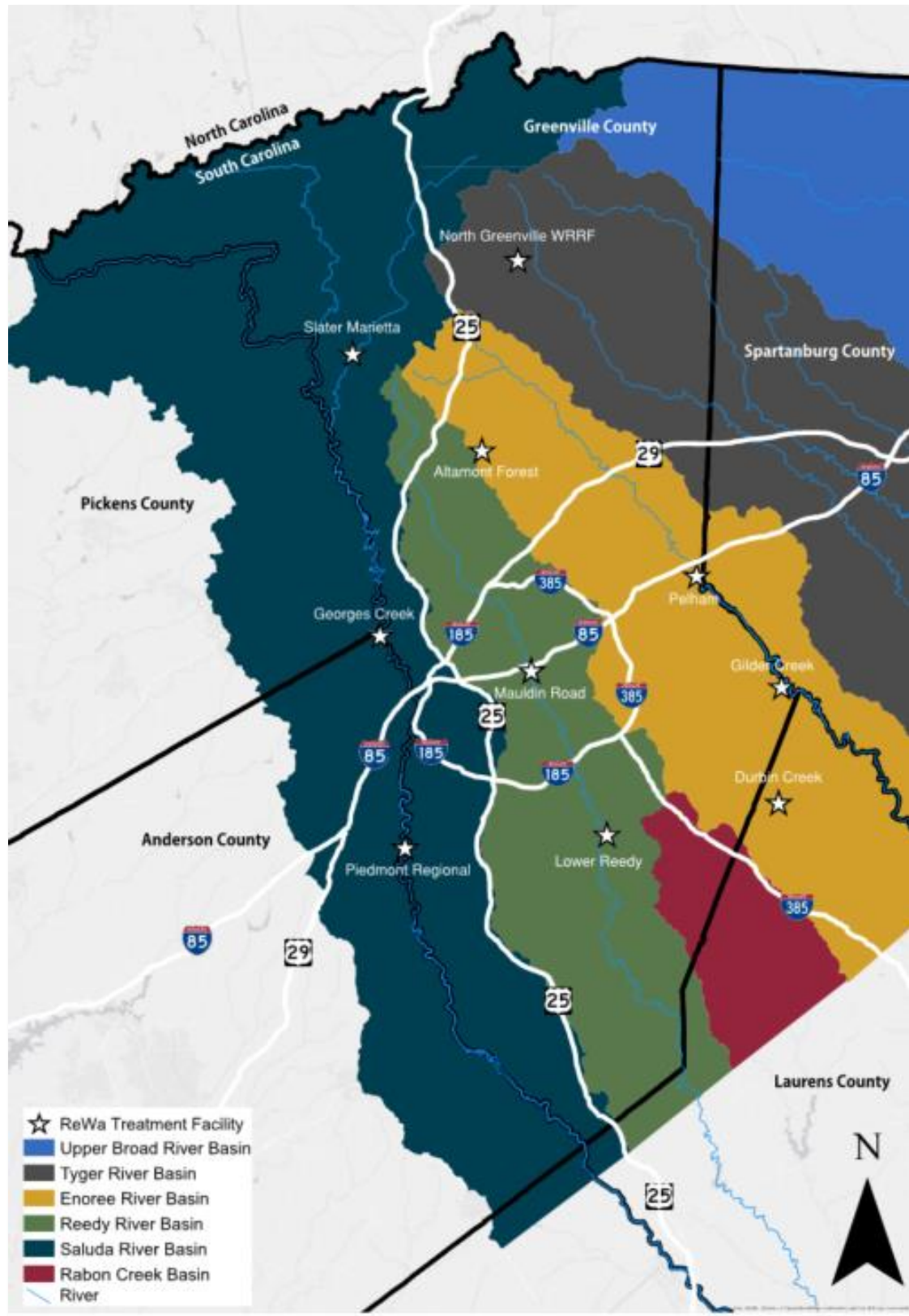


Figure 4. River Basins within ReWa's Service Area

3.1 Reedy River Basin

This section outlines the infrastructure improvement needs within the Reedy River Basin. The Reedy River Basin is located primarily in Greenville County and contains notable areas such as Downtown Greenville, Haywood Mall, and parts of southern Greenville County. There are two ReWa maintained WRRFs located within the Reedy River Basin: Mauldin Road WRRF and Lower Reedy WRRF. Mauldin Road WRRF can treat approximately 29 million gallons per day (MGD) and Lower Reedy WRRF can treat approximately 11.5 MGD.

3.1.1 Mauldin Road WRRF Basin

The Mauldin Road WRRF Basin includes a network of trunk collection sewer that carries flow from Downtown Greenville, Augusta Road, West Greenville, San Souci, and Traveler's Rest areas to the Mauldin Road WRRF. **Figure 5** below shows an overview of the infrastructure in the Mauldin Road WRRF basin.

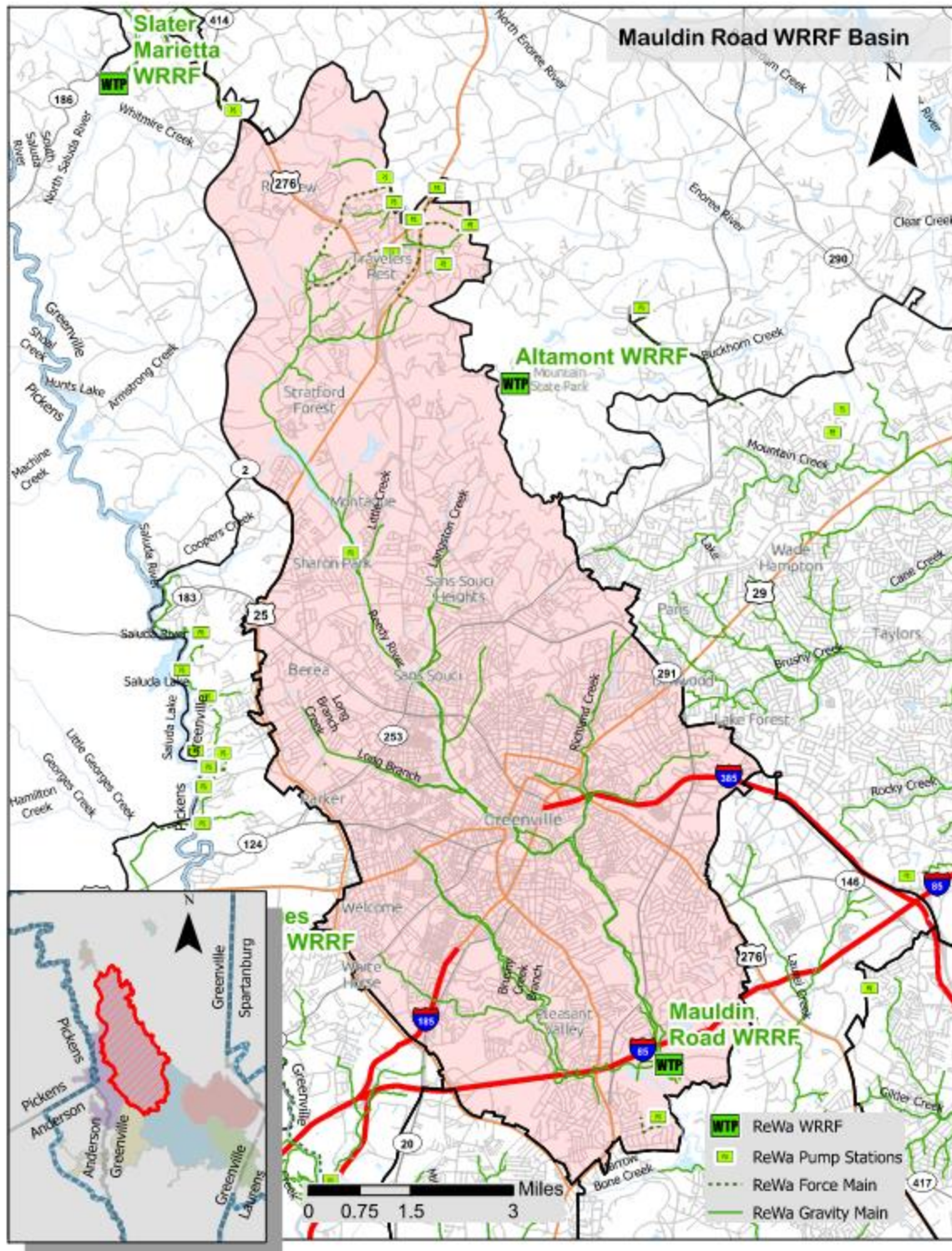


Figure 5. Mauldin Road WRRF Basin

The following sections provide a breakdown of 20-year capital improvement costs for the Mauldin Road WRRF basin, including WRRF projects, trunk sewer system and collection sewer system improvements, new service area, planning and technology, and other priority projects. Of planned capital improvements, 27 projects located within the Mauldin Road WRRF basin, totaling \$260,750,000, have been identified as Wet Weather Program projects. A summary table outlining the 20-year capital improvement costs for the Mauldin Road WRRF basin is provided in [Appendix A](#).

3.1.1.1 Water Resource Recovery Facility

Capital improvements for the Mauldin Road WRRF, shown in [Figure 6](#), primarily include growth related projects, process improvements to the plant, renewal and replacement of specific equipment, necessary regulatory and permit compliance improvements, and other WRRF related projects. Near-term improvements to the Mauldin Road WRRF include return activated sludge building and equipment improvements, influent pumping improvements for anticipated future wastewater flows, biological basin blower improvements, dewatering system improvements, main switchgear replacement, equalization basin rehabilitation, digester rehabilitation, nutrient removal enhancements, renovation of the operator control building, solids pad improvements, and a new solar dryer facility.



Figure 6. Mauldin Road WRRF

A total of \$201,100,000 is planned to be spent on growth related projects, \$5,222,000 on process improvements, \$74,446,000 on renewal and replacement of equipment, \$82,275,000 on necessary regulatory and permit compliance improvements, and \$5,597,000 on other WRRF related projects. The largest expenditure for this facility in the next 20 years will be the facility capacity expansion to 40 MGD to accommodate projected growth. In total, Mauldin Road WRRF is estimated to receive approximately

\$368,640,000 of investment in the next 20 years. A summary of the planned improvement costs for the next 20 years can be seen in [Figure 7](#). A breakdown of the 20-year capital improvement costs can be seen in [Figure 8](#).

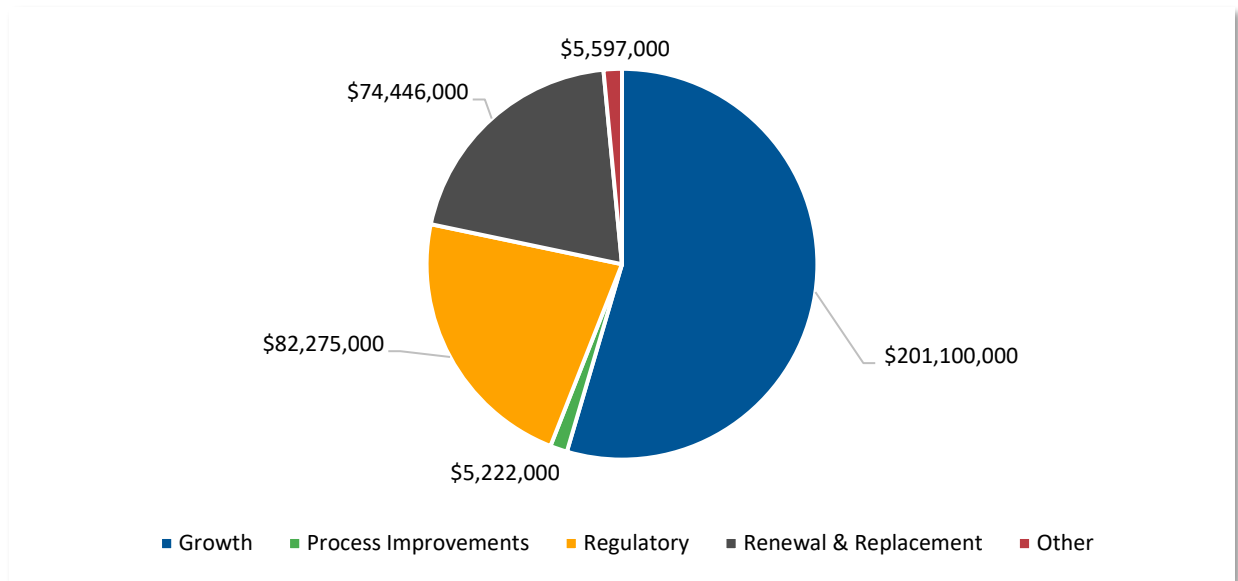


Figure 7. Mauldin Road WRRF 20-year Capital Improvements

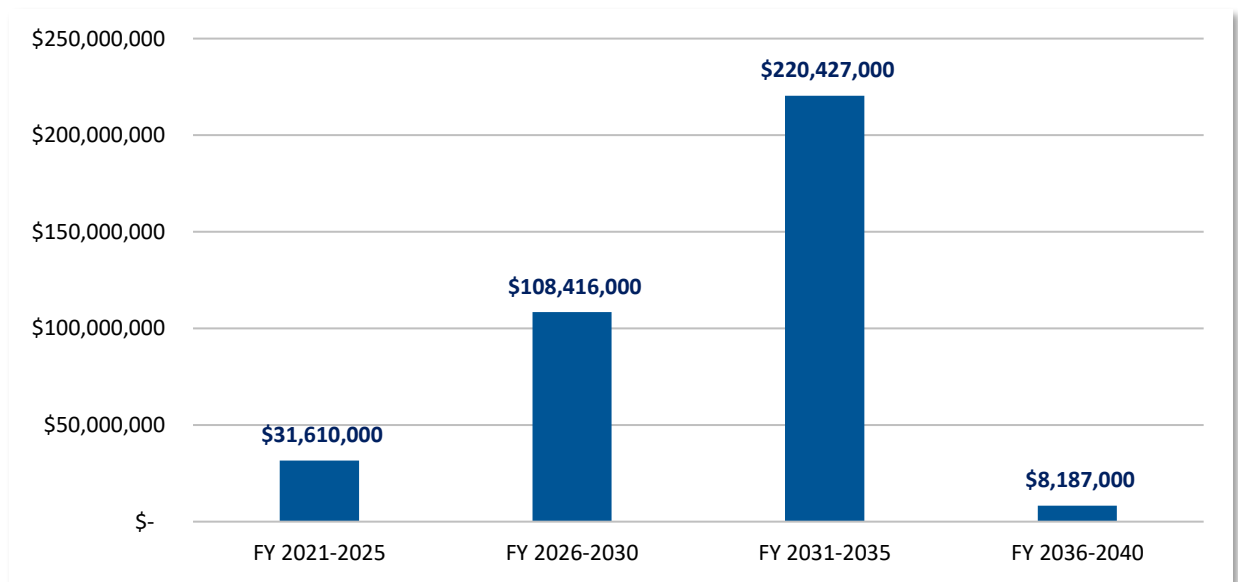


Figure 8. Mauldin Road WRRF 20-Year Capital Improvements Timeline

3.1.1.2 Trunk Sewer System

Capital improvements for ReWa's trunk sewer system within the Mauldin Road WRRF basin will primarily include improvements to the trunk sewer lines, pump stations and force mains. Improvements will include both dry and wet weather capacity upgrades, renewal and replacement of equipment, and

growth related projects. Near-term improvements include wet weather upgrades of approximately 17,550 linear feet of gravity trunk sewer lines along Long Branch Creek and approximately 6,300 linear feet along the Swamp Rabbit Trunk line.

A total of \$190,066,000 is planned to be spent on capacity upgrades, \$7,239,000 on renewal and replacement of equipment, and \$30,655,000 on growth related projects. The largest expenditure to be spent on trunk sewer system improvements in the Mauldin Road WRRF basin will be for upgrades to the sewer lines that are approaching their capacities and useful lives. In total, the trunk sewer systems within the Mauldin Road WRRF basin are estimated to receive approximately \$227,960,000 of investment in the next 20 years. A summary of the planned improvement costs for the next 20 years can be seen in [Figure 9](#). A breakdown the 20-year capital improvement costs can be seen in [Figure 10](#).

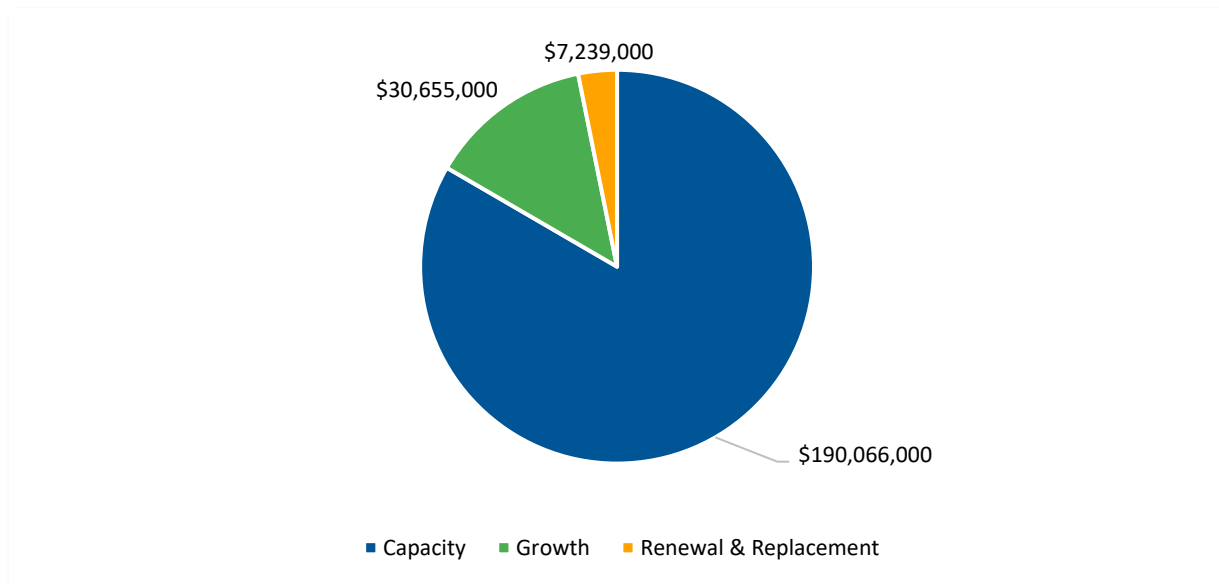


Figure 9. Mauldin Road WRRF Basin Trunk Sewer System 20-year Capital Improvements

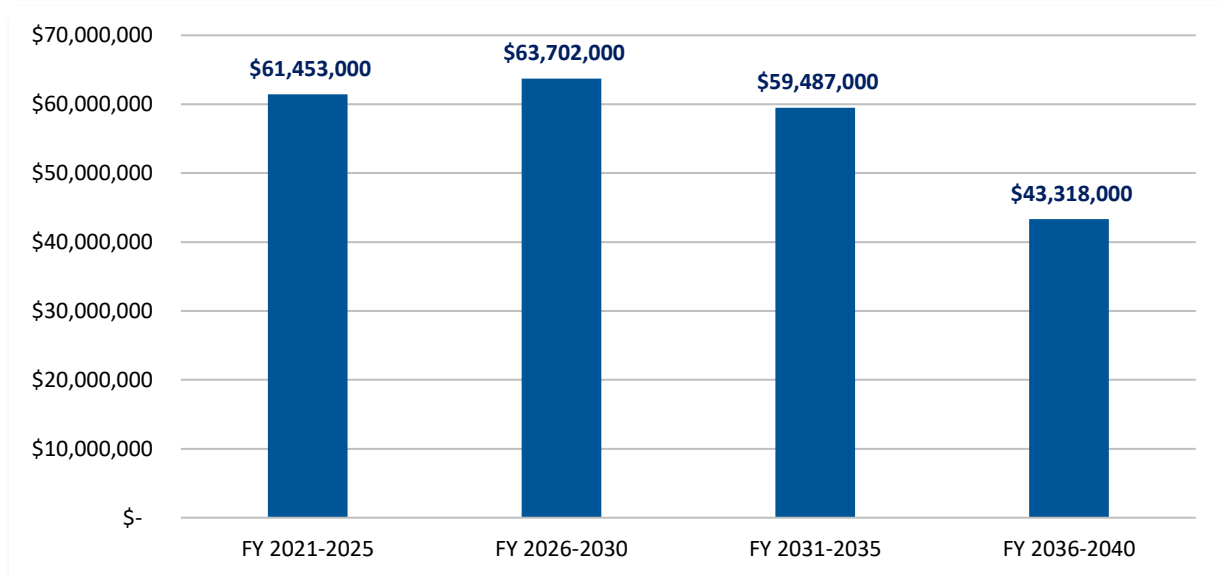


Figure 10. Mauldin Road WRRF Basin Trunk Sewer System 20-Year Capital Improvements Timeline

3.1.1.3 Collection Sewer System

In addition to capital improvements to the trunk sewer system, several capital improvement projects are planned for the collection sewer system. These projects include both dry and wet weather capacity upgrades to collection sewer lines within the Mauldin Road WRRF basin. Near term improvements include the upsizing of approximately 3,100 linear feet of existing gravity sewer near Watson Road and Park Vista Way.

In total, the collection sewer systems within the Mauldin Road WRRF basin are estimated to receive approximately \$10,352,000 of investment in the next 20 years. A breakdown of the 20-year capital improvement costs can be seen in [Figure 11](#).

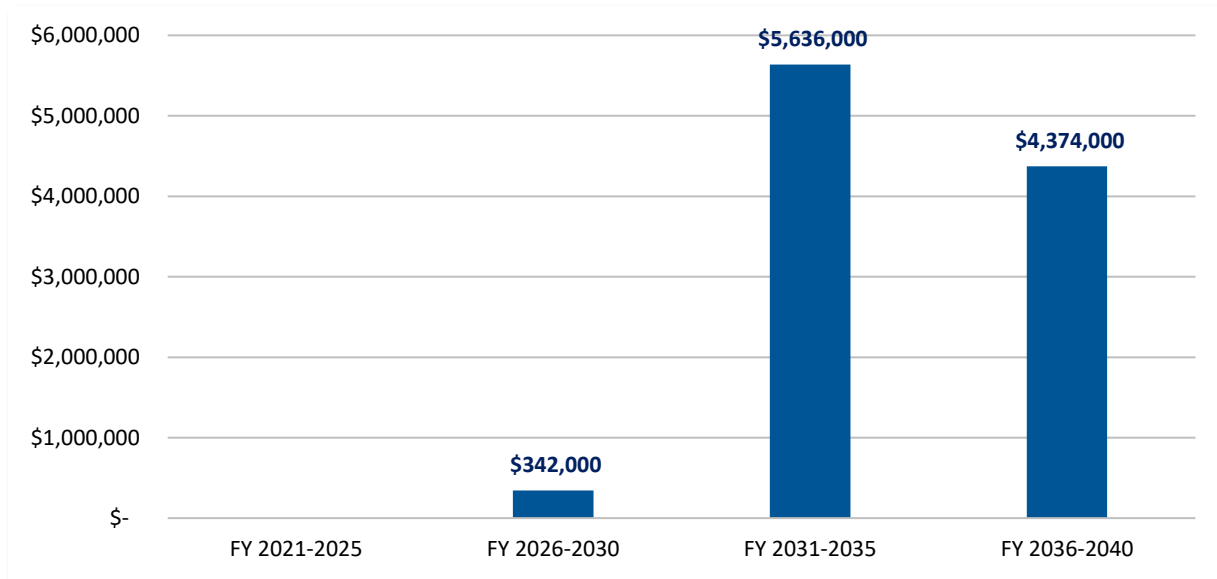


Figure 11. Mauldin Road WRRF Basin Collection Sewer System 20-Year Capital Improvements Timeline

3.1.1.4 New Service Area

Capital improvements dedicated to new service areas within the Mauldin Road WRRF basin primarily include a new regional pump station north of Travelers Rest to direct flow to the Mauldin Road WRRF. In total, the new service area within the Mauldin Road WRRF basin is estimated to receive approximately \$11,430,000 of investment within the next five fiscal years. A breakdown of the 20-year capital improvement costs can be seen in [Figure 12](#).

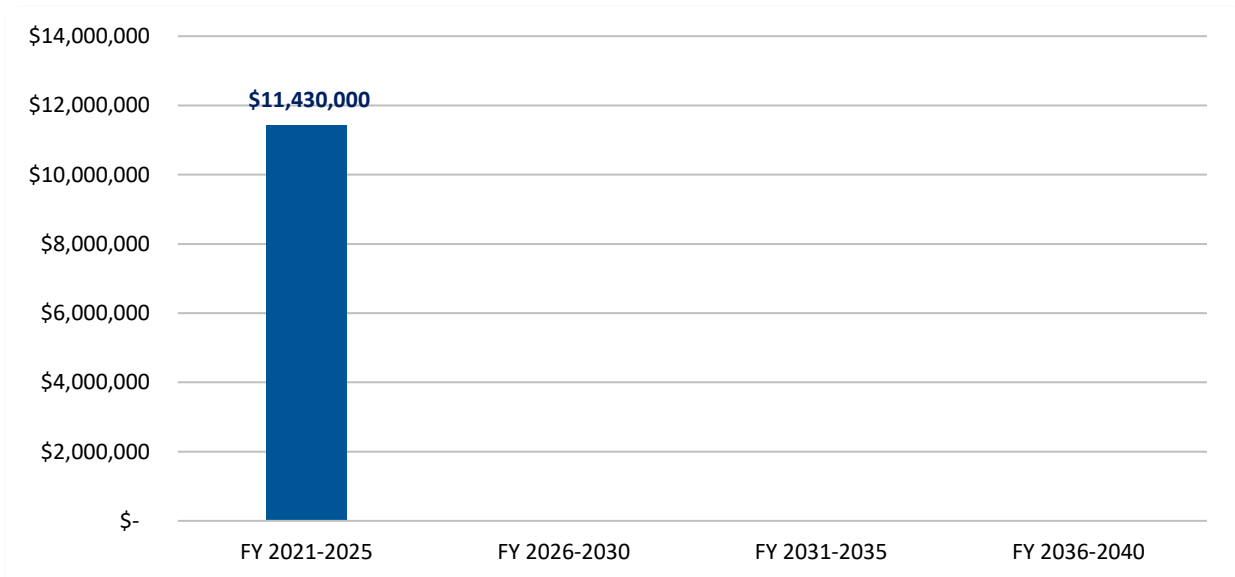


Figure 12. Mauldin Road WRRF Basin New Service Area 20-Year Capital Improvements Timeline

3.1.1.5 Planning and Technology

Capital improvements related to planning and technology within the Mauldin Road WRRF basin will primarily include system planning projects. These system planning projects, which are already underway, include the evaluation of facilities within the Mauldin Road WRRF basin related to both capacity and asset condition. This facility master plan will allow ReWa to better manage assets within the Mauldin Road WRRF Basin. In total, the Mauldin Road WRRF basin is estimated to receive approximately \$385,000 of investment towards planning and technology within the next five fiscal years. A breakdown of the 20-year capital improvement costs can be seen in [Figure 13](#).

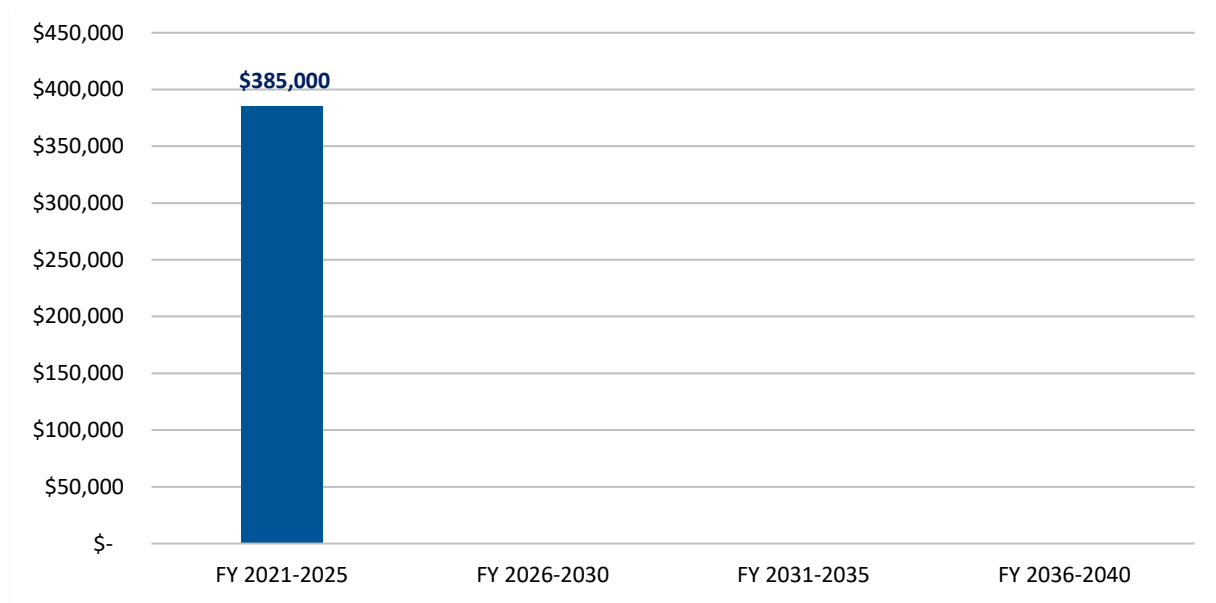


Figure 13. Mauldin Road WRRF Basin Planning and Technology 20-Year Capital Improvements Timeline

3.1.1.6 Other Priority Projects

In addition to capital improvements mentioned above, several additional capital improvement projects are planned for the Mauldin Road WRRF campus and surrounding areas. These projects include rehabilitation and repurposing of old treatment buildings, installation of a litter trap in the Reedy River, and study, design, and construction of a new fats, oils, and grease (FOG) receiving station.

In total, the Mauldin Road WRRF basin is estimated to receive approximately \$10,090,000 of investment in other priority projects within the next five fiscal years. A breakdown of the 20-year capital improvement costs can be seen in [Figure 14](#).

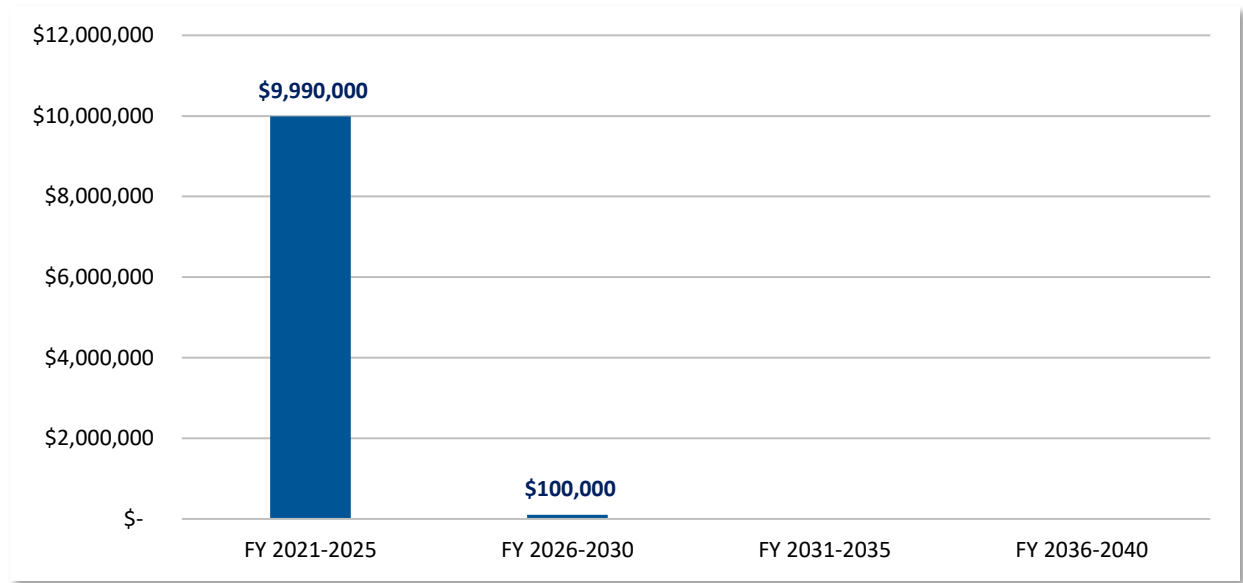


Figure 14. Mauldin Road WRRF Basin Other Priority Projects 20-Year Capital Improvements Timeline

3.1.2 Lower Reedy WRRF Basin

The Lower Reedy WRRF Basin includes a network of trunk collection sewer that carries flow from Mauldin, Donaldson Center Airport, and western Simpsonville areas to the Lower Reedy WRRF. [Figure 15](#) below shows an overview of the infrastructure in the Lower Reedy WRRF basin.

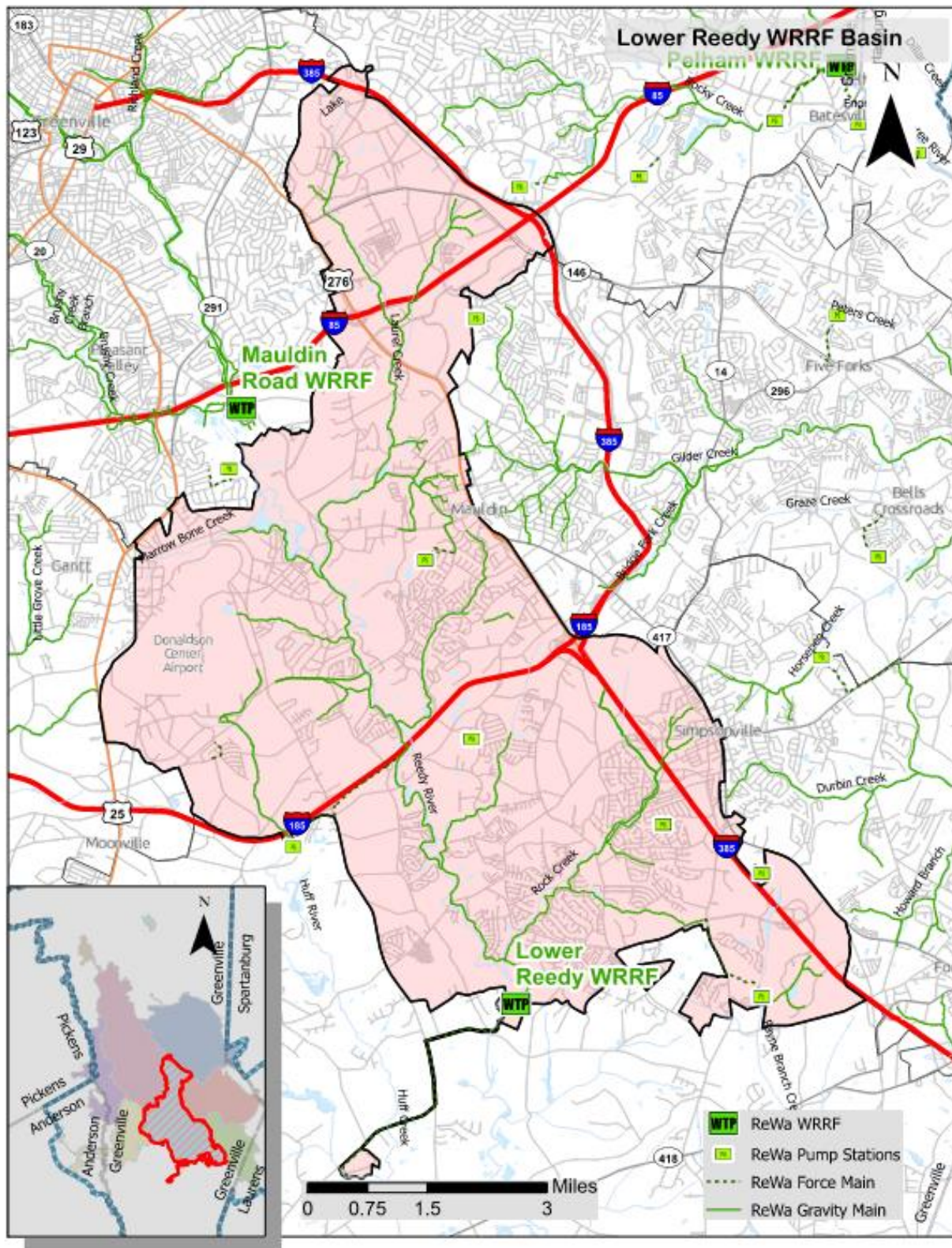


Figure 15. Lower Reedy WRRF Basin

The following sections provide a breakdown of 20-year capital improvement costs for the Lower Reedy WRRF basin, including WRRF projects, trunk sewer system and collection sewer system improvements, new service area, planning and technology, and other priority projects. Of planned capital improvements, 6 projects located within the Lower Reedy WRRF basin, totaling \$22,714,600, have been identified as Wet Weather Program projects. A summary table outlining the 20-year capital improvement costs for the Lower Reedy WRRF basin is provided in [Appendix A](#).

3.1.2.1 Water Resource Recovery Facility

Capital improvements for the Lower Reedy WRRF, shown in [Figure 16](#), primarily include capacity upgrades, process improvements to the plant, renewal and replacement of specific equipment, and necessary regulatory and permit compliance improvements. Near-term improvements to the Lower Reedy WRRF include nutrient removal improvements necessary for permit compliance and expansion from 11.5 MGD to 15.6 MGD to support growth in the Lower Reedy WRRF Basin, blower improvements, digester rehabilitation, fine screening facility, chemical feed rehabilitation, operator control building improvements, odor control system, gravity belt thickener rehabilitation, solids pad improvements, and grit collector replacement.



Figure 16. Lower Reedy WRRF

A total of \$4,426,000 is planned to be spent on capacity upgrades, \$12,915,000 on process improvements, \$27,092,000 on renewal and replacement of equipment, \$58,790,000 on necessary

regulatory and permit compliance improvements, and \$140,000 on other WRRF related projects. The Conestee PS project is being planned to handle flows in the northern portion of the Lower Reedy WRRF basin and transfer them to the Mauldin Road WRRF basin. This will allow additional growth in the southern portion of the Lower Reedy WRRF basin and the potential delay of the Lower Reedy WRRF expansion project, thus delaying the need for a larger capital spend in that WRRF basin. The largest expenditure for this facility in the next 20 years will be the WRRF capacity expansion to 15.6 MGD. In total, Lower Reedy WRRF is estimated to receive approximately \$103,363,000 of investment in the next 20 years. A summary of the planned improvement costs for the next 20 years can be seen in [Figure 17](#). A breakdown of the 20-year capital improvement costs can be seen in [Figure 18](#).

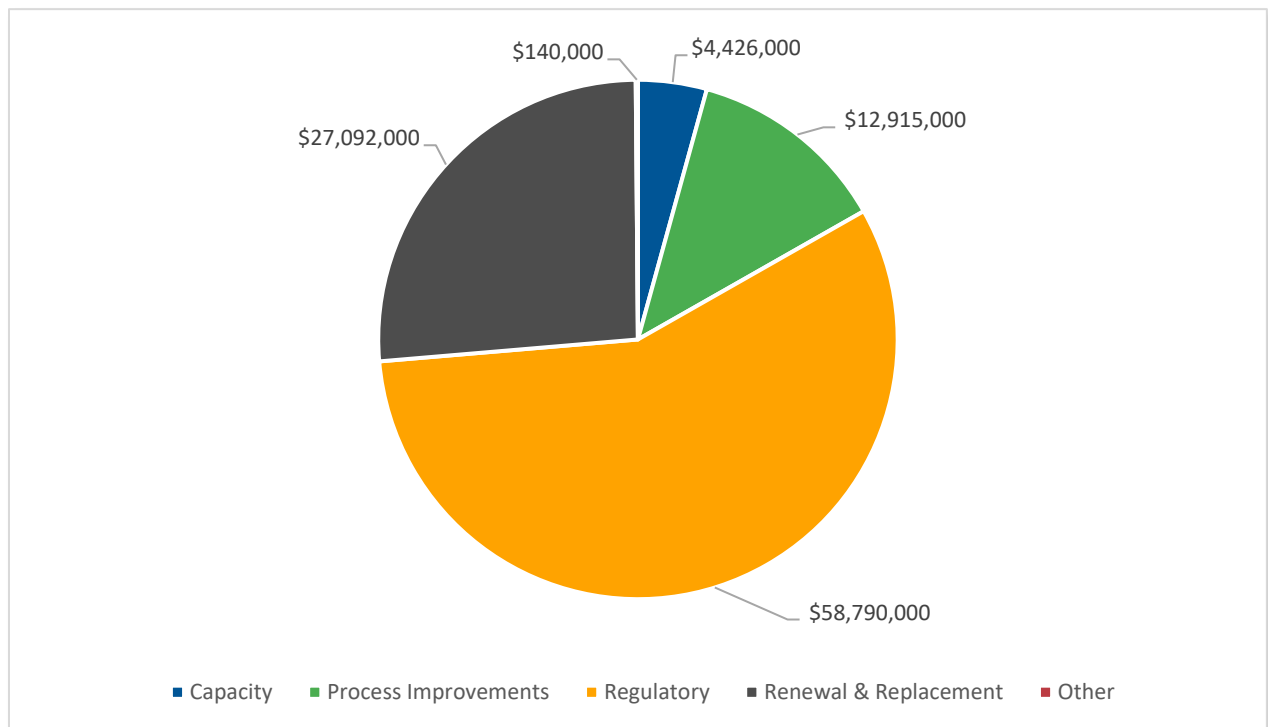


Figure 17. Lower Reedy WRRF 20-Year Capital Improvements

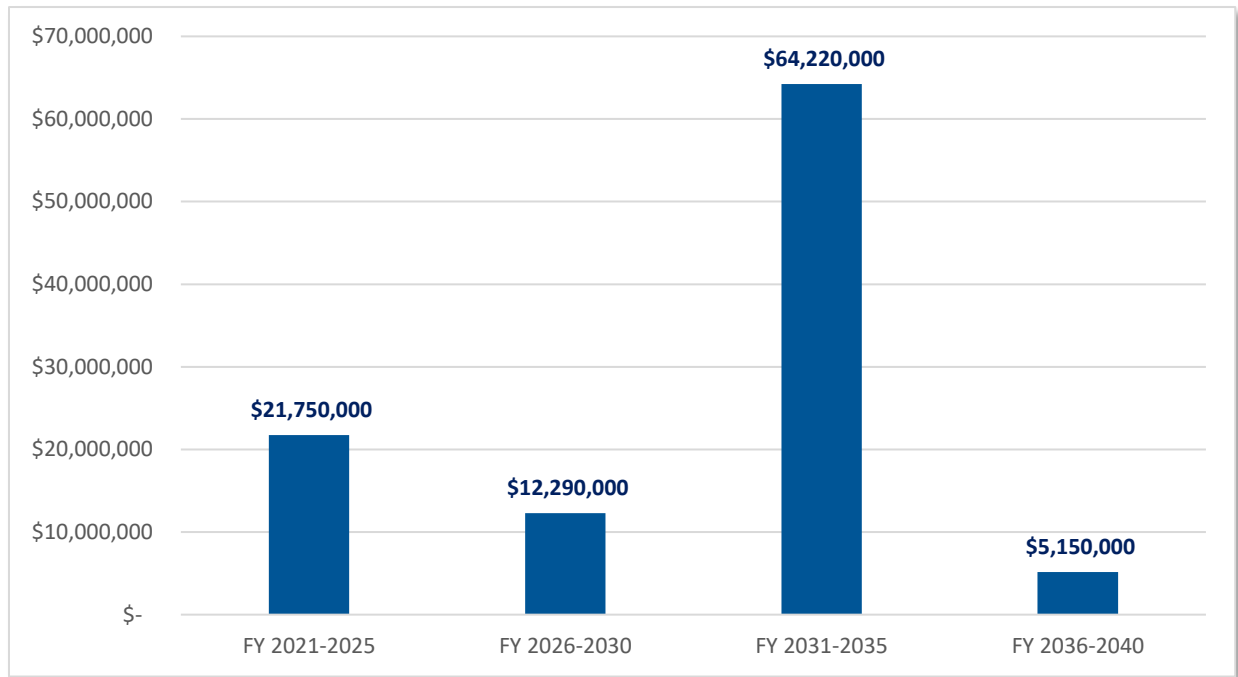


Figure 18. Lower Reedy WRRF 20-Year Capital Improvements Timeline

3.1.2.2 Trunk Sewer System

Capital improvements for ReWa's trunk sewer system within the Lower Reedy WRRF basin will primarily include improvements to the sewer lines, pump stations and force mains. Improvements will include capacity upgrades, chemical feed process improvements, and renewal and replacement of equipment. Near-term improvements include upgrades to approximately 13,500 LF of the existing Rock Creek Interceptor, as well as the installation of a new gravity sewer system to provide service south of the SC Technology & Aviation Center (SCTAC).

A total of \$60,839,000 is planned to be spent on capacity upgrades, \$478,000 on process improvements, and \$2,000,000 on renewal and replacement of equipment. The largest expenditure to be spent on trunk sewer system improvements in the Lower Reedy WRRF basin will be for dry weather upgrades to multiple existing trunk sewer lines throughout the Lower Reedy WRRF basin. In total, the trunk sewer systems within the Lower Reedy WRRF basin are estimated to receive approximately \$63,317,000 of investment in the next 20 years. A summary of the planned improvement costs for the next 20 years can be seen in [Figure 19](#). A breakdown of the 20-year capital improvement costs can be seen in [Figure 20](#).

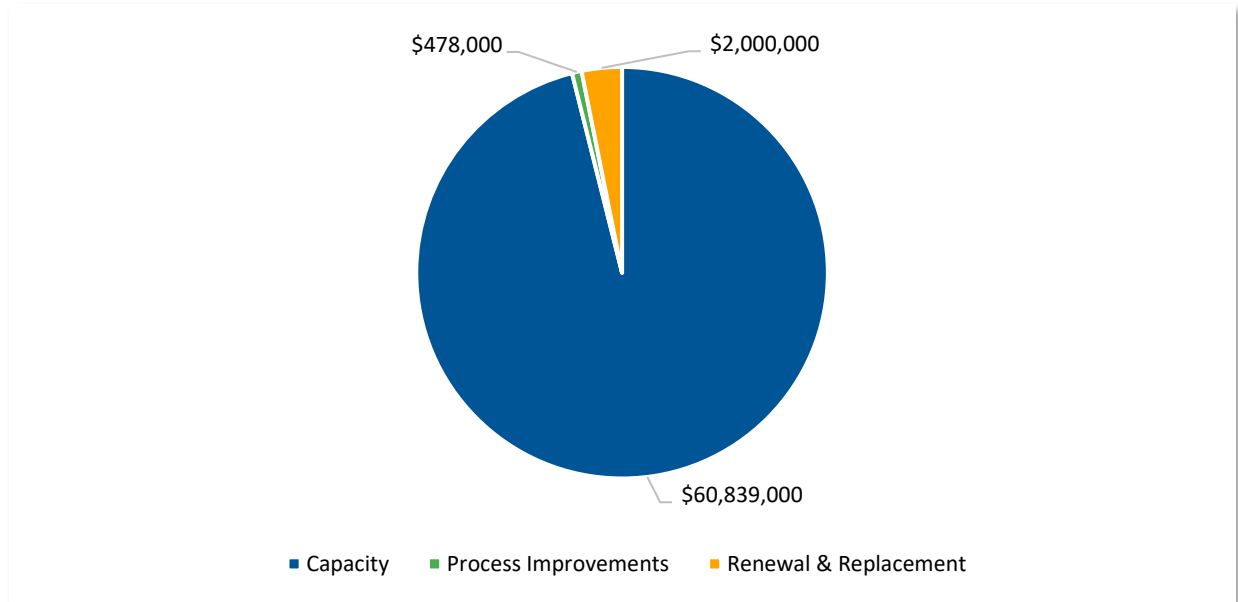


Figure 19. Lower Reedy WRRF Basin Trunk Sewer System 20-Year Capital Improvements

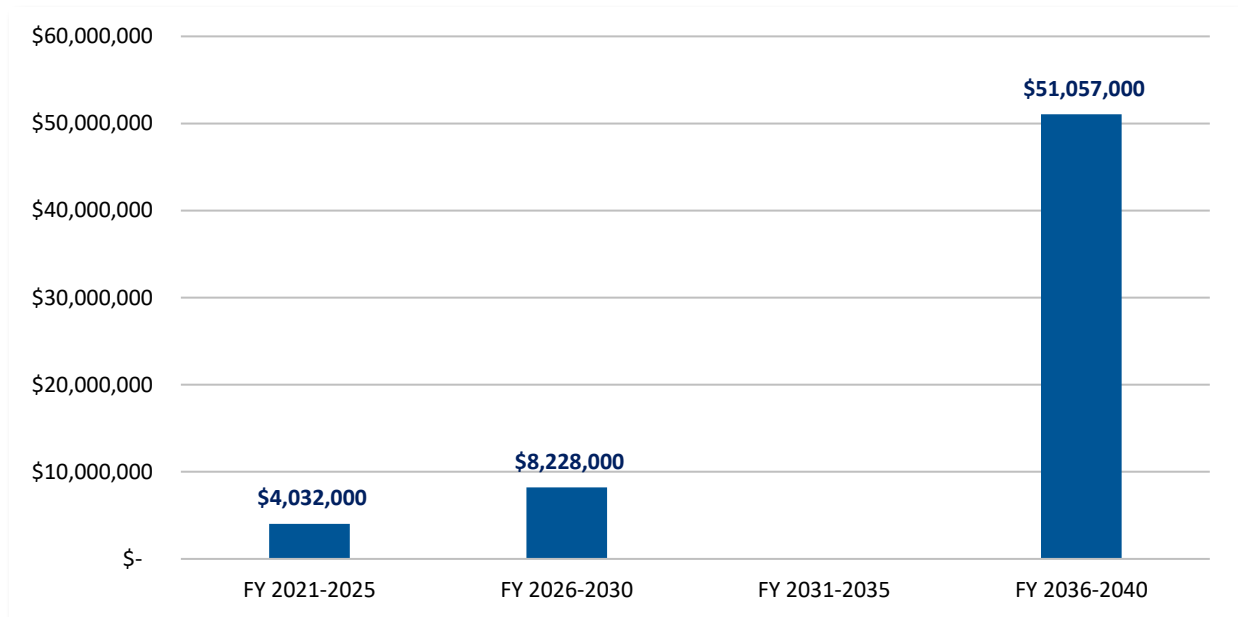


Figure 20. Lower Reedy WRRF Basin Trunk Sewer System 20-Year Capital Improvements Timeline

3.1.2.3 Collection Sewer System

In addition to capital improvements to the trunk sewer system, several capital improvement projects are planned for the Lower Reedy WRRF basin collection sewer system. These projects include capacity upgrades to collection sewer lines and renewal and replacement of equipment within the Lower Reedy WRRF basin. Near-term improvements include approximately 1,000 LF of gravity sewer extension and pump station abandonment in the Pine Forest area.

In total, the collection sewer systems within the Lower Reedy WRRF basin are estimated to receive approximately \$28,261,000 of investment in the next 20 years. A summary of the planned improvement costs for the next 20 years can be seen in [Figure 21](#). A breakdown the 20-year capital improvement costs can be seen in [Figure 22](#).

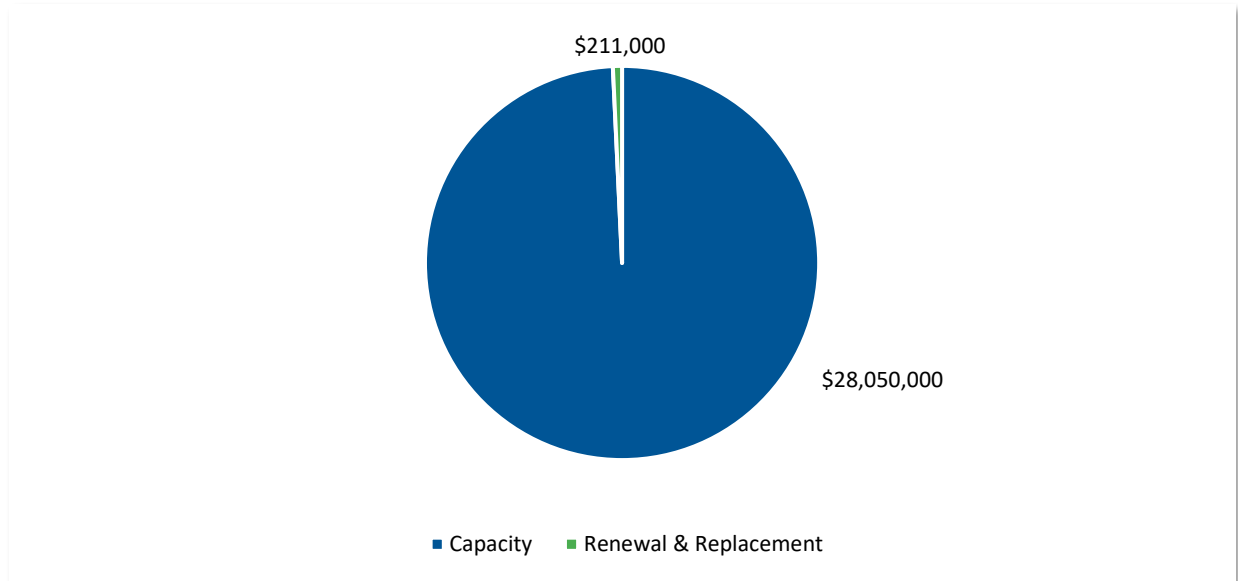


Figure 21. Lower Reedy WRRF Basin Collection Sewer System 20-Year Capital Improvements

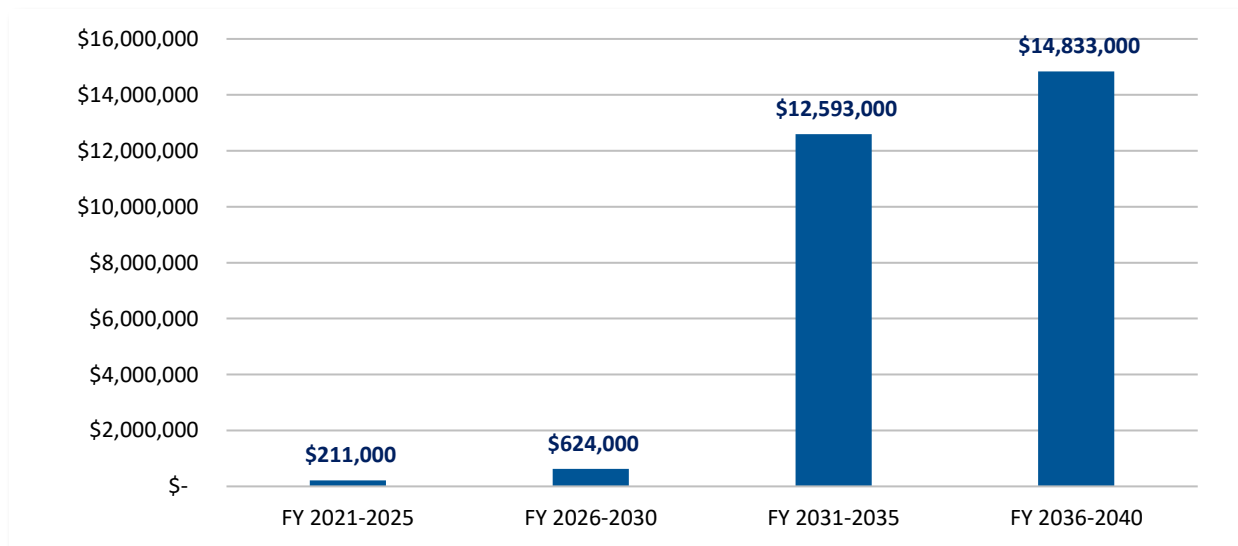


Figure 22. Lower Reedy WRRF Basin Collection Sewer System 20-Year Capital Improvements Timeline

3.1.2.4 New Service Area

Capital improvements dedicated to new service areas within the Lower Reedy WRRF basin primarily include costs for new pump stations and force mains and new gravity trunk and collection sewer lines. Planned improvements include a new pump station and force main to provide service at the intersection

of West Georgia Road and Fork Shoals Road, as well several additional new pump stations throughout the Lower Reedy WRRF basin and associated force mains and gravity sewer.

In total, the new service areas within the Lower Reedy WRRF basin are estimated to receive approximately \$119,403,000 of investment in the next 20 years. A breakdown the 20-year capital improvement costs can be seen in **Figure 23**.

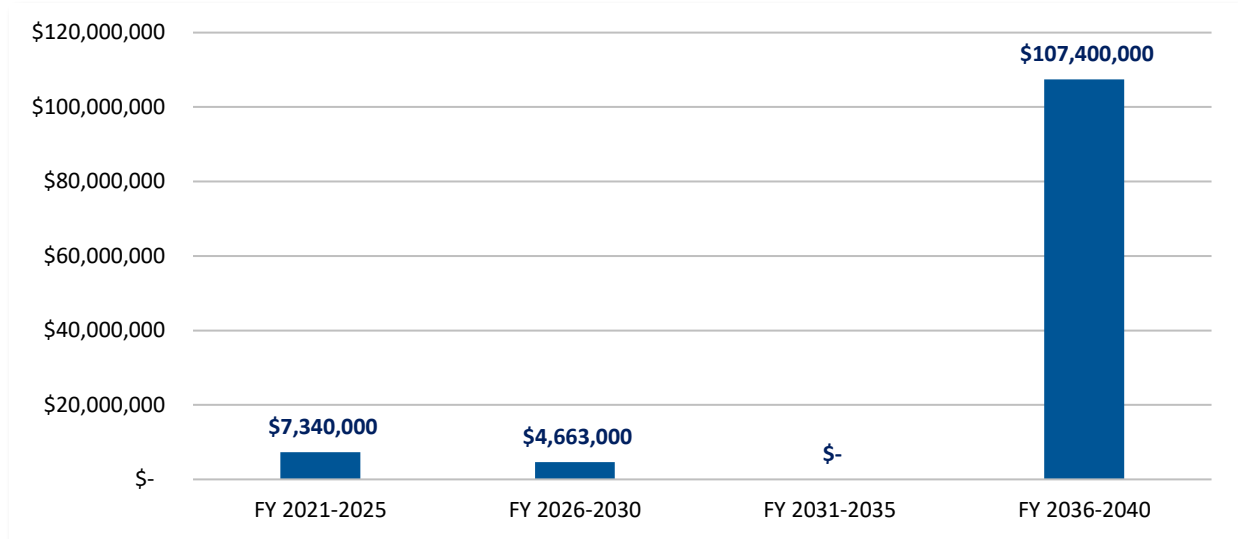


Figure 23. Lower Reedy WRRF Basin New Service Area 20-Year Capital Improvements Timeline

3.1.2.5 Planning & Technology

Capital improvements related to planning and technology within the Lower Reedy WRRF basin will primarily include system planning projects. These system planning projects, which are already underway, include the evaluation of facilities within the Lower Reedy WRRF basin related to both capacity and asset condition. This facility master plan will allow ReWa to better manage assets within the Lower Reedy WRRF Basin.

In total, the Lower Reedy WRRF basin is estimated to receive approximately \$434,000 of investment towards planning and technology within the next five fiscal years. A breakdown of the 20-year capital improvement costs can be seen in **Figure 24**.



Figure 24. Lower Reedy WRRF Basin Planning & Technology 20-Year Capital Improvements Timeline

3.1.2.6 Other Priority Projects

In addition to the capital improvements mentioned above, an additional capital improvement project is planned for the Lower Reedy WRRF basin. This project includes a private line and new service line from Beattie Plant in Fountain Inn, SC. The lines will be made public and dedicated to MetroConnects. MetroConnects will own and operate the collection system. The total cost for this project is \$200,000 and is anticipated to happen within the next two fiscal years.

3.1.3 Reedy River Basin Wide Capital Improvements

In addition to capital improvements related to the Mauldin Road and Lower Reedy WRRF basins, there are several Reedy River basin-wide capital improvements projects planned. These projects include basin wide planning initiatives, process improvements, and other priority projects. Near-term projects include the evaluation of existing and proposed permits for WRRFs discharging to the Reedy River and investigation the benefits of various fermentation concepts on treatment sludge from both the Mauldin Road and Lower Reedy WRRFs.

In total, the Reedy River basin is estimated to receive approximately \$1,124,000 of investment towards basin wide needs within the next ten fiscal years. A summary of the planned improvement costs for the next 20 years can be seen in [Figure 25](#). A breakdown of the 20-year capital improvement costs can be seen in [Figure 26](#).



Figure 25. Reedy River Basin Wide 20-Year Capital Improvements

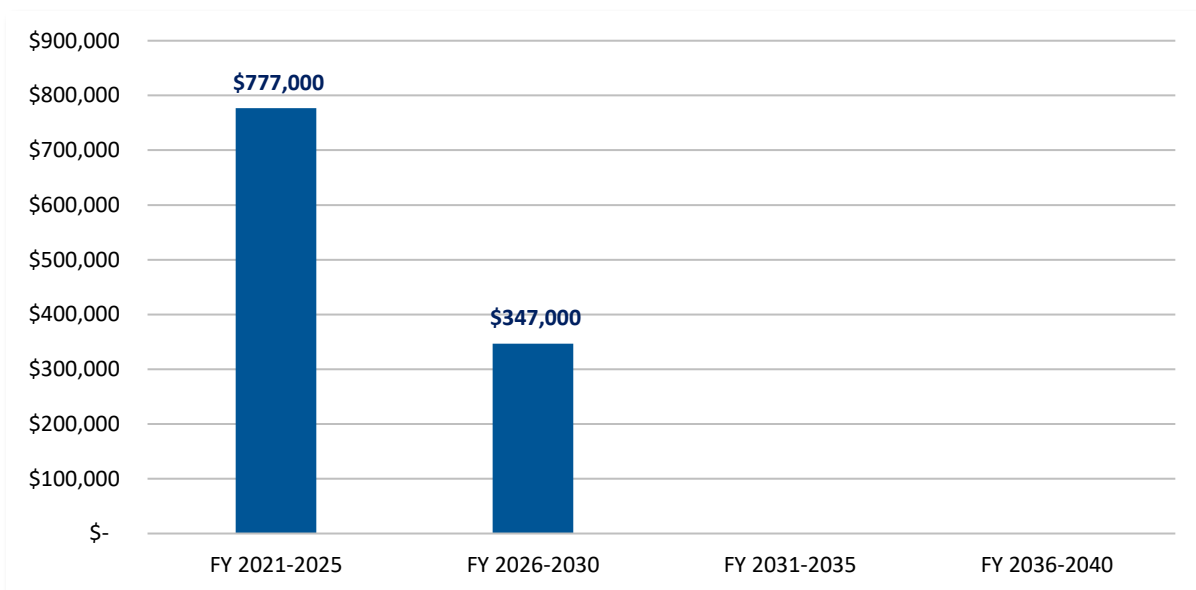


Figure 26. Reedy River Basin Wide Capital Improvements Timeline

3.2 Saluda River Basin

This section outlines the infrastructure improvement needs within the Saluda River Basin. The Saluda River Basin is located primarily in Greenville County, Pickens County, and Anderson County and contains notable areas such as Piedmont, Slater-Marietta, and parts of Greenville County west of White Horse Road. There are three ReWa maintained WRRFs located within the Saluda River Basin: Slater Marietta WRRF, Georges Creek WRRF, and Piedmont Regional WRRF. The Slater Marietta WRRF can treat approximately 0.67 MGD, Georges Creek WRRF can treat approximately 3 MGD, and Piedmont Regional WRRF can treat approximately 4 MGD.

3.2.1 Slater Marietta WRRF

The Slater Marietta WRRF Basin includes a network of trunk collection sewer that carries flow from the Slater and Marietta areas to the Slater Marietta WRRF. [Figure 27](#) below shows an overview of the infrastructure in the Slater Marietta WRRF Basin.

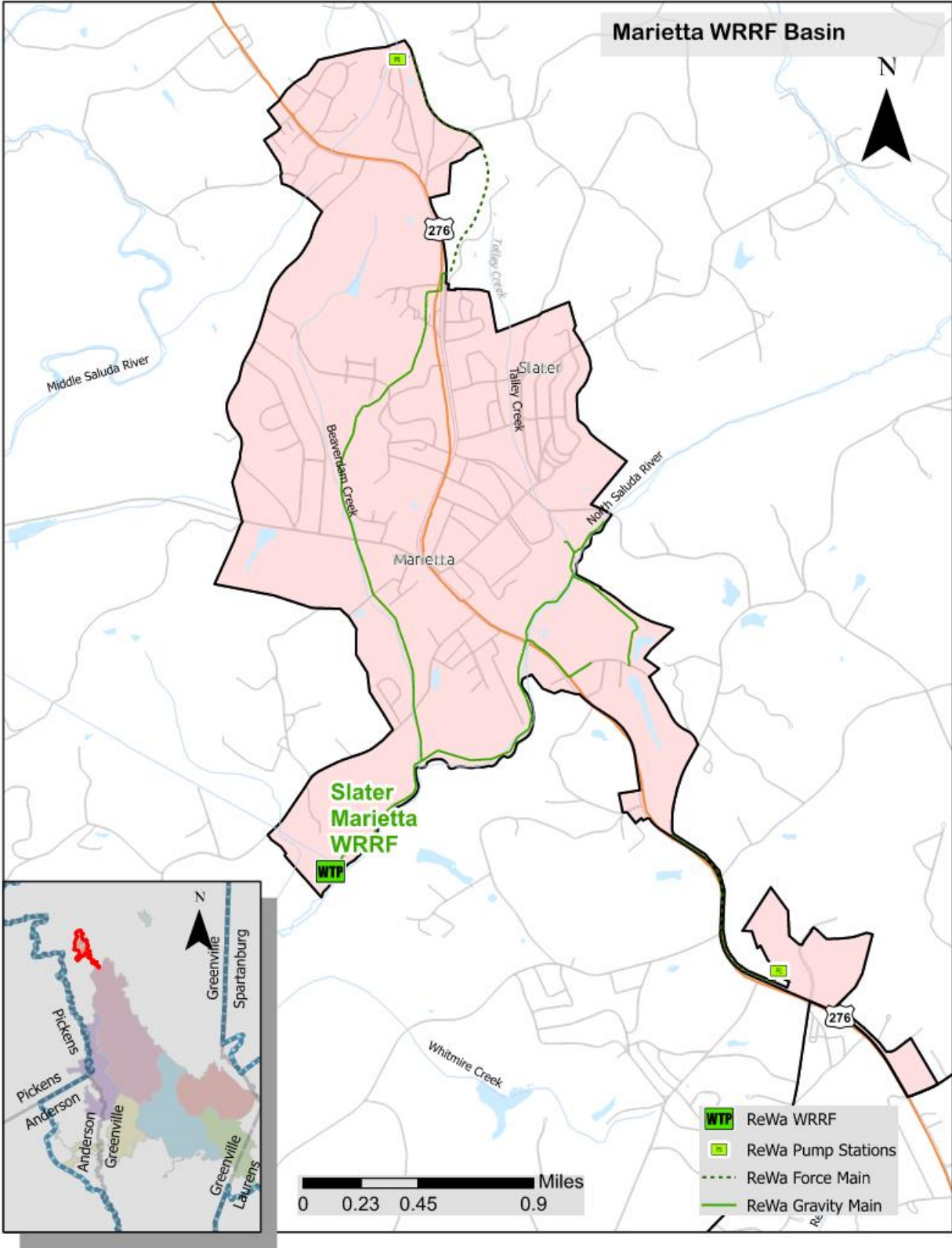


Figure 27. Slater Marietta WRRF Basin

The following sections provide a breakdown of 20-year capital improvement costs for the Slater Marietta WRRF Basin, including WRRF projects, collection sewer system improvements, and planning and technology. A summary table outlining the 20-year capital improvement costs for the Slater Marietta WRRF basin is provided in [Appendix A](#).

3.2.1.1 Water Resource Recovery Facility

Capital improvements for the Slater Marietta WRRF, shown in [Figure 28](#), primarily include the renewal and replacement of specific equipment. Near term improvements to the Slater Marietta WRRF include rehabilitation of equipment within the WAS/RAS pump station, secondary clarifiers, and solid holding tanks. A total of \$150,000 is planned to be spent within the next fiscal year on renewal and replacement of equipment. A breakdown of the 20-year capital improvement costs can be seen in [Figure 29](#).



Figure 28. Slater Marietta WRRF



Figure 29. Slater Marietta WRRF 20-Year Capital Improvements Timeline

3.2.1.2 Collection Sewer System

In addition to capital improvements to the WRRF, several capital improvement projects are planned for the Slater Marietta Basin collection sewer system. These projects include upgrades to collection sewer lines within the Slater Marietta WRRF Basin. These improvements include capacity upgrades and renewal and replacement of equipment. Specific improvements include upgrades to the existing Marietta trunk sewer line, as well as existing gravity sewer along Beaver Creek.

A total of \$6,603,000 is planned to be spent on capacity upgrades and \$10,624,000 on renewal and replacement of equipment. In total, the collection sewer systems within the Slater Marietta WRRF basin are estimated to receive approximately \$17,227,000 of investment in the next 20 years. A summary of the planned improvement costs for the next 20 years can be seen in [Figure 30](#). A breakdown the 20-year capital improvement costs can be seen in [Figure 31](#).

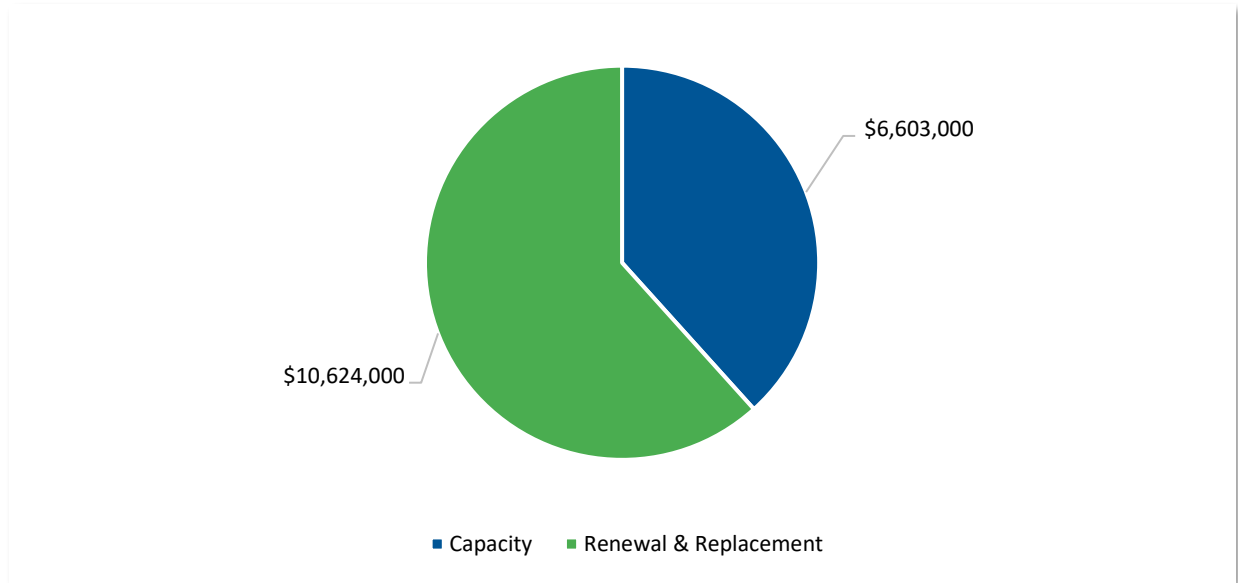


Figure 30. Slater Marietta WRRF Basin Collection Sewer System 20-Year Capital Improvements

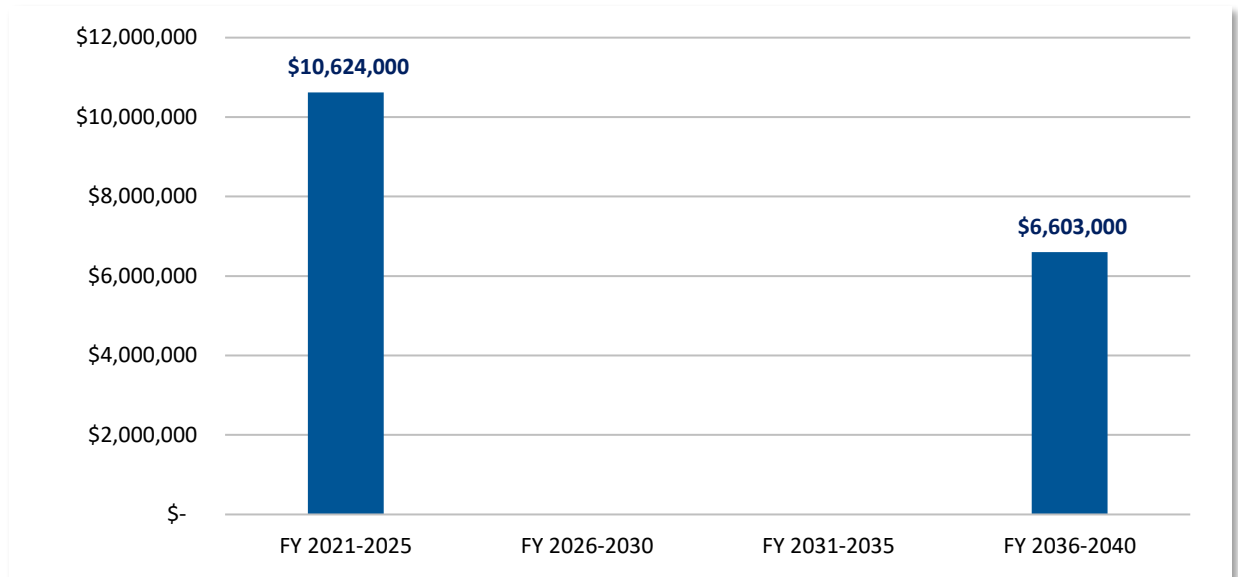


Figure 31. Slater Marietta WRRF Basin Collection Sewer System 20-Year Capital Improvements Timeline

3.2.1.3 Planning & Technology

Capital improvements related to planning and technology within the Slater Marietta WRRF Basin will primarily include system planning projects. These system planning projects, which are already underway, include the evaluation of facilities within the Slater Marietta WRRF Basin related to both capacity and asset condition. This facility master plan will allow ReWa to better manage assets within the Slater Marietta WRRF Basin.

In total, the Slater Marietta WRRF Basin is estimated to receive approximately \$106,000 of investment towards planning and technology within the next five fiscal years. A breakdown of the 20-year capital improvement costs can be seen in [Figure 32](#).



Figure 32. Slater Marietta WRRF Basin Planning and Technology 20-Year Capital Improvements Timeline

3.2.2 Georges Creek WRRF

The Georges Creek WRRF Basin includes a network of trunk collection sewer that carries flow from portions of Powdersville, West Greenville, and areas along the Saluda River to the Georges Creek WRRF. [Figure 33](#) below shows an overview of the infrastructure in the Georges Creek WRRF basin.

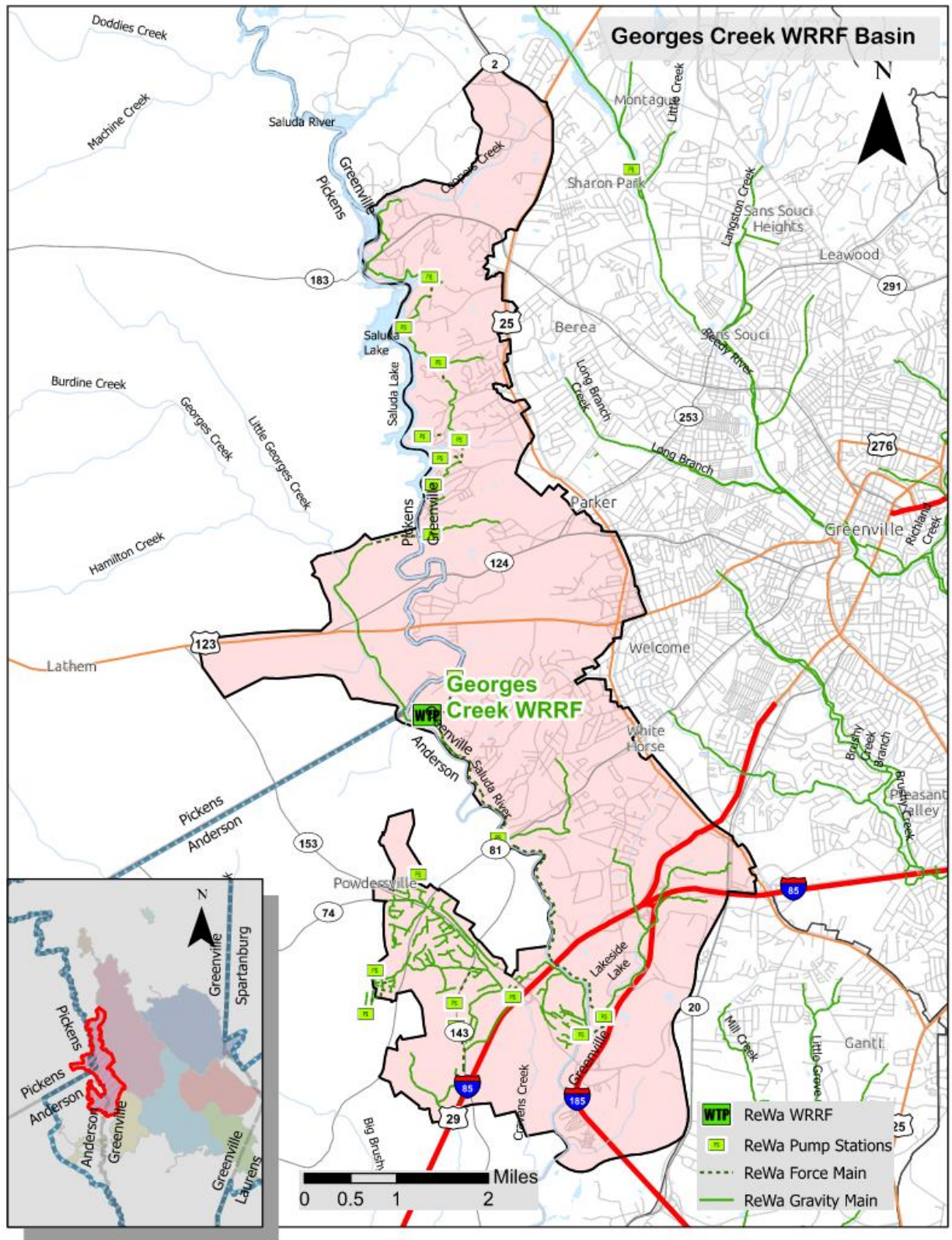


Figure 33. Georges Creek WRRF Basin

The following sections provide a breakdown of 20-year capital improvement costs for the Georges Creek WRRF Basin, including WRRF projects, trunk sewer system and collection sewer system improvements, new service area, and planning and technology. A summary table outlining the 20-year capital improvement costs for the Georges Creek WRRF Basin is provided in [Appendix A](#).

3.2.2.1 Water Resource Recovery Facility

Capital improvements for the Georges Creek WRRF, shown in [Figure 34](#), primarily include capacity upgrades, process improvements to the plant, and renewal and replacement of specific equipment. Near term improvements to the Georges Creek WRRF include treatment capacity expansion, flow equalization, nutrient removal, chemical feed system rehabilitation, dewatering system improvements as well as the replacement of equipment such as mixers, aerators, clarifier mechanisms, and the existing influent screen.



Figure 34. Georges Creek WRRF

A total of \$26,910,00 is planned to be spent on capacity upgrades, \$8,766,000 on process improvements, and \$14,058,000 on renewal and replacement of equipment. The largest expenditure for this facility in the next 20 years will be the WRRF capacity expansion to 6.2 MGD. In total, Georges Creek WRRF is estimated to receive approximately \$49,734,000 of investment in the next 20 years. A summary of the planned improvement costs for the next 20 years can be seen in [Figure 35](#). A breakdown of the 20-year capital improvement costs can be seen in [Figure 36](#).

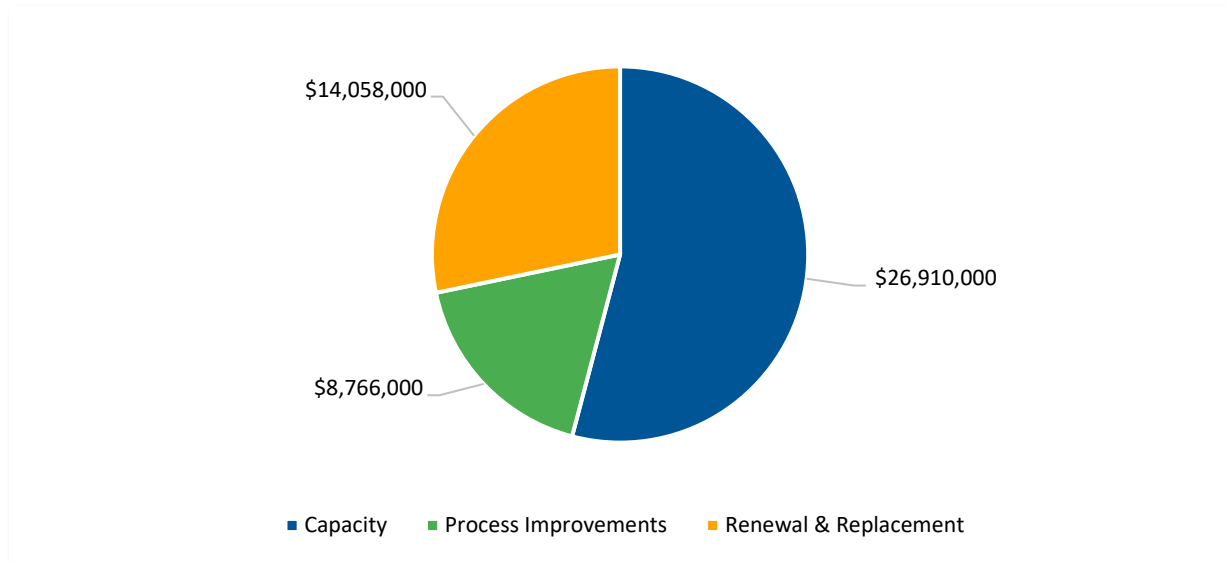


Figure 35. Georges Creek WRRF 20-Year Capital Improvements

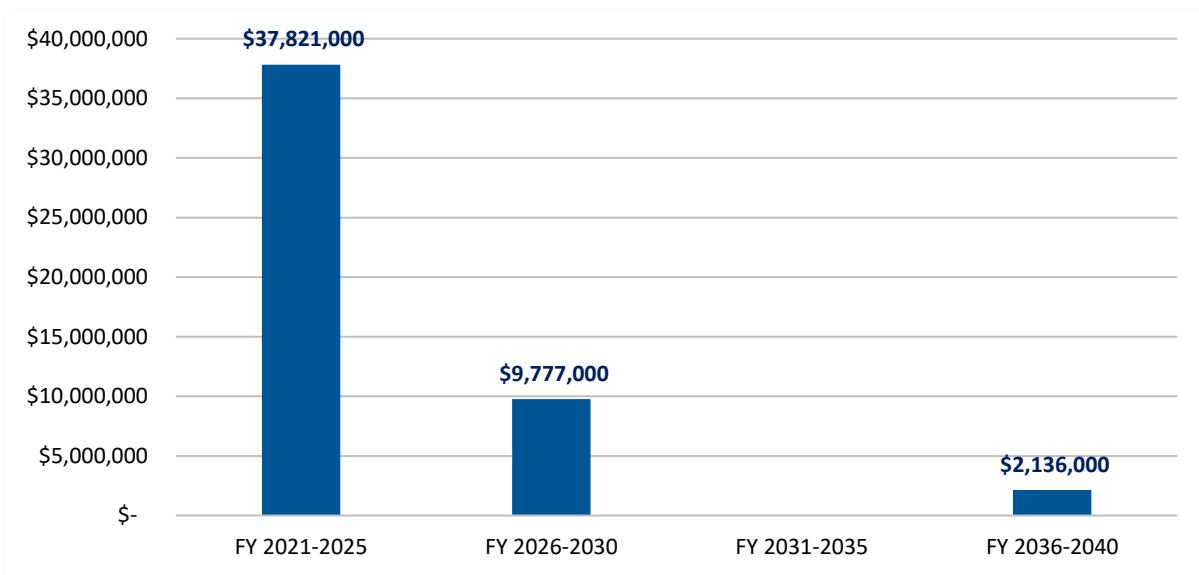


Figure 36. Georges Creek WRRF 20-Year Capital Improvements Timeline

3.2.2.2 Trunk Sewer System

Capital improvements for ReWa's trunk sewer system within the Georges Creek WRRF Basin will primarily include improvements to the sewer lines, pump stations and force mains. Improvements will include capacity upgrades, growth driven upgrades, and renewal and replacement of equipment. Near-term improvements include capacity upgrades to an existing pump station, as well as installation of approximately 2,300 linear feet of gravity trunk sewer to eliminate an existing pump station.

A total of \$31,638,000 is planned to be spent on capacity upgrades, \$4,561,000 on growth driven upgrades, and \$2,719,000 on renewal and replacement of equipment. The largest expenditure to be spent on trunk sewer system improvements in the Georges Creek WRRF Basin is the upgrade of

approximately 14,500 linear feet of force main and capacity upgrades to the existing Lakeside Pump Station. In total, the trunk sewer systems within the Georges Creek WRRF Basin are estimated to receive approximately \$38,918,000 of investment in the next 20 years. A summary of the planned improvement costs for the next 20 years can be seen in [Figure 37](#). A breakdown of the 20-year capital improvement costs can be seen in [Figure 38](#).

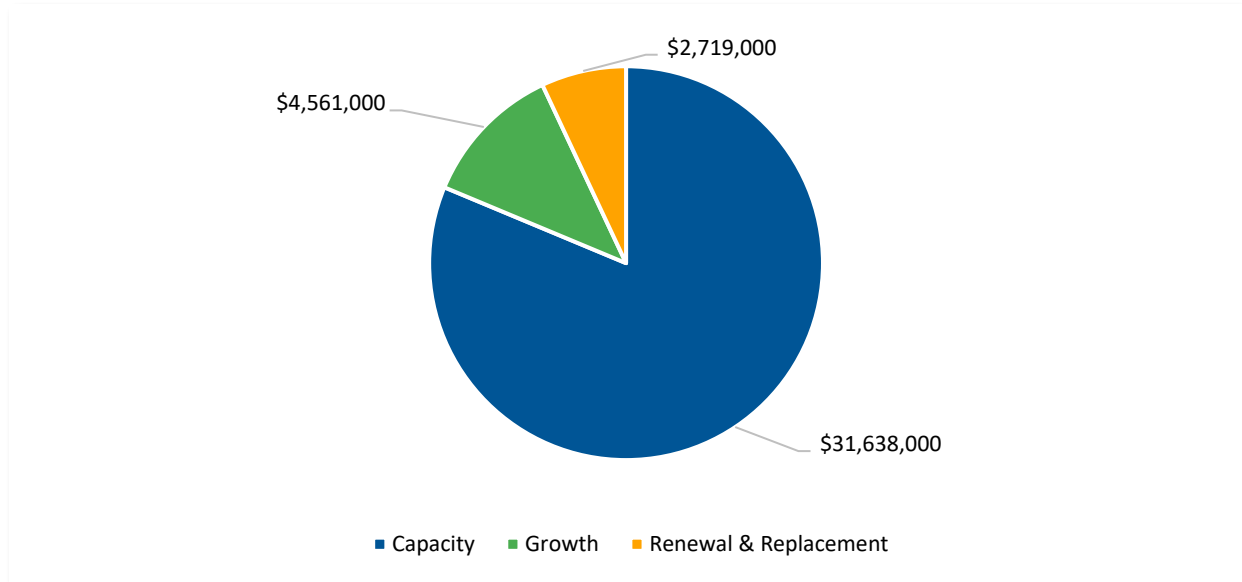


Figure 37. Georges Creek WRRF Basin Trunk Sewer System 20-Year Capital Improvements

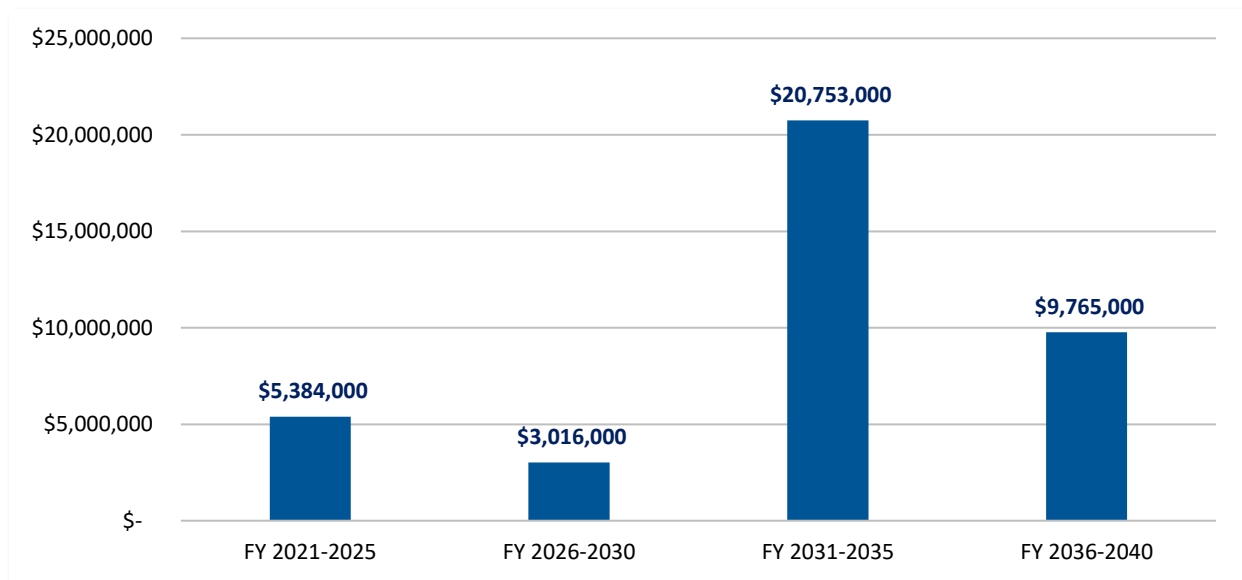


Figure 38. Georges Creek WRRF Basin Trunk Sewer System 20-Year Capital Improvements Timeline

3.2.2.3 Collection Sewer System

In addition to capital improvements to the trunk sewer system, several capital improvement projects are planned for the Georges Creek WRRF basin collection sewer system. These projects include capacity upgrades to collection sewer lines within the Georges Creek WRRF Basin. Near-term improvements include upgrades of approximately 600 linear feet of existing gravity sewer near the Saluda Lake Pump Station #2 and approximately 900 linear feet of gravity sewer to carry flows from the Parker area to the Saluda Lake Pump Station #5.

In total, the collection sewer systems within the Georges Creek WRRF Basin are estimated to receive approximately \$14,132,000 of investment in the next 20 years. A breakdown the 20-year capital improvement costs can be seen in **Figure 39**.

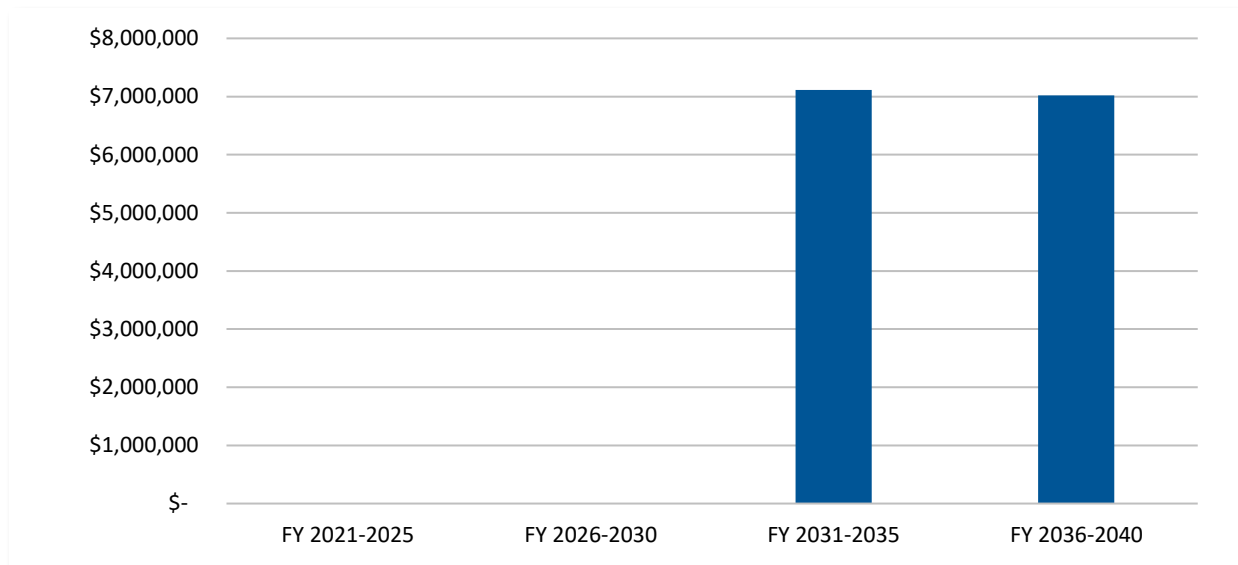


Figure 39. Georges Creek WRRF Basin Collection Sewer System 20-Year Capital Improvements Timeline

3.2.2.4 New Service Area

Capital improvements dedicated to new service areas within the Georges Creek WRRF Basin primarily include costs for new pump stations and force mains and new gravity trunk and collection sewer lines. Planned improvements new pump stations and sewer systems, and the extension of existing trunk sewer lines to provide service in northeast Anderson County.

In total, the new service areas within the Georges Creek WRRF Basin are estimated to receive approximately \$55,435,000 of investment in the next 20 years. A breakdown the 20-year capital improvement costs can be seen in **Figure 40**.

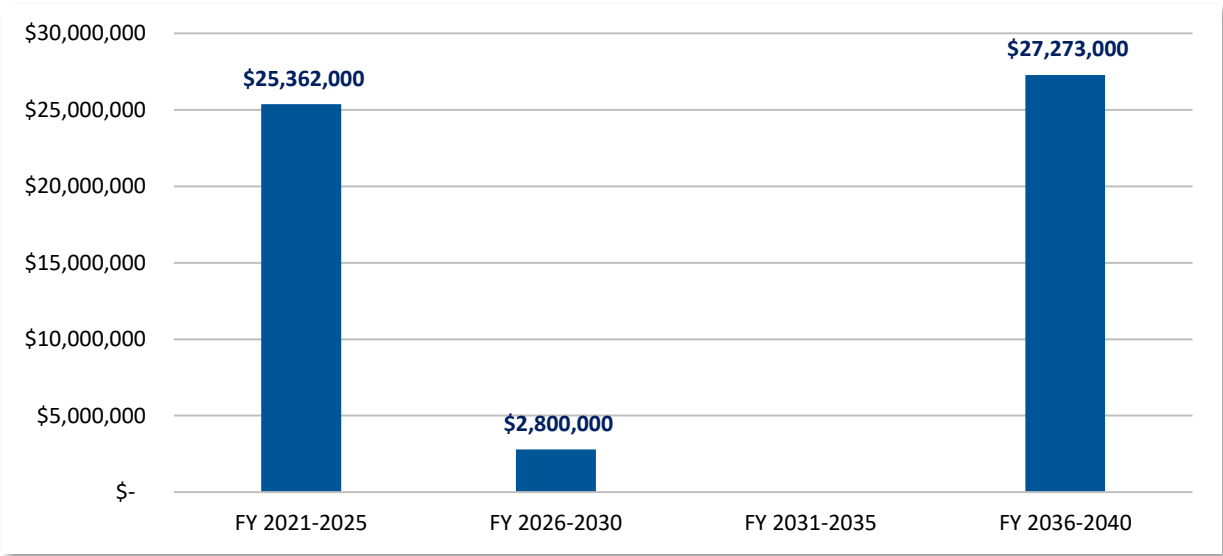


Figure 40. Georges Creek WRRF Basin New Service Area Capital Improvements Timeline

3.2.2.5 Planning and Technology

Capital improvements related to planning and technology within the Georges Creek WRRF basin will primarily include system planning projects. These system planning projects, which are already underway, include the evaluation of facilities within the Georges Creek WRRF basin related to both capacity and asset condition. This facility master plan will allow ReWa to better manage assets within the Georges Creek WRRF Basin.

In total, the Georges Creek WRRF basin is estimated to receive approximately \$151,000 of investment towards planning and technology within the next five fiscal years. A breakdown of the 20-year capital improvement costs can be seen in **Figure 41**.

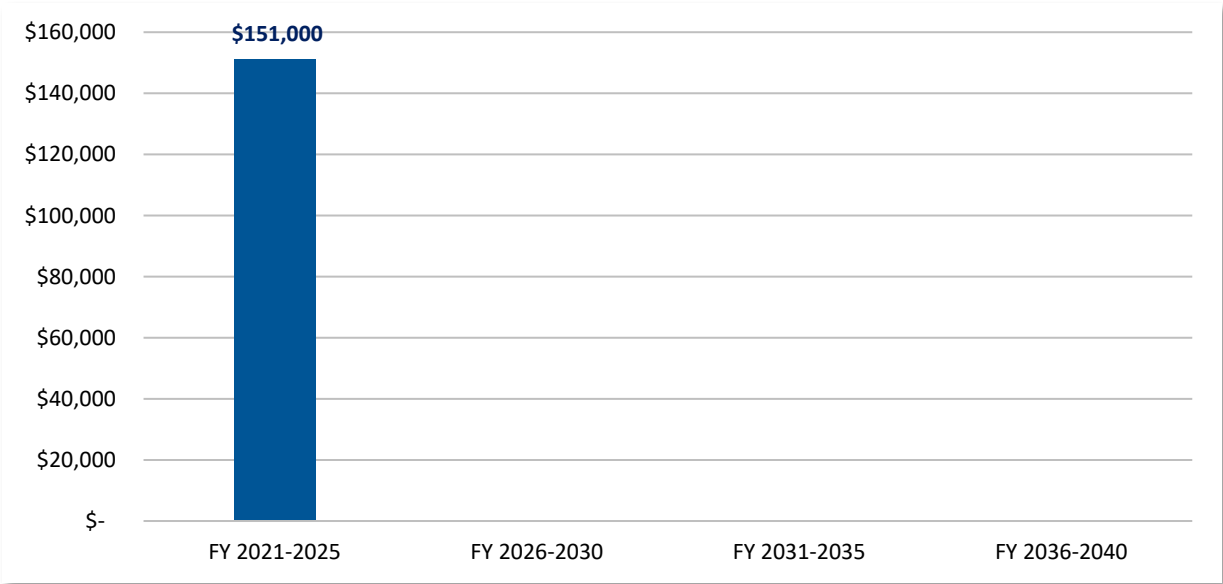


Figure 41. Georges Creek WRRF Basin Planning and Technology Capital Improvements Timeline

3.2.3 Piedmont Regional WRRF

The Piedmont Regional WRRF Basin includes a network of trunk collection sewer that carries flow from the Piedmont and Gant areas to the Piedmont Regional WRRF. [Figure 42](#) below shows an overview of the infrastructure in the Piedmont Regional WRRF basin.

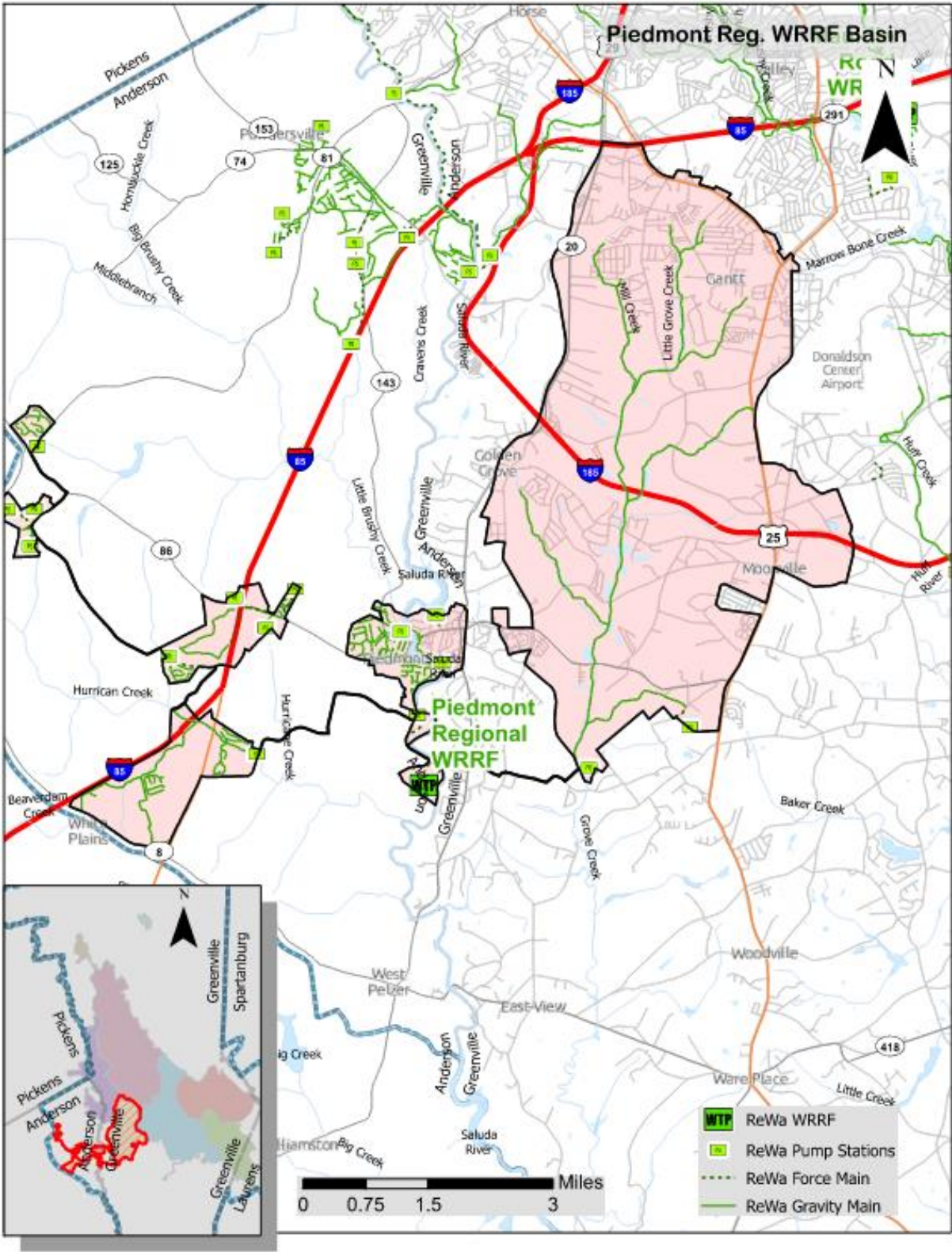


Figure 42. Piedmont Regional WRRF Basin

The following sections provide a breakdown of 20-year capital improvement costs for the Piedmont Regional WRRF basin, including WRRF projects, trunk sewer system and collection sewer system improvements, new service area, and planning and technology. A summary table outlining the 20-year capital improvement costs for the Piedmont Regional WRRF basin is provided in [Appendix A](#).

3.2.3.1 Water Resource Recovery Facility

Capital improvements for the Piedmont Regional WRRF, shown in [Figure 43](#), primarily include capacity upgrades, process improvements to the plant, and renewal and replacement of specific equipment. Near term improvements to the Piedmont Regional WRRF include offsite flow equalization as well as the replacement of equipment such as bioreactor blowers, generator, plant control system, and filtration membranes.



Figure 43. Piedmont Regional WRRF

A total of \$201,300,000 is planned to be spent on capacity upgrades, \$11,227,000 on process improvements, and \$16,011,000 on renewal and replacement of equipment. The largest expenditure for this facility in the next 20 years will be the WRRF capacity expansion to 9 MGD. In total, Piedmont Regional WRRF is estimated to receive approximately \$288,538,000 of investment in the next 20 years. A summary of the planned improvement costs for the next 20 years can be seen in [Figure 44](#). A breakdown of the 20-year capital improvement costs can be seen in [Figure 45](#).

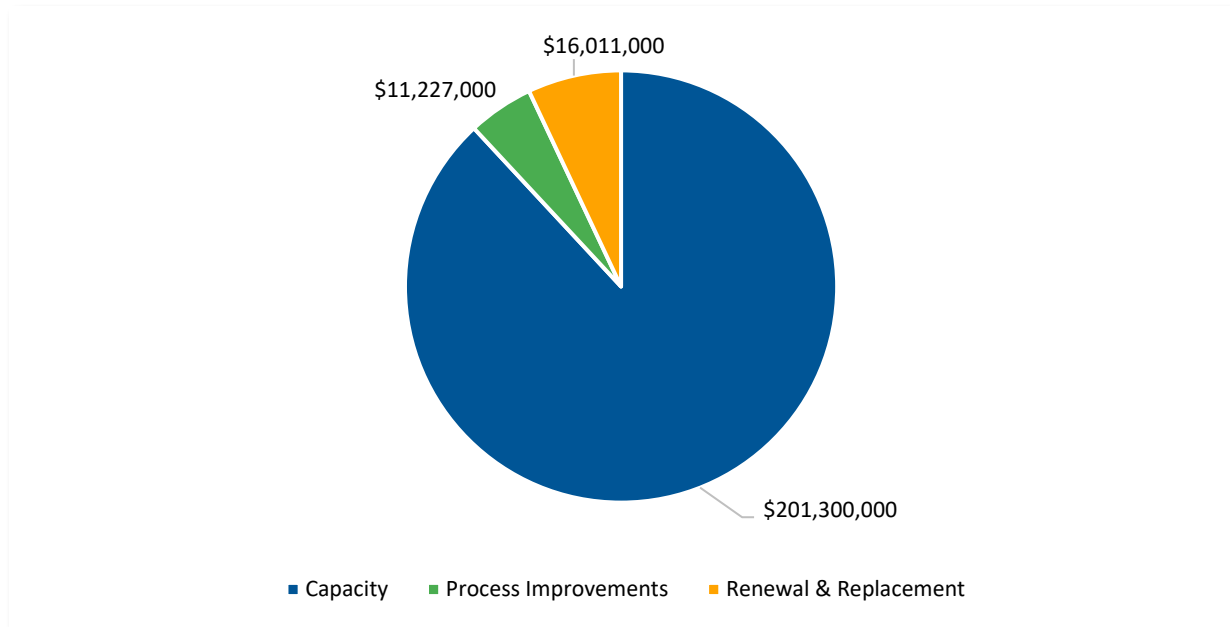


Figure 44. Piedmont Regional WRRF 20-Year Capital Improvements

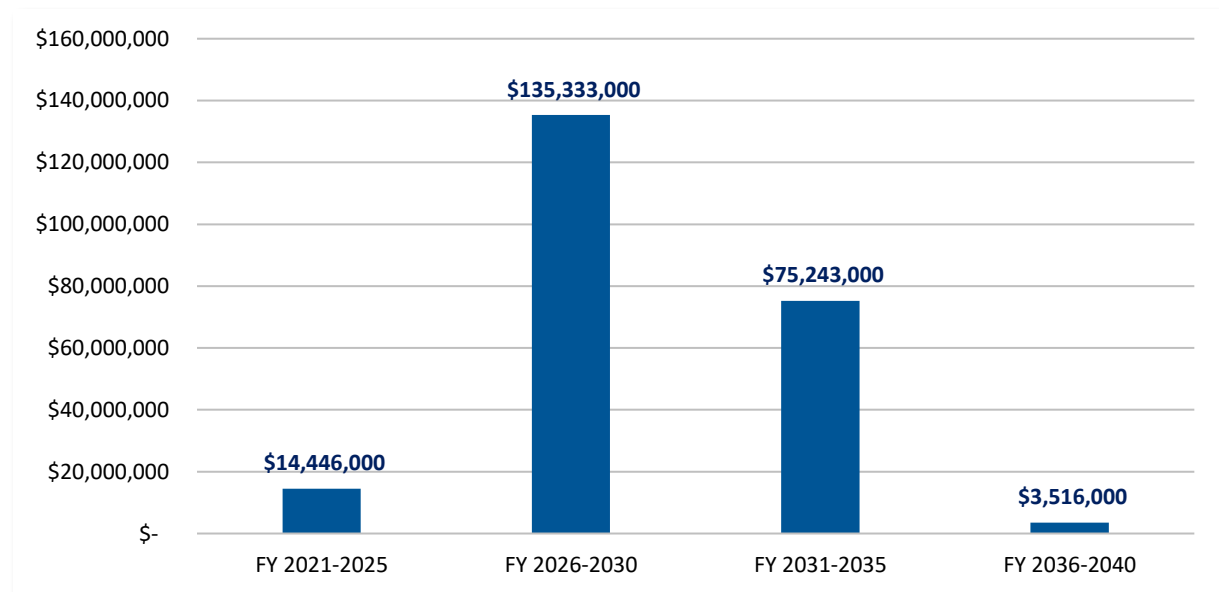


Figure 45. Piedmont Regional WRRF 20-Year Capital Improvements Timeline

3.2.3.2 Trunk Sewer System

Capital improvements for ReWa's trunk sewer system within the Piedmont Regional WRRF Basin will primarily include improvements to the sewer lines, pump stations and force mains. Improvements will include capacity upgrades and renewal and replacement of equipment. Near-term improvements include rehabilitation of existing pump station and upgrades to approximately 20,000 linear feet of the Grove Creek interceptor.

A total of \$30,339,000 is planned to be spent on capacity upgrades and \$3,299,000 on renewal and replacement of equipment. The largest expenditure to be spent on trunk sewer system improvements in the Piedmont Regional WRRF basin are the upgrades to the Grove Creek interceptor. In total, the trunk sewer systems within the Piedmont Regional WRRF basin are estimated to receive approximately \$33,638,000 of investment in the next 20 years. A summary of the planned improvement costs for the next 20 years can be seen in [Figure 46](#). A breakdown of the 20-year capital improvement costs can be seen in [Figure 47](#).

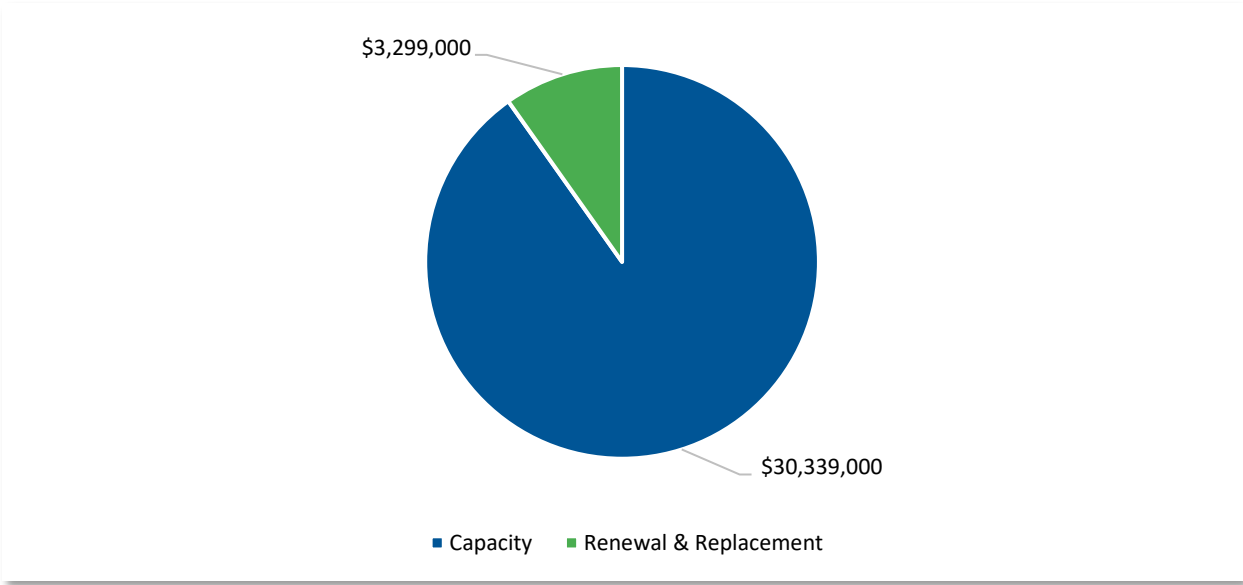


Figure 46. Piedmont Regional WRRF Basin Trunk Sewer System 20-Year Capital Improvements

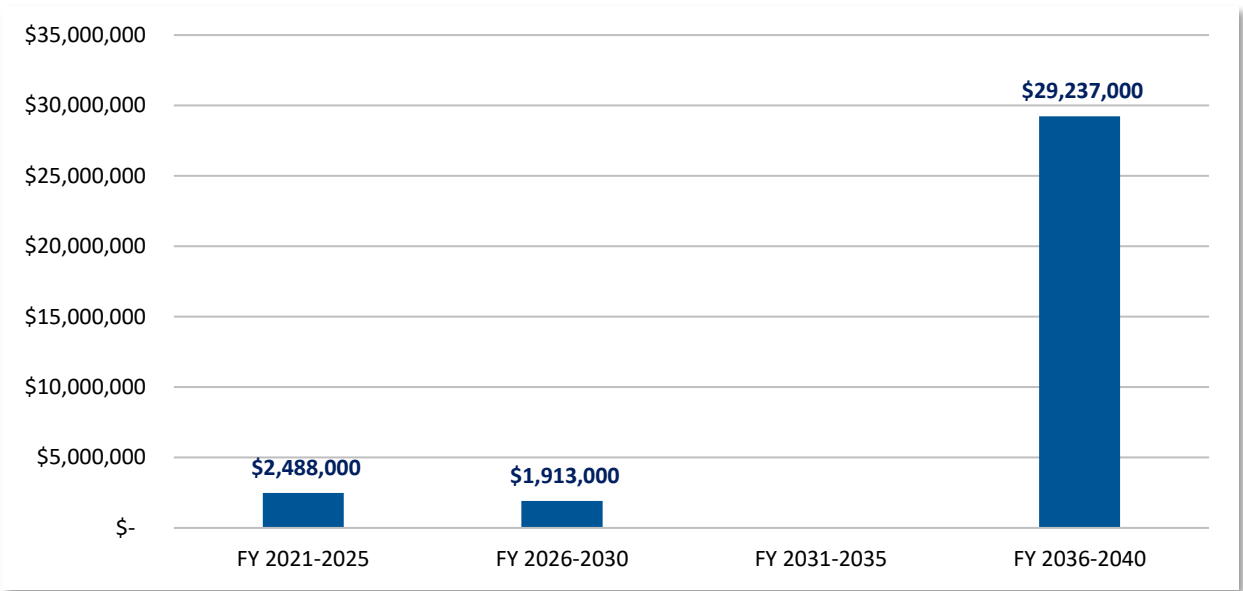


Figure 47. Piedmont Regional WRRF Basin Trunk Sewer System 20-Year Capital Improvements Timeline

3.2.3.3 Collection Sewer System

In addition to capital improvements to the trunk sewer system, several capital improvement projects are planned for the Piedmont Regional WRRF basin collection sewer system. Improvements will include capacity upgrades, growth related upgrades, and renewal and replacement of equipment. Near term improvements include rehabilitation of existing pump stations.

A total of \$7,627,000 is planned to be spent on capacity upgrades, \$6,298,000 on growth related improvements, and \$3,962,000 on renewal and replacement of equipment. The largest expenditure to be spent on trunk sewer system improvements in the Piedmont Regional WRRF will be for approximately 2,400 linear feet of new gravity sewer to serve Childers Circle, as well as an additional 1,300 linear feet of gravity sewer to eliminate the Riverstone Pump Station and 900 linear feet to eliminate the Meadow Green Pump Station. In total, the collection sewer systems within the Piedmont Regional WRRF Basin are estimated to receive approximately \$17,887,000 of investment in the next 20 years. A summary of the planned improvement costs for the next 20 years can be seen in [Figure 48](#). A breakdown of the 20-year capital improvement costs can be seen in [Figure 49](#).

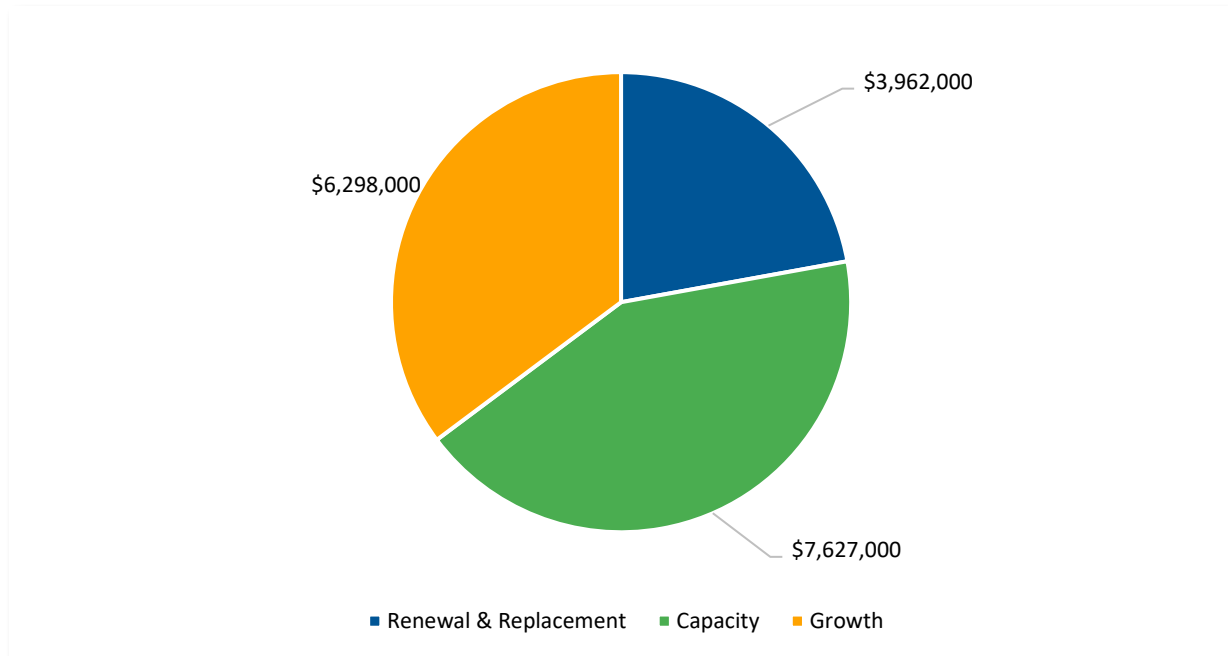


Figure 48. Piedmont Regional WRRF Basin Collection Sewer System 20-Year Capital Improvements

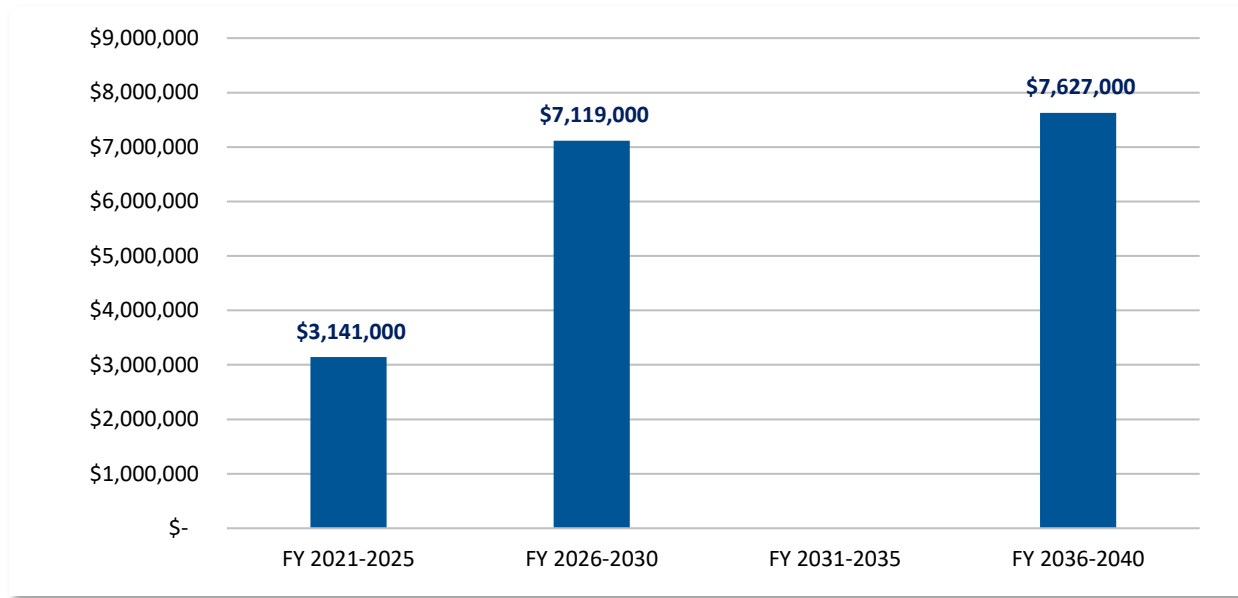


Figure 49. Piedmont Regional WRRF Basin Collection Sewer System 20-Year Capital Improvements Timeline

3.2.3.4 New Service Area

Capital improvements dedicated to new service areas within the Piedmont Regional WRRF basin primarily include costs for new pump stations and force mains and new gravity trunk and collection sewer lines. Planned improvements include new pump stations, force mains, and gravity sewer to provide service to new service area in northeast Anderson County.

In total, the new service areas within the Piedmont Regional WRRF basin are estimated to receive approximately \$49,416,000 of investment in the next 20 years. A breakdown the 20-year capital improvement costs can be seen in [Figure 50](#).

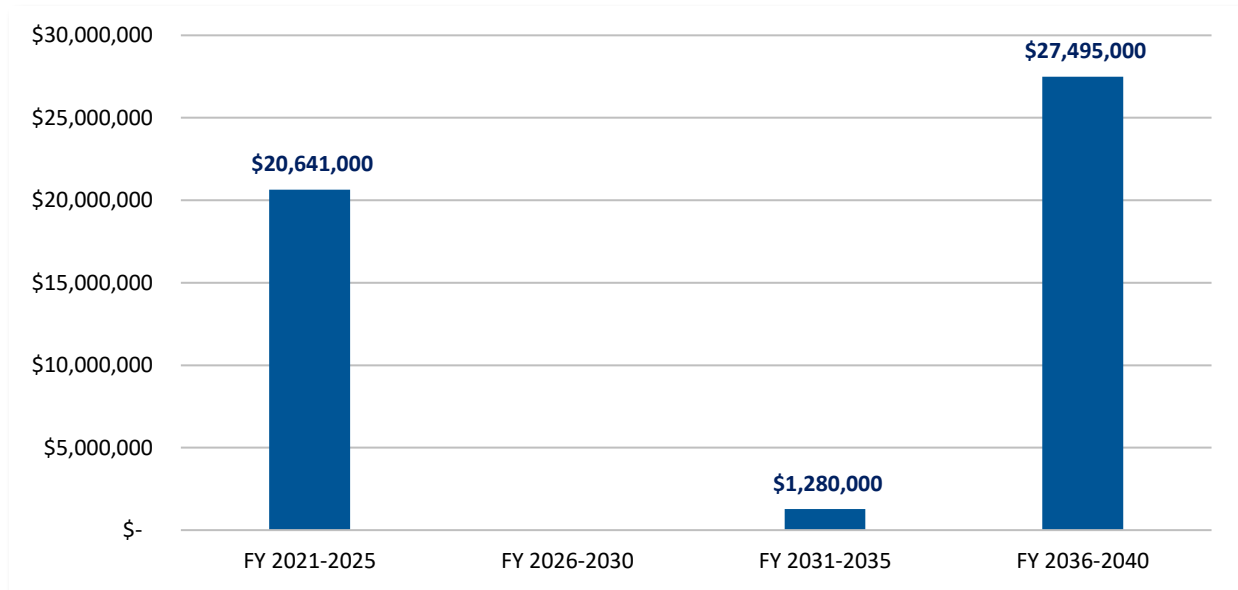


Figure 50. Piedmont Regional WRRF Basin New Service Area 20-Year Capital Improvements Timeline

3.2.3.5 Planning and Technology

Capital improvements related to planning and technology within the Piedmont Regional WRRF basin will primarily include system planning projects. These system planning projects, which are already underway, include the evaluation of facilities within the Piedmont Regional WRRF basin related to both capacity and asset condition. This facility master plan will allow ReWa to better manage assets within the Piedmont Regional WRRF Basin.

In total, the Piedmont Regional WRRF basin is estimated to receive approximately \$264,000 of investment towards planning and technology within the next five fiscal years. A breakdown of the 20-year capital improvement costs can be seen in [Figure 51](#).

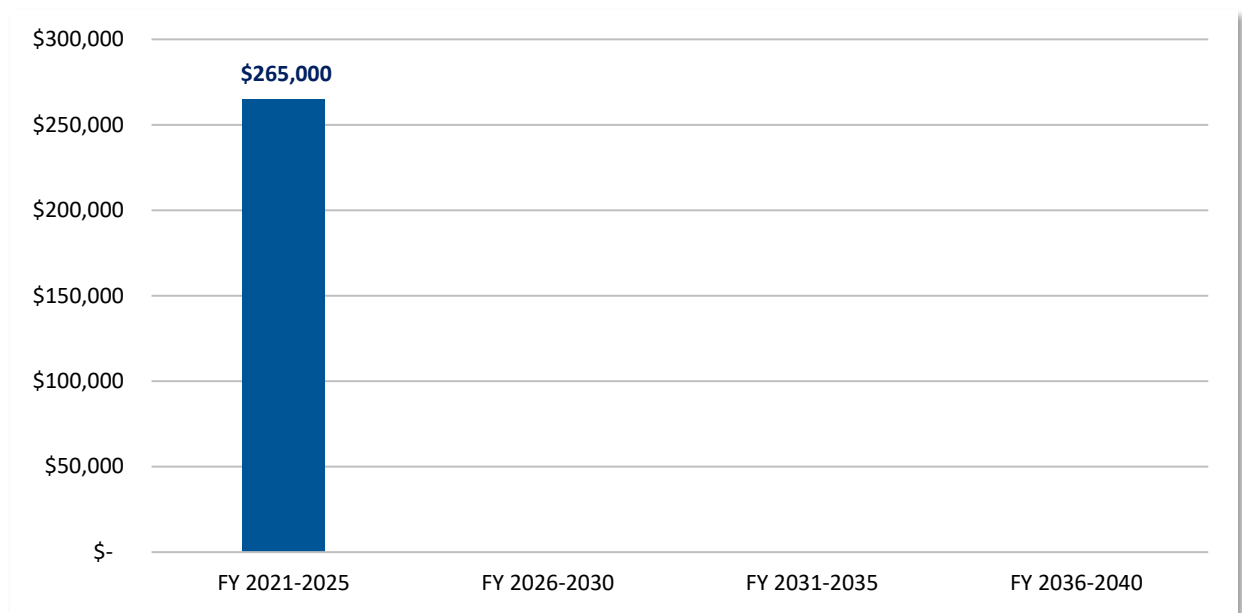


Figure 51. Piedmont Regional WRRF Basin Planning and Technology 20-Year Capital Improvements Timeline

3.2.4 Saluda River Basin Wide Capital Improvements

In addition to capital improvements related to the Slater Marietta, Georges Creek, and Piedmont Regional WRRF basins, there are several Saluda River basin-wide capital improvements projects planned. These projects include adding stationary generators to pump stations within the Saluda River Basin, as well as constructing canopies of electrical equipment at approximately 39 pump stations.

In total, the Saluda River basin is estimated to receive approximately \$1,300,000 of investment towards basin wide needs within the next five fiscal years. A summary of the planned improvement costs for the next 20 years can be seen in [Figure 52](#). A breakdown of the 20-year capital improvement costs can be seen in [Figure 53](#).

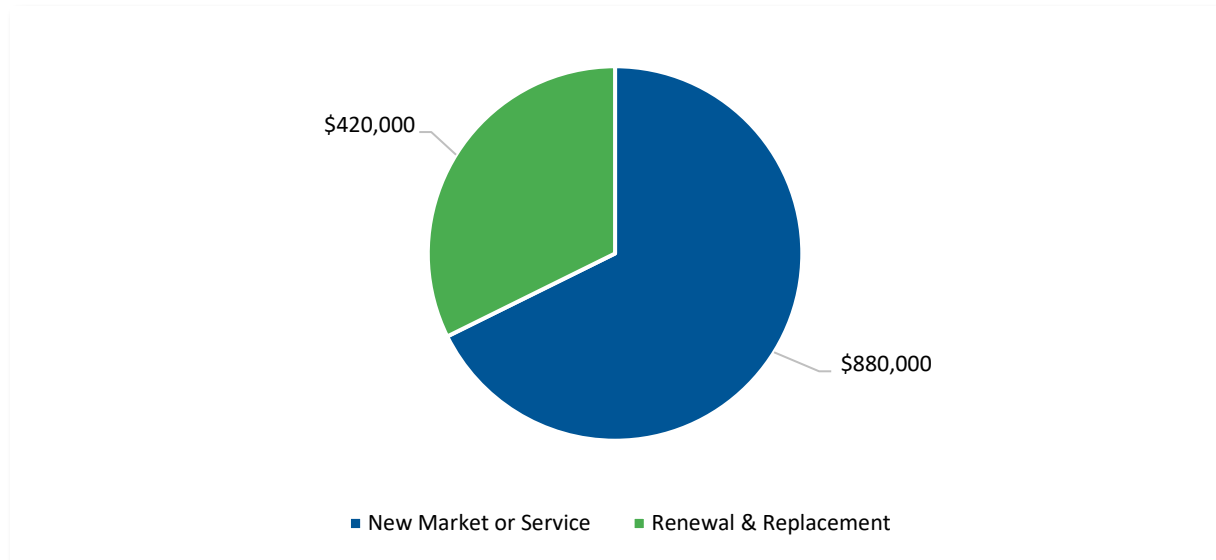


Figure 52. Saluda River Basin Wide 20-Year Capital Improvements

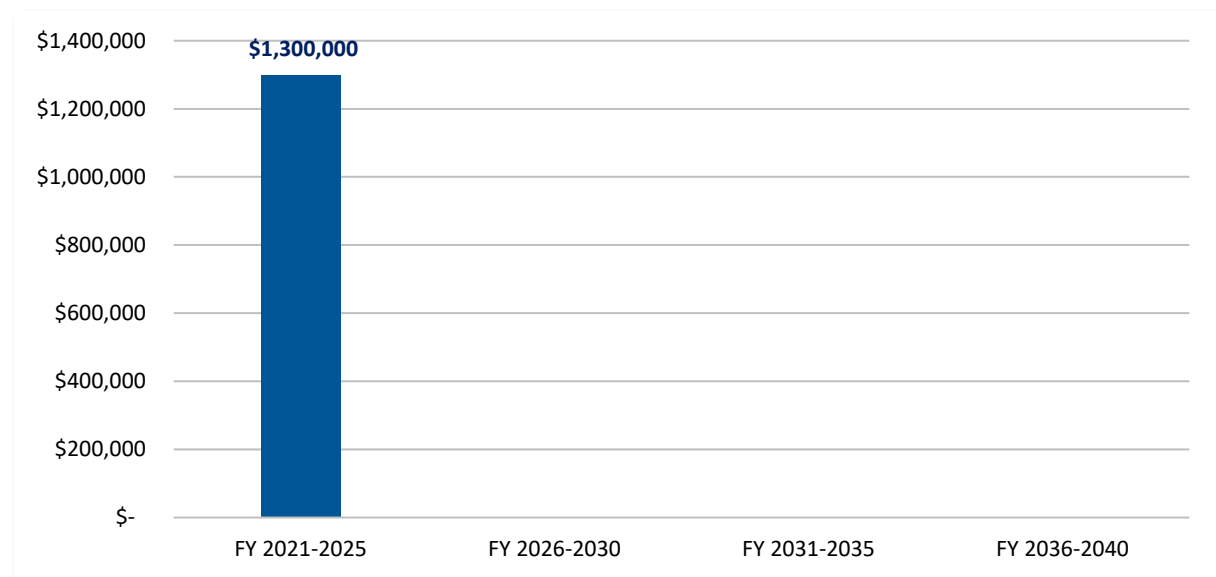


Figure 53. Saluda River Basin Wide 20-Year Capital Improvements Timeline

3.3 Enoree River Basin

This section outlines the infrastructure improvement needs within the Enoree River Basin. The Enoree River Basin is located primarily in Greenville County and contains notable areas such as Five Forks, Mauldin, and areas east of I-385. There are four ReWa maintained WRRFs located within the Enoree River Basin: Altamont Forest WRRF, Pelham WRRF, Gilder Creek WRRF and Durbin Creek WRRF. The Altamont Forest WRRF can treat approximately 12,400 gpd, Pelham WRRF can treat approximately 22.5 MGD, Gilder Creek WRRF can treat 11.3 MGD, and Durbin Creek WRRF can treat approximately 4 MGD. Currently, ReWa is only responsible for contract operation and maintenance of the DHEC owned

Altamont Forest WRRF, therefore there are no capital improvements planned for the Altamont Forest WRRF.

3.3.1 Pelham WRRF

The Pelham WRRF Basin includes a network of trunk collection sewer that carries flow from the Wade Hampton, Taylors, and Pelham areas to the Pelham WRRF. **Figure 54** below shows an overview of the infrastructure in the Pelham WRRF basin.

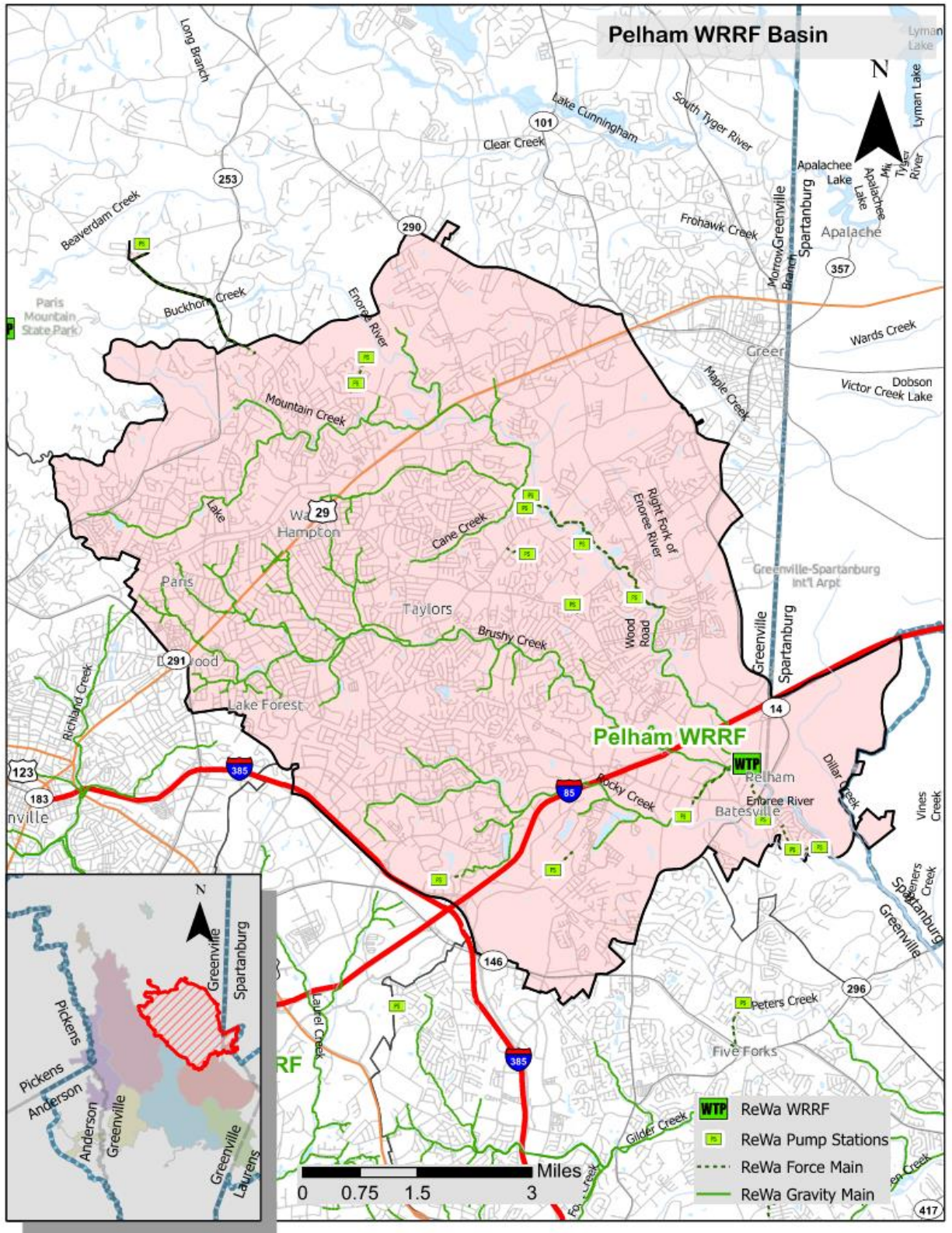


Figure 54. Pelham WRRF Basin

The following sections provide a breakdown of 20-year capital improvement costs for the Pelham WRRF Basin, including WRRF projects, trunk sewer system and collection sewer system improvements, new service area, and planning and technology. Of planned capital improvements, 8 projects located within the Pelham WRRF basin, totaling \$49,732,200, have been identified as Wet Weather Program projects. A summary table outlining the 20-year capital improvement costs for the Pelham WRRF Basin is provided in [Appendix A](#).

3.3.1.1 Water Resource Recovery Facility

Capital improvements for the Pelham WRRF, shown in [Figure 55](#), primarily include process improvements to the plant and renewal and replacement of specific equipment. Near-term improvements to the Pelham WRRF include improvements to the plant control system, influent pumping, lime silo rehabilitation, non-potable water system replacement, hypochlorite system rehabilitation, belt press rehabilitation, as well as the replacement of equipment such as gas dryers, diffuser membranes, and heat exchangers.



Figure 55. Pelham WRRF

A total of \$3,676,000 is planned to be spent on process improvements and \$82,451,000 on renewal and replacement of equipment. The largest expenditure for this facility in the next 20 years will be a new 50 MGD influent pump station. In total, Pelham WRRF is estimated to receive approximately \$86,127,000 of investment in the next 20 years. A summary of the planned improvement costs for the next 20 years can be seen in [Figure 56](#). A breakdown of the 20-year capital improvement costs can be seen in [Figure 57](#).

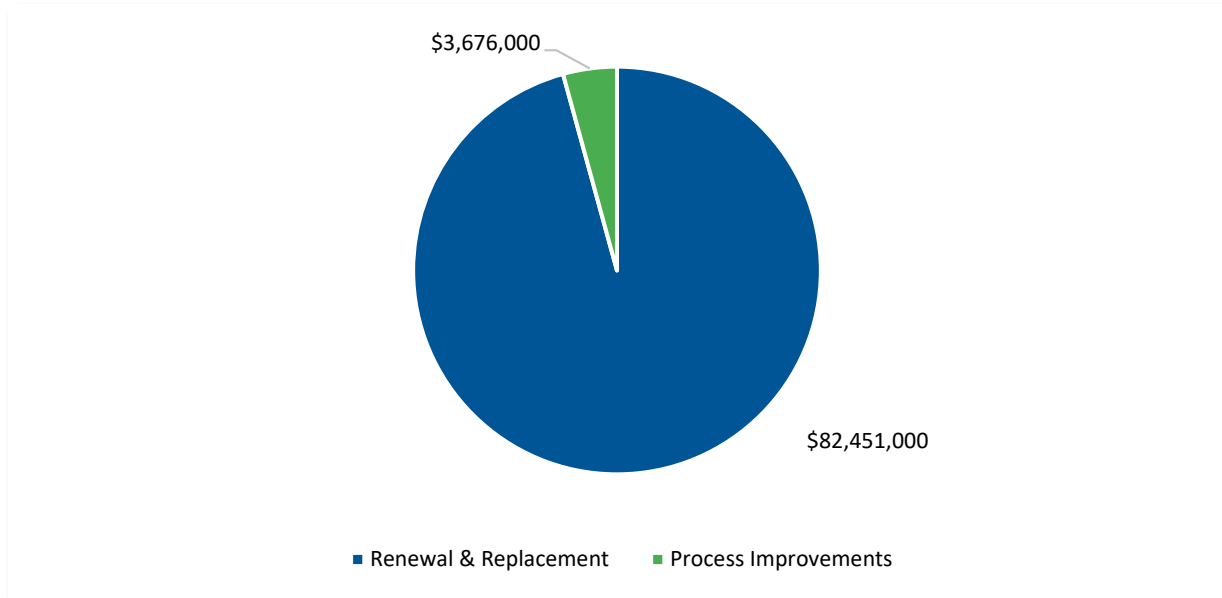


Figure 56. Pelham WRRF 20-Year Capital Improvements

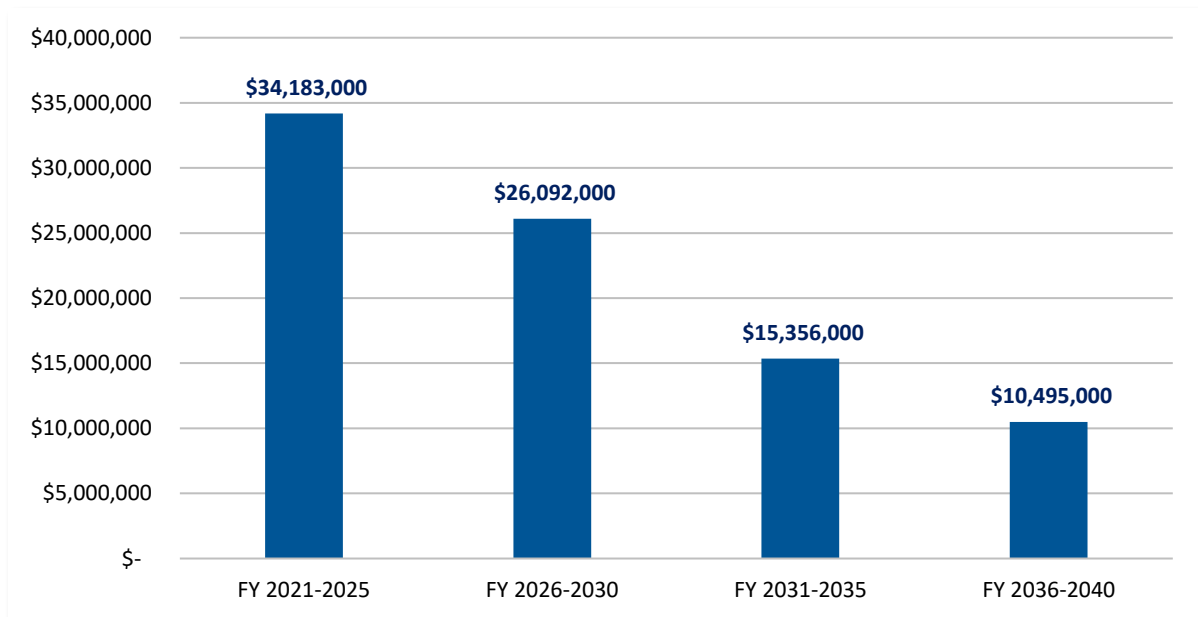


Figure 57. Pelham WRRF 20-Year Capital Improvements Timeline

3.3.1.2 Trunk Sewer System

Capital improvements for ReWa's trunk sewer system within the Pelham WRRF basin will primarily include improvements to the sewer lines, pump stations and force mains. Improvements will include capacity upgrades, growth related upgrades, and renewal and replacement of equipment. Near term improvements include the relocation of two sections of gravity sewer due to the Roper Mountain Road and Roper Mountain Road Extension widening.

A total of \$41,898,000 is planned to be spent on capacity upgrades, \$26,172,000 on growth related upgrades, \$6,309,000 on renewal and replacement of equipment, and \$244,000 on other capital improvements. The largest expenditure to be spent on trunk sewer system improvements in the Pelham WRRF basin will be approximately 29,500 linear feet of new trunk sewer along the Enoree River to West Darby Road. In total, the trunk sewer systems within the Pelham WRRF basin are estimated to receive approximately \$72,790,000 of investment in the next 20 years. A summary of the planned improvement costs for the next 20 years can be seen in [Figure 58](#). A breakdown of the 20-year capital improvement costs can be seen in [Figure 59](#).

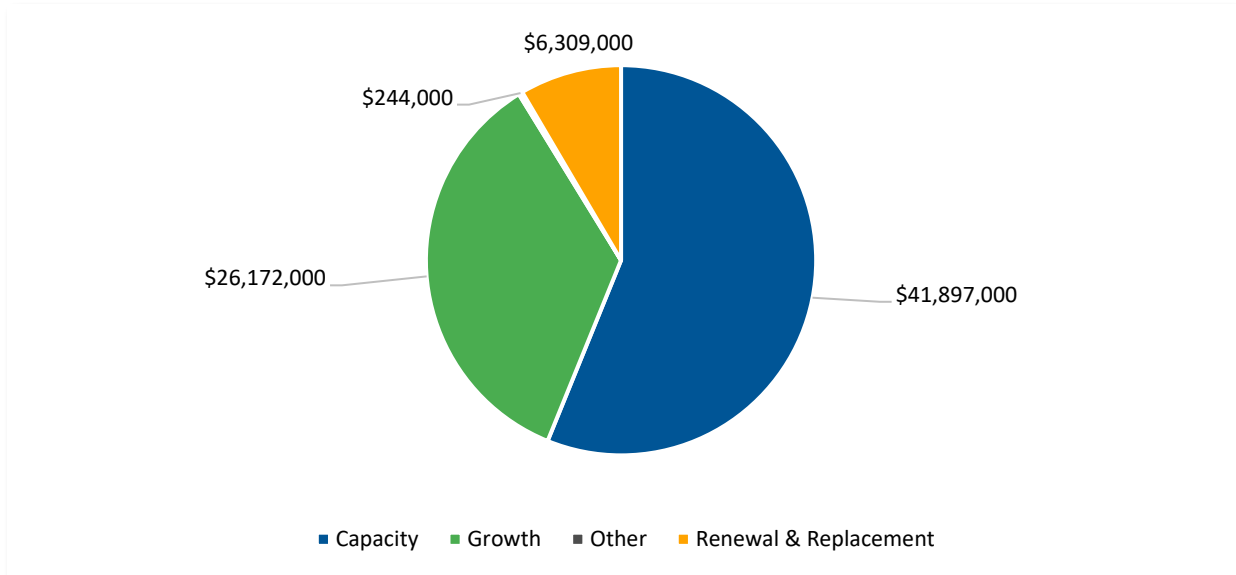


Figure 58. Pelham WRRF Basin Trunk Sewer System 20-Year Capital Improvements

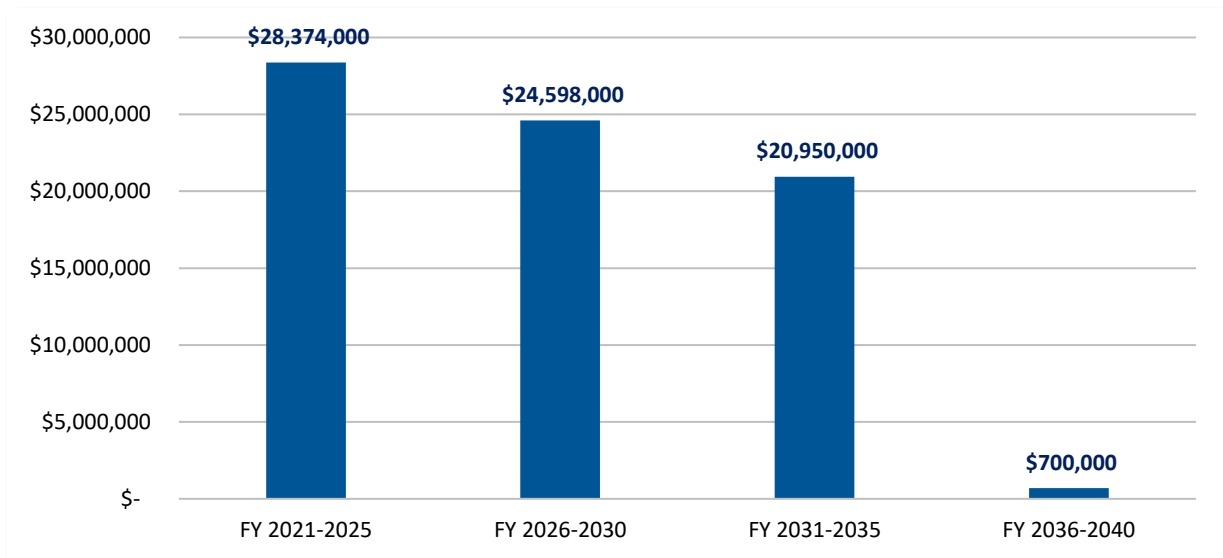


Figure 59. Pelham WRRF Basin Trunk Sewer System 20-Year Capital Improvements Timeline

3.3.1.3 Collection Sewer System

In addition to capital improvements to the trunk sewer system, several capital improvement projects are planned for the Pelham WRRF basin collection sewer system. These projects include dry weather capacity upgrades to collection sewer lines within the Pelham WRRF basin. Near term improvements include dry weather upgrades of approximately 2,870 linear feet of existing gravity sewer near Cardinal Drive and Ikes Road.

In total, the collection sewer systems within the Pelham WRRF basin are estimated to receive approximately \$8,712,000 of investment in the next 20 years. A breakdown of the 20-year capital improvement costs can be seen in [Figure 60](#).

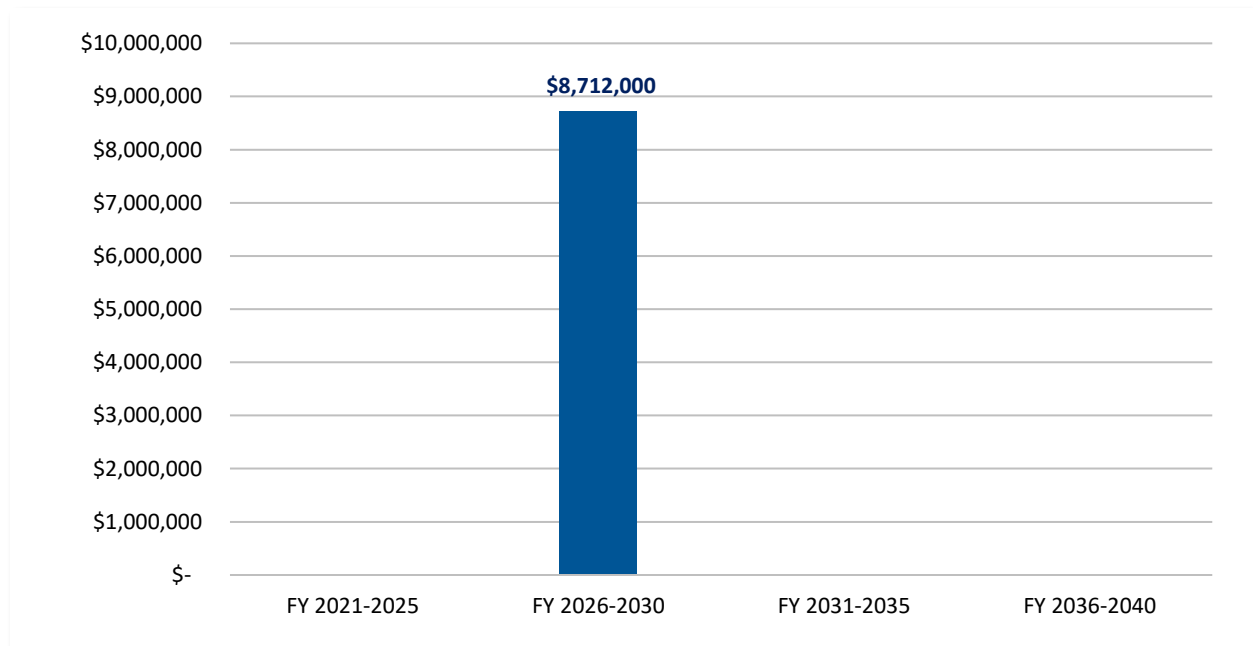


Figure 60. Pelham WRRF Basin Collection Sewer System 20-Year Capital Improvements Timeline

3.3.1.4 New Service Area

Capital improvements dedicated to new service areas within the Pelham WRRF basin primarily include costs for new pump stations and force mains and new gravity trunk and collection sewer lines. Planned improvements include new gravity sewer to serve growth areas around Greenville-Spartanburg Airport, as well as new gravity sewer to eliminate the Coachman Estates Pump Station.

In total, the new service areas within the Pelham WRRF Basin are estimated to receive approximately \$8,843,000 of investment in the next 20 years. A breakdown the 20-year capital improvement costs can be seen in [Figure 61](#).

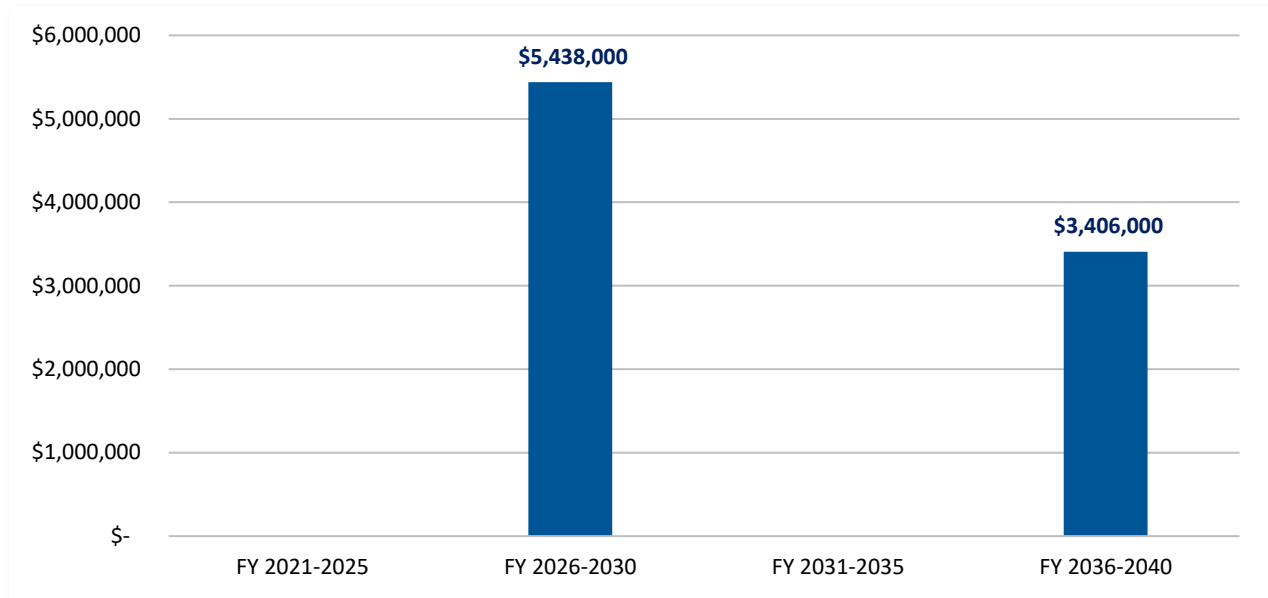


Figure 61. Pelham WRRF Basin New Service Area 20-Year Capital Improvements Timeline

3.3.1.5 Planning and Technology

Capital improvements related to planning and technology within the Pelham WRRF basin will primarily include system planning projects. These system planning projects, which are already underway, include the evaluation of facilities within the Pelham WRRF basin related to both capacity and asset condition. This facility master plan will allow ReWa to better manage assets within the Pelham WRRF Basin.

In total, the Pelham WRRF basin is estimated to receive approximately \$320,000 of investment towards planning and technology within the next five fiscal years. A summary of the planned improvement costs for the next 20 years can be seen in [Figure 62](#). A breakdown of the 20-year capital improvement costs can be seen in [Figure 63](#).

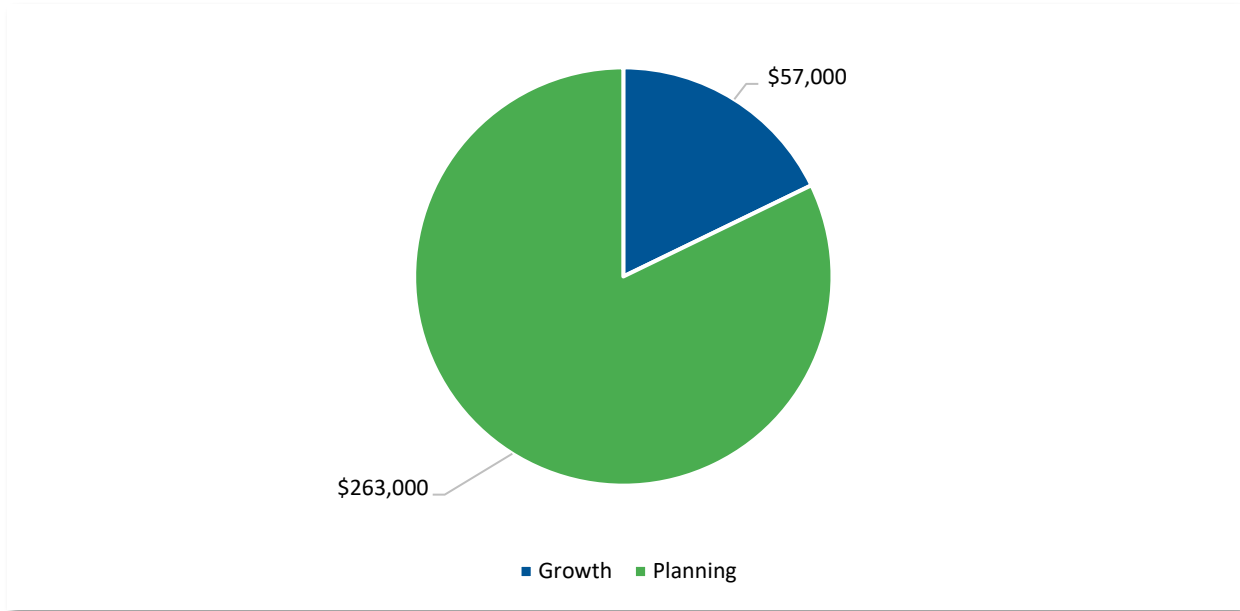


Figure 62. Pelham WRRF Basin Planning and Technology 20-Year Capital Improvements

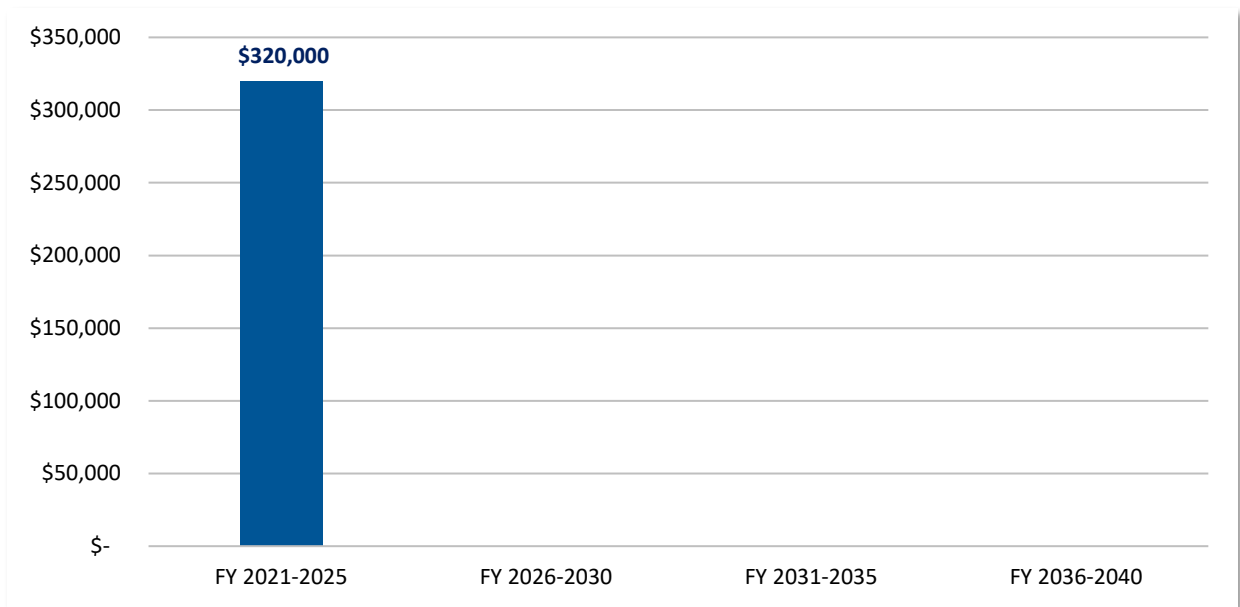


Figure 63. Pelham WRRF Basin Planning and Technology 20-Year Capital Improvements Timeline

3.3.2 Gilder Creek WRRF

The Gilder Creek WRRF Basin includes a network of trunk collection sewer that carries flow from the Mauldin and Five Forks areas to the Gilder Creek WRRF. **Figure 64** below shows an overview of the infrastructure in the Gilder Creek WRRF Basin.

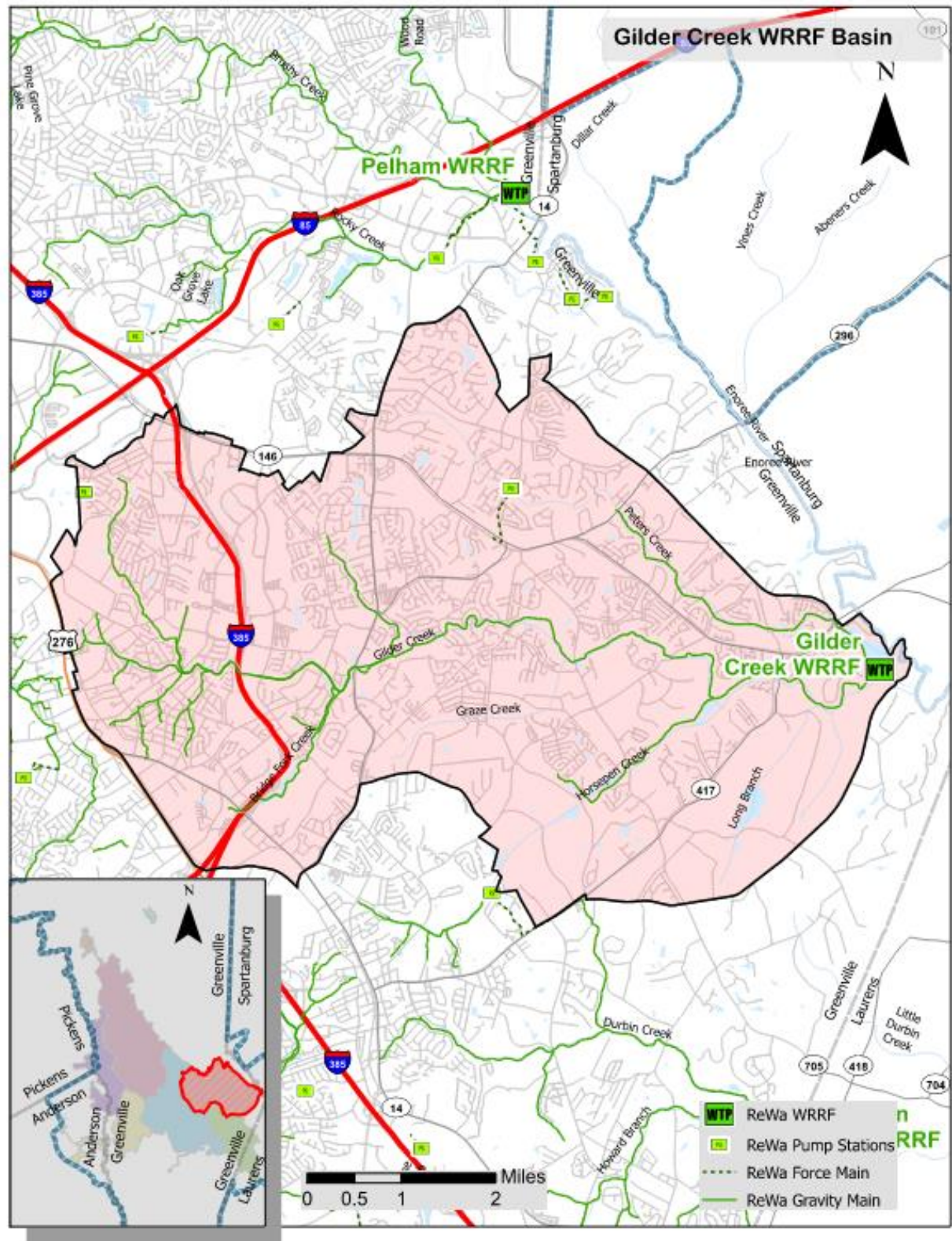


Figure 64. Gilder Creek WRRF Basin

The following sections provide a breakdown of 20-year capital improvement costs for the Gilder Creek WRRF Basin, including WRRF projects, trunk sewer system and collection sewer system improvements, new service area, planning and technology, renewable resources, and other priority projects. Of planned capital improvements, 6 projects located within the Gilder Creek WRRF basin, totaling \$22,400,400, have been identified as Wet Weather Program projects. A summary table outlining the 20-year capital improvement costs for the Gilder Creek WRRF Basin is provided in [Appendix A](#).

3.3.2.1 Water Resource Recovery Facility

Capital improvements for the Gilder Creek WRRF, shown in [Figure 65](#), primarily include growth related upgrades, process improvements to the plant, renewal and replacement of specific equipment, and other WRRF related improvements. Near-term improvements to the Gilder Creek WRRF include concrete repairs on process tanks and influent screen rehabilitation as well as replacement of the sodium hypochlorite system, polymer system, boiler and heat exchangers, odor control components, primary clarifier mechanisms, and primary sludge pumps.



Figure 65. Gilder Creek WRRF

A total of \$94,890,000 is planned to be spent on growth related upgrades, \$23,876,000 on process improvements, \$59,382,000 on renewal and replacement of equipment, and \$129,000 on other WRRF related improvements. The largest expenditure for this facility in the next 20 years will be the WRRF capacity expansion to 19 MGD. In total, Gilder Creek WRRF is estimated to receive approximately \$178,277,000 of investment in the next 20 years. A summary of the planned improvement costs for the

next 20 years can be seen in [Figure 66](#). A breakdown of the 20-year capital improvement costs can be seen in [Figure 67](#).

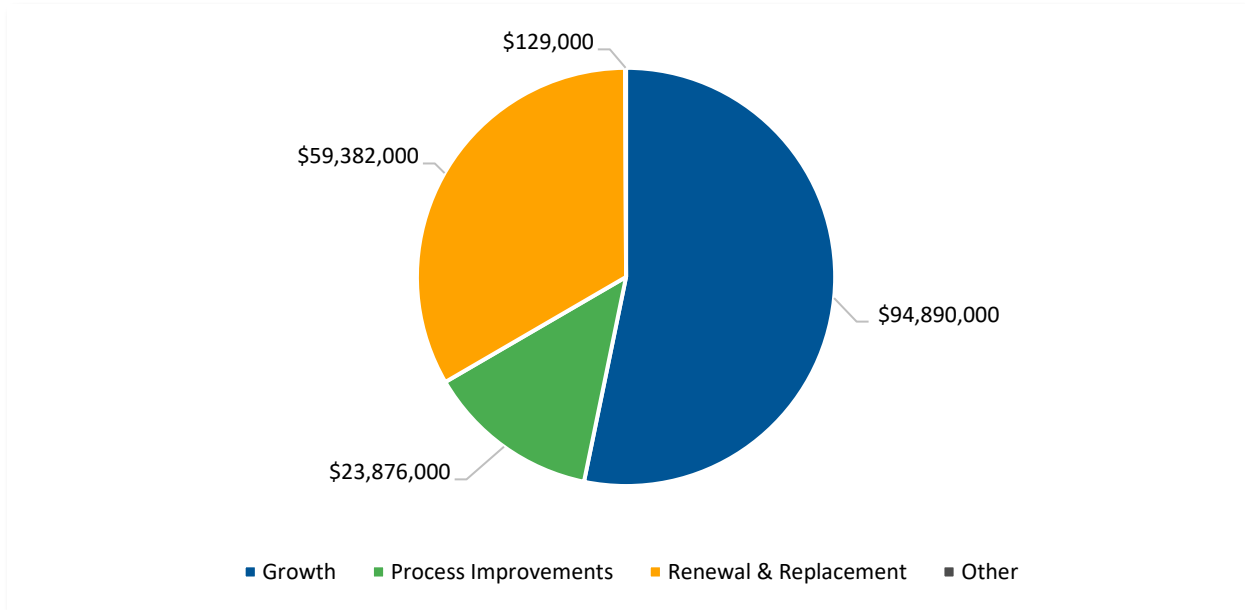


Figure 66. Gilder Creek WRRF 20-Year Capital Improvements

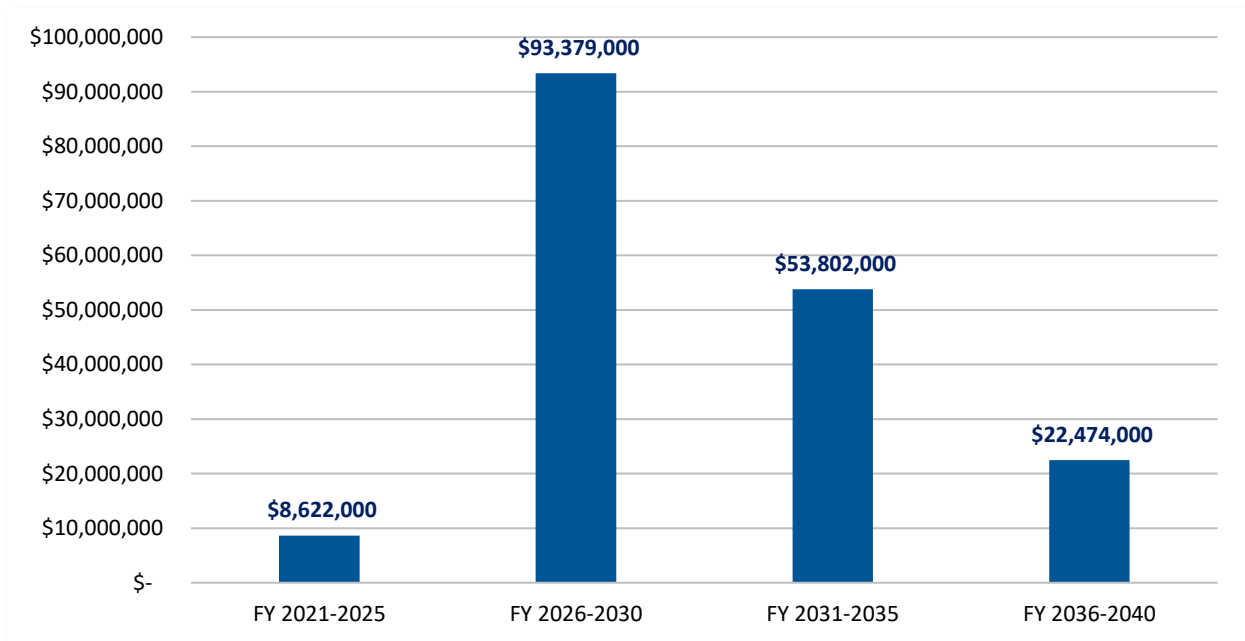


Figure 67. Gilder Creek WRRF 20-Year Capital Improvements Timeline

3.3.2.2 Trunk Sewer System

Capital improvements for ReWa's trunk sewer system within the Gilder Creek WRRF basin will primarily include improvements to the sewer lines, pump stations and force mains. Improvements will include capacity upgrades and renewal and replacement of equipment. Near term improvements include upgrades to approximately 12,700 linear feet of the existing gravity sewer along Gilder Creek.

A total of \$19,067,000 is planned to be spent on capacity upgrades and \$810,000 on renewal and replacement of equipment. In total, the trunk sewer systems within the Gilder Creek WRRF basin are estimated to receive approximately \$19,877,000 of investment in the next 20 years. A summary of the planned improvement costs for the next 20 years can be seen in [Figure 68](#). A breakdown of the 20-year capital improvement costs can be seen in [Figure 69](#).

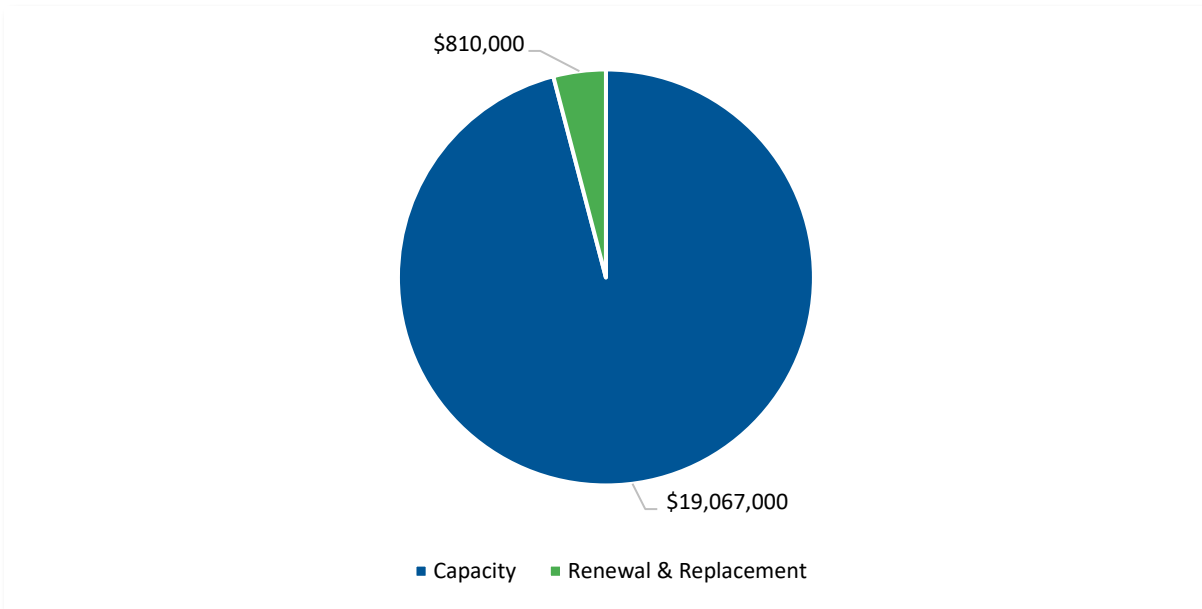


Figure 68. Gilder Creek WRRF Basin Trunk Sewer System 20-Year Capital Improvements

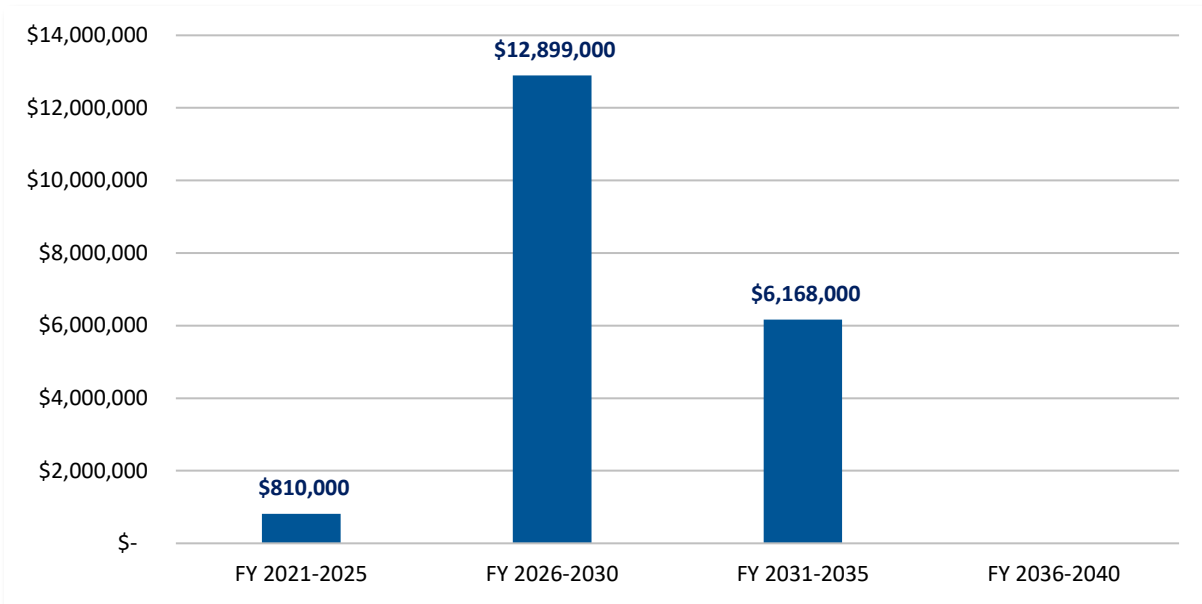


Figure 69. Gilder Creek WRRF Basin Trunk Sewer System 20-Year Capital Improvements

3.3.2.3 Collection Sewer System

In addition to capital improvements to the trunk sewer system, several capital improvement projects are planned for the Gilder Creek WRRF basin collection sewer system. These projects include capacity upgrades to collection sewer lines within the Gilder Creek WRRF basin. Long term improvements include wet weather upgrades of approximately 6,950 linear feet of existing gravity sewer along the Bridge Fork Creek branch.

In total, the collection sewer systems within the Gilder Creek WRRF basin are estimated to receive approximately \$15,240,000 of investment in the next 20 years. A breakdown of the 20-year capital improvement costs can be seen in [Figure 70](#).

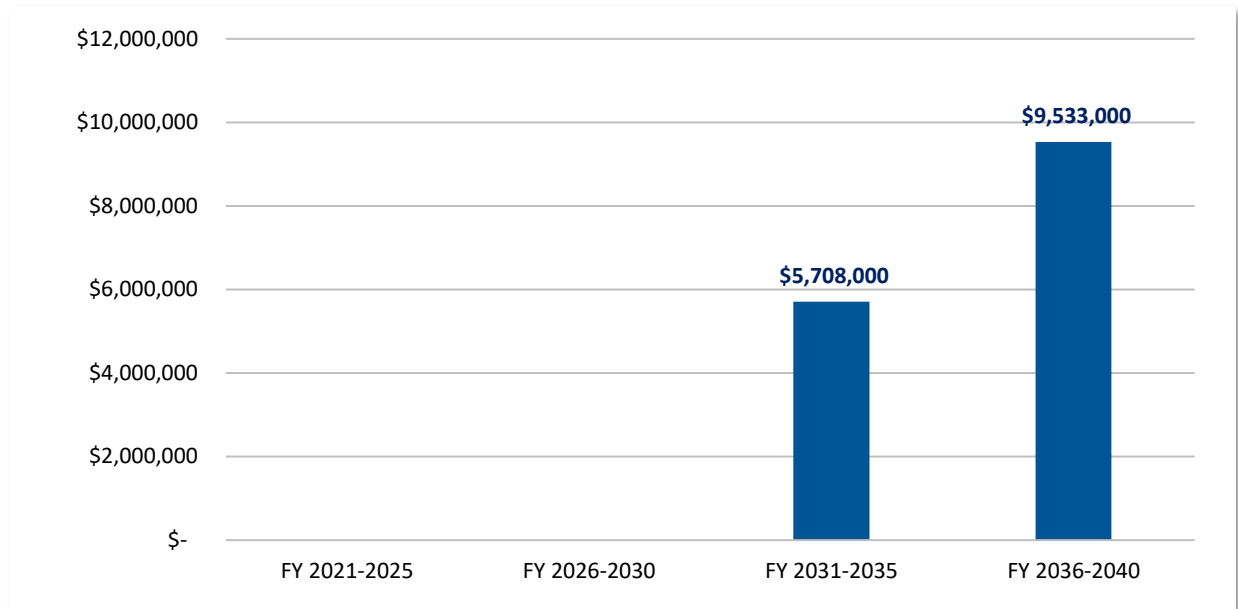


Figure 70. Gilder Creek WRRF Basin Collection Sewer System 20-Year Capital Improvements

3.3.2.4 New Service Area

Capital improvements dedicated to new service areas within the Gilder Creek WRRF basin primarily include costs for new pump stations and force mains and new gravity trunk and collection sewer lines, as well as renewal and replacement of equipment associated with new service areas. Planned improvements include new pump stations, force mains, and gravity sewer to provide service in west Spartanburg County.

A total of \$59,027,000 is planned to be spent on new service area growth and \$4,000,000 on renewal and replacement of equipment. The largest expenditure for new service area within the Gilder Creek WRRF basin is the expansion of the Gilder Creek influent pump station, along with new force main and several branches of gravity sewer to provide service to new areas within the Enoree River basin. In total, the new service areas within the Gilder Creek WRRF basin are estimated to receive approximately \$63,027,000 of investment in the next 20 years. A summary of the planned improvement costs for the next 20 years can be seen in [Figure 71](#). A breakdown the 20-year capital improvement costs can be seen in [Figure 72](#).

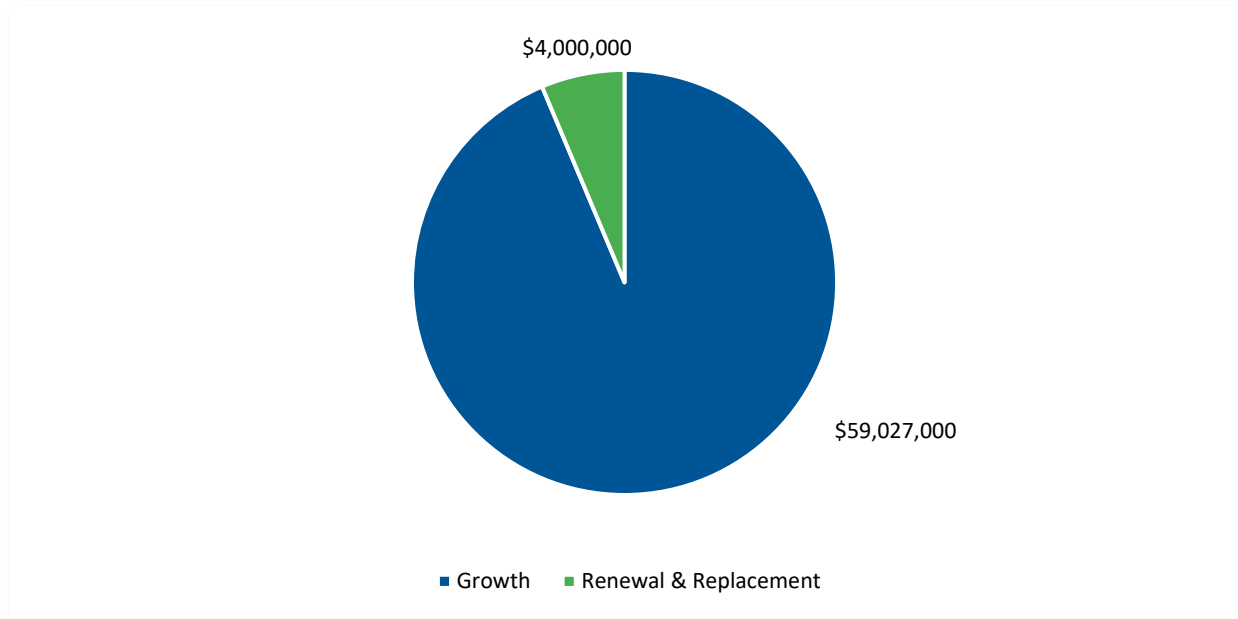


Figure 71. Gilder Creek WRRF Basin New Service Area 20-Year Capital Improvements

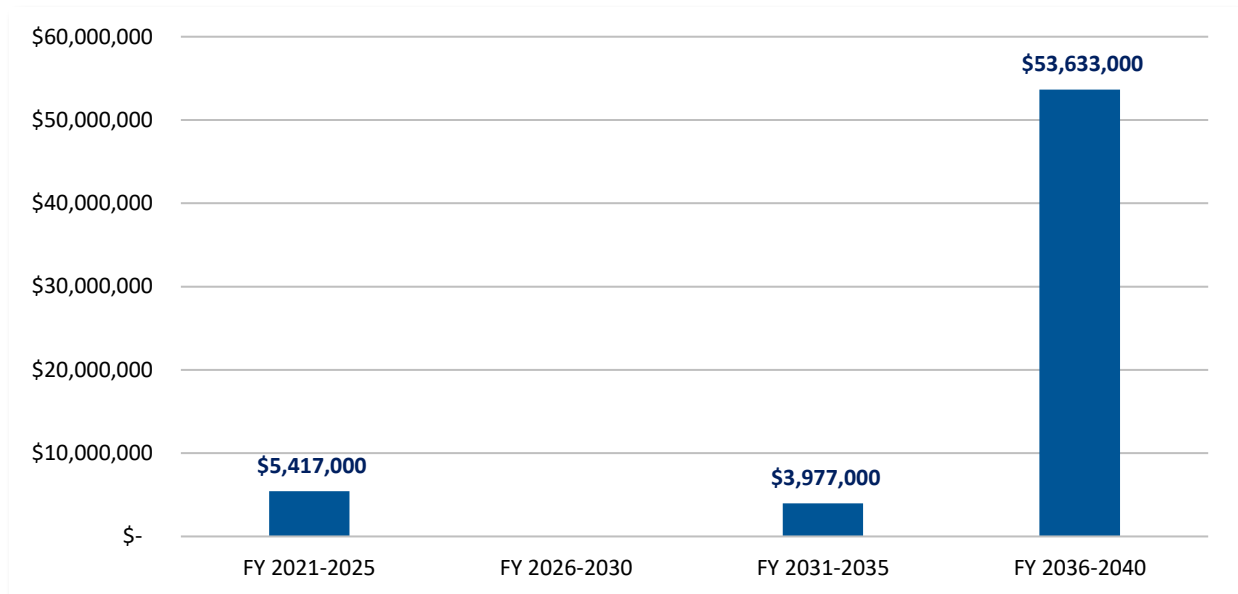


Figure 72. Gilder Creek WRRF Basin New Service Area 20-Year Capital Improvements Timeline

3.3.2.5 Planning and Technology

Capital improvements related to planning and technology within the Gilder Creek WRRF basin will primarily include system planning and growth projects. These system planning projects, which are already underway, include the evaluation of facilities within the Gilder Creek WRRF basin related to both capacity and asset condition. This facility master plan will allow ReWa to better manage assets within the Gilder WRRF Basin.

In total, the Gilder Creek WRRF basin is estimated to receive approximately \$412,000 of investment towards planning and technology within the next five fiscal years. A summary of the planned improvement costs for the next 20 years can be seen in [Figure 73](#). A breakdown of the 20-year capital improvement costs can be seen in [Figure 74](#).



Figure 73. Gilder Creek WRRF Basin Planning and Technology 20-Year Capital Improvements

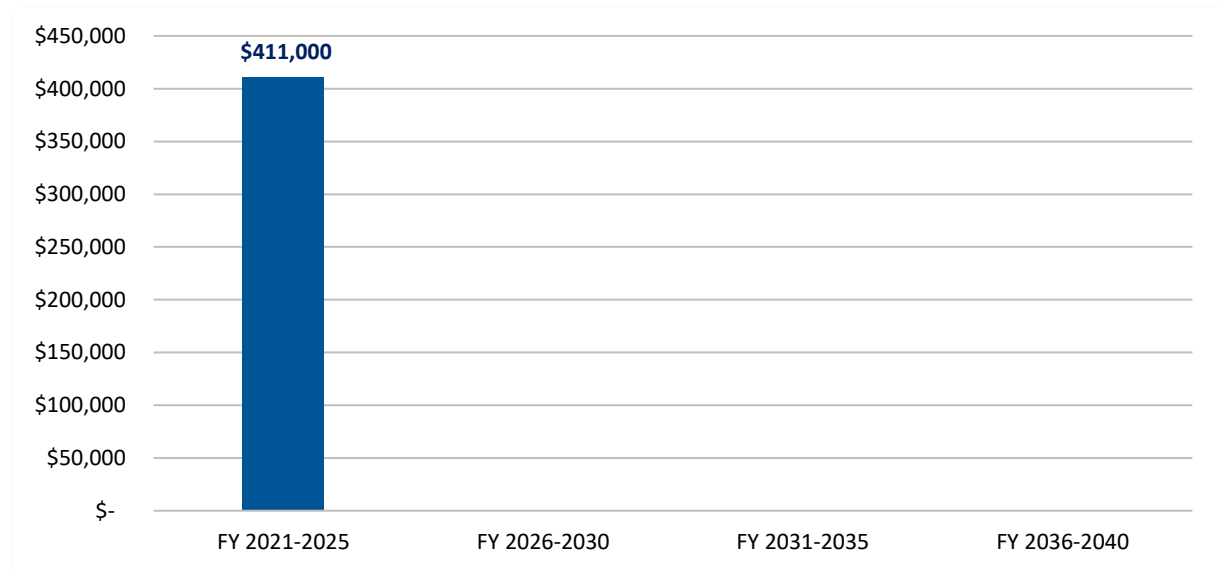


Figure 74. Gilder Creek WRRF Basin Planning and Technology 20-Year Capital Improvements Timeline

3.3.2.6 Renewable Resources

Capital improvements in the Gilder Creek WRRF basin include construction of a combined heat and power system. In total, an investment of \$3,926,000 is estimated to be needed for these renewable

resource capital improvements. A breakdown of the 20-year capital improvement costs can be seen in [Figure 75](#).

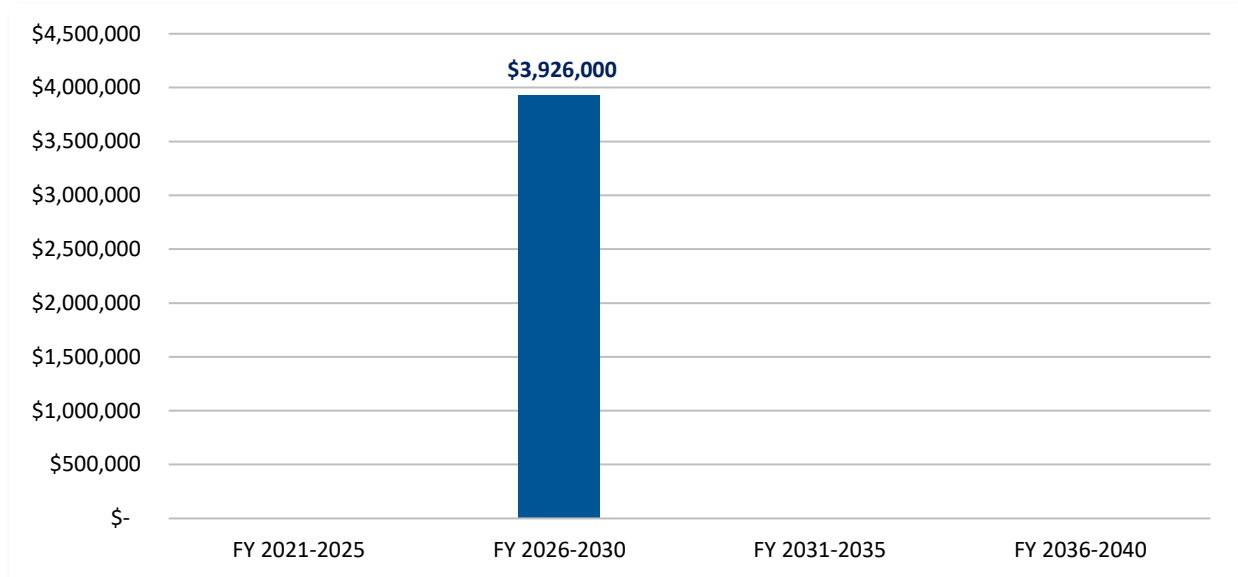


Figure 75. Gilder Creek WRRF Basin Renewable Resources 20-Year Capital Improvements Timeline

3.3.2.7 Other Priority Projects

In addition to capital improvements mentioned above, additional capital improvement projects are planned for the Gilder Creek WRRF campus and surrounding areas. These projects include the renovation and expansion of the existing Operations center.

In total, the Gilder Creek WRRF basin is estimated to receive approximately \$660,000 of investment in other priority projects within the next five fiscal years. A breakdown of the 20-year capital improvement costs can be seen in [Figure 76](#).

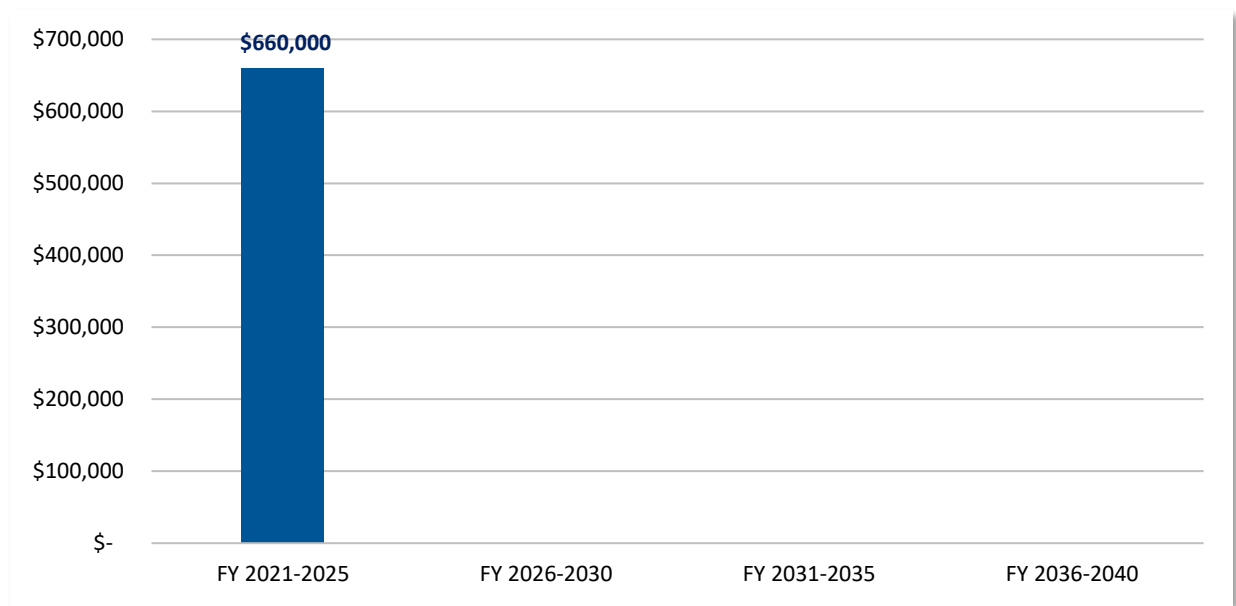


Figure 76. Gilder Creek WRRF Basin Other Priority Project 20-Year Capital Improvements Timeline

3.3.3 Durbin Creek WRRF

The Durbin Creek WRRF Basin includes a network of trunk collection sewer that carries flow from the Fountain Inn and Simpsonville areas to the Durbin Creek WRRF. [Figure 77](#) below shows an overview of the infrastructure in the Durbin Creek WRRF basin.

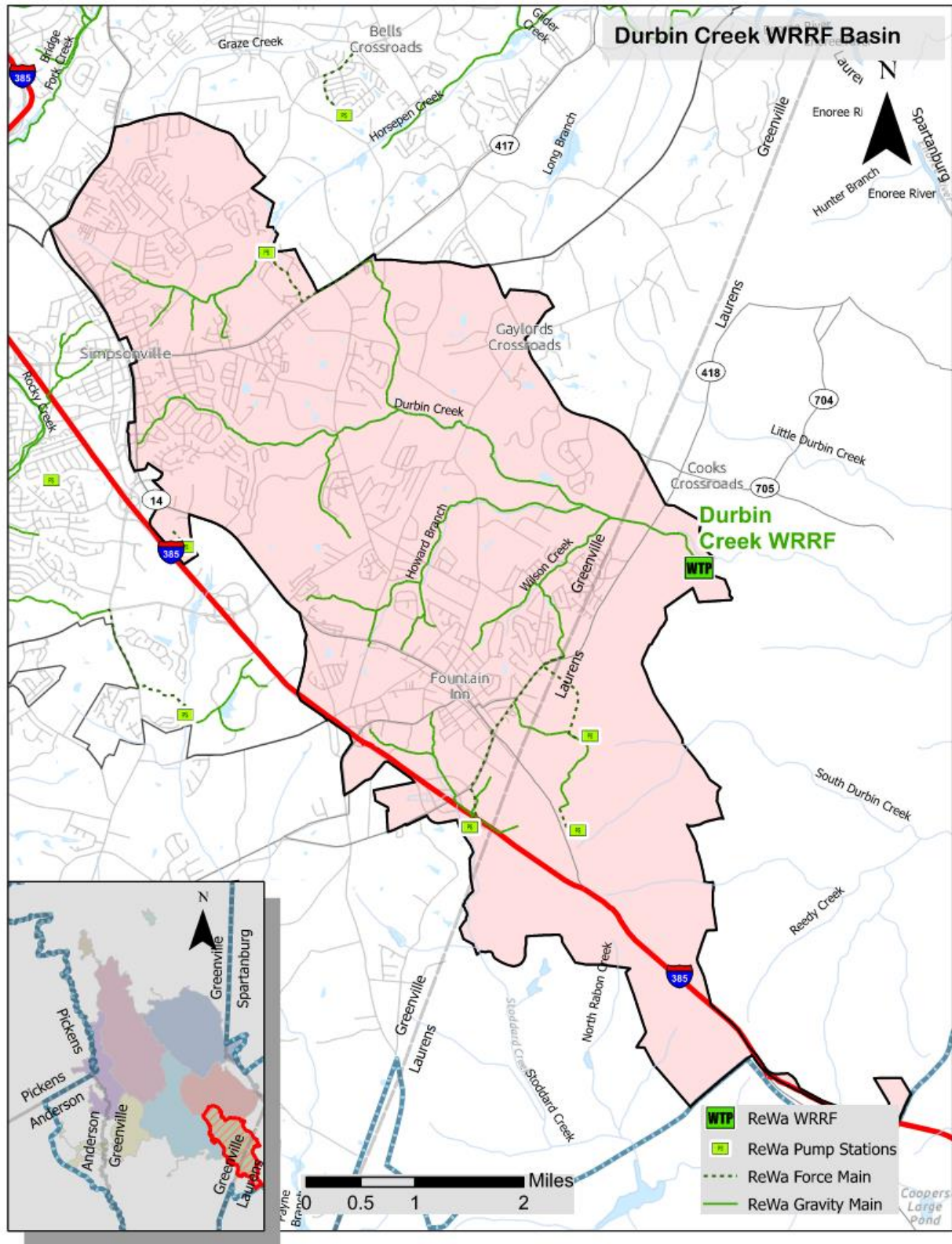


Figure 77. Durbin Creek WRRF Basin

The following sections provide a breakdown of 20-year capital improvement costs for the Durbin Creek WRRF basin, including WRRF projects, trunk sewer system and collection sewer system improvements, new service area, and planning and technology. A summary table outlining the 20-year capital improvement costs for the Durbin Creek WRRF basin is provided in [Appendix A](#).

3.3.3.1 Water Resource Recovery Facility

Capital improvements for the Durbin Creek WRRF, shown in [Figure 78](#), primarily include renewal and replacement of specific equipment. Near term improvements to the Durbin Creek WRRF include plant control system upgrades and equalization concrete repairs as well as the replacement of equipment such as the existing diffused air membranes, mixers, and screenings compactor.



Figure 78. Durbin Creek WRRF

In total, Durbin Creek WRRF is estimated to receive approximately \$27,240,000 of investment in the next 20 years. A breakdown of the 20-year capital improvement costs can be seen in [Figure 79](#).

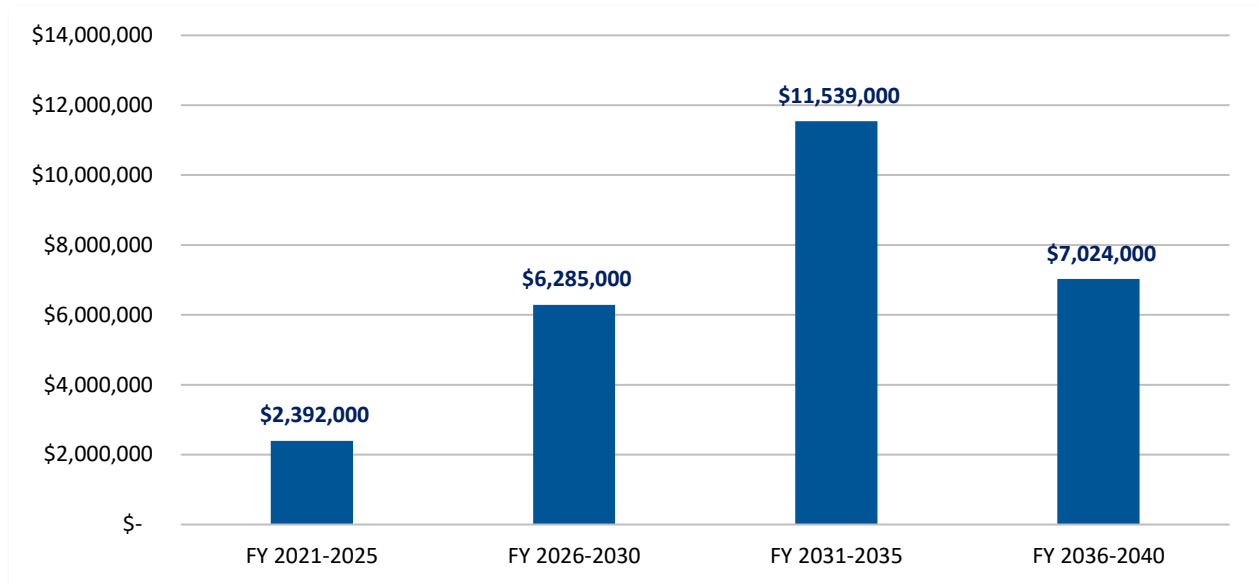


Figure 79. Durbin Creek WRRF 20-Year Capital Improvements Timeline

3.3.3.2 Trunk Sewer System

Capital improvements for ReWa's trunk sewer system within the Durbin Creek WRRF basin will primarily include improvements to the sewer lines, pump stations and force mains. Improvements will include capacity upgrades and renewal and replacement of equipment. Near-term improvements include the construction of new gravity sewer to eliminate multiple pump stations.

A total of \$19,466,000 is planned to be spent on capacity upgrades, \$4,201,000 on renewal and replacement of equipment, and \$518,000 on other improvements. The largest expenditure to be spent on trunk sewer system improvements in the Durbin Creek WRRF basin includes upgrades to approximately 11,000 linear feet of the Durbin Creek sewer line. In total, the trunk sewer systems within the Durbin Creek WRRF basin are estimated to receive approximately \$24,185,000 of investment in the next 20 years. A summary of the planned improvement costs for the next 20 years can be seen in [Figure 80](#). A breakdown of the 20-year capital improvement costs can be seen in [Figure 81](#).

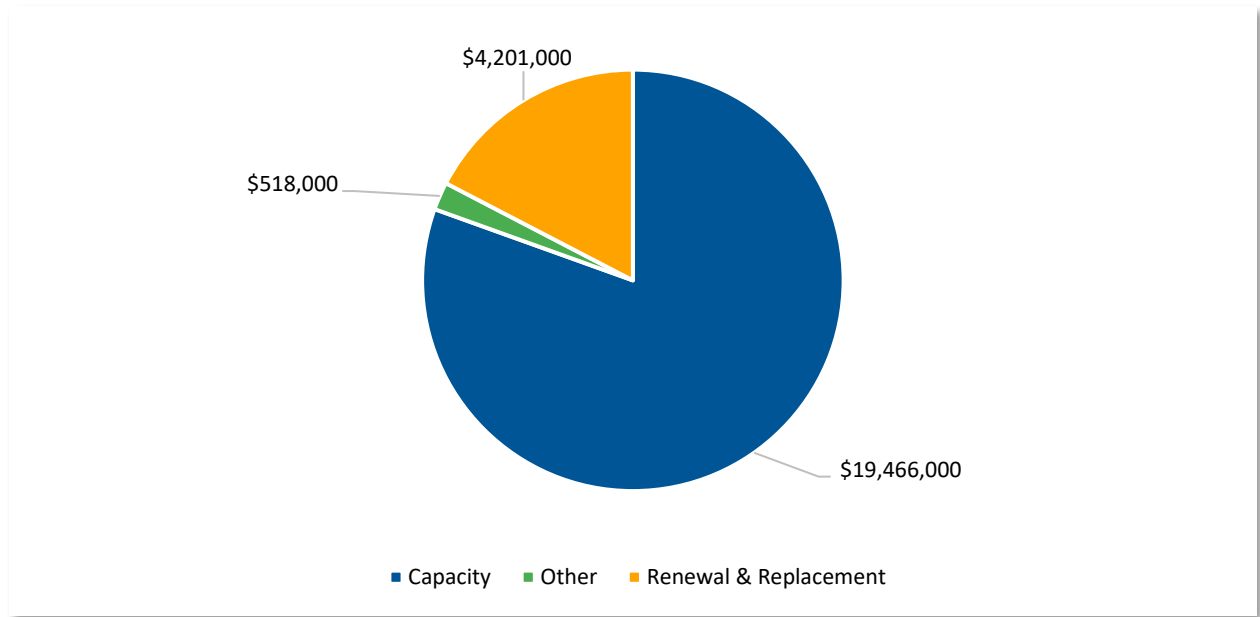


Figure 80. Durbin Creek WRRF Basin Trunk Sewer System 20-Year Capital Improvements

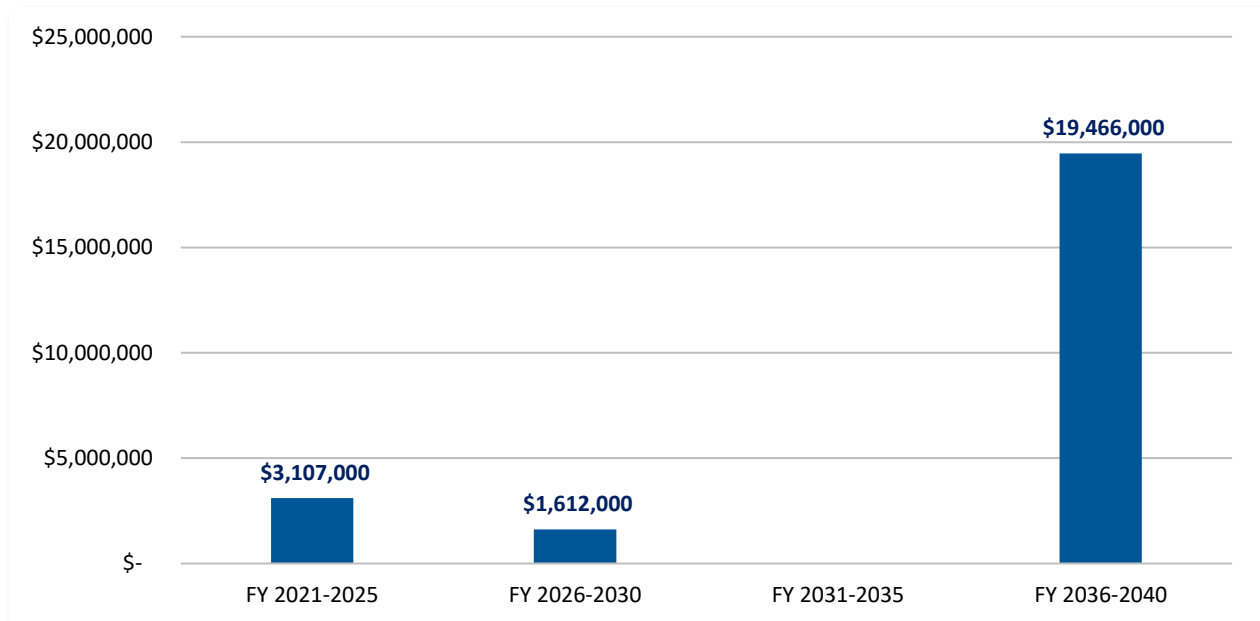


Figure 81. Durbin Creek WRRF Basin Trunk Sewer System 20-Year Capital Improvements Timeline

3.3.3.3 Collection Sewer System

In addition to capital improvements to the trunk sewer system, several capital improvement projects are planned for the Durbin Creek WRRF basin collection sewer system. These projects include capacity upgrades to collection sewer lines within the Durbin Creek WRRF basin. Near-term improvements include upgrades of approximately 8,300 linear feet of existing gravity sewer near the Fountain Inn Pump Station.

In total, the collection sewer systems within the Durbin Creek WRRF Basin are estimated to receive approximately \$13,382,000 of investment in the next 20 years. A breakdown of the 20-year capital improvement costs can be seen in [Figure 82](#).

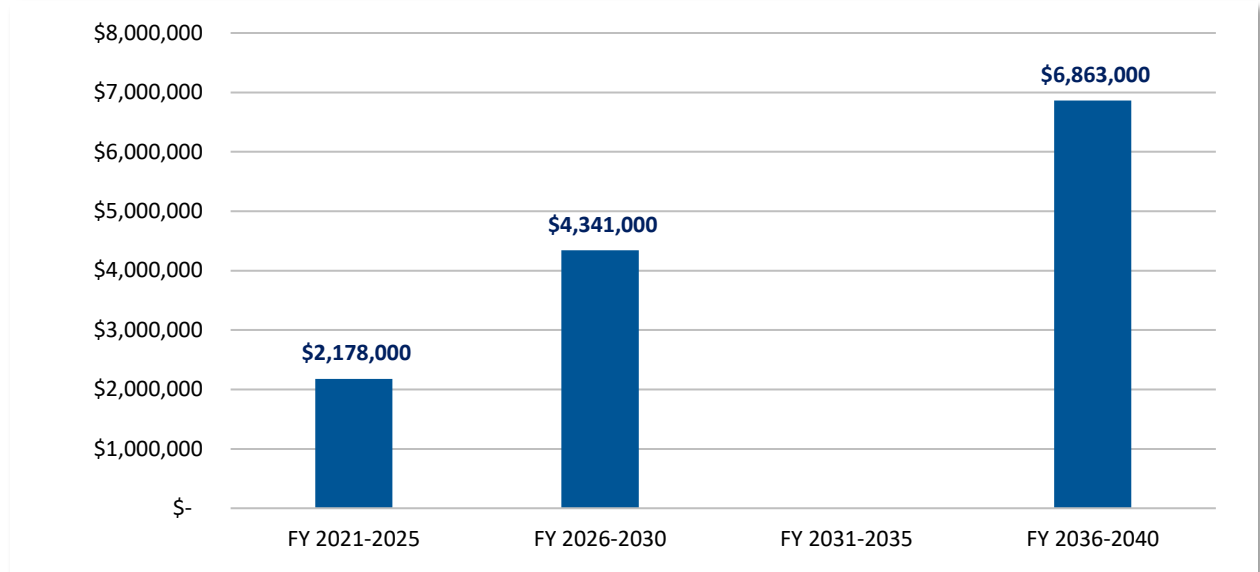


Figure 82. Durbin Creek WRRF Basin Collection Sewer System 20-Year Capital Improvements Timeline

3.3.3.4 New Service Area

Capital improvements dedicated to new service areas within the Durbin Creek WRRF basin primarily include costs for new pump stations, force mains, new gravity trunk and collection sewer lines, and a new WRRF located downstream of Durbin Creek WRRF. Planned improvements include new pump stations, force mains, and gravity sewer to provide service to new service areas south of the Durbin Creek WRRF and around Fountain Inn.

In total, the new service areas within the Durbin Creek WRRF basin are estimated to receive approximately \$191,658,000 of investment in the next 20 years. A breakdown the 20-year capital improvement costs can be seen in [Figure 83](#).

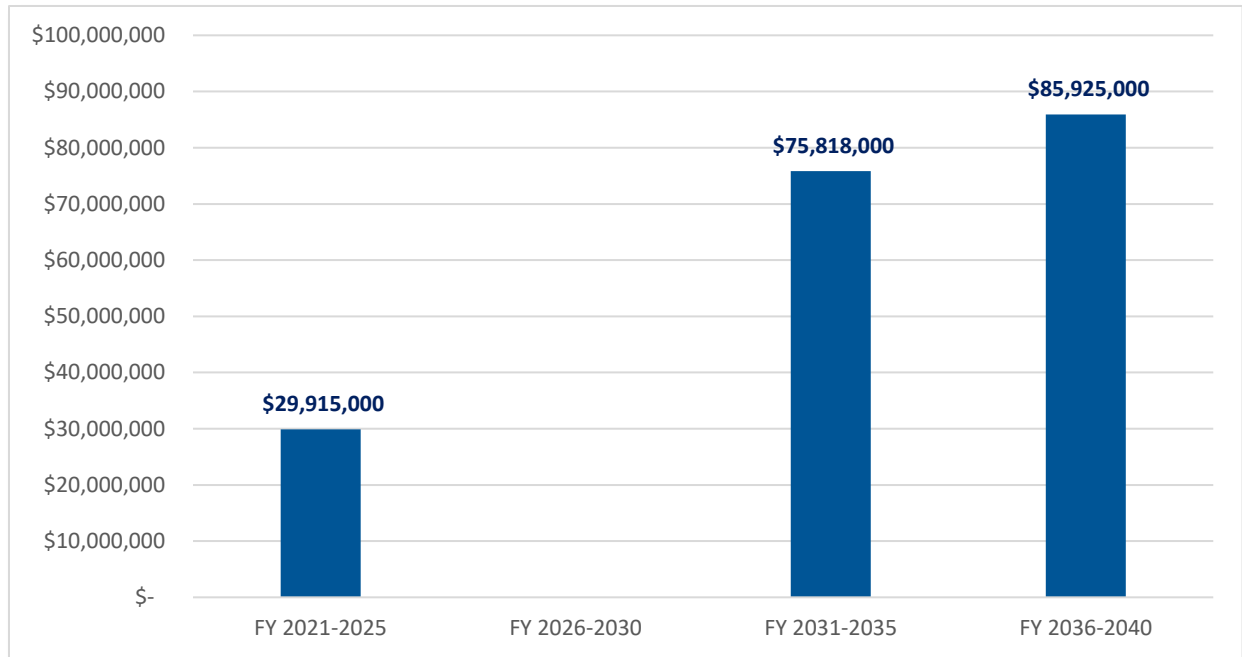


Figure 83. Durbin Creek WRRF Basin New Service Area 20-Year Capital Improvements Timeline

3.3.3.5 Planning and Technology

Capital improvements related to planning and technology within the Durbin Creek WRRF basin will primarily include system planning and growth projects. These system planning projects, which are already underway, include the evaluation of facilities within the Durbin Creek WRRF basin related to both capacity and asset condition. This facility master plan will allow ReWa to better manage assets within the Durbin WRRF basin.

In total, the Durbin Creek WRRF basin is estimated to receive approximately \$187,000 of investment towards planning and technology within the next five fiscal years. A breakdown of the 20-year capital improvement costs can be seen in [Figure 84](#).

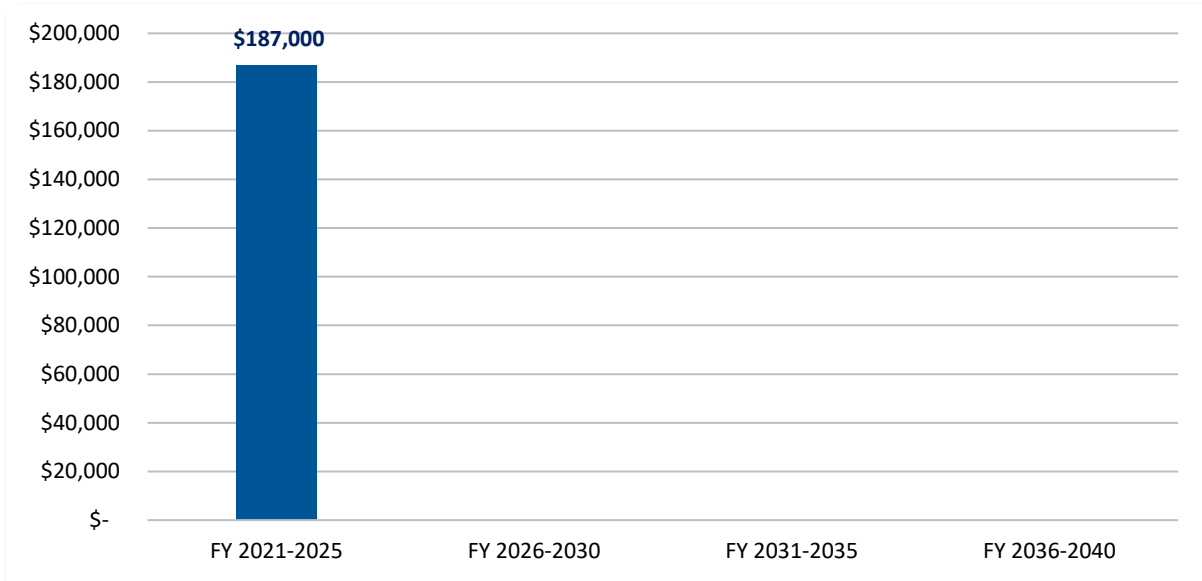


Figure 84. Durbin Creek WRRF Basin Planning and Technology 20-Year Capital Improvements Timeline

3.3.4 Enoree River Basin Wide Capital Improvements

In addition to capital improvements related to the Pelham, Gilder Creek, and Durbin Creek WRRF basins, there are several Enoree River basin-wide capital improvements projects planned. These projects include three new pump stations, new gravity sewer lines, and new forcemains to provide new service to southwest Spartanburg County and Two Mile Creek.

In total, the Enoree River basin is estimated to receive approximately \$58,874,000 of investment towards basin wide needs in the next 20 years. A breakdown of the 20-year capital improvement costs can be seen in [Figure 85](#).

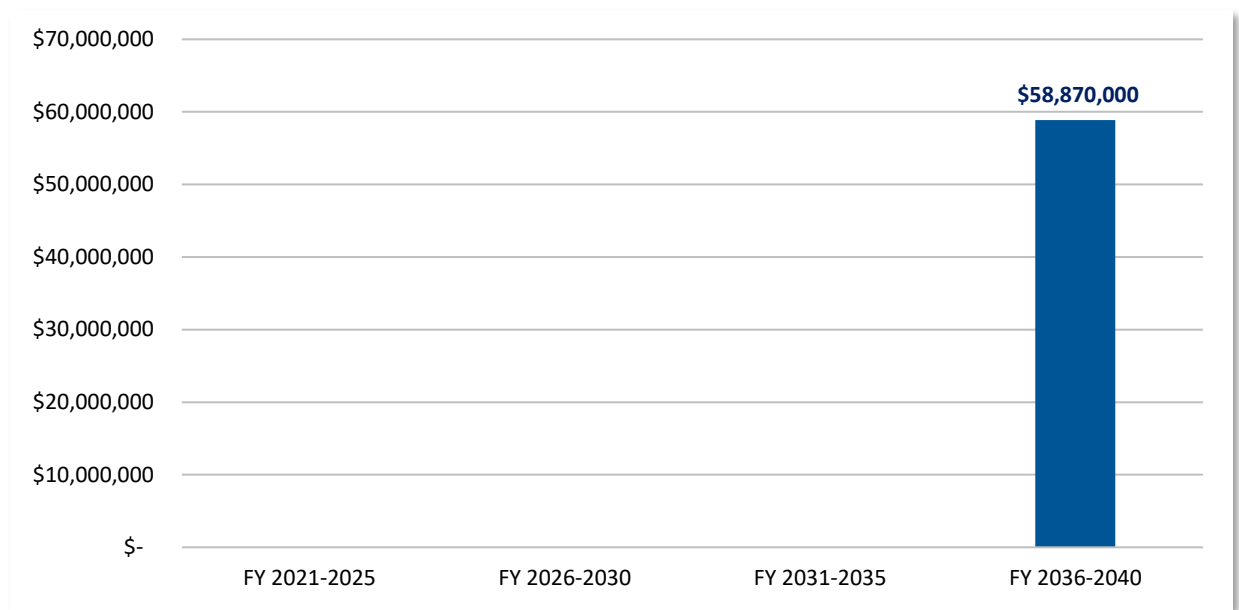


Figure 85. Enoree River Basin Basin Wide 20-Year Capital Improvements Timeline

3.4 Tyger River Basin

This section outlines the infrastructure improvement needs within the Tyger River Basin. The Tyger River Basin is located primarily in Greenville County and contains North Greenville University. There is one ReWa maintained WRRF located within the Tyger River Basin: North Greenville University WRRF. The North Greenville University WRRF can treat approximately 0.20 MGD.

3.4.1 North Greenville University WRRF

The North Greenville University WRRF Basin includes a network of trunk collection sewer that carries flow from the Cherokee Valley subdivision and University facilities to the North Greenville University WRRF. **Figure 86** below shows an overview of the infrastructure in the North Greenville University WRRF basin.

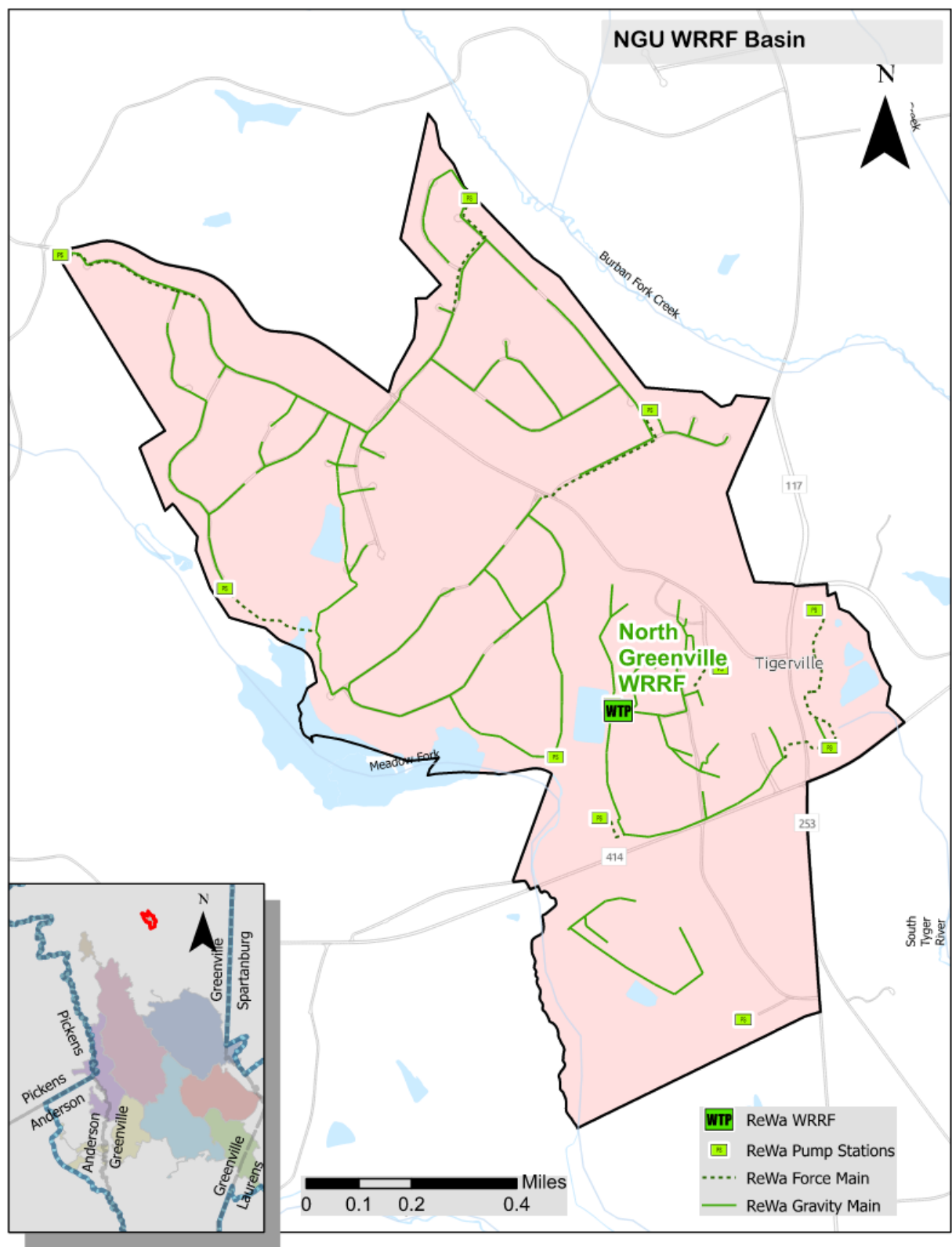


Figure 86. North Greenville WRRF Basin

The following sections provide a breakdown of 20-year capital improvement costs for the North Greenville University WRRF basin, including WRRF projects, trunk sewer system and collection sewer system improvements, and planning and technology. A summary table outlining the 20-year capital improvement costs for the North Greenville University WRRF basin is provided in [Appendix A](#).

3.4.1.1 Water Resource Recovery Facility

Capital improvements for the North Greenville University WRRF, shown in [Figure 87](#), primarily include capacity upgrades. Near-term improvements to the North Greenville University WRRF include the design and construction of a new WRRF near North Greenville University.



Figure 87. North Greenville University WRRF

In total, North Greenville University WRRF is estimated to receive approximately \$16,542,000 of investment in the next 20 years. A breakdown of the 20-year capital improvement costs can be seen in [Figure 88](#).

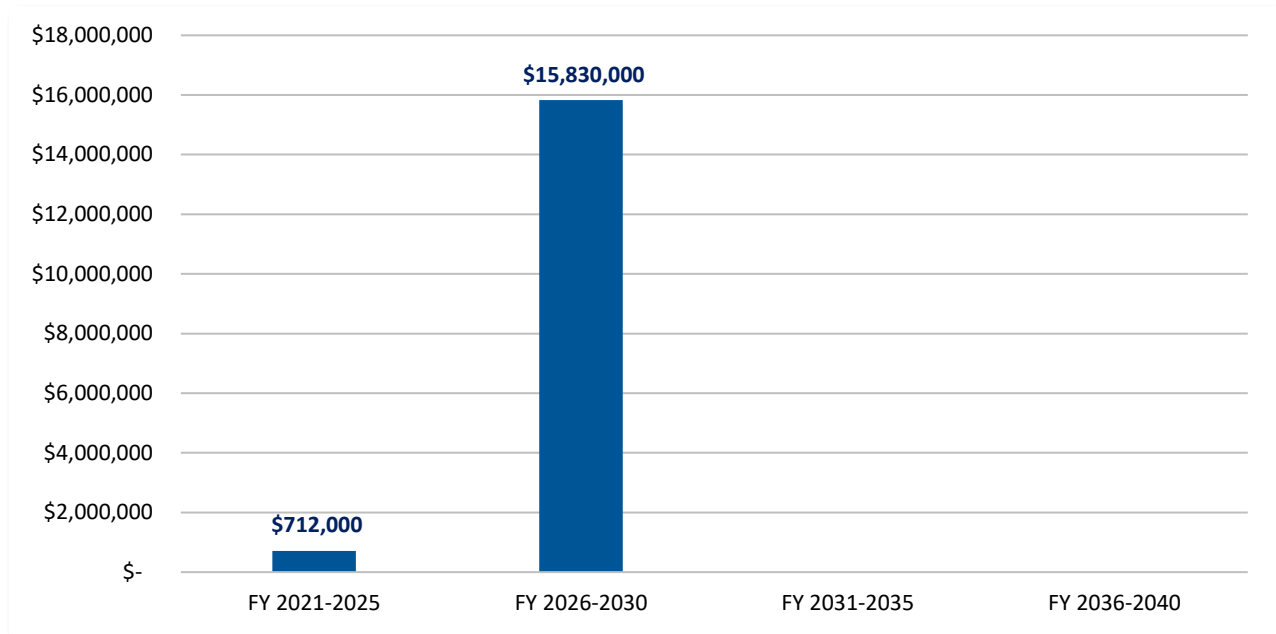


Figure 88. North Greenville WRRF 20-Year Capital Improvements Timeline

3.4.1.2 Trunk Sewer System

Capital improvements for ReWa's trunk sewer system within the North Greenville WRRF basin will primarily include improvements to the sewer lines, pump stations and force mains. Improvements include construction of new gravity sewer to eliminate the existing North Greenville University WRRF and multiple pump stations.

In total, the trunk sewer systems within the North Greenville WRRF basin are estimated to receive approximately \$1,905,000 of investment in the next 20 years. A breakdown of the 20-year capital improvement costs can be seen in [Figure 89](#).

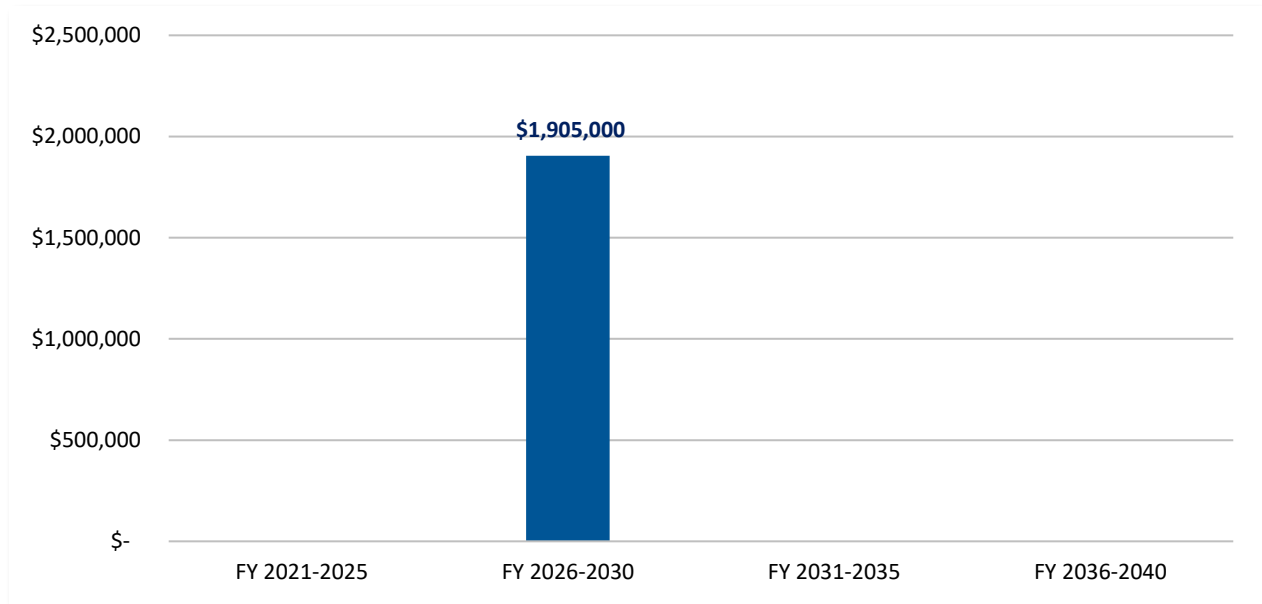


Figure 89. North Greenville WRRF Basin Trunk Sewer System 20-Year Capital Improvements Timeline

3.4.1.3 Collection Sewer System

In addition to capital improvements to the trunk sewer system, several capital improvement projects are planned for the North Greenville WRRF basin collection sewer system. These projects include rehabilitation of existing gravity sewer, pump station improvements, and construction of new pump station, force main, and gravity sewer to replace the existing Old Woods Store and Billingsley Pump Stations.

In total, the collection sewer systems within the North Greenville WRRF basin are estimated to receive approximately \$4,869,000 of investment in the next 20 years. A breakdown of the 20-year capital improvement costs can be seen in [Figure 90](#).

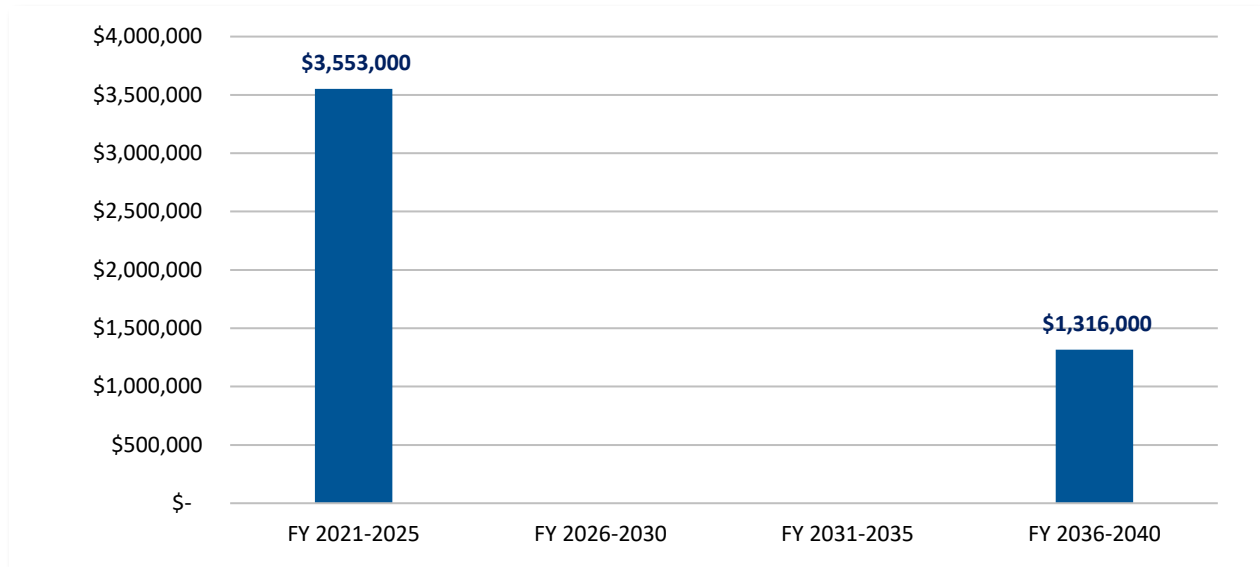


Figure 90. North Greenville WRRF Basin Collection Sewer System 20-Year Capital Improvements Timeline

3.4.1.4 Planning and Technology

Capital improvements related to planning and technology within the North Greenville WRRF basin will primarily include master planning efforts for the WRRF basin. In total, the North Greenville WRRF basin is estimated to receive approximately \$80,000 of investment towards planning and technology within the next five fiscal years. A breakdown of the 20-year capital improvement costs can be seen in [Figure 91](#).

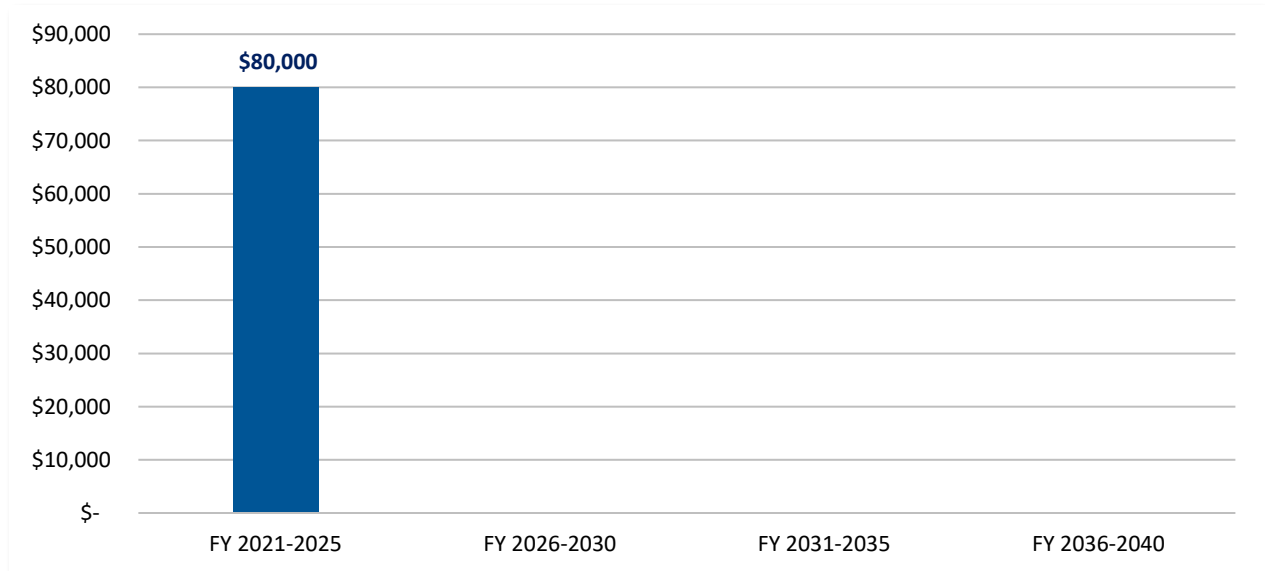


Figure 91. North Greenville WRRF Basin Planning and Technology 20-Year Capital Improvements Timeline

3.5 System Wide Needs

3.5.1 Water Resource Recovery Facilities

System wide capital improvements related to ReWa's many WRRFs include process improvements, renewal and replacement of equipment, sustainability driven improvements, and other improvements. Near term system wide WRRF projects include biosolids masterplan implementation, variable frequency drive replacements, storage buildings, and purchasing of spare parts for identified equipment.

A total of \$4,755,000 is planned to be spent on process improvements, \$1,638,000 on renewal and replacement of equipment, \$7,200,000 on sustainability driven improvements, and \$812,000 on other improvements. In total, an investment of \$14,405,000 is estimated to be spent on system wide WRRFs capital improvements within the next five fiscal years. A summary of the planned improvement costs for the next 20 years can be seen in [Figure 92](#). A breakdown of the 20-year capital improvement costs can be seen in [Figure 93](#).

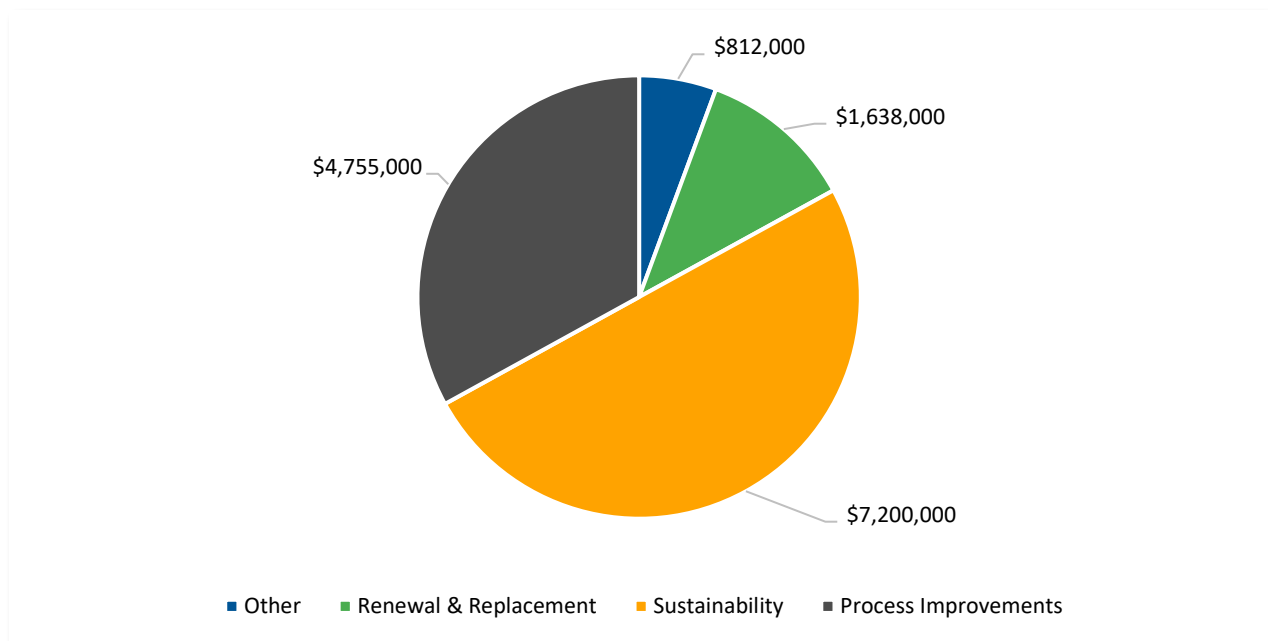


Figure 92. System Wide WRRF 20-Year Capital Improvements

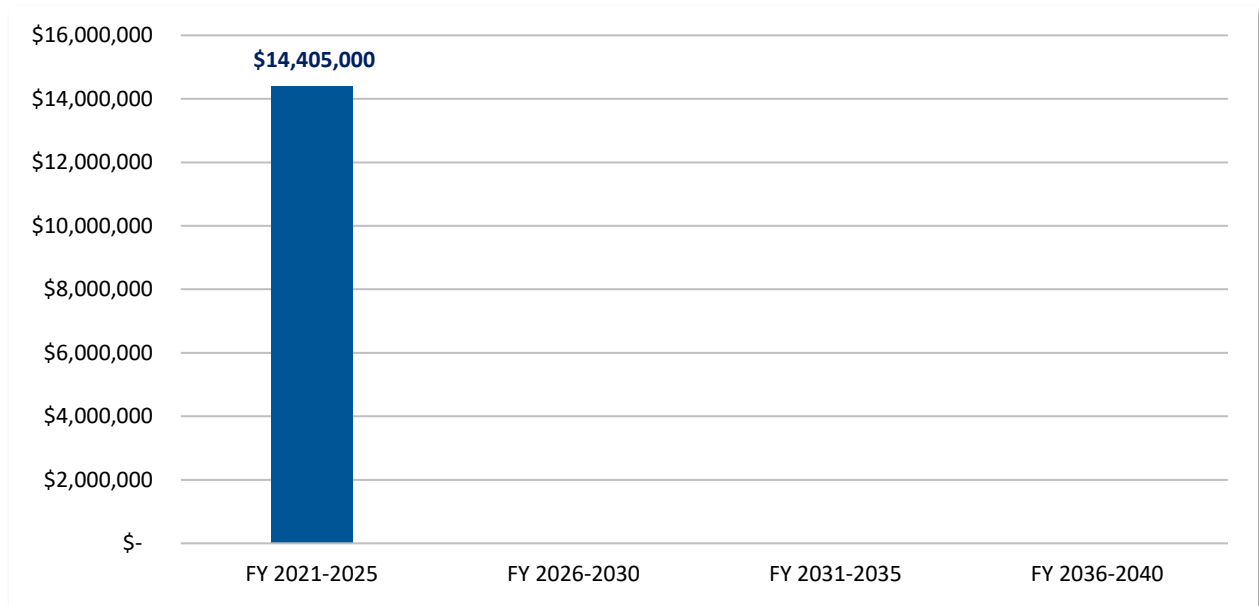


Figure 93. System Wide WRRF 20-Year Capital Improvements Timeline

3.5.2 Trunk Sewer System

Capital improvements for ReWa's system wide trunk sewer system will primarily include improvements to the sewer lines, pump stations, and force mains. Improvements will include capacity upgrades and studies, regulatory projects, renewal and replacement of equipment, and sustainability driven improvements. Near term improvements to the system wide trunk sewer system include rehabilitation of approximately 43,000 linear feet sewer pipes, construction of canopies at multiple pump stations, and a force main assessment program.

A total of \$57,372,000 is planned to be spent on capacity upgrades and studies, \$353,000 on regulatory projects, and \$7,176,000 on renewal and replacement of equipment. In total, an investment of \$64,901,000 is estimated to be spent on system wide trunk sewer system capital improvements over the next 20 years. A summary of the planned improvement costs for the next 20 years can be seen in [Figure 94](#). A breakdown of the 20-year capital improvement costs can be seen in [Figure 95](#).

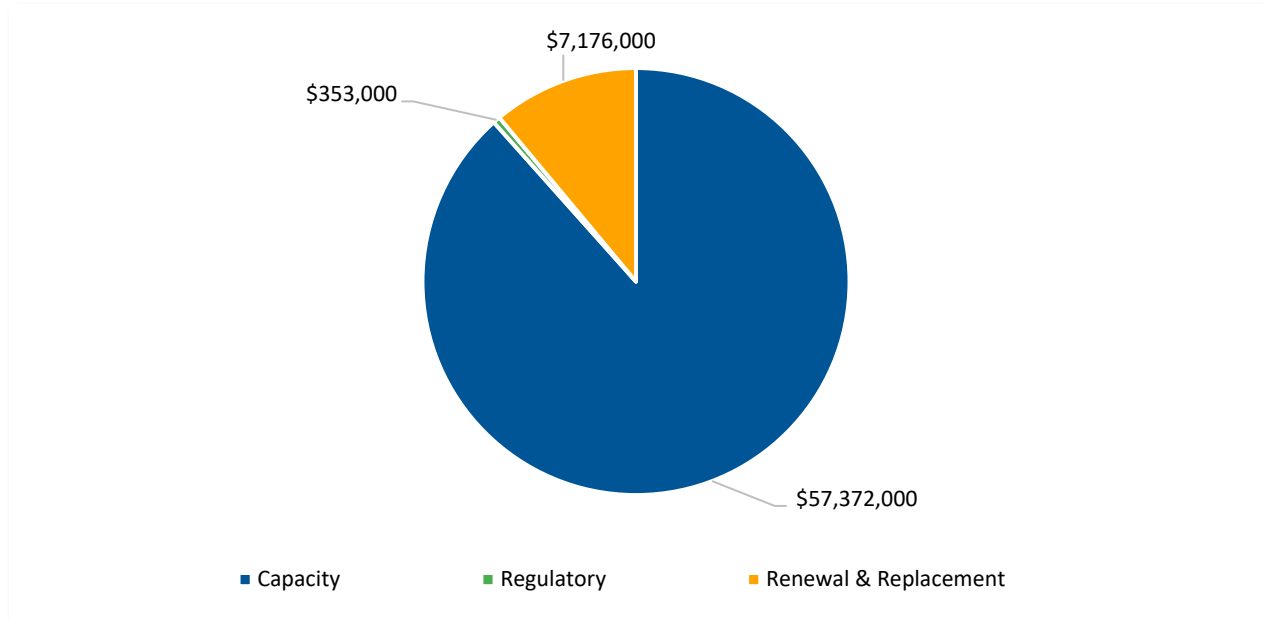


Figure 94. System Wide Trunk Sewer System 20-Year Capital Improvements

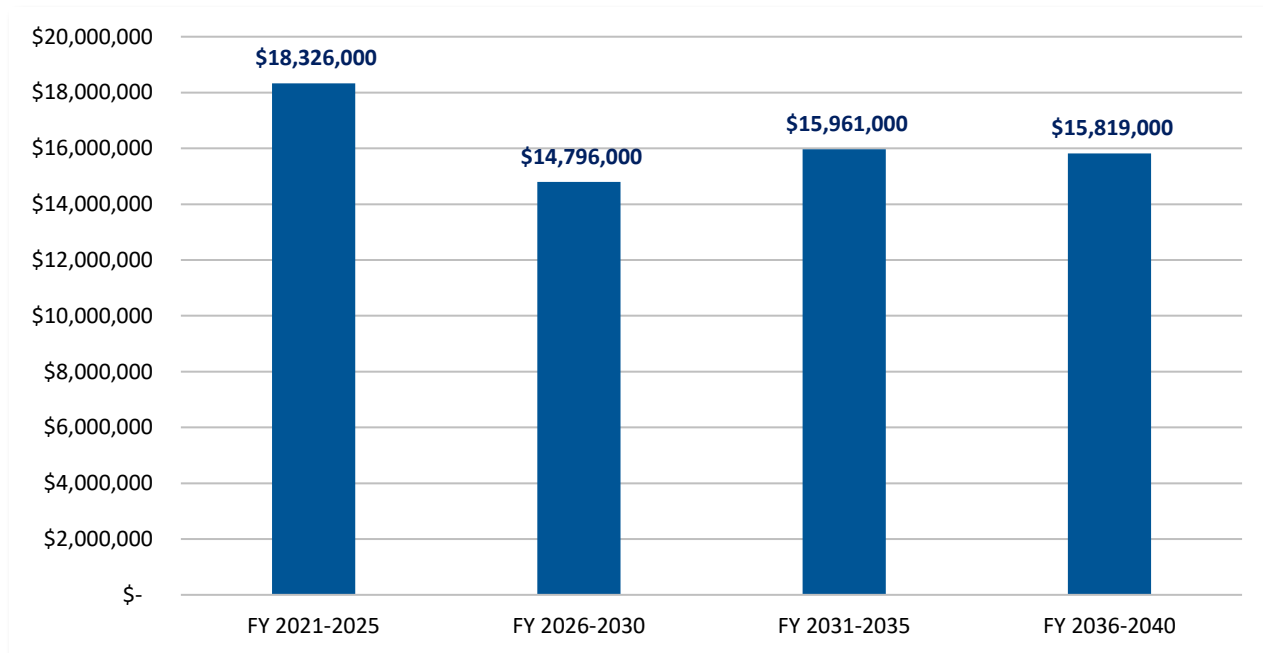


Figure 95. System Wide Trunk Sewer System 20-Year Capital Improvements Timeline

3.5.3 Collection Sewer System

In addition to capital improvements to the trunk sewer system, several system wide collection sewer system capital improvement projects are planned. These projects include renewal and replacement of equipment and other improvements. Near term improvements include procurement and

implementation of system wide collection system security improvements, as well as efforts to address identified defects in the gravity sewer collection system.

A total of \$4,785,000 is planned to be spent on renewal and replacement of equipment and \$676,000 on other improvements. In total, an investment of \$5,461,000 is estimated to be spent on system wide collection sewer system capital improvements over the next 20 years. A summary of the planned improvement costs for the next 20 years can be seen in [Figure 96](#). A breakdown of the 20-year capital improvement costs can be seen in [Figure 97](#).

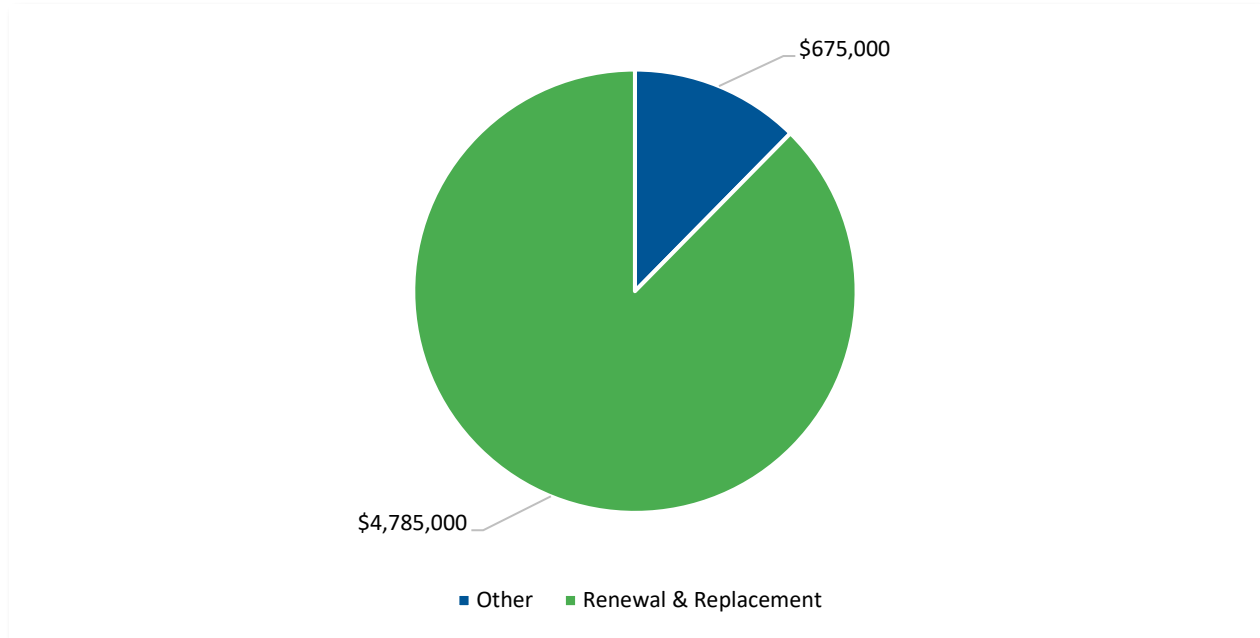


Figure 96. System Wide Collection Sewer System 20-Year Capital Improvements

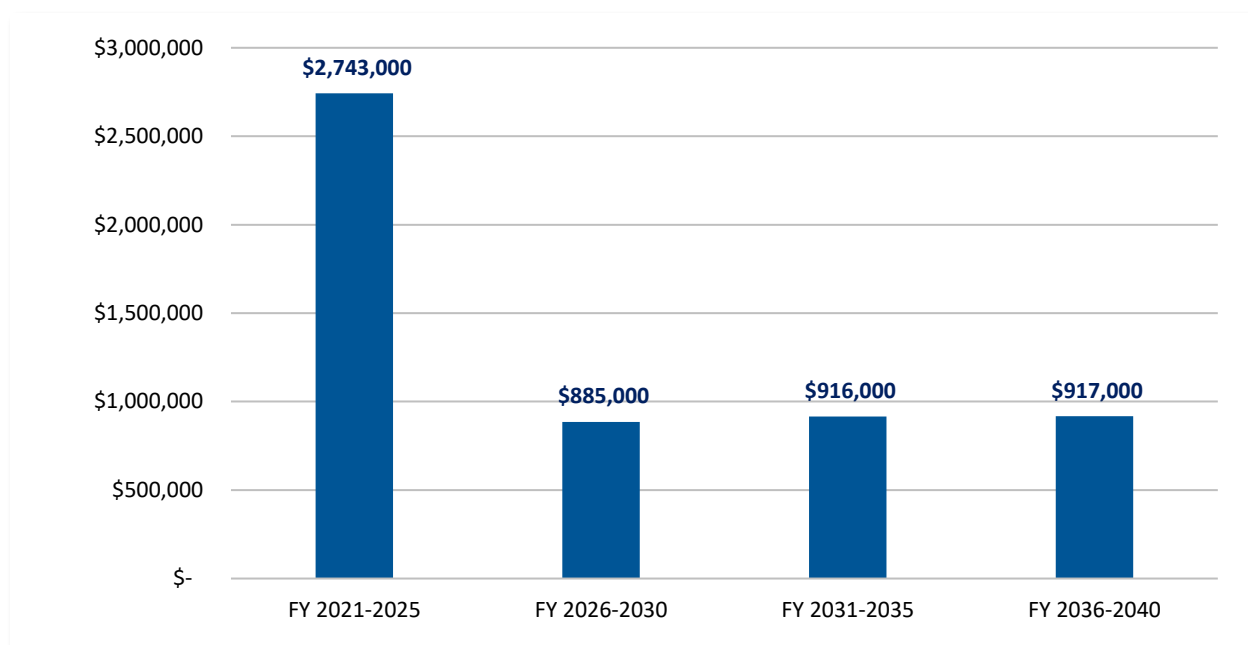


Figure 97. System Wide Collection Sewer System 20-Year Capital Improvements Timeline

3.5.4 Planning & Technology

Capital improvements related to system wide planning and technology will primarily include capacity and growth-related improvements, IT business application, IT systems and infrastructure, system wide planning, process improvements, and other improvements. These system planning projects include updates to ReWa's Development Manual and design standards, as well as various studies and evaluations of system wide needs.

A total of \$24,474,000 is planned to be spent on capacity improvements, \$6,280,000 on growth, \$4,940,000 on IT business applications, \$5,410,000 on IT systems and infrastructure, \$13,095,000 on planning, \$600,000 on process improvements, and \$1,429,000 on other improvements. The largest system wide planning and technology expenditure within the next 20 years is the equipment costs associated with the comprehensive flow monitoring program to monitor infiltration and inflow conditions, as well as growth and development approvals. In total, an investment of \$56,228,000 is estimated to be spent towards planning and technology in the next 20 years. A summary of the planned improvement costs for the next 20 years can be seen in [Figure 98](#). A breakdown of the 20-year capital improvement costs can be seen in [Figure 99](#).

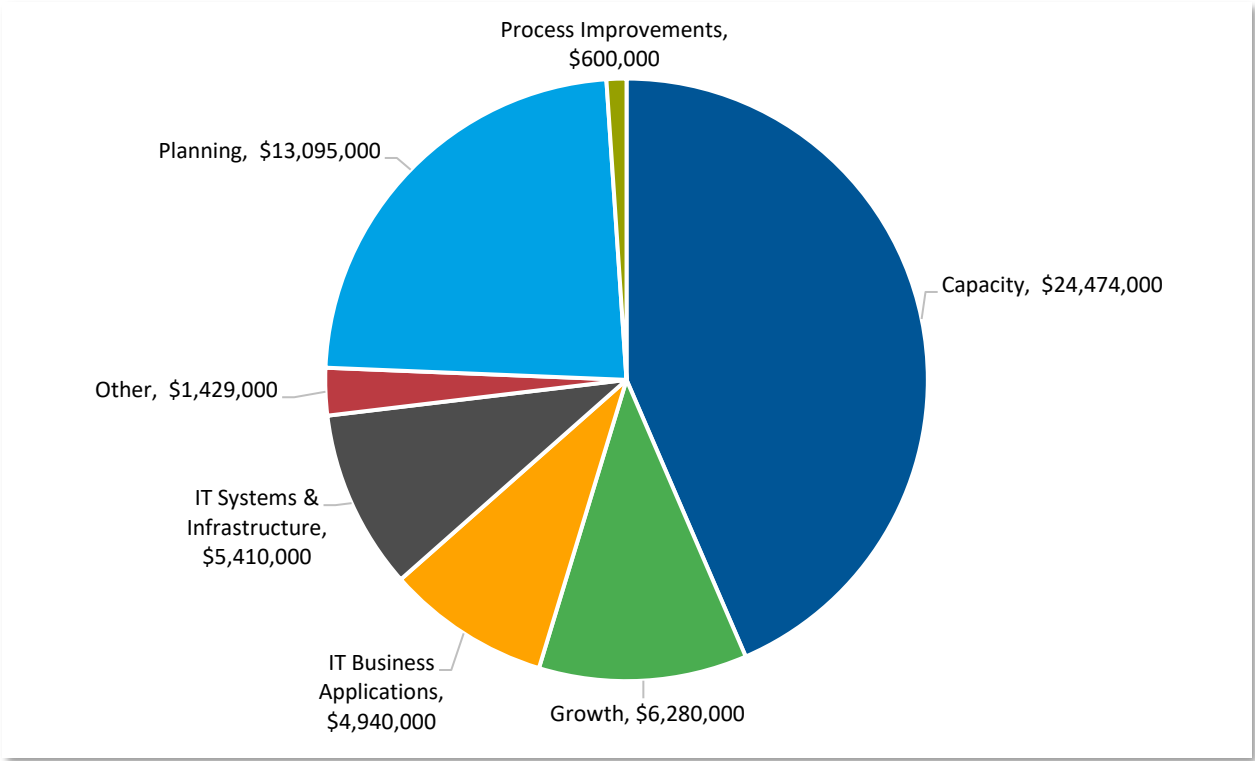


Figure 98. System Wide Planning and Technology 20-Year Capital Improvements

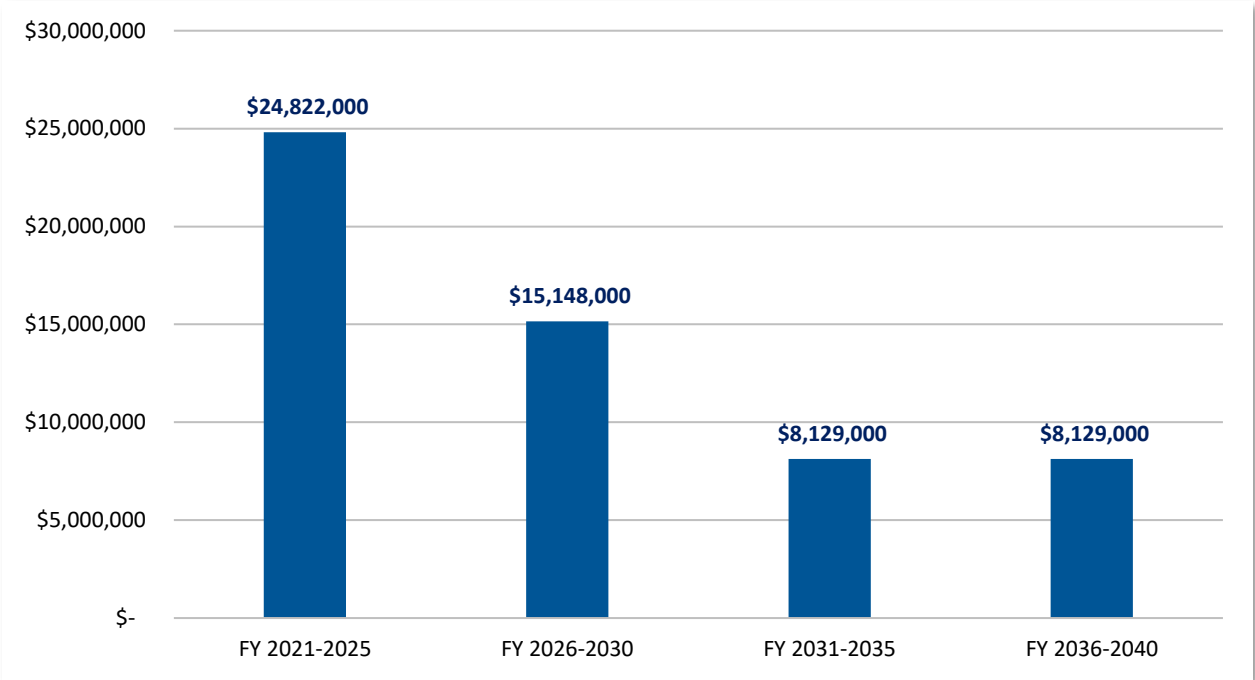


Figure 99. System Wide Planning and Technology 20-Year Capital Improvements Timeline

3.5.5 Renewable Resources

System wide capital improvements related to a future renewable resources project will primarily include sustainability driven improvements.

In total, an investment of \$1,800,000 is planned to be spent on system wide renewable resource capital improvements. A breakdown of the 20-year capital improvement costs can be seen in [Figure 100](#).

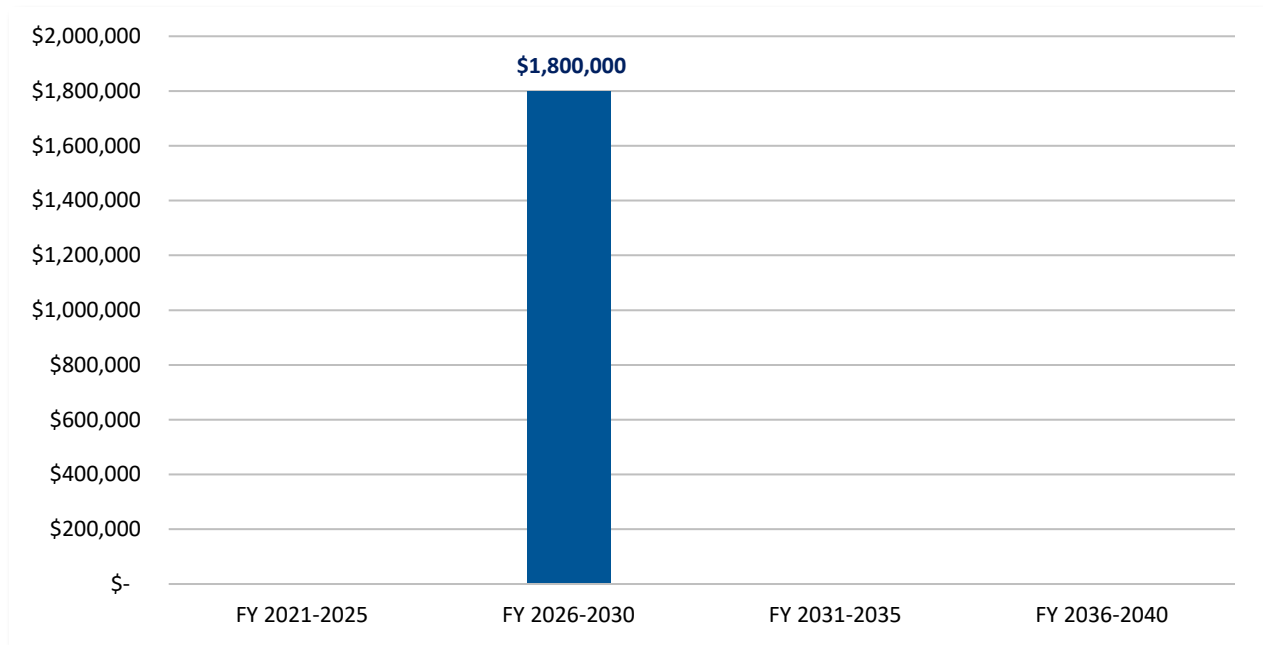


Figure 100. System Wide Renewable Resources 20-Year Capital Improvements Timeline

3.5.6 Other Priority Projects

In addition to capital improvements mentioned above, several additional system wide capital improvement projects are planned. These projects include regulatory projects, sustainability driven improvements, and other improvements. Near term projects include facility security system improvements and improvements to backflow prevention devices at ten locations to bring them into compliance with Cross Connection Control Regulations.

A total of \$225,000 is planned to be spent on regulatory projects, \$1,100,000 on sustainability driven improvements, and \$32,785,000 on other improvements. The largest of these expenditures will be the design and construction of a new Collections, Operations, and Maintenance shop. In total, an investment of \$34,110,000 is estimated for other system wide priority projects. A summary of the planned improvement costs for the next 20 years can be seen in [Figure 101](#). A breakdown of the 20-year capital improvement costs can be seen in [Figure 102](#).

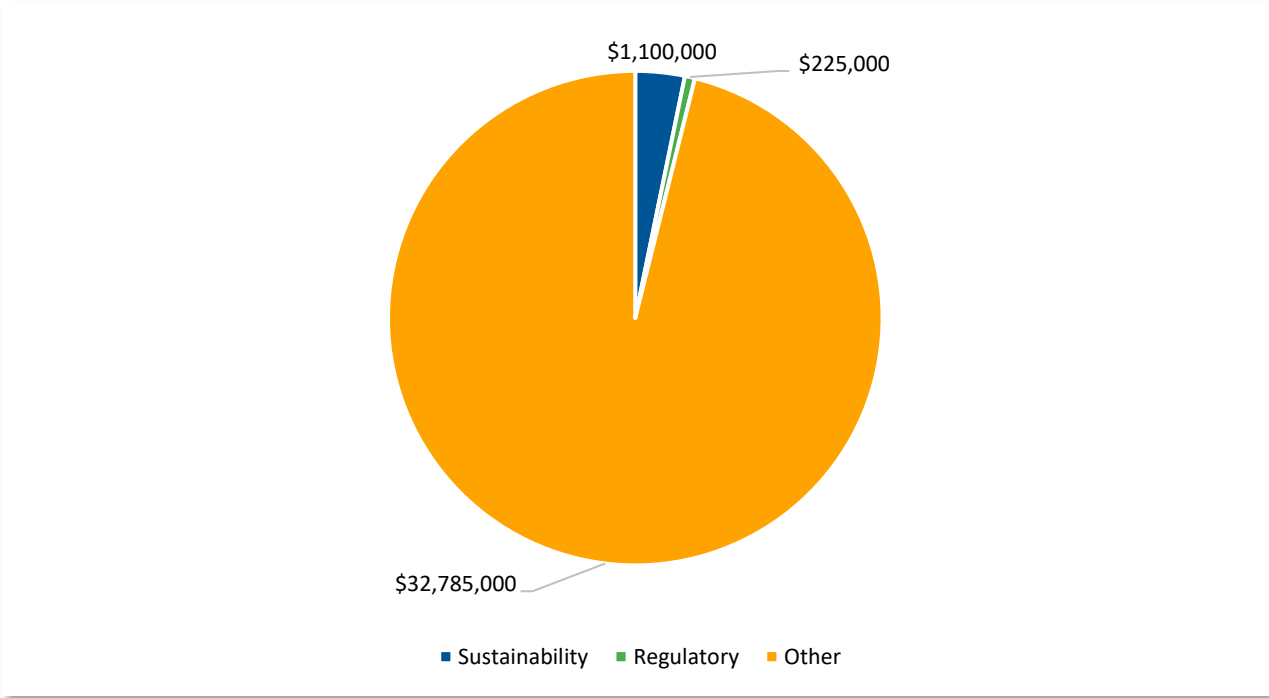


Figure 101. System Wide Other Priority Projects 20-Year Capital Improvements

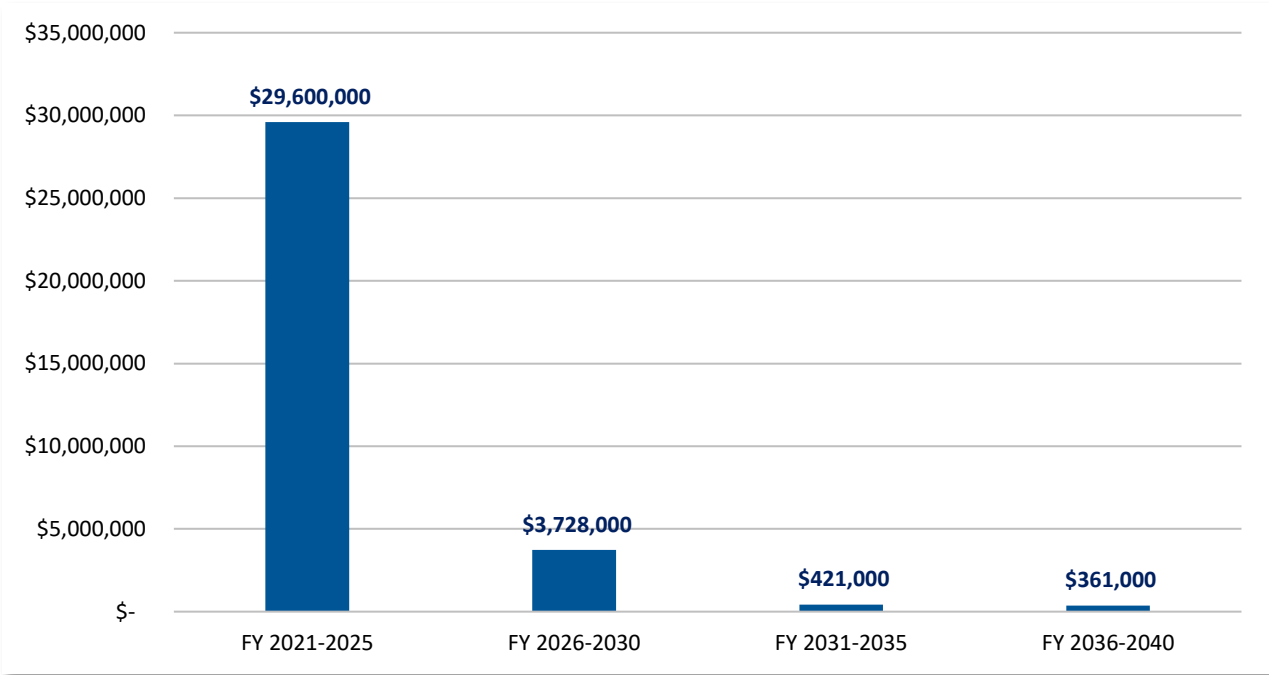


Figure 102. System Wide Other Priority Projects 20-Year Capital Improvements Timeline

3.5.7 System Wide Capital Improvements Summary

A summary table outlining the system wide 20-year capital improvement costs is provided in [Appendix A](#).

4.0 20-Year Infrastructure – Community Investment Plan Budget Summary

4.1 River Basin Summary

ReWa serves six river basins across the upstate of South Carolina. Four of those river basins, Reedy River, Saluda River, Enoree River, and Tyger River, contain WRRFs and associated wastewater infrastructure. A summary of the 20-Year capital improvements for ReWa’s service area, by river basin, is provided in [Figure 103](#). A breakdown of the 20-year capital improvement costs can be seen in [Figure 104](#).

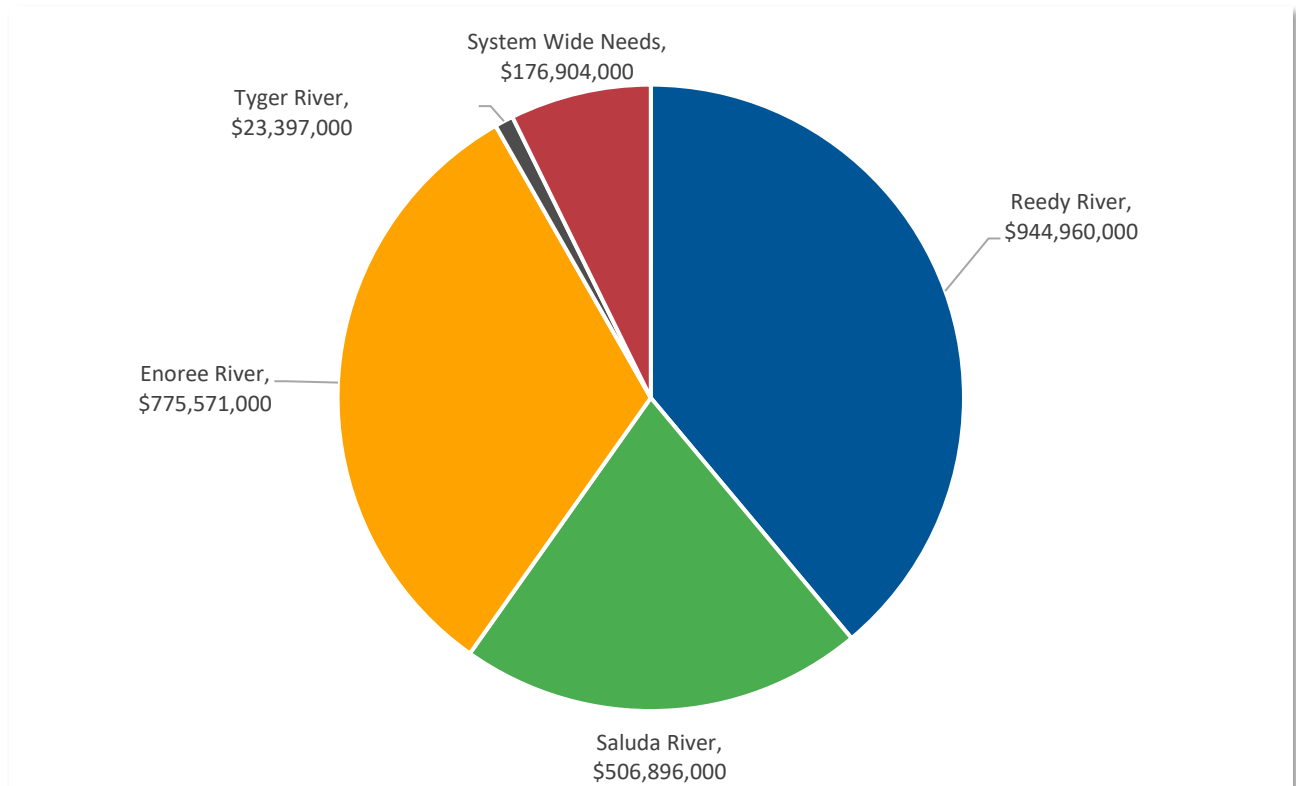


Figure 103. 20-Year Capital Improvements Summary by Basin

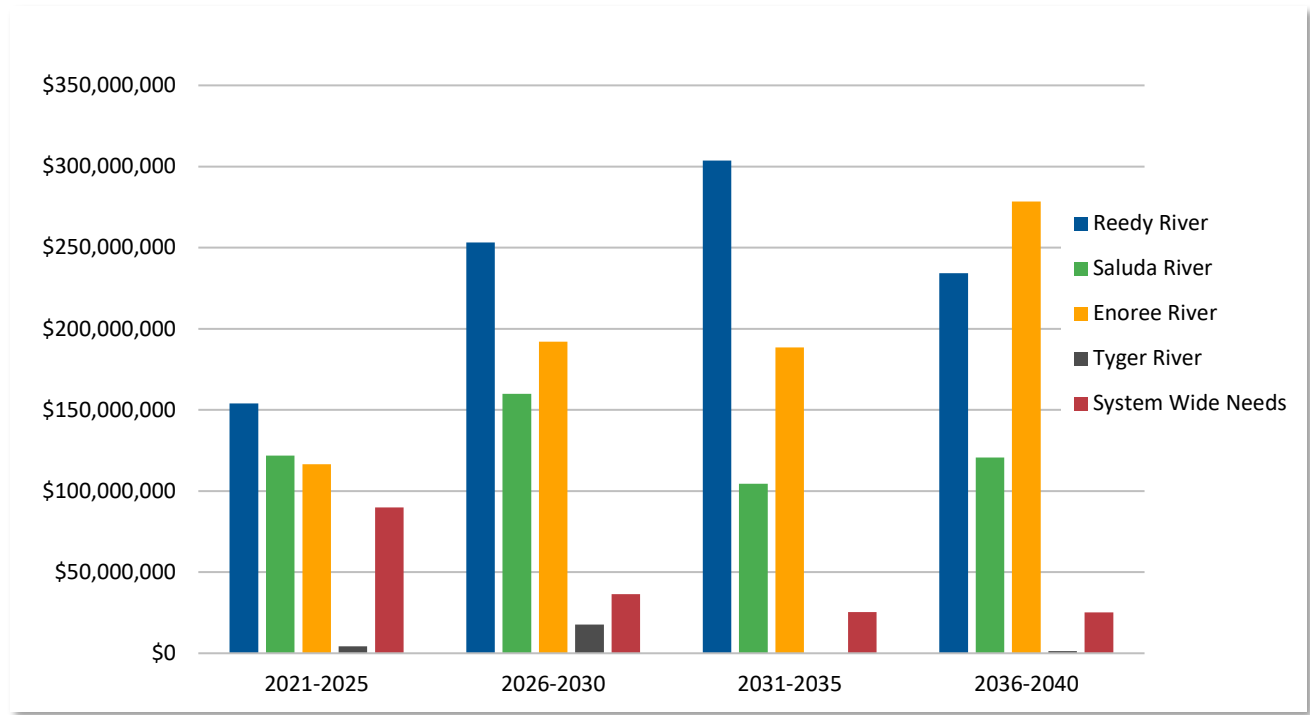


Figure 104. 20-Year Capital Improvements Timeline by Basin

4.2 Budget Category Summary

A summary of ReWa’s 20-year capital improvements, by budget category, is provided in [Figure 105](#). A breakdown of the 20-year capital improvement costs can be seen in [Figure 106](#). A summary table outlining the 20-year capital improvement costs for each budget category is provided in [Table 1](#).

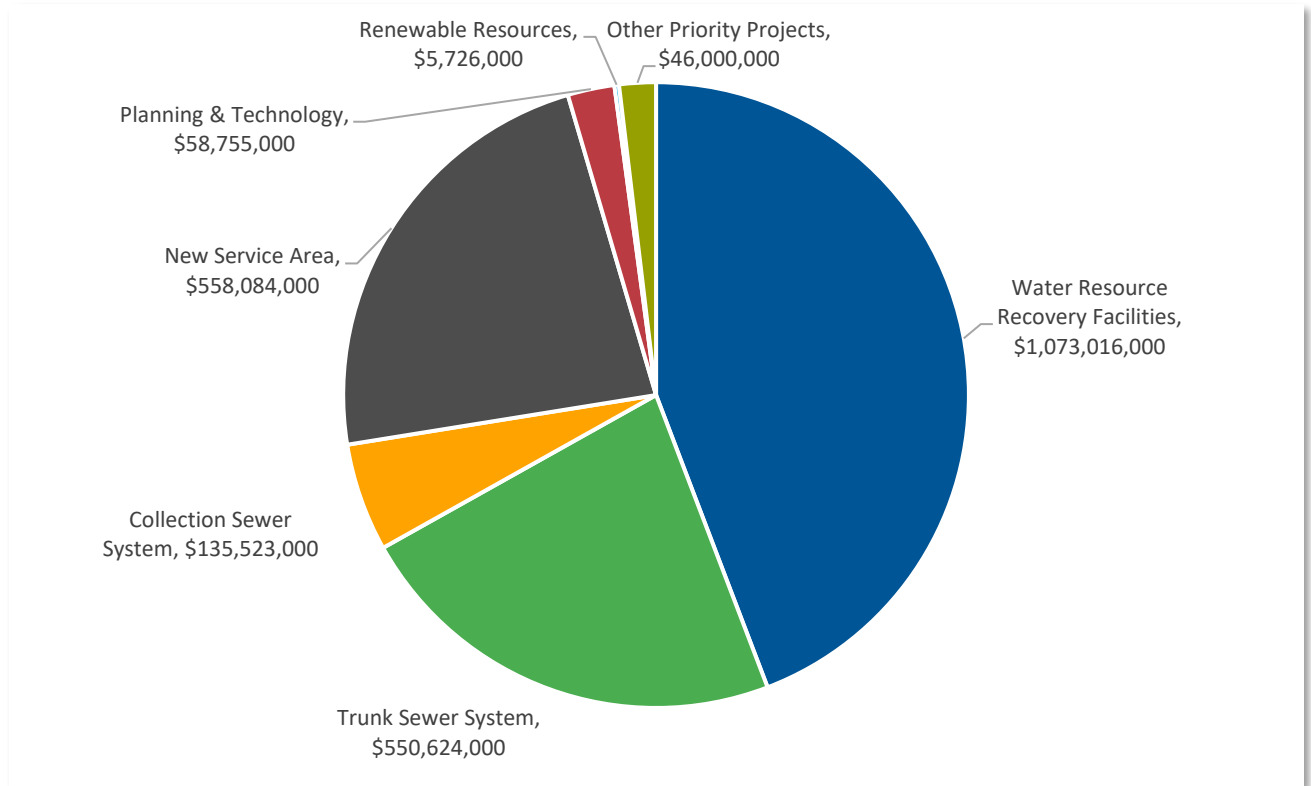


Figure 105. 20-Year Capital Improvements by Budget Category

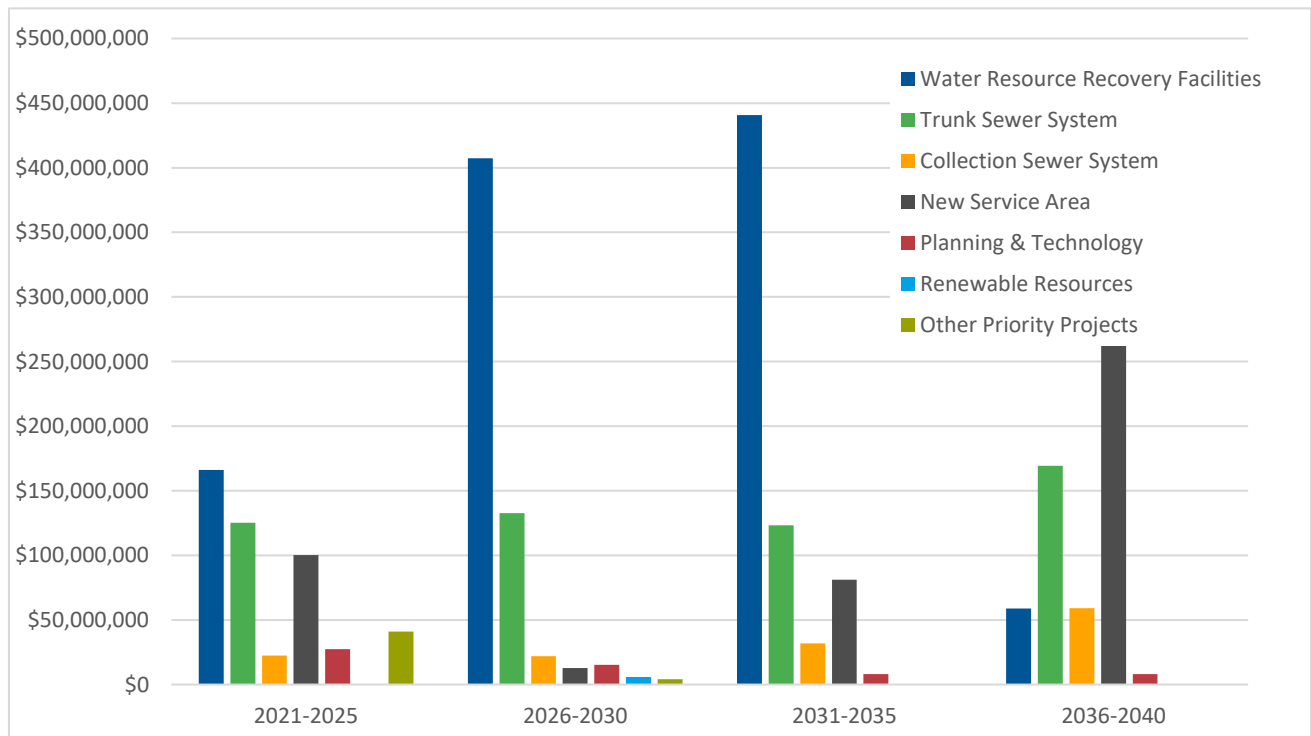


Figure 106. 20-Year Capital Improvements Timeline by Budget Category

Table 1 20-Year Capital Improvements Cost Summary by Budget Category

Budget Category	5-Year Period Beginning				20-Year Total
	2021	2026	2031	2036	
Water Resource Recovery Facilities	\$165,987,000	\$407,420,000	\$440,672,000	\$58,937,000	\$1,073,016,000
Trunk Sewer System	\$125,274,000	\$132,669,000	\$123,319,000	\$169,362,000	\$550,624,000
Collection Sewer System	\$22,450,000	\$22,023,000	\$31,968,000	\$59,082,000	\$135,523,000
New Service Area	\$100,106,000	\$12,901,000	\$81,075,000	\$364,002,000	\$558,084,000
Planning & Technology	\$27,349,000	\$15,148,000	\$8,129,000	\$8,129,000	\$58,755,000
Renewable Resources	\$ -	\$5,726,000	\$ -	\$ -	\$5,726,000
Other Priority Projects	\$41,043,000	\$4,175,000	\$421,000	\$361,000	\$46,000,000
ReWa Total	\$482,209,000	\$600,062,000	\$685,584,000	\$659,873,000	\$2,427,728,000

Appendix A. Summary Tables

1.0 Mauldin Road WRRF Basin

Project Driver	5-Year Period Beginning				20-Year Total
	2021	2026	2031	2036	
Maudlin Road WRRF					
Capacity	\$ -	\$ -	\$ -	\$ -	\$ -
Growth	\$ -	\$3,850,000	\$197,250,000	\$ -	\$201,100,000
Process Improvements	\$3,537,000	\$1,685,000	\$ -	\$ -	\$5,222,000
Regulatory	\$7,100,000	\$75,175,000	\$ -	\$ -	\$82,275,000
Renewal & Replacement	\$15,609,000	\$27,706,000	\$23,177,000	\$7,954,000	\$74,446,000
Sustainability	\$ -	\$ -	\$ -	\$ -	\$ -
Other	\$5,364,000	\$ -	\$ -	\$233,000	\$5,597,000
WRRF Total	\$31,610,000	\$108,416,000	\$220,427,000	\$8,187,000	\$368,640,000
Trunk Sewer System					
Capacity	\$27,144,000	\$60,647,000	\$59,487,000	\$42,788,000	\$190,066,000
Growth	\$30,655,000	\$ -	\$ -	\$ -	\$30,655,000
New Market or Service	\$ -	\$ -	\$ -	\$ -	\$ -
Process Improvements	\$ -	\$ -	\$ -	\$ -	\$ -
Regulatory	\$ -	\$ -	\$ -	\$ -	\$ -
Renewal & Replacement	\$3,654,000	\$3,055,000	\$ -	\$530,000	\$7,239,000
Sustainability	\$ -	\$ -	\$ -	\$ -	\$ -
Other	\$ -	\$ -	\$ -	\$ -	\$ -
Trunk Sewer System Total	\$61,453,000	\$63,702,000	\$59,487,000	\$43,318,000	\$227,960,000
Collection Sewer System					
Capacity	\$ -	\$342,000	\$5,636,000	\$4,374,000	\$10,352,000
Growth	\$ -	\$ -	\$ -	\$ -	\$ -
Renewal & Replacement	\$ -	\$ -	\$ -	\$ -	\$ -
Other	\$ -	\$ -	\$ -	\$ -	\$ -
Collection Sewer System Total	\$ -	\$342,000	\$5,636,000	\$4,374,000	\$10,352,000

Project Driver	5-Year Period Beginning				20-Year Total
	2021	2026	2031	2036	
New Service Area					
Growth	\$11,431,000	\$ -	\$ -	\$ -	\$11,431,000
Renewal & Replacement	\$ -	\$ -	\$ -	\$ -	\$ -
New Service Area Total	\$11,431,000	\$ -	\$ -	\$ -	\$11,431,000
Planning & Technology					
Capacity	\$ -	\$ -	\$ -	\$ -	\$ -
Growth	\$ -	\$ -	\$ -	\$ -	\$ -
IT Business Applications	\$ -	\$ -	\$ -	\$ -	\$ -
IT Systems & Infrastructure	\$ -	\$ -	\$ -	\$ -	\$ -
New Market or Service	\$ -	\$ -	\$ -	\$ -	\$ -
Planning	\$385,000	\$ -	\$ -	\$ -	\$385,000
Process Improvements	\$ -	\$ -	\$ -	\$ -	\$ -
Other	\$ -	\$ -	\$ -	\$ -	\$ -
Planning & Technology Total	\$385,000	\$ -	\$ -	\$ -	\$385,000
Renewable Resources					
Sustainability	\$ -	\$ -	\$ -	\$ -	\$ -
Renewable Resources Total	\$ -	\$ -	\$ -	\$ -	\$ -
Other Priority Projects					
Capacity	\$ -	\$ -	\$ -	\$ -	\$ -
Growth	\$ -	\$ -	\$ -	\$ -	\$ -
Planning	\$ -	\$ -	\$ -	\$ -	\$ -
Regulatory	\$ -	\$ -	\$ -	\$ -	\$ -
Renewal & Replacement	\$ -	\$ -	\$ -	\$ -	\$ -
Sustainability	\$ -	\$ -	\$ -	\$ -	\$ -
Other	\$9,991,000	\$100,000	\$ -	\$ -	\$10,091,000

Project Driver	5-Year Period Beginning				20-Year Total
	2021	2026	2031	2036	
Other Priority Projects Total	\$9,991,000	\$100,000	\$ -	\$ -	\$10,091,000
Mauldin Road WRRF Basin Total	\$114,870,000	\$172,560,000	\$285,550,000	\$55,879,000	\$628,859,000

2.0 Lower Reedy WRRF Basin

Project Driver	5-Year Period Beginning				20-Year Total
	2021	2026	2031	2036	
Lower Reedy WRRF					
Capacity	\$4,426,000	\$ -	\$ -	\$ -	\$4,426,000
Growth	\$ -	\$ -	\$ -	\$ -	\$ -
Process Improvements	\$7,455,000	\$5,460,000	\$ -	\$ -	\$12,915,000
Regulatory	\$ -	\$ -	\$58,790,000	\$ -	\$58,790,000
Renewal & Replacement	\$9,623,000	\$6,848,000	\$5,516,000	\$5,105,000	\$27,092,000
Sustainability	\$ -	\$ -	\$ -	\$ -	\$ -
Other	\$140,000	\$ -	\$ -	\$ -	\$140,000
WRRF Total	\$21,644,000	\$12,308,000	\$64,306,000	\$5,105,000	\$103,363,000
Trunk Sewer System					
Capacity	\$3,554,000	\$8,228,000	\$ -	\$49,057,000	\$60,839,000
Growth	\$ -	\$ -	\$ -	\$ -	\$ -
New Market or Service	\$ -	\$ -	\$ -	\$ -	\$ -
Process Improvements	\$478,000	\$ -	\$ -	\$ -	\$ 478,000
Regulatory	\$ -	\$ -	\$ -	\$ -	\$ -
Renewal & Replacement	\$ -	\$ -	\$ -	\$2,000,000	\$2,000,000
Sustainability	\$ -	\$ -	\$ -	\$ -	\$ -
Other	\$ -	\$ -	\$ -	\$ -	\$ -
Trunk Sewer System Total	\$4,032,000	\$8,228,000	\$ -	\$51,057,000	\$63,317,000
Collection Sewer System					
Capacity	\$ -	\$624,000	\$12,593,000	\$14,833,000	\$28,050,000
Growth	\$ -	\$ -	\$ -	\$ -	\$ -
Renewal & Replacement	\$211,000	\$ -	\$ -	\$ -	\$211,000
Other	\$ -	\$ -	\$ -	\$ -	\$ -
Collection Sewer System Total	\$211,000	\$624,000	\$12,593,000	\$14,833,000	\$28,261,000

Project Driver	5-Year Period Beginning				20-Year Total
	2021	2026	2031	2036	
New Service Area					
Growth	\$7,340,000	\$4,663,000	\$ -	\$107,400,000	\$119,403,000
Renewal & Replacement	\$ -	\$ -	\$ -	\$ -	\$ -
New Service Area Total	\$7,340,000	\$4,663,000	\$ -	\$107,400,000	\$119,403,000
Planning & Technology					
Capacity	\$ -	\$ -	\$ -	\$ -	\$ -
Growth	\$ -	\$ -	\$ -	\$ -	\$ -
IT Business Applications	\$ -	\$ -	\$ -	\$ -	\$ -
IT Systems & Infrastructure	\$ -	\$ -	\$ -	\$ -	\$ -
New Market or Service	\$ -	\$ -	\$ -	\$ -	\$ -
Planning	\$434,000	\$ -	\$ -	\$ -	\$434,000
Process Improvements	\$ -	\$ -	\$ -	\$ -	\$ -
Other	\$ -	\$ -	\$ -	\$ -	\$ -
Planning & Technology Total	\$434,000	\$ -	\$ -	\$ -	\$434,000
Renewable Resources					
Sustainability	\$ -	\$ -	\$ -	\$ -	\$ -
Renewable Resources Total	\$ -	\$ -	\$ -	\$ -	\$ -
Other Priority Projects					
Capacity	\$200,000	\$ -	\$ -	\$ -	\$200,000
Growth	\$ -	\$ -	\$ -	\$ -	\$ -
Planning	\$ -	\$ -	\$ -	\$ -	\$ -
Regulatory	\$ -	\$ -	\$ -	\$ -	\$ -
Renewal & Replacement	\$ -	\$ -	\$ -	\$ -	\$ -
Sustainability	\$ -	\$ -	\$ -	\$ -	\$ -
Other	\$ -	\$ -	\$ -	\$ -	\$ -

Project Driver	5-Year Period Beginning				20-Year Total
	2021	2026	2031	2036	
Other Priority Projects Total	\$200,000	\$ -	\$ -	\$ -	\$200,000
Lower Reedy WRRF Basin Total	\$33,861,000	\$25,823,000	\$76,899,000	\$178,395,000	\$314,978,000

3.0 Slater Marietta WRRF Basin

Project Driver	5-Year Period Beginning				20-Year Total
	2021	2026	2031	2036	
Slater Marietta WRRF					
Capacity	\$ -	\$ -	\$ -	\$ -	\$ -
Growth	\$ -	\$ -	\$ -	\$ -	\$ -
Process Improvements	\$ -	\$ -	\$ -	\$ -	\$ -
Regulatory	\$ -	\$ -	\$ -	\$ -	\$ -
Renewal & Replacement	\$150,000	\$ -	\$ -	\$ -	\$150,000
Sustainability	\$ -	\$ -	\$ -	\$ -	\$ -
Other	\$ -	\$ -	\$ -	\$ -	\$ -
WRRF Total	\$150,000	\$ -	\$ -	\$ -	\$150,000
Trunk Sewer System					
Capacity	\$ -	\$ -	\$ -	\$ -	\$ -
Growth	\$ -	\$ -	\$ -	\$ -	\$ -
New Market or Service	\$ -	\$ -	\$ -	\$ -	\$ -
Process Improvements	\$ -	\$ -	\$ -	\$ -	\$ -
Regulatory	\$ -	\$ -	\$ -	\$ -	\$ -
Renewal & Replacement	\$ -	\$ -	\$ -	\$ -	\$ -
Sustainability	\$ -	\$ -	\$ -	\$ -	\$ -
Other	\$ -	\$ -	\$ -	\$ -	\$ -
Trunk Sewer System Total	\$ -	\$ -	\$ -	\$ -	\$ -
Collection Sewer System					
Capacity	\$ -	\$ -	\$ -	\$6,603,000	\$6,603,000
Growth	\$ -	\$ -	\$ -	\$ -	\$ -
Renewal & Replacement	\$10,624,000	\$ -	\$ -	\$ -	\$10,624,000
Other	\$ -	\$ -	\$ -	\$ -	\$ -
Collection Sewer System Total	\$10,624,000	\$ -	\$ -	\$6,603,000	\$17,227,000

Project Driver	5-Year Period Beginning				20-Year Total
	2021	2026	2031	2036	
New Service Area					
Growth	\$ -	\$ -	\$ -	\$ -	\$ -
Renewal & Replacement	\$ -	\$ -	\$ -	\$ -	\$ -
New Service Area Total	\$ -	\$ -	\$ -	\$ -	\$ -
Planning & Technology					
Capacity	\$ -	\$ -	\$ -	\$ -	\$ -
Growth	\$ -	\$ -	\$ -	\$ -	\$ -
IT Business Applications	\$ -	\$ -	\$ -	\$ -	\$ -
IT Systems & Infrastructure	\$ -	\$ -	\$ -	\$ -	\$ -
New Market or Service	\$ -	\$ -	\$ -	\$ -	\$ -
Planning	\$106,000	\$ -	\$ -	\$ -	\$106,000
Process Improvements	\$ -	\$ -	\$ -	\$ -	\$ -
Other	\$ -	\$ -	\$ -	\$ -	\$ -
Planning & Technology Total	\$106,000	\$ -	\$ -	\$ -	\$106,000
Renewable Resources					
Sustainability	\$ -	\$ -	\$ -	\$ -	\$ -
Renewable Resources Total	\$ -	\$ -	\$ -	\$ -	\$ -
Other Priority Projects					
Capacity	\$ -	\$ -	\$ -	\$ -	\$ -
Growth	\$ -	\$ -	\$ -	\$ -	\$ -
Planning	\$ -	\$ -	\$ -	\$ -	\$ -
Regulatory	\$ -	\$ -	\$ -	\$ -	\$ -
Renewal & Replacement	\$ -	\$ -	\$ -	\$ -	\$ -
Sustainability	\$ -	\$ -	\$ -	\$ -	\$ -
Other	\$ -	\$ -	\$ -	\$ -	\$ -

Project Driver	5-Year Period Beginning				20-Year Total
	2021	2026	2031	2036	
Other Priority Projects Total	\$ -	\$ -	\$ -	\$ -	\$ -
Slater Marietta WRRF Basin Total	\$10,880,000	\$ -	\$ -	\$6,603,000	\$17,483,000

4.0 Georges Creek WRRF Basin

Project Driver	5-Year Period Beginning				20-Year Total
	2021	2026	2031	2036	
Georges Creek WRRF					
Capacity	\$26,910,000	\$ -	\$ -	\$ -	\$26,910,000
Growth	\$ -	\$ -	\$ -	\$ -	\$ -
Process Improvements	\$3,791,000	\$4,975,000	\$ -	\$ -	\$8,766,000
Regulatory	\$ -	\$ -	\$ -	\$ -	\$ -
Renewal & Replacement	\$7,120,000	\$4,802,000	\$ -	\$2,136,000	\$14,058,000
Sustainability	\$ -	\$ -	\$ -	\$ -	\$ -
Other	\$ -	\$ -	\$ -	\$ -	\$ -
WRRF Total	\$37,821,000	\$9,777,000	\$ -	\$2,136,000	\$49,734,000
Trunk Sewer System					
Capacity	\$ -	\$1,120,000	\$20,753,000	\$9,765,000	\$31,638,000
Growth	\$2,865,000	\$1,696,000	\$ -	\$ -	\$4,561,000
New Market or Service	\$ -	\$ -	\$ -	\$ -	\$ -
Process Improvements	\$ -	\$ -	\$ -	\$ -	\$ -
Regulatory	\$ -	\$ -	\$ -	\$ -	\$ -
Renewal & Replacement	\$2,519,000	\$200,000	\$ -	\$ -	\$2,719,000
Sustainability	\$ -	\$ -	\$ -	\$ -	\$ -
Other	\$ -	\$ -	\$ -	\$ -	\$ -
Trunk Sewer System Total	\$5,384,000	\$3,016,000	\$20,753,000	\$9,765,000	\$38,918,000
Collection Sewer System					
Capacity	\$ -	\$ -	\$7,115,000	\$7,017,000	\$14,132,000
Growth	\$ -	\$ -	\$ -	\$ -	\$ -
Renewal & Replacement	\$ -	\$ -	\$ -	\$ -	\$ -
Other	\$ -	\$ -	\$ -	\$ -	\$ -
Collection Sewer System Total	\$ -	\$ -	\$7,115,000	\$7,017,000	\$14,132,000

Project Driver	5-Year Period Beginning				20-Year Total
	2021	2026	2031	2036	
New Service Area					
Growth	\$25,362,000	\$2,800,000	\$ -	\$27,273,000	\$55,435,000
Renewal & Replacement	\$ -	\$ -	\$ -	\$ -	\$ -
New Service Area Total	\$25,362,000	\$2,800,000	\$ -	\$27,273,000	\$55,435,000
Planning & Technology					
Capacity	\$ -	\$ -	\$ -	\$ -	\$ -
Growth	\$ -	\$ -	\$ -	\$ -	\$ -
IT Business Applications	\$ -	\$ -	\$ -	\$ -	\$ -
IT Systems & Infrastructure	\$ -	\$ -	\$ -	\$ -	\$ -
New Market or Service	\$ -	\$ -	\$ -	\$ -	\$ -
Planning	\$151,000	\$ -	\$ -	\$ -	\$151,000
Process Improvements	\$ -	\$ -	\$ -	\$ -	\$ -
Other	\$ -	\$ -	\$ -	\$ -	\$ -
Planning & Technology Total	\$151,000	\$ -	\$ -	\$ -	\$151,000
Renewable Resources					
Sustainability	\$ -	\$ -	\$ -	\$ -	\$ -
Renewable Resources Total	\$ -	\$ -	\$ -	\$ -	\$ -
Other Priority Projects					
Capacity	\$ -	\$ -	\$ -	\$ -	\$ -
Growth	\$ -	\$ -	\$ -	\$ -	\$ -
Planning	\$ -	\$ -	\$ -	\$ -	\$ -
Regulatory	\$ -	\$ -	\$ -	\$ -	\$ -
Renewal & Replacement	\$ -	\$ -	\$ -	\$ -	\$ -
Sustainability	\$ -	\$ -	\$ -	\$ -	\$ -
Other	\$ -	\$ -	\$ -	\$ -	\$ -

Project Driver	5-Year Period Beginning				20-Year Total
	2021	2026	2031	2036	
Other Priority Projects Total	\$ -	\$ -	\$ -	\$ -	\$ -
Georges Creek WRRF Basin Total	\$68,718,000	\$15,593,000	\$27,868,000	\$46,191,000	\$158,370,000

5.0 Piedmont Regional WRRF Basin

Project Driver	5-Year Period Beginning				20-Year Total
	2021	2026	2031	2036	
Piedmont Regional WRRF					
Capacity	\$ -	\$130,997,000	\$70,303,000	\$ -	\$201,300,000
Growth	\$ -	\$ -	\$ -	\$ -	\$ -
Process Improvements	\$8,707,000	\$2,520,000	\$ -	\$ -	\$11,227,000
Regulatory	\$ -	\$ -	\$ -	\$ -	\$ -
Renewal & Replacement	\$5,739,000	\$1,816,000	\$4,940,000	\$3,516,000	\$16,011,000
Sustainability	\$ -	\$ -	\$ -	\$ -	\$ -
Other	\$ -	\$ -	\$ -	\$ -	\$ -
WRRF Total	\$14,446,000	\$135,333,000	\$75,243,000	\$3,516,000	\$228,538,000
Trunk Sewer System					
Capacity	\$89,000	\$1,013,000	\$ -	\$29,237,000	\$30,339,000
Growth	\$ -	\$ -	\$ -	\$ -	\$ -
New Market or Service	\$ -	\$ -	\$ -	\$ -	\$ -
Process Improvements	\$ -	\$ -	\$ -	\$ -	\$ -
Regulatory	\$ -	\$ -	\$ -	\$ -	\$ -
Renewal & Replacement	\$2,399,000	\$900,000	\$ -	\$ -	\$3,299,000
Sustainability	\$ -	\$ -	\$ -	\$ -	\$ -
Other	\$ -	\$ -	\$ -	\$ -	\$ -
Trunk Sewer System Total	\$2,488,000	\$1,913,000	\$ -	\$29,237,000	\$33,638,000
Collection Sewer System					
Capacity	\$ -	\$ -	\$ -	\$7,627,000	\$7,627,000
Growth	\$ -	\$6,298,000	\$ -	\$ -	\$6,298,000
Renewal & Replacement	\$3,141,000	\$821,000	\$ -	\$ -	\$3,962,000
Other	\$ -	\$ -	\$ -	\$ -	\$ -
Collection Sewer System Total	\$3,141,000	\$7,119,000	\$ -	\$7,627,000	\$17,887,000

Project Driver	5-Year Period Beginning				20-Year Total
	2021	2026	2031	2036	
New Service Area					
Growth	\$20,641,000	\$ -	\$1,280,000	\$27,495,000	\$49,416,000
Renewal & Replacement	\$ -	\$ -	\$ -	\$ -	\$ -
New Service Area Total	\$20,641,000	\$ -	\$1,280,000	\$27,495,000	\$49,416,000
Planning & Technology					
Capacity	\$ -	\$ -	\$ -	\$ -	\$ -
Growth	\$ -	\$ -	\$ -	\$ -	\$ -
IT Business Applications	\$ -	\$ -	\$ -	\$ -	\$ -
IT Systems & Infrastructure	\$ -	\$ -	\$ -	\$ -	\$ -
New Market or Service	\$ -	\$ -	\$ -	\$ -	\$ -
Planning	\$221,000	\$ -	\$ -	\$ -	\$221,000
Process Improvements	\$ -	\$ -	\$ -	\$ -	\$ -
Other	\$43,000	\$ -	\$ -	\$ -	\$43,000
Planning & Technology Total	\$264,000	\$ -	\$ -	\$ -	\$264,000
Renewable Resources					
Sustainability	\$ -	\$ -	\$ -	\$ -	\$ -
Renewable Resources Total	\$ -	\$ -	\$ -	\$ -	\$ -
Other Priority Projects					
Capacity	\$ -	\$ -	\$ -	\$ -	\$ -
Growth	\$ -	\$ -	\$ -	\$ -	\$ -
Planning	\$ -	\$ -	\$ -	\$ -	\$ -
Regulatory	\$ -	\$ -	\$ -	\$ -	\$ -
Renewal & Replacement	\$ -	\$ -	\$ -	\$ -	\$ -
Sustainability	\$ -	\$ -	\$ -	\$ -	\$ -
Other	\$ -	\$ -	\$ -	\$ -	\$ -

Project Driver	5-Year Period Beginning				20-Year Total
	2021	2026	2031	2036	
Other Priority Projects Total	\$ -	\$ -	\$ -	\$ -	\$ -
Piedmont Regional WRRF Basin Total	\$40,980,000	\$144,365,000	\$76,523,000	\$67,875,000	\$329,743,000

6.0 Pelham WRRF Basin

Project Driver	5-Year Period Beginning				20-Year Total
	2021	2026	2031	2036	
Pelham WRRF					
Capacity	\$ -	\$ -	\$ -	\$ -	\$ -
Growth	\$ -	\$ -	\$ -	\$ -	\$ -
Process Improvements	\$1,156,000	\$2,520,000	\$ -	\$ -	\$3,676,000
Regulatory	\$ -	\$ -	\$ -	\$ -	\$ -
Renewal & Replacement	\$33,028,000	\$23,572,000	\$15,356,000	\$10,495,000	\$82,451,000
Sustainability	\$ -	\$ -	\$ -	\$ -	\$ -
Other	\$ -	\$ -	\$ -	\$ -	\$ -
WRRF Total	\$34,184,000	\$26,092,000	\$15,356,000	\$10,495,000	\$86,127,000
Trunk Sewer System					
Capacity	\$15,168,000	\$24,029,000	\$2,700,000	\$ -	\$41,897,000
Growth	\$7,922,000	\$ -	\$18,250,000	\$ -	\$26,172,000
New Market or Service	\$ -	\$ -	\$ -	\$ -	\$ -
Process Improvements	\$ -	\$ -	\$ -	\$ -	\$ -
Regulatory	\$ -	\$ -	\$ -	\$ -	\$ -
Renewal & Replacement	\$5,040,000	\$569,000	\$ -	\$700,000	\$6,309,000
Sustainability	\$ -	\$ -	\$ -	\$ -	\$ -
Other	\$244,000	\$ -	\$ -	\$ -	\$244,000
Trunk Sewer System Total	\$28,374,000	\$24,598,000	\$20,950,000	\$700,000	\$74,622,000
Collection Sewer System					
Capacity	\$ -	\$ 8,712,000	\$ -	\$ -	\$8,712,000
Growth	\$ -	\$ -	\$ -	\$ -	\$ -
Renewal & Replacement	\$ -	\$ -	\$ -	\$ -	\$ -
Other	\$ -	\$ -	\$ -	\$ -	\$ -
Collection Sewer System Total	\$ -	\$8,712,000	\$ -	\$ -	\$8,712,000

Project Driver	5-Year Period Beginning				20-Year Total
	2021	2026	2031	2036	
New Service Area					
Growth	\$ -	\$5,438,000	\$ -	\$3,406,000	\$8,844,000
Renewal & Replacement	\$ -	\$ -	\$ -	\$ -	\$ -
New Service Area Total	\$ -	\$5,438,000	\$ -	\$3,406,000	\$8,844,000
Planning & Technology					
Capacity	\$ -	\$ -	\$ -	\$ -	\$ -
Growth	\$57,000	\$ -	\$ -	\$ -	\$57,000
IT Business Applications	\$ -	\$ -	\$ -	\$ -	\$ -
IT Systems & Infrastructure	\$ -	\$ -	\$ -	\$ -	\$ -
New Market or Service	\$ -	\$ -	\$ -	\$ -	\$ -
Planning	\$263,000	\$ -	\$ -	\$ -	\$263,000
Process Improvements	\$ -	\$ -	\$ -	\$ -	\$ -
Other	\$ -	\$ -	\$ -	\$ -	\$ -
Planning & Technology Total	\$320,000	\$ -	\$ -	\$ -	\$320,000
Renewable Resources					
Sustainability	\$ -	\$ -	\$ -	\$ -	\$ -
Renewable Resources Total	\$ -	\$ -	\$ -	\$ -	\$ -
Other Priority Projects					
Capacity	\$ -	\$ -	\$ -	\$ -	\$ -
Growth	\$ -	\$ -	\$ -	\$ -	\$ -
Planning	\$ -	\$ -	\$ -	\$ -	\$ -
Regulatory	\$ -	\$ -	\$ -	\$ -	\$ -
Renewal & Replacement	\$ -	\$ -	\$ -	\$ -	\$ -
Sustainability	\$ -	\$ -	\$ -	\$ -	\$ -
Other	\$ -	\$ -	\$ -	\$ -	\$ -

Project Driver	5-Year Period Beginning				20-Year Total
	2021	2026	2031	2036	
Other Priority Projects Total	\$ -	\$ -	\$ -	\$ -	\$ -
Pelham WRRF Basin Total	\$62,878,000	\$64,840,000	\$36,306,000	\$14,601,000	\$178,625,000

7.0 Gilder Creek WRRF Basin

Project Driver	5-Year Period Beginning				20-Year Total
	2021	2026	2031	2036	
Gilder Creek WRRF					
Capacity	\$ -	\$ -	\$ -	\$ -	\$ -
Growth	\$ -	\$47,325,000	\$47,565,000	\$ -	\$94,890,000
Process Improvements	\$ -	\$23,876,000.00	\$ -	\$ -	\$23,876,000
Regulatory	\$ -	\$ -	\$ -	\$ -	\$ -
Renewal & Replacement	\$8,494,000	\$22,178,000	\$6,236,000	\$22,474,000	\$59,382,000
Sustainability	\$ -	\$ -	\$ -	\$ -	\$ -
Other	\$129,000	\$ -	\$ -	\$ -	\$129,000
WRRF Total	\$8,623,000	\$93,379,000	\$53,801,000	\$22,474,000	\$178,277,000
Trunk Sewer System					
Capacity	\$ -	\$12,899,000	\$6,168,000	\$ -	\$19,067,000
Growth	\$ -	\$ -	\$ -	\$ -	\$ -
New Market or Service	\$ -	\$ -	\$ -	\$ -	\$ -
Process Improvements	\$ -	\$ -	\$ -	\$ -	\$ -
Regulatory	\$ -	\$ -	\$ -	\$ -	\$ -
Renewal & Replacement	\$810,000	\$ -	\$ -	\$ -	\$810,000
Sustainability	\$ -	\$ -	\$ -	\$ -	\$ -
Other	\$ -	\$ -	\$ -	\$ -	\$ -
Trunk Sewer System Total	\$810,000	\$12,899,000	\$6,168,000	\$ -	\$19,877,000
Collection Sewer System					
Capacity	\$ -	\$ -	\$5,708,000	\$9,533,000	\$15,241,000
Growth	\$ -	\$ -	\$ -	\$ -	\$ -
Renewal & Replacement	\$ -	\$ -	\$ -	\$ -	\$ -
Other	\$ -	\$ -	\$ -	\$ -	\$ -
Collection Sewer System Total	\$ -	\$ -	\$5,708,000	\$9,533,000	\$15,241,000

Project Driver	5-Year Period Beginning				20-Year Total
	2021	2026	2031	2036	
New Service Area					
Growth	\$5,417,000	\$ -	\$3,977,000	\$49,633,000	\$59,027,000
Renewal & Replacement	\$ -	\$ -	\$ -	\$4,000,000	\$4,000,000
New Service Area Total	\$5,417,000	\$ -	\$3,977,000	\$53,633,000	\$63,027,000
Planning & Technology					
Capacity	\$ -	\$ -	\$ -	\$ -	\$ -
Growth	\$105,000	\$ -	\$ -	\$ -	\$105,000
IT Business Applications	\$ -	\$ -	\$ -	\$ -	\$ -
IT Systems & Infrastructure	\$ -	\$ -	\$ -	\$ -	\$ -
New Market or Service	\$ -	\$ -	\$ -	\$ -	\$ -
Planning	\$307,000	\$ -	\$ -	\$ -	\$307,000
Process Improvements	\$ -	\$ -	\$ -	\$ -	\$ -
Other	\$ -	\$ -	\$ -	\$ -	\$ -
Planning & Technology Total	\$412,000	\$ -	\$ -	\$ -	\$412,000
Renewable Resources					
Sustainability	\$ -	\$3,926,000	\$ -	\$ -	\$3,926,000
Renewable Resources Total	\$ -	\$3,926,000	\$ -	\$ -	\$3,926,000
Other Priority Projects					
Capacity	\$ -	\$ -	\$ -	\$ -	\$ -
Growth	\$ -	\$ -	\$ -	\$ -	\$ -
Planning	\$ -	\$ -	\$ -	\$ -	\$ -
Regulatory	\$ -	\$ -	\$ -	\$ -	\$ -
Renewal & Replacement	\$ -	\$ -	\$ -	\$ -	\$ -
Sustainability	\$ -	\$ -	\$ -	\$ -	\$ -
Other	\$660,000	\$ -	\$ -	\$ -	\$660,000

Project Driver	5-Year Period Beginning				20-Year Total
	2021	2026	2031	2036	
Other Priority Projects Total	\$660,000	\$ -	\$ -	\$ -	\$660,000
Gilder Creek WRRF Basin Total	\$15,922,000	\$110,204,000	\$69,654,000	\$85,640,000	\$281,420,000

8.0 Durbin Creek WRRF Basin

Project Driver	5-Year Period Beginning				20-Year Total
	2021	2026	2031	2036	
Durbin Creek WRRF					
Capacity	\$ -	\$ -	\$ -	\$ -	\$ -
Growth	\$ -	\$ -	\$ -	\$ -	\$ -
Process Improvements	\$ -	\$ -	\$ -	\$ -	\$ -
Regulatory	\$ -	\$ -	\$ -	\$ -	\$ -
Renewal & Replacement	\$2,392,000	\$6,285,000	\$11,539,000	\$7,024,000	\$27,240,000
Sustainability	\$ -	\$ -	\$ -	\$ -	\$ -
Other	\$ -	\$ -	\$ -	\$ -	\$ -
WRRF Total	\$2,392,000	\$6,285,000	\$11,539,000	\$7,024,000	\$27,240,000
Trunk Sewer System					
Capacity	\$ -	\$ -	\$ -	\$19,466,000	\$19,466,000
Growth	\$ -	\$ -	\$ -	\$ -	\$ -
New Market or Service	\$ -	\$ -	\$ -	\$ -	\$ -
Process Improvements	\$ -	\$ -	\$ -	\$ -	\$ -
Regulatory	\$ -	\$ -	\$ -	\$ -	\$ -
Renewal & Replacement	\$3,101,000	\$1,100,000	\$ -	\$ -	\$4,201,000
Sustainability	\$ -	\$ -	\$ -	\$ -	\$ -
Other	\$6,000	\$512,000	\$ -	\$ -	\$518,000
Trunk Sewer System Total	\$3,107,000	\$1,612,000	\$ -	\$19,466,000	\$24,185,000
Collection Sewer System					
Capacity	\$1,778,000	\$4,341,000	\$ -	\$6,863,000	\$12,982,000
Growth	\$ -	\$ -	\$ -	\$ -	\$ -
Renewal & Replacement	\$ -	\$ -	\$ -	\$ -	\$ -
Other	\$400,000	\$ -	\$ -	\$ -	\$400,000
Collection Sewer System Total	\$2,178,000	\$4,341,000	\$ -	\$6,863,000	\$13,382,000

Project Driver	5-Year Period Beginning				20-Year Total
	2021	2026	2031	2036	
New Service Area					
Growth	\$29,915,000	\$ -	\$75,818,000	\$85,925,000	\$191,658,000
Renewal & Replacement	\$ -	\$ -	\$ -	\$ -	\$ -
New Service Area Total	\$29,915,000	\$ -	\$75,818,000	\$85,925,000	\$191,658,000
Planning & Technology					
Capacity	\$ -	\$ -	\$ -	\$ -	\$ -
Growth	\$ -	\$ -	\$ -	\$ -	\$ -
IT Business Applications	\$ -	\$ -	\$ -	\$ -	\$ -
IT Systems & Infrastructure	\$ -	\$ -	\$ -	\$ -	\$ -
New Market or Service	\$ -	\$ -	\$ -	\$ -	\$ -
Planning	\$187,000	\$ -	\$ -	\$ -	\$187,000
Process Improvements	\$ -	\$ -	\$ -	\$ -	\$ -
Other	\$ -	\$ -	\$ -	\$ -	\$ -
Planning & Technology Total	\$187,000	\$ -	\$ -	\$ -	\$187000
Renewable Resources					
Sustainability	\$ -	\$ -	\$ -	\$ -	\$ -
Renewable Resources Total	\$ -	\$ -	\$ -	\$ -	\$ -
Other Priority Projects					
Capacity	\$ -	\$ -	\$ -	\$ -	\$ -
Growth	\$ -	\$ -	\$ -	\$ -	\$ -
Planning	\$ -	\$ -	\$ -	\$ -	\$ -
Regulatory	\$ -	\$ -	\$ -	\$ -	\$ -
Renewal & Replacement	\$ -	\$ -	\$ -	\$ -	\$ -
Sustainability	\$ -	\$ -	\$ -	\$ -	\$ -
Other	\$ -	\$ -	\$ -	\$ -	\$ -

Project Driver	5-Year Period Beginning				20-Year Total
	2021	2026	2031	2036	
Other Priority Projects Total	\$ -	\$ -	\$ -	\$ -	\$ -
Durbin Creek WRRF Basin Total	\$37,779,000	\$12,238,000	\$87,357,000	\$119,278,000	\$256,652,000

9.0 North Greenville WRRF Basin

Project Driver	5-Year Period Beginning				20-Year Total
	2021	2026	2031	2036	
North Greenville WRRF					
Capacity	\$578,000	\$15,830,000	\$ -	\$ -	\$16,408,000
Growth	\$ -	\$ -	\$ -	\$ -	\$ -
Process Improvements	\$ -	\$ -	\$ -	\$ -	\$ -
Regulatory	\$ -	\$ -	\$ -	\$ -	\$ -
Renewal & Replacement	\$134,000	\$ -	\$ -	\$ -	\$134,000
Sustainability	\$ -	\$ -	\$ -	\$ -	\$ -
Other	\$ -	\$ -	\$ -	\$ -	\$ -
WRRF Total	\$712,000	\$15,830,000	\$ -	\$ -	\$16,542,000
Trunk Sewer System					
Capacity	\$1,000	\$1,905,000	\$ -	\$ -	\$1,906,000
Growth	\$ -	\$ -	\$ -	\$ -	\$ -
New Market or Service	\$ -	\$ -	\$ -	\$ -	\$ -
Process Improvements	\$ -	\$ -	\$ -	\$ -	\$ -
Regulatory	\$ -	\$ -	\$ -	\$ -	\$ -
Renewal & Replacement	\$ -	\$ -	\$ -	\$ -	\$ -
Sustainability	\$ -	\$ -	\$ -	\$ -	\$ -
Other	\$ -	\$ -	\$ -	\$ -	\$ -
Trunk Sewer System Total	\$1,000	\$1,905,000	\$ -	\$ -	\$1,906,000
Collection Sewer System					
Capacity	\$ -	\$ -	\$ -	\$ -	\$ -
Growth	\$ -	\$ -	\$ -	\$ -	\$ -
Renewal & Replacement	\$3,553,000	\$ -	\$ -	\$1,316,000	\$4,869,000
Other	\$ -	\$ -	\$ -	\$ -	\$ -
Collection Sewer System Total	\$3,553,000	\$ -	\$ -	\$1,316,000	\$4,869,000

Project Driver	5-Year Period Beginning				20-Year Total
	2021	2026	2031	2036	
New Service Area					
Growth	\$ -	\$ -	\$ -	\$ -	\$ -
Renewal & Replacement	\$ -	\$ -	\$ -	\$ -	\$ -
New Service Area Total	\$ -	\$ -	\$ -	\$ -	\$ -
Planning & Technology					
Capacity	\$ -	\$ -	\$ -	\$ -	\$ -
Growth	\$ -	\$ -	\$ -	\$ -	\$ -
IT Business Applications	\$ -	\$ -	\$ -	\$ -	\$ -
IT Systems & Infrastructure	\$ -	\$ -	\$ -	\$ -	\$ -
New Market or Service	\$ -	\$ -	\$ -	\$ -	\$ -
Planning	\$80,000	\$ -	\$ -	\$ -	\$80,000
Process Improvements	\$ -	\$ -	\$ -	\$ -	\$ -
Other	\$ -	\$ -	\$ -	\$ -	\$ -
Planning & Technology Total	\$80,000	\$ -	\$ -	\$ -	\$80,000
Renewable Resources					
Sustainability	\$ -	\$ -	\$ -	\$ -	\$ -
Renewable Resources Total	\$ -	\$ -	\$ -	\$ -	\$ -
Other Priority Projects					
Capacity	\$ -	\$ -	\$ -	\$ -	\$ -
Growth	\$ -	\$ -	\$ -	\$ -	\$ -
Planning	\$ -	\$ -	\$ -	\$ -	\$ -
Regulatory	\$ -	\$ -	\$ -	\$ -	\$ -
Renewal & Replacement	\$ -	\$ -	\$ -	\$ -	\$ -
Sustainability	\$ -	\$ -	\$ -	\$ -	\$ -
Other	\$ -	\$ -	\$ -	\$ -	\$ -

Project Driver	5-Year Period Beginning				20-Year Total
	2021	2026	2031	2036	
Other Priority Projects Total	\$ -	\$ -	\$ -	\$ -	\$ -
North Greenville WRRF Basin Total	\$4,346,000	\$17,735,000	\$ -	\$1,316,000	\$23,397,000

10.0 System Wide

Budget Category	5-Year Period Beginning				20-Year Total
	2021	2026	2031	2036	
Water Resource Recovery Facilities					
Capacity	\$ -	\$ -	\$ -	\$ -	\$ -
Growth	\$ -	\$ -	\$ -	\$ -	\$ -
Process Improvements	\$4,755,000	\$ -	\$ -	\$ -	\$4,755,000
Regulatory	\$ -	\$ -	\$ -	\$ -	\$ -
Renewal & Replacement	\$1,638,000	\$ -	\$ -	\$ -	\$1,638,000
Sustainability	\$7,200,000	\$ -	\$ -	\$ -	\$7,200,000
Other	\$812,000	\$ -	\$ -	\$ -	\$812,000
WRRF Total	\$14,405,000	\$ -	\$ -	\$ -	\$14,405,000
Trunk Sewer System					
Capacity	\$12,896,000	\$14,046,000	\$15,211,000	\$15,219,000	\$57,372,000
Growth	\$ -	\$ -	\$ -	\$ -	\$ -
New Market or Service	\$ -	\$ -	\$ -	\$ -	\$ -
Process Improvements	\$ -	\$ -	\$ -	\$ -	\$ -
Regulatory	\$353,000	\$ -	\$ -	\$ -	\$353,000
Renewal & Replacement	\$5,076,000	\$750,000	\$750,000	\$600,000	\$7,176,000
Sustainability	\$ -	\$ -	\$ -	\$ -	\$ -
Other	\$ -	\$ -	\$ -	\$ -	\$ -
Trunk Sewer System Total	\$18,325,000	\$14,796,000	\$15,961,000	\$15,819,000	\$64,901,000
Collection Sewer System					
Capacity	\$ -	\$ -	\$ -	\$ -	\$ -
Growth	\$ -	\$ -	\$ -	\$ -	\$ -
Renewal & Replacement	\$2,185,000	\$846,000	\$877,000	\$877,000	\$4,785,000
Other	\$558,000	\$39,000	\$39,000	\$39,000	\$675,000
Collection Sewer System Total	\$2,743,000	\$885,000	\$916,000	\$916,000	\$5,460,000

Budget Category	5-Year Period Beginning				20-Year Total
	2021	2026	2031	2036	
New Service Area					
Growth	\$ -	\$ -	\$ -	\$ -	\$ -
Renewal & Replacement	\$ -	\$ -	\$ -	\$ -	\$ -
New Service Area Total	\$ -	\$ -	\$ -	\$ -	\$ -
Planning & Technology					
Capacity	\$9,474,000	\$5,000,000	\$5,000,000	\$5,000,000	\$24,474,000
Growth	\$1,715,000	\$1,522,000	\$1,522,000	\$1,522,000	\$6,281,000
IT Business Applications	\$2,745,000	\$2,194,000	\$ -	\$ -	\$4,939,000
IT Systems & Infrastructure	\$5,410,000	\$ -	\$ -	\$ -	\$5,410,000
New Market or Service	\$ -	\$ -	\$ -	\$ -	\$ -
Planning	\$3,849,000	\$6,032,000	\$1,607,000	\$1,607,000	\$13,095,000
Process Improvements	\$200,000	\$400,000	\$ -	\$ -	\$600,000
Other	\$1,429,000	\$ -	\$ -	\$ -	\$1,429,000
Planning & Technology Total	\$24,822,000	\$15,148,000	\$8,129,000	\$8,129,000	\$56,228,000
Renewable Resources					
Sustainability	\$ -	\$1,800,000	\$ -	\$ -	\$1,800,000
Renewable Resources Total	\$ -	\$1,800,000	\$ -	\$ -	\$1,800,000
Other Priority Projects					
Capacity	\$ -	\$ -	\$ -	\$ -	\$ -
Growth	\$ -	\$ -	\$ -	\$ -	\$ -
Planning	\$ -	\$ -	\$ -	\$ -	\$ -
Regulatory	\$225,000	\$ -	\$ -	\$ -	\$225,000
Renewal & Replacement	\$ -	\$ -	\$ -	\$ -	\$ -
Sustainability	\$ -	\$1,100,000	\$ -	\$ -	\$1,100,000
Other	\$29,375,000	\$2,628,000	\$421,000	\$361,000	\$32,785,000

Budget Category	5-Year Period Beginning				20-Year Total
	2021	2026	2031	2036	
Other Priority Projects Total	\$29,600,000	\$3,728,000	\$421,000	\$361,000	\$34,110,000
System Wide Total	\$89,895,000	\$36,357,000	\$25,427,000	\$25,225,000	\$176,904,000

11.0 River Basin Summary Table

Budget Category	5-Year Period Beginning				20-Year Total
	2021	2026	2031	2036	
Reedy River					
WRRF	\$53,254,000	\$120,724,000	\$284,733,000	\$13,292,000	\$472,003,000
Trunk Sewer System	\$65,485,000	\$71,930,000	\$59,487,000	\$94,375,000	\$291,277,000
Collection Sewer System	\$211,000	\$966,000	\$18,229,000	\$19,207,000	\$38,613,000
New Service Area	\$18,771,000	\$4,663,000	\$ -	\$107,400,000	\$130,834,000
Planning & Technology	\$1,003,000	\$ -	\$ -	\$ -	\$1,003,000
Renewable Resources	\$ -	\$ -	\$ -	\$ -	\$ -
Other Priority Projects	\$10,783,000	\$447,000	\$ -	\$ -	\$11,230,000
Reedy River Basin Total	\$149,507,000	\$198,730,000	\$362,449,000	\$234,274,000	\$944,960,000
Saluda River					
WRRF	\$52,417,000	\$145,110,000	\$75,243,000	\$5,652,000	\$278,422,000
Trunk Sewer System	\$9,172,000	\$4,929,000	\$20,753,000	\$39,002,000	\$73,856,000
Collection Sewer System	\$13,765,000	\$7,119,000	\$7,115,000	\$21,247,000	\$49,246,000
New Service Area	\$46,003,000	\$2,800,000	\$1,280,000	\$54,768,000	\$104,851,000
Planning & Technology	\$521,000	\$ -	\$ -	\$ -	\$521,000
Renewable Resources	\$ -	\$ -	\$ -	\$ -	\$ -
Other Priority Projects	\$ -	\$ -	\$ -	\$ -	\$ -
Saluda River Basin Total	\$121,878,000	\$159,958,000	\$104,391,000	\$120,669,000	\$506,896,000
Enoree River					
WRRF	\$45,199,000	\$125,756,000	\$80,696,000	\$39,993,000	\$291,644,000
Trunk Sewer System	\$32,291,000	\$39,109,000	\$27,118,000	\$20,166,000	\$118,684,000
Collection Sewer System	\$2,178,000	\$13,053,000	\$5,708,000	\$16,396,000	\$37,335,000
New Service Area	\$35,332,000	\$5,438,000	\$79,795,000	\$201,834,000	\$322,399,000
Planning & Technology	\$923,000	\$ -	\$ -	\$ -	\$923,000
Renewable Resources	\$ -	\$3,926,000	\$ -	\$ -	\$3,926,000
Other Priority Projects	\$660,000	\$ -	\$ -	\$ -	\$660,000
Enoree River Basin Total	\$116,583,000	\$187,282,000	\$193,317,000	\$278,389,000	\$775,571,000
Tyger River					
WRRF	\$712,000	\$15,830,000	\$ -	\$ -	\$16,542,000

Budget Category	5-Year Period Beginning				20-Year Total
	2021	2026	2031	2036	
Trunk Sewer System	\$1,000	\$1,905,000	\$ -	\$ -	\$1,906,000
Collection Sewer System	\$3,553,000	\$ -	\$ -	\$1,316,000	\$4,869,000
New Service Area	\$ -	\$ -	\$ -	\$ -	\$ -
Planning & Technology	\$80,000	\$ -	\$ -	\$ -	\$80,000
Renewable Resources	\$ -	\$ -	\$ -	\$ -	\$ -
Other Priority Projects	\$ -	\$ -	\$ -	\$ -	\$ -
Tyger River Basin Total	\$4,346,000	\$17,735,000	\$ -	\$1,316,000	\$23,397,000
System Wide Needs					
WRRF	\$14,405,000	\$ -	\$ -	\$ -	\$14,405,000
Trunk Sewer System	\$18,325,000	\$14,796,000	\$15,961,000	\$15,819,000	\$64,901,000
Collection Sewer System	\$2,743,000	\$885,000	\$916,000	\$916,000	\$5,460,000
New Service Area	\$ -	\$ -	\$ -	\$ -	\$ -
Planning & Technology	\$24,822,000	\$15,148,000	\$8,129,000	\$8,129,000	\$56,228,000
Renewable Resources	\$ -	\$1,800,000	\$ -	\$ -	\$1,800,000
Other Priority Projects	\$29,600,000	\$3,728,000	\$421,000	\$361,000	\$34,110,000
System Wide Needs Total	\$89,895,000	\$36,357,000	\$25,427,000	\$25,225,000	\$176,904,000
Capital Improvements Total	\$482,209,000	\$600,062,000	\$685,584,000	\$659,873,000	\$2,427,728,000



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