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JOHNSTON COUNTY REGIONALIZATION FEASIBILITY REPORT

PREPARED FOR

Johnston County, North Carolina

15 APRIL 2024

BLACK & VEATCH

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1.0 Legal Notice

This report was prepared for the Johnston County Commission ("Owner") through the Johnston County Public Utilities Department ("JCPU") by Black & Veatch Management Consulting, LLC (Black & Veatch) and is based on information provided by the JCPU and its representative agents and partners that are not within the control of Black & Veatch. While it is believed that the information, data and opinions contained herein will be reliable under the conditions and subject to the limitations set forth in this report, Black & Veatch does not guarantee the accuracy thereof. Black & Veatch has assumed that the information provided by others, both verbal and written, is complete and correct. The projections set forth in this report are intended as "forward-looking statements." In formulating these projections, Black & Veatch has made certain assumptions with respect to conditions, events, and circumstances that may occur in the future. While Black & Veatch believes the assumptions are reasonable, actual results may differ materially from those projected, as they are influenced by the conditions, events, and circumstances that occur. As such, Black & Veatch does not take responsibility for the accuracy of data or projections provided by or prepared on behalf of the Client, nor does Black & Veatch have any responsibility for updating this report for events occurring after the date of this report.

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2.0 Executive Summary

The Johnston County Commission ("Owner") through the Johnston County Public Utilities Department ("JCPU") retained Black & Veatch Management Consulting, LLC (Black & Veatch) to prepare an assessment of the viability of a regionalization scenario for water and sewer systems owned and operated by the JCPU and the other utility systems within the County. To meet the stated objective of the analysis, Black & Veatch conducted a Preliminary Due Diligence evaluation, including an Organization Review, an Infrastructure Review, a Stakeholder Review, and a High-Level Financial Review. For the Report detailed herein, the results of the Organization Review, the Stakeholder Review, and the High-Level Financial Review are provided as the Infrastructure Review was completed and presented as a separate analysis not included in this Report.

2.1 Governance Review

A review of the existing forms of governance utilized by the JCPU and the Utility Systems was completed to understand the statutory basis of the existing forms of governance and highlight the legislative framework necessary to support and provide the appropriate oversight to implement and maintain a regionalization arrangement.

The following section provides a bulleted summary of the key findings associated with the Governance Review:

- There are four typical forms of regionalization, as listed below in **Figure 1**:

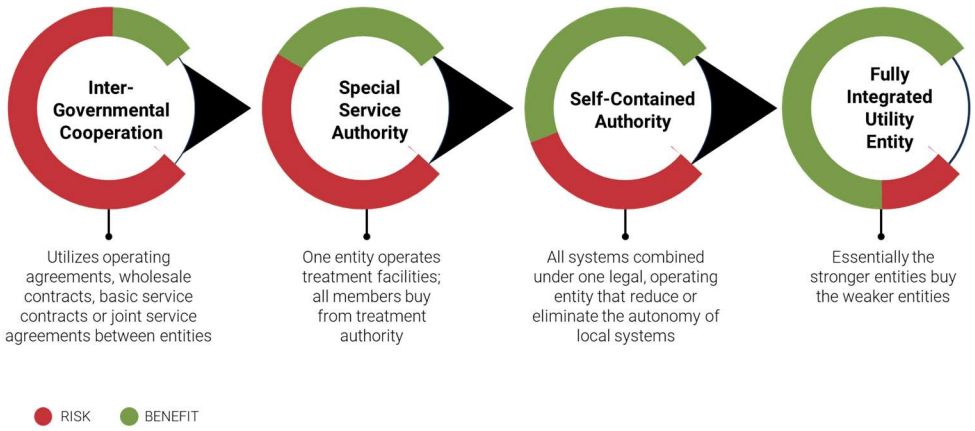

Figure 1 Typical Forms of Regionalization

- The nature of current inter-local/service agreements between the JCPU and the utility systems constitutes a limited form of inter-governmental cooperation that can be built upon to ratify a regionalization arrangement. In addition, the current Inter-local/Service Agreements benefit the JCPU and the utility systems in terms of service stability, operating requirements, and individual cost obligations compared to a stand-alone system. However, ratifying a regionalization arrangement may gain additional operating and financial benefits.
- To ratify a governance framework as a part of a regionalization arrangement, the JCPU, the Utility Systems, and the Regionalized Entity must coordinate deeply with the North Carolina General Assembly, the North Carolina Department of Environmental Quality, the North Carolina

Environmental Management Commission, the North Carolina Treasurer's Office of Local Government Commission, and the North Carolina Utilities Commission, to name a few, to comply and incorporate the respective regulatory and other requirements into a regionalization arrangement.

- The current operating environment within the County is very complex because there is a growing demand for water and sewer services. In addition, there are opportunities for the Utility Systems to procure incremental water and sewer service capacity in and around the County coupled with an informed customer, which is driving the need and will to provide the necessary governance support to optimize the cost to provide the requisite services. As such, a governance framework must be implemented that incorporates existing service agreements, infrastructure development projects, and existing operating practices and appropriately transitions the functional components of the JCPU's and Utility Systems' water and sewer systems.

2.2 Review of the Operating Organization

Black & Veatch initiated the Organization Review by conducting interviews with all the Utility Systems and JCPU to understand the current operating objectives, specific operating functions, and the daily activities performed by each organization's staff to provide water and sewer services to existing customers within the County. The operating functions of the JCPU and the Utility System were reviewed to determine specific areas of focus. Upon completing the review of the operating functions, Black and Veatch identified specific areas of focus and highlighted specific considerations and benefits.

The following section provides a bulleted summary of the key findings associated with the Operating Organization Review:

1. For most Utility Systems, the existing staff that support water and sewer functions serve multiple functions and departments within the respective organizations, so the transition of staff into a regionalized entity will require deep prospecting around the roles and responsibilities and the functions of staff within the respective jurisdictions.
2. During the initial interviews, the Utility Systems reported an inability to fill existing positions budgeted within the respective organizations and the general need for additional staff to support existing operations. The inability to find staffing resources has created a working environment where existing staff performs daily operating functions that may be outside of their stated job descriptions to support the operations of the Utility System.
3. Currently, opportunities exist to achieve staffing synergies and uniformity across administrative services, maintenance services, and specific operating functions, to name a few.
4. The water treatment plants are located within the central and southeastern parts of the County due to the location of the JCPU and the Town of Smithfield, which are the major water service providers in the County, but the incremental growth and demand are most concentrated in the Northern part of the County. As such, the stratifying and balancing of resources across the region to permit, design, construct, and gain the regulatory approvals to ratify incremental

water treatment capacity within the County must consider the cost and operating requirements associated with the geographic location of the incremental demand in the County.

5. The sewer conveyance system within the County is more built out in the central and northern parts of the County, with septic tanks serving a portion of the County that does not currently have sewer conveyance infrastructure. As such, the build-out and sourcing of incremental treatment capacity of the sewer system must consider the geographic location of incremental demand along with the areas within the County that require sewer conveyance and other infrastructure.
6. Across the JCPU and the Utility Systems, there is variance in the information technology infrastructure and resources utilized for information technology functions across the Utility Systems, and a regionalization arrangement must consider the smooth integration of these resources.
7. A combination of Manual Meter Reading, Automated Meter Reading (AMR), and Advanced Metering Infrastructure (AMI) is utilized within the County to provide metering and billing services to existing customers. An opportunity exists for the JCPU and the Utility Systems to convert to AMI and maintain a regional meter reading and customer billing program that will support the quality of water services provided to customers, enhance the revenue predictability, and serve to identify breaks and leaks within the water system which may become costly.
8. Opportunities exist to identify potential synergies and cost savings through a regionalization arrangement across the following areas:
    - **System Resiliency and Performance Monitoring** - Based on the initial interviews conducted, the integrity of the existing water distribution systems, the integrity of the wastewater collection system, the upgrade of water and wastewater maintenance services, the conversion of septic to sewer in portions of the County, and the utilization of more systematic operating practices represent considerations that must be addressed to maintain a resilient and agile water and sewer system in the County.
    - **Existing Cost of Operations** - The existing cost of processing potable water and treating wastewater within the County is higher than the regional and national averages detailed in the AWWA Utility Benchmarking, Performance Management for Water and

Wastewater Survey (AWWA Survey). **Figures 2** and **3** compare the regional and national AWWA Survey results to the JCPU and the Utility Systems.

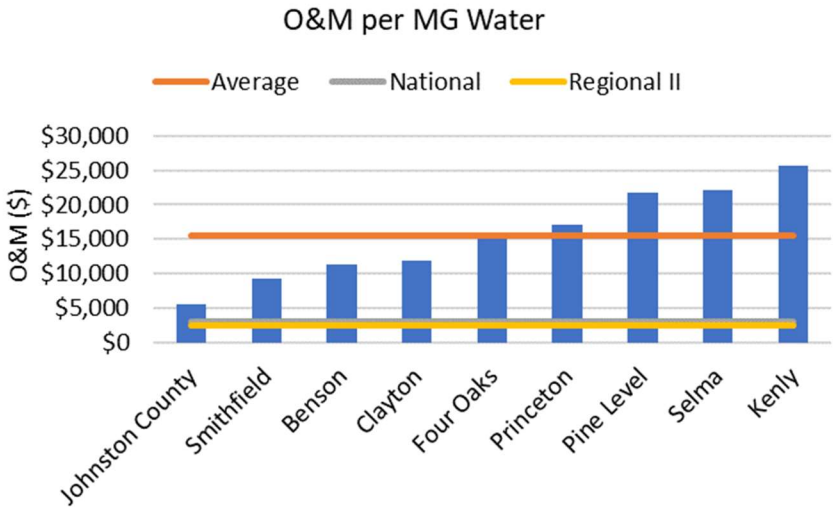

Figure 2 O&M per Million Gallons of Water Processed

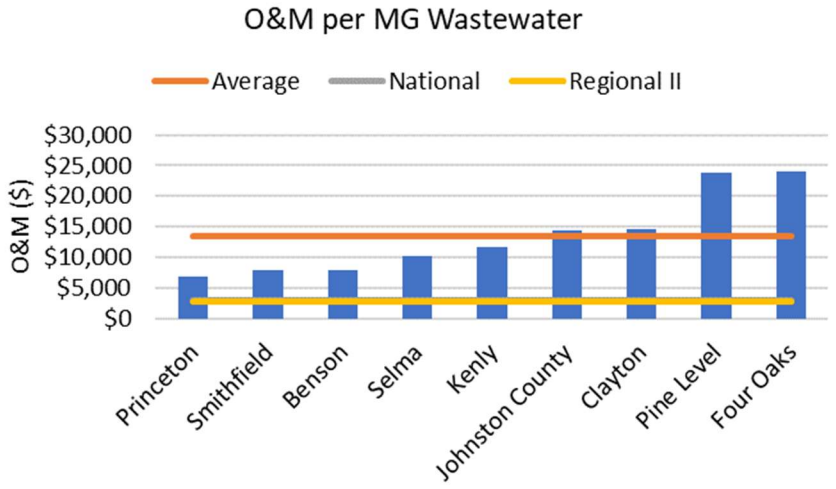

Figure 3 O&M per Million Gallons of Sewer Treated

While the results of the specific variables influence how small systems procure and plan for services and other requirements, the financial resources and operating constraints that drive the purchases of goods and services typically impact the purchasing ability of smaller systems.

- **Structured Planning Approach and Decision-Making Process** – With or without regionalization, the JCPU and Utility System should develop a structured planning approach to ratify service requirements, serve the growth and diversity of customers

(retail, industrial, etc.), and maintain the integrity of existing water and sewer infrastructure within the County.

- **Inflow and Infiltration (I&I)** - An I&I reduction plan must be developed to isolate areas on the existing sewer conveyance system that currently experience high I&I flows to optimize the cost of operations.
- **Asset Maintenance Services** - The JCPU and Utility Systems should consider establishing a dedicated maintenance group as part of a regionalization arrangement to perform preventive and corrective maintenance services. The dedicated maintenance group must possess its own planners, schedulers, and other management services tools to provide focused and precise allocation of existing resources.

2.3 Financial Feasibility

The Financial Feasibility Analysis details a comparison of revenue against revenue requirements for the Regionalized System. Total revenue requirements, including operating and maintenance (O&M) expenses, debt service obligations, and other expenditures and transfers, are forecasted to increase more than the forecasted revenues under existing rates generated from the collective JCPU and the Utility Systems. Error! Reference source not found. compares existing and proposed revenues and revenue requirements over the forecast period for the collective JCPU and Utility Systems.

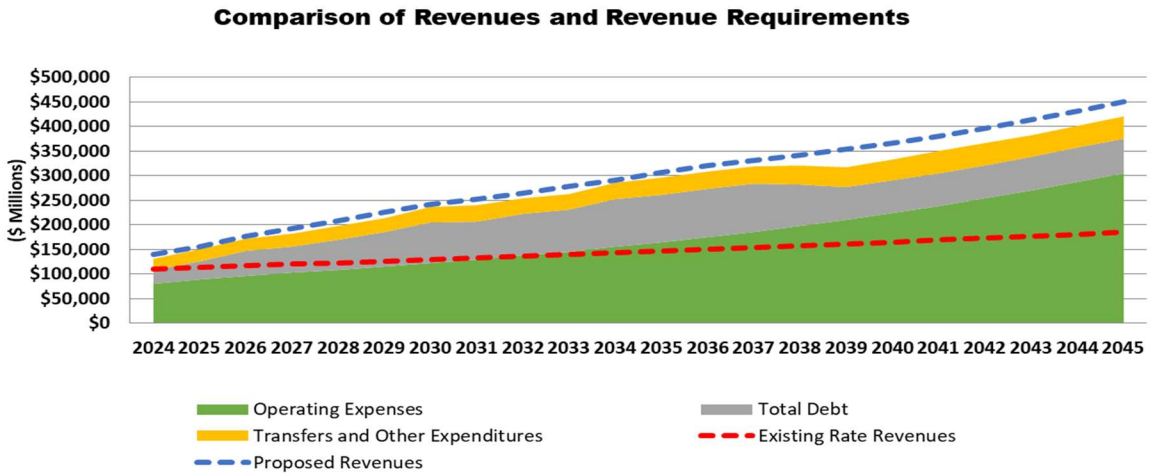

Figure 4 Projected Operating Results

The existing revenue estimate does not meet the forecast period's revenue requirements (cost). Existing revenues are sufficient to meet a portion of O&M expenses over the forecast period but are insufficient to meet the debt service estimate and other expenditures over the forecast period.

As a result, proposed revenue increases are required over the forecast period to meet the Regionalized Systems' obligations because of existing organic operating requirements before the consideration of a regionalization scenario and the additional cost requirements associated with the regionalization scenario.

Error! Reference source not found. summarizes the proposed annual combined systems revenue increases needed for the JCPU and the Utility System. The Regionalized System column represents the aggregated revenue increases for the JCPU and Utility Systems.

Table 1 Proposed Revenue Increases

Year	JCPU	Clayton	Smithfield	Pine Level	Selma	Benson	Kenly	Princeton	Four Oaks	Regionalized System
2025	12.0%	16.3%	8.0%	12.0%	12.0%	10.0%	8.0%	12.0%	12.0%	12.0%
2026	12.0%	16.7%	8.0%	9.0%	10.0%	7.0%	6.0%	10.0%	9.0%	12.0%
2027	9.0%	8.0%	6.0%	8.0%	8.0%	6.0%	6.0%	8.0%	7.0%	8.0%
2028	7.0%	6.0%	4.0%	7.0%	6.0%	6.0%	5.0%	8.0%	6.0%	6.0%
2029	7%	6.0%	4.0%	5.0%	6.0%	5.0%	5.0%	6.0%	5.0%	6.0%
2030	7%	5.0%	4.0%	5.0%	5.0%	5.0%	4.0%	6.0%	5.0%	5.0%
2031	3%	5.0%	2.0%	5.0%	5.0%	3.0%	4.0%	5.0%	2.0%	2.0%
2032	2%	4.0%	2.0%	5.0%	5.0%	3.0%	4.0%	5.0%	2.0%	2.0%
2033	2%	4.0%	2.0%	5.0%	5.0%	3.0%	4.0%	5.0%	2.0%	2.0%
2034	2%	4.0%	2.0%	5.0%	5.0%	3.0%	3.0%	4.0%	2.0%	2.0%
2035	2%	4.0%	2.0%	6.0%	3.0%	3.0%	3.0%	4.0%	2.0%	2.0%
2036	2%	2.0%	2.0%	3.0%	3.0%	3.0%	2.0%	3.0%	2.0%	2.0%
2037	2%	2.0%	2.0%	3.0%	3.0%	3.0%	2.0%	3.0%	2.0%	0.0%
2038	0%	0.0%	2.0%	3.0%	3.0%	3.0%	2.0%	3.0%	2.0%	0.0%
2039	0%	0.0%	2.0%	3.0%	3.0%	3.0%	2.0%	3.0%	2.0%	0.0%
2040	0%	0.0%	2.0%	3.0%	3.0%	3.0%	2.0%	3.0%	2.0%	0.0%
2041	0%	0.0%	2.0%	3.0%	3.0%	3.0%	2.0%	3.0%	2.0%	0.0%
2042	0%	0.0%	2.0%	2.0%	3.0%	3.0%	2.0%	2.0%	2.0%	0.0%
2042	0%	0.0%	2.0%	0.0%	3.0%	3.0%	2.0%	2.0%	2.0%	0.0%
2044	0%	0.0%	2.0%	0.0%	3.0%	3.0%	2.0%	2.0%	0.0%	0.0%
2045	0%	0.0%	2.0%	0.0%	3.0%	3.0%	2.0%	2.0%	0.0%	0.0%

2.4 Proposed Regionalization Scenario

Based on the existing contractual arrangements, the operating requirements, and the growing demand for water and sewer services within the County, there is an implicit need for the JCPU and the Utility Systems to explore a deeper form of regionalization as compared to the current form of Inter-Governmental Cooperation that constitutes existing service. **As such, the JCPU and the Utility Systems should consider a Self-Contained Authority form of regionalization**. The ability of the Self-Contained Authority to facilitate potential cost savings, establish operating synergies, and outline systematic solutions to system capacity and financial planning will provide great value to all water and sewer customers and residents within the County.

The water and sewer systems within the County have different and specific requirements that must be understood and managed accordingly. As such, Black & Veatch proposes an organizational structure of the Self-Contained Authority that recognizes and prioritizes the requirements of each system.

Error! Reference source not found. presents the proposed organizational structure of the Self-Contained Authority.

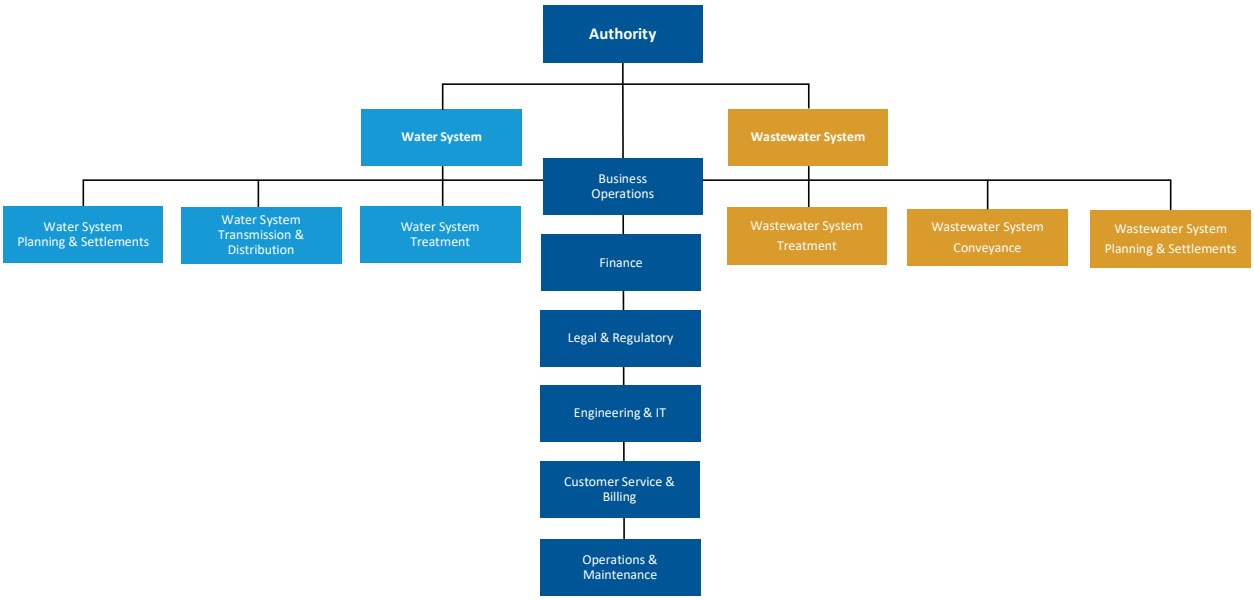

Figure 5 Proposed Organization Structure

Note:
The proposed organization structure was formulated to recognize and elevate the separate and relevant issues driving the current operations and planning of the water and sewer system.

2.5 Regionalization Roadmap

Black & Veatch proposes a 36-month schedule to form and implement the Self-Contained Authority. The proposed roadmap provides a strategic and structural implementation framework to perform deeper due diligence around ratifying a Self-Contained Authority.

Detailed is a summary of the 36-month schedule:

- **Year 1 (months 1 – 12)** – Organization Development;
- **Year 2 (months 13 – 24)** – Organizational Alignment; and
- **Year 3 (months 25 – 36)** – Implementation.

Error! Reference source not found. outlines the roadmap to form the Self-Contained Authority.

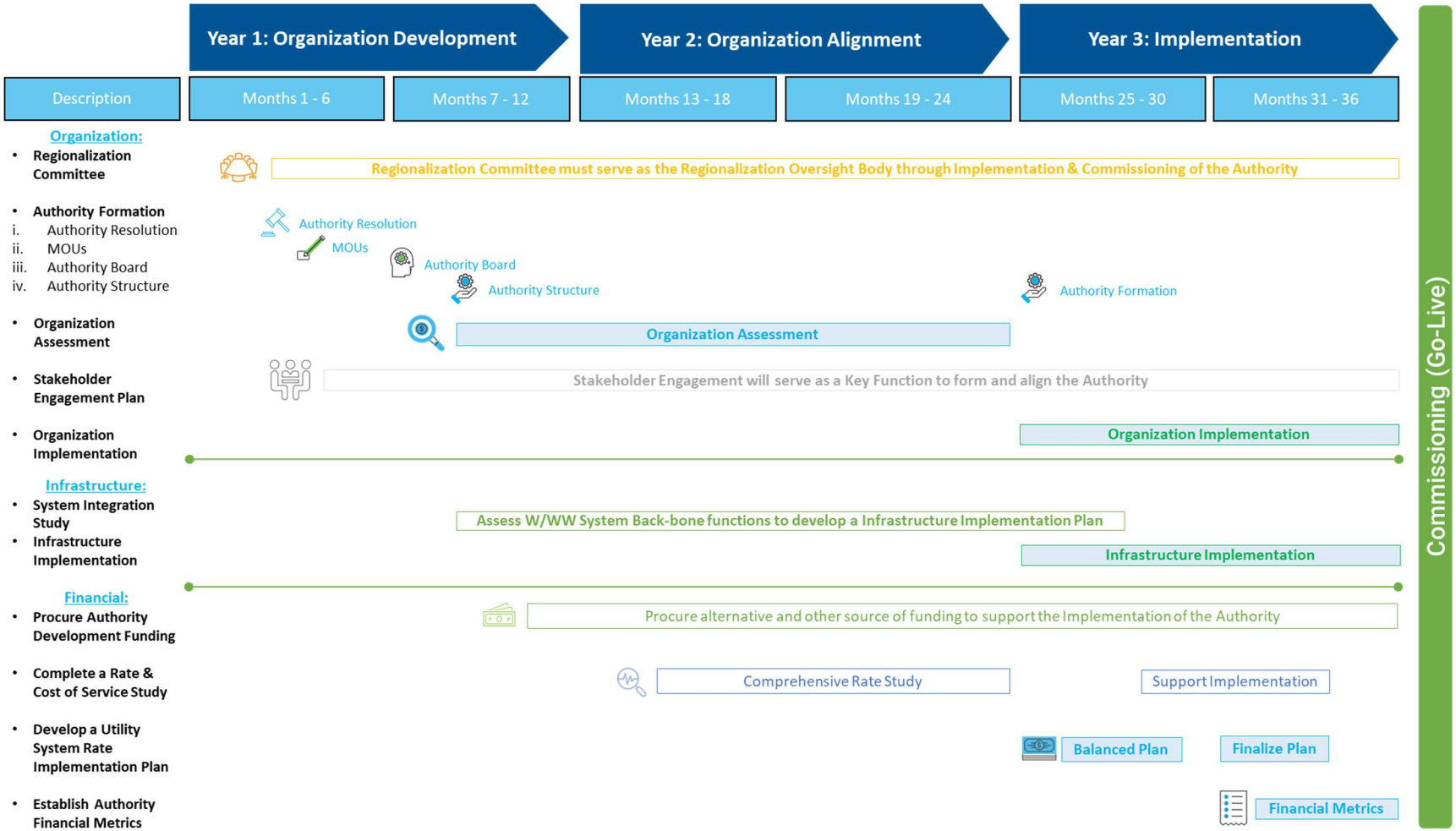

Figure 6 Roadmap to Form the Self-Contained Authority

3.0 Introduction

Johnston County, North Carolina (County) is located in the eastern part of North Carolina, near the Raleigh, NC, Metropolitan Statistical Area. In addition, Johnston County has an approximate area of 796 square miles, and 0.5% is covered by superficial water. The north-western portion of Johnston County is a major population center experiencing significant growth within the region. Based on the 2020 Census, the County's population is estimated to be over 226,000 people, and it has experienced an aggregate increase in population of about 25% over the last 10 years.

The County is governed by the Johnston County Board of Commissioners (Board), which consists of a seven-member board elected to serve four-year terms. The Board enacts all policies, such as the establishment of the property tax rate, the regulation of land use and zoning outside municipal jurisdictions, and the adoption of the annual budget within the County's service area, to name a few. The Board policies guide the daily operations of all County activities and the respective departments, such as the JCPU.

The Owner is currently assessing the viability of a regionalization scenario for water and sewer systems owned and operated by the JCPU and the other utility systems within the County. The Owner retained Black & Veatch to complete a Regionalization Feasibility Analysis Report (Report) to understand the elements and potential to ratify and regionalize the arrangement. With the increase in water and sewer service demand in North Carolina, the increasing regulatory scrutiny around procuring incremental water and sewer treatment service capacity, existing efforts and initiatives to maintain the integrity and resilience of existing water and sewer system infrastructure, and existing and future anticipated cost implications associated with providing water and sewer services, the Owner seeks to optimize and provide the appropriate levels of water and sewer service at the lowest cost to the existing and future anticipated customer in the County.

Black & Veatch completed a preliminary due diligence analysis to understand the feasibility of a regionalization scenario within the County. As a part of the Regionalization Feasibility Analysis, Black & Veatch completed an Organization Review, an Infrastructure Review, a Stakeholder Review, and a High-Level Financial Review. The analysis presented in this report will outline the results of the organizational review, stakeholder review, and high-level financial review, as the infrastructure review analysis was completed and presented separately. While the Infrastructure Report's analysis and proposed action steps are considered and incorporated into the Proposed Regionalization Scenario detailed herein, the implicit details of the Infrastructure Report are not presented herein.

At the initiation of the Regionalization Feasibility Analysis, the 14 systems participated in the initial meetings and deliberations:

> JCPU, Town of Benson, Town of Clayton, Town of Four Oaks, Town of Kenly, Town of Micro, Town of Pine Level, Aqua North Carolina, Carolina Water Services, North Carolina, Town of Princeton, Town of Selma, Town of Smithfield, Wilson's Mills*, and Archer's Lodge*
>
> **Footnote:**
> *Incorporated into the analysis and evaluated as a part of the JCPU system
> For the evaluation detailed herein, all the systems except the JCPU are collectively referred to as the "Utility Systems."

Upon initiating the analysis detailed herein, Aqua North Carolina and Carolina Water Services, North Carolina, communicated their intent not to participate in the Regionalization Feasibility Analysis. In addition, the Town of Micro, North Carolina, could not provide the necessary information to be incorporated into the analysis detailed herein.

To understand the elements and considerations of a regionalization scenario, Black & Veatch has employed an approach that includes four phases: Phase 1 – Project Initiation, Phase 2 – Preliminary Due Diligence, Phase 3 – Deep Dive Evaluations, and Phase 4 – Implementation Activities.

Figure 7 provides an overview of the approach that will be utilized to conduct the complete study.

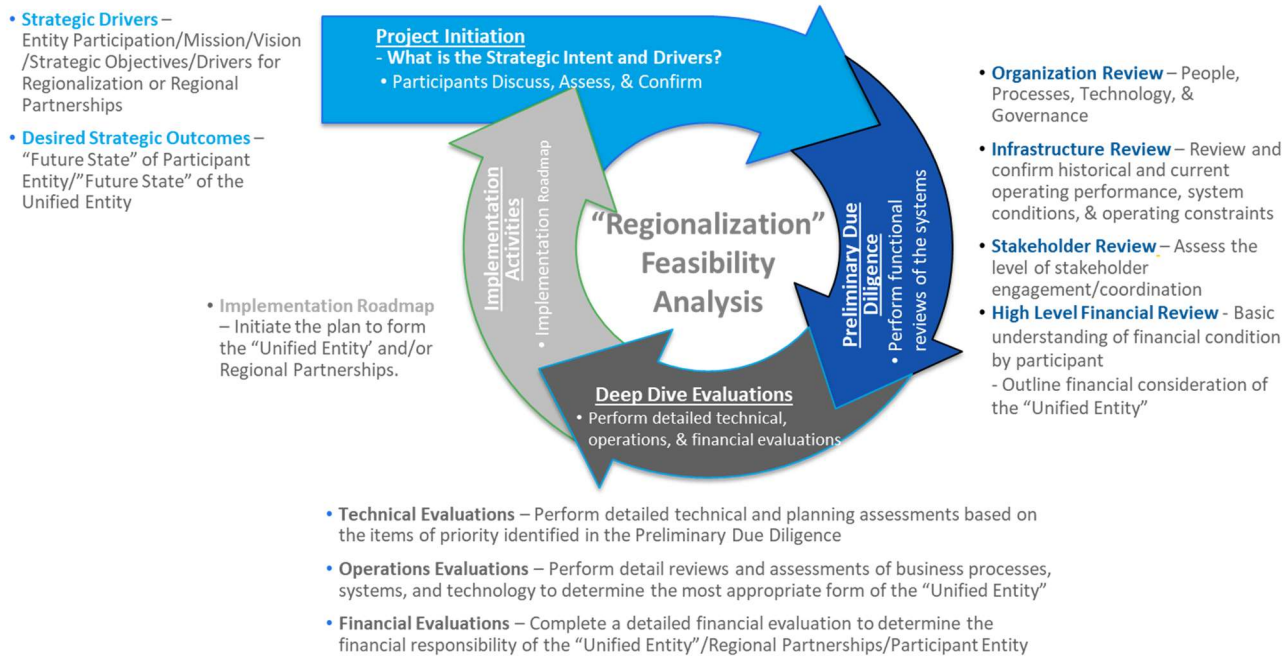

Figure 7 Analysis Approach

Phase 1, Project Initiation, allows the project team to align the goals, objectives, and drivers for completing the analysis. Phase 2, Preliminary Due Diligence, seeks to establish a baseline understanding of the County to assess the benefits of a regionalization scenario. Phase 3, Deep Dive Evaluations, will build on the tenets of Phase 2 to perform more in-depth and detailed evaluations of a regionalization scenario based on the findings and action steps determined after Phase 2. Finally, Phase 4 will outline the implementation activities and considerations.

For the analysis conducted, only the activities and evaluations associated with Phase 1 and Phase 2 of the approach detailed in Figure 2 was completed by Black & Veatch. The activities associated with Phase 3 and Phase 4 will be initiated at the discretion of the Owner, the JCPU, and the Utility Systems upon the acceptance of the results and next steps detailed herein.

As a part of the analysis detailed herein, Black & Veatch facilitated interviews with the JCPU and the Utility Systems staff, reviewed long-term planning and system configuration documents made available, reviewed JCPU and Utility System audits produced annually, and sought to understand the current operating characteristics of the JCPU and the Utility Systems.

4.0 Governance Review

The Governance Review was conducted to understand the statutory basis of the Owner and the Utility Systems within the County and the legislative framework necessary to support and provide the appropriate oversight of a regionalization scenario.

To establish and ratify any regionalization scenario, Governance serves as the platform to drive the strategic intent and operating frameworks under which a regionalization scenario may be commissioned.

Within the County, 14 independent water and sewer providers (12 public and 2 private) are identified herein as the Utility Systems.

Table 2 provides a tabular summary of the 11 Utility Systems being evaluated as a part of the Regionalization Assessment.

Table 2 Utility Systems Evaluated

JCPU	Town of Pine Level	Archer's Lodge
Town of Benson	Town of Princeton	
Town of Clayton	Town of Selma	
Town of Four Oaks	Town of Smithfield	
Town of Kenly	Wilson's Mills	

4.1 Johnston County Service Area

Johnston County is in eastern North Carolina, near the Raleigh, NC, Metropolitan Statistical Area. In addition, Johnston County has an approximate area of 796 square miles, and 0.5% is covered by superficial water. Based on the North Carolina General Statute (GS) 160D-202, any City or jurisdiction in North Carolina may exercise its zoning powers beyond its contiguous corporate limits to utility and other services. The action of a jurisdiction extending services into an area beyond its contiguous corporate limits creates an Extra-Territorial Jurisdiction (ETJ). The ETJ, along with the contiguous corporate limit for the Owner and each Utility System, constitutes the service area where water and sewer service is provided within the County.

Due to the changing characteristics in neighborhoods and the increase in the demand for utility services, extending services provided within a utility system's ETJ is a key indicator of customer growth and the incremental demand for utility services. While Black & Veatch could not verify the exact nature of each Utility System's extension of water and sewer services into their respective ETJ, **Table 3** outlines the conditions and maximum area for a Utility System within North Carolina to request and/or create an ETJ area.

Table 3 North Carolina Extra-Territorial Jurisdiction Requirements

Municipal Population	Maximum ETJ Area
Up to 10,000	1 Mile
10,000 to 25,000	2 Miles
Over 25,000	3 Miles

Figure 8**Figure 8** outlines the Johnston County water and sewer systems' service area with the locations of the respective Utility Systems and their ETJ, as provided by the JCPU.

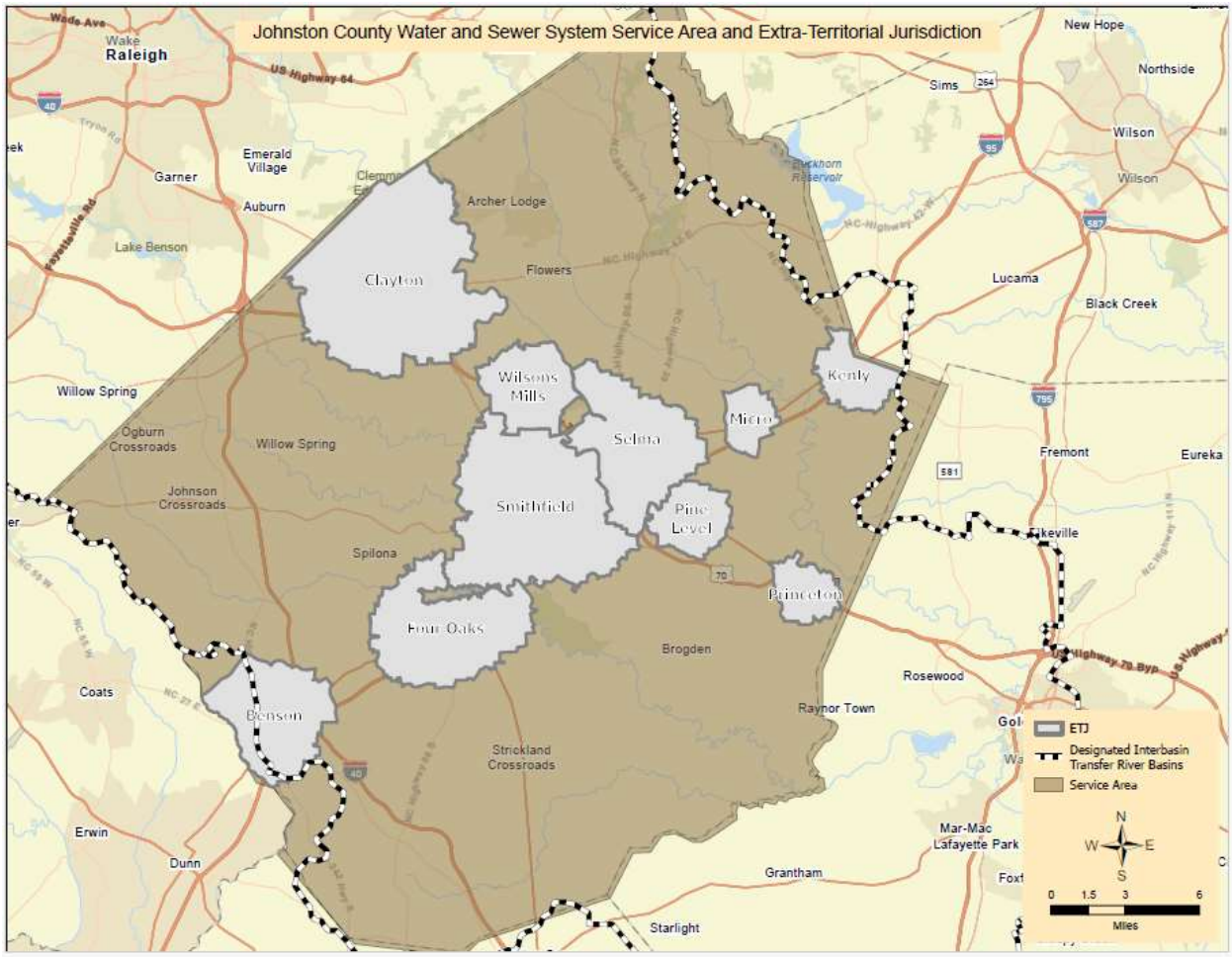

Figure 8 **Map of the County Service Area with the Utility Systems and their Extra-Territorial Jurisdiction**

4.2 Water and Sewer Services in the County

Water and sewer service providers in the County maintain multi-jurisdictional service agreements between individual and multiple providers in and around the County. The nature of these agreements and the services provided to customers reflect that not all the Utility Systems own and operate their own water and sewer facilities, so operating and service arrangements with JCPU and other Utility Systems have been ratified to retain the requisite services. In addition, the service and operating agreements maintain multiple interconnections, in some cases, across the water and sewer systems within the respective jurisdictions.

Table 4 summarizes the systems within the County that provide water and sewer treatment services.

Table 4 Water and Sewer Treatment Services within the County

Line	System	Water Treatment	Sewer Treatment
1	Johnston County (JCPU)	✓	✓
2	Clayton		✓
3	Smithfield	✓	
4	Benson	✓	✓
5	Princeton		✓
6	Kenly		✓
7	Selma	✓	

Within the County limits, the Town of Smithfield, the Town of Selma, the Town of Benson, and JCPU are the current providers of water treatment services. In addition, the Town of Clayton, the Town of Benson, the Town of Princeton, the Town of Kenly, and JCPU provide sewer treatment services within the County.

Table 5 outlines the current population and the water and sewer service customers' count for the utility systems listed in **Table 2**. As a note, the two private entities, Carolina Water Services, NC, and Aqua NC, did not participate in the analysis conducted herein, so no statistical information is provided in **Table 5** for those entities.

Table 5 Summary of Utilities Systems' Population and Water and Sewer Customers

Utility System	Population	Customers	
		Water	Sewer
Town of Benson	4,295	1,645	1,645
Town of Clayton	29,967	11,840	10,493
Town of Four Oaks	2,776	1,388	1,388
Town of Kenly	1,650	950	950
Town of Pine Level	2,651	1,148	1,148
Town of Princeton	1,326	695	695
Town of Selma	6,832	2,800	2,800
Town of Smithfield	13,525	6,000	6,000
Wilson's Mills	2,992	700	700
Archer's Lodge	5,658	1,600	1,600
Johnston County	226,661	N/A	N/A
JCPU	N/A	43,516	8,747

JCPU and the Utility Systems within the County operate under varying forms of government. Provided is a summary of the typical forms of government under which water and sewer systems operate within the County:

- Commission-Manager;
- Council-Manager;
- Mayor-Council; and
- Private Entity [Led by a CEO].

For the analysis conducted herein, the following section describes the forms of government under which water and sewer systems operate within the County.

Commission-Manager – this form of government is established by the appointment of a County Manager by the respective Commission who reports directly to the Commission, retains the responsibilities of overseeing and managing the daily operations of all County departments placed in the manager's charge, and reports to the Commission periodically on the progress and development of the County departments;

Council-Manager – the North Carolina General Statute 160A-147(a) outlines the administration of the Council-Manager form of government to cities and towns in North Carolina:

"*In cities whose charters provide for a council-manager form of government, the council shall appoint a city manager to serve at its pleasure. The manager shall be appointed solely on the basis of the manager's executive and administrative qualifications. The manager need not be a resident of the city or State at the time of appointment. The office of the city manager is hereby declared to be an office that may be held concurrently with other appointive (but not elective) offices pursuant to Article VI, Sec. 9, of the Constitution*".

In addition, the North Carolina General Statute 160A-148(a) outlines the powers and duties of the City Manager:

"…The manager shall be responsible to the council for administering all municipal affairs placed in the manager's charge by the council, and shall have the following powers and duties:

1. *He shall appoint and suspend or remove all city officers and employees….*
2. *He shall direct and supervise the administration of all departments, offices, and agencies….*
3. *He shall attend all meetings of the council and recommend any measures that he deems expedient.*
4. *He shall see that all laws of the State, the city charter, and the ordinances, resolutions, and regulations of the council are faithfully executed within the city.*
5. *He shall prepare and submit annual budget and capital program to the council.*
6. *He shall annually submit to the council and make available to the public a complete report on the finances and administrative activities of the city….*
7. *He shall make any other reports that the council may require concerning the operations of city departments, offices, and agencies subject to his discretion and control.*

8. He shall perform any other duties that may be required or authorized by the council.

9. *The manager shall receive a minimum of six clock hours of education upon occurrence….*"

Mayor-Council – this form of government requires that the respective City and/or Town Council maintains the responsibility of managing and overseeing the operations of the respective City or Town. In many cases, the Council deems it appropriate to hire an Administrator to oversee the operations of the City or Town. The Administrator reports to the Council on all matters, and the Council sets the Town's policies and procedures, enforces the policies and procedures, and makes all the major decisions related to the management of the Town's business.

Private Entity – The private entity is led by a Chief Executive Officer (CEO) who reports to the respective Entity's Board of Directors (BOD). The BOD, through the CEO, sets and enforces the policies, procedures, and organizational structure under which the Entity must operate.

The Commissioners and Council members for the respective Utility Systems are elected on periodic two-to-four-year terms, and they are responsible for determining the policy and legislative frameworks under which the Utility Systems must operate. In addition, the Utility System Managers are responsible for administering the policies, procedures, programs, and initiatives as directed by these governing bodies.

Table 6 provides a summary of the form of government by Utility System.

Table 6 Utility Systems Form of Government

JCPU – Commission-Manager	Aqua NC – Private Entity
Town of Benson – Council-Manager	Carolina Water Services, NC – Private Entity
Town of Clayton – Council-Manager	Town of Princeton – Mayor-Council [Administrator]
Town of Four Oaks – Mayor-Council [Administrator]	Town of Selma – Council-Manager
Town of Kenly – Council-Manager	Town of Smithfield – Council-Manager
Town of Micro – Council-Manager	Wilson's Mills – Mayor-Council [Administrator]
Town of Pine Level – Mayor-Council [Administrator]	Archer's Lodge – Mayor-Council [Administrator]

In addition, the private entities Aqua NC and Carolina Water Services, NC, operate as stand-alone organizations led by a board of directors and a chief executive officer who drives how the organizations operate. For the analysis detailed herein, the Private Entities did not participate in the analysis and/or evaluations.

4.3 Regulatory Oversight and Governance

Operating a department and/or a Utility System within a municipal government requires deep coordination and high levels of trust with specific governmental entities to ensure compliance with regulatory requirements formulated to support these entities. JCPU and the Utility Systems operating water and sewer systems within the County coordinate regularly with the organizations listed:

North Carolina General Assembly (NCGA) – The NCGA consists of two bodies, the Senate and the House of Representatives, which meet periodically through a fiscal year to contemplate and pass the laws of North Carolina. In addition, the NCGA passes and maintains statutes outlining how municipal forms of government must be established and operated. The statutes developed by the NCGA apply to JCPU and Utility Systems detailed as a part of this analysis.

North Carolina Department of Environmental Quality (DEQ) – The DEQ is North Carolina's lead stewardship agency, which is empowered with the charter to protect air quality, water quality, and the health of the public in North Carolina. Periodically, local governments in North Carolina are required to submit reports outlining the status of water and air quality along with any public health concerns that may be evident to the public in the respective jurisdictions.

North Carolina Environmental Management Commission (EMC) – The EMC is a fifteen-member commission appointed by the Governor, Senate Pro Tempore, Speaker of the House, and Commissioner of Agriculture. The EMC is responsible for adopting and enforcing rules to protect, preserve, and enhance the state's air and water resources. Individuals selected to serve on the EMD represent the following interests: medical field, agriculture, engineering, fish and wildlife, groundwater, air, water pollution, municipal government interest, and public interest, to name a few. The EMC works with the DEQ to establish and enforce the rules pertaining to water quality, air quality, and public health concerns, to name a few.

North Carolina Treasurer's Office of Local Government Commission (LGC) – The LGC serves as the oversight and financial governance body for all governmental entities in North Carolina. The approval, sale, and delivery of any bond, notes, or other forms of financing involving a North Carolina municipal agency must be approved by the LGC. In addition, the LGC provides educational guidance and insight for municipal entities related to financial and cash management.

North Carolina Utilities Commission (NCUC) – The NCGA created the NCUC to regulate the rates and services provided by all investor-owned utilities in North Carolina. The NCUC regulates electricity, telephone, natural gas, and water and sewer services, to name a few. The NCUC regulates the water and sewer rates charged by Carolina Water Services and Aqua.

In addition, North Carolina has recognized and enacted tenets of the Dillon Rule related to how local government can exercise the powers granted by the NCGA. The powers granted to the respective jurisdictions within the state of North Carolina can be reasonably applied and enforced to meet the organization's objectives under the Dillon Rule.

Footnote:
The Dillon Rule's origin stems from a Supreme Court of the United States ruling that fully adopted the tenets of the Dillon Rule as a part of the case *D. Hunter, Jr., [et al. l.] v. City of Pittsburgh*, 207 U.S. 161.

The North Carolina General Assemble (GS) 160A-536 and (GS) 162A outline the legislative requirements and steps to establish a Utility District and a Utility Authority. In addition (GS) 162A, "The North Carolina Water and Sewer Authorities Act," outlines all the legislative steps, terms and conditions, and member responsibilities associated with forming a Utility Authority. (GS) 162A-3 outlines the procedures to create a Utility Authority, as detailed:

> *"The governing body of a single county or the governing bodies of any two or more political subdivisions may by resolution signify their determination to organize an authority under the provisions of this Article. Each of such resolutions shall be adopted after a public hearing thereon, notice of which hearing shall be given by publication at least once, not less than 10 days prior to the date fixed for such hearing, in a newspaper having a general circulation in the political subdivision. Such notice shall contain a brief statement of the substance of the proposed resolution, shall set forth the proposed articles of incorporation of the authority and shall state the time and place of the public hearing to be held thereof. No such political subdivision shall be required to make any other publication of such resolution under the provisions of any other law…."*

To ratify a regionalization arrangement, JCPU, each Utility System, and the Regionalized System must coordinate deeply with the governmental agencies and other stakeholders listed herein to remain compliant with the necessary regulatory and legislative requirements associated with creating and operating a Utility Authority and/or other Utility Entity.

4.4 Existing Regionalization Form of Governance

In 1996, the National Research Regulatory Institute (NRRI) reviewed the regionalization of water systems in the United States and the prevailing definition of regionalization: "The Regionalization of Water Utilities: Perspectives, Literature Review, and Annotated Bibliography."

Provided is the definition of regionalization as detailed in the 1996 NRRI publication:

"Regionalization constitutes a fundamental structural and institutional change in the way water and sewer utility services are provided. Regionalization reflects structural change in terms of consolidating water utility ownership, operations, or management within a politically geographic or hydrogeologic area. Regionalization reflects institutional change in terms of establishing public policy and resource planning frameworks that encompass regional considerations…."

Across the spectrum of regionalization arrangements, four typical forms of regionalization arrangements may be entered into between organizations commissioning water and sewer services to existing customers. Listed are the four typical forms of a regionalization arrangement:

- Inter-Governmental Cooperation
- Special Service Authority
- Self-Contained Authority
- Fully Integrated Utility Entity

Figure 9 summarizes the typical forms of regionalization with a directional summary of the comparative risk and benefit associated with each alternative.

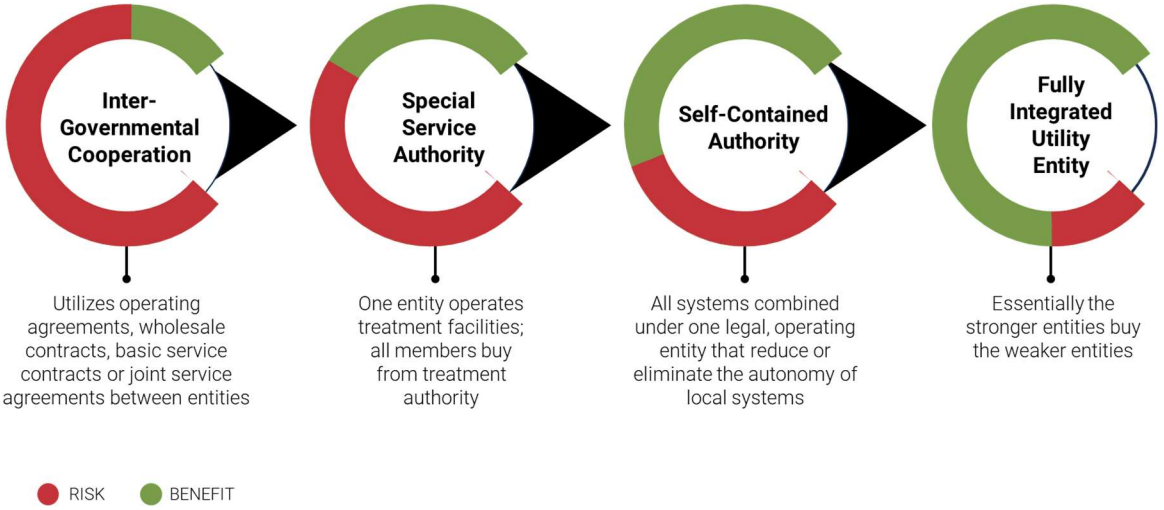

Figure 9 Typical Forms of Regionalization

JCPU and the Utility Systems operate with varying forms of inter-governmental cooperation utilizing interlocal agreements that outline the terms and conditions for ratifying water and sewer system services. The Utility Systems and JCPU maintain service agreements to provide and take water and sewer treatment services from multiple/neighboring jurisdictions. Hence, an implicit freedom of choice exists that increases the risk profile and decreases the potential benefits of ratifying water and sewer services through multiple Special Service Agreement arrangements. While the benefits around the stability of service, the operating requirements, and individual cost obligations may be realized under Special Service Agreements as compared to operating as a stand-alone system, more benefits can be gained while reducing the risk profile associated with operations and cost obligations upon the consideration of a deeper regionalization arrangement.

Figure 10 summarizes the pros and cons associated with the typical forms of regionalization.

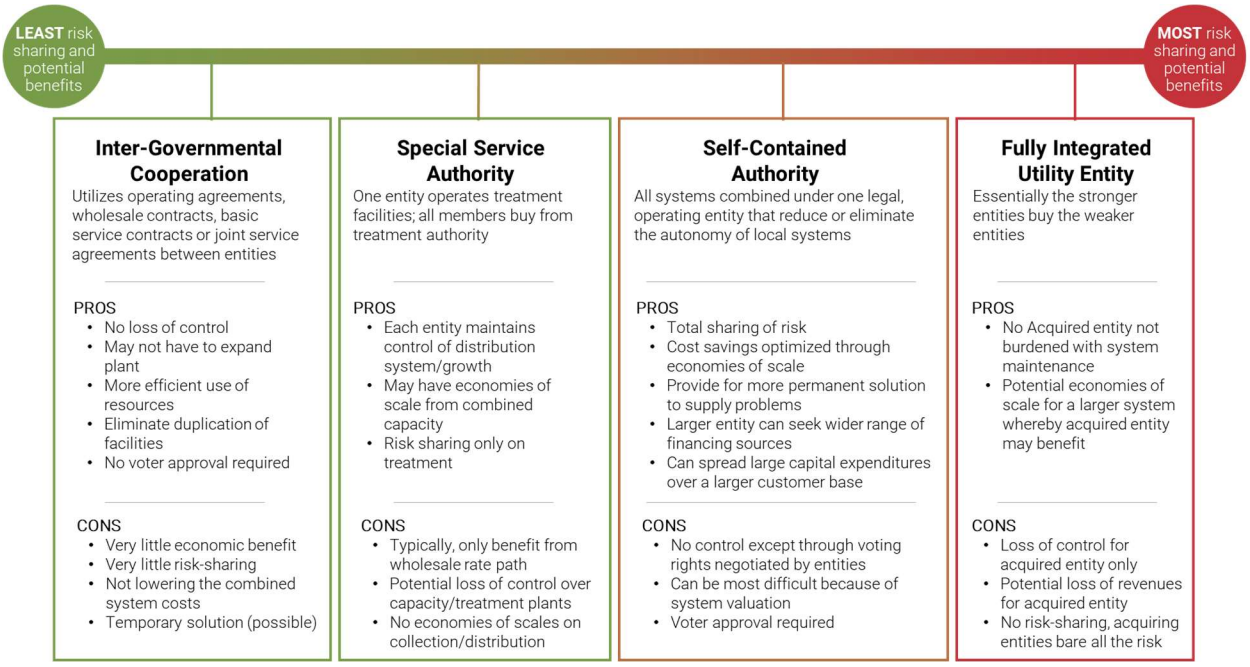

Figure 10 Pros and Cons of the Typical Forms of Regionalization

As detailed in **Figure 10**, the Fully Integrated Utility Entity represents the deepest form of a Regionalization Scenario that may be considered. The Fully Integrated Utility System requires the greatest sharing of risks and benefits where all the systems and related functions under consideration are integrated into one system, which is led, managed, and operated solely by the executives of the Fully Integrated Utility Entity. On the other spectrum, Inter-Governmental Cooperation is ratified by interlocal and other agreements establishing terms and conditions specific to an isolated service and need. There is very limited sharing of risks and benefits outside of the agreed-upon conditions established as a part of contracting the required services. Water and Sewer Services Operating Environment.

In 2021, the County's estimated population was about 226,600. It is estimated that the population within the County will grow to about 331,500 by 2040, as detailed by the North Carolina Office of State Budget and Management. In addition, the County is near the Research Triangle Park and the City of Raleigh, North Carolina’s research and technology hub and capitol. As such, specific transportation and roadway development projects (US Highway 70, NC Highway 540 Outer Loop, and the Future Interstate 42) will continue to provide access to the County, supporting the growth of services within the County.

The current and estimated growth within the County is driving water and sewer services providers to explore and consider all potential options to secure and stabilize the next increment of water and sewer treatment and other related services. As a result, the operating environment within the County is very complex, but it is driven by the high demand for water and sewer services. To maintain the appropriate levels of water and sewer services, the proper planning and scheduling of the needed water and sewer infrastructure investment, the appropriate timing of scheduled maintenance services to optimize existing operating costs, and closer coordination between the JCPU and the Utility Systems may be considered to support providing the appropriate level of water and sewer services.

Several Utility Systems listed in **Table 2** operate water, sewer, electric, and other related municipal services as Enterprise Funds within their respective municipalities. Enterprise Funds operate to maintain separate government accounting for respective municipal services to achieve self-sufficiency for the respective services (the revenues associated with the services can maintain and meet the annual cost to provide these services). To meet the objectives highlighted herein, each Enterprise Fund operates as a business unit within the municipality, but the associated revenues and costs are reported as a part of the municipality's financial statements. The Enterprise Funds benefit from the availability of resources within the municipality, the financing capability of the municipality, and the governance support and guidance distilled from the overseeing body of the municipality. The tenets of a regionalization arrangement will maintain the principles and objectives associated with operating an Enterprise Fund by operating as a stand-alone and self-sufficient business unit within a municipal government organization.

As detailed in **Table 7,** there are four interconnections for water treatment services within Johnston County (JCPU, Town of Smithfield, Town of Benson, and Town of Dunn). JCPU is the most significant water service provider. In addition, **Table 7** outlines the water system service and interconnections maintained within the County.

Table 7 Water System Interconnections and Capacity

Line	System	County-Wide Water Service Interconnections (MGD)			
		Johnston County (JCPU)	Town of Smithfield	Town of Benson	Town of Dunn
1	Johnston County (JCPU)		✓	✓	
2	Aqua Subdivisions	✓			
3	Aqua Flowers Plantation	✓			
4	Fuquay Varina	✓			
5	Clayton	✓			
6	Flowers Plantation	✓			
7	Kenly	✓			
8	Micro	✓			
9	Princeton	✓			
10	Pine Level	✓			
11	Selma	✓			
12	Four Oaks	✓			
13	Benson	✓			✓
14	Raleigh	✓			
15	Fork Township SD	✓			
16	Wayne County WD	✓			
17	White Oak Plantation (CWS)	✓			
18	Willowbrook Development (CWS)	✓			

Line	System	County-Wide Water Service Interconnections (MGD)			
		Johnston County (JCPU)	Town of Smithfield	Town of Benson	Town of Dunn
19	Winston Plantation (CWS)	✓			
20	Winston Point (CWS)	✓			

As detailed in **Table 8**, there are five sewer system interconnections within Johnston County (JCPU, Town of Clayton, Town of Benson, City of Raleigh, and Town of Micro). Johnston County serves as the most significant provider of sewer treatment services.

Table 8 Sewer System Interconnections and Capacity

Line	System	County-Wide Sewer Service Interconnection (MGD)				
		Johnston County (JCPU)	Town of Clayton	Town of Benson	City of Raleigh	Town of Micro
1	Johnston County (JCPU)		✓	✓		
2	Town of Clayton	✓			✓	
3	Town of Benson					
4	Winston Point (CWS)	✓				
5	Town of Kenly					✓

Finally, the influx of new and growing industrial customers and the ability of existing Utility Systems to freely procure the next increment of water and sewer treatment services compounds the difficulties associated with procuring the next increment of water and sewer services on the Neuse River. In addition, the ability to procure specific resources/services is exacerbated by the current prices for goods and services and the competitive landscape and regulatory requirements of procuring water source of supply and/or sewer discharge capacity on the Neuse River, which creates a competitive and evolving operating, regulatory, and governing environment for the JCPU and the Utility Systems.

5.0 Review of Operating Organization

Black & Veatch initiated the Organization Review by conducting interviews with all the Utility Systems and JCPU to understand the current operating objectives, specific operating functions, and the daily activities performed by each organization's staff to provide water and sewer services to existing customers within the County. The operating functions of the JCPU and the Utility System were reviewed to determine specific areas of focus. Upon completing the review of the operating functions, Black and Veatch identified specific areas of focus and highlighted specific considerations and benefits.

The following section summarizes these specific considerations and benefits that must be understood as part of the Regionalization Arrangement.

5.1 Staffing and Training

During the initial interviews conducted by Black & Veatch, the executive management, operators, and other staff demonstrated great passion and empathy for the daily rigors of operating their respective water and sewer systems in the County. Additionally, specific diligence was placed on understanding the accomplishments of each system given existing staffing and economic challenges, the maintenance of staffing requirements and benefits, and the existing system knowledge of existing staff in operating and managing the existing water and sewer systems.

For most of the water and sewer systems, the role of existing staff is cross-functional and expands across all the enterprise funds operated by the jurisdiction. Consequently, in some cases, a proportion of the existing staff's time is dedicated to the water and sewer system. This information was documented as reported during the initial meetings.

Table 9**Table 9** summarizes the staffing levels reported by the utility system.

Table 9 Water and Sewer System Staffing Level by Utility System

Line	Staffing	Archer Lodge		Benson		Clayton		Four Oaks		Johnston County*		Kenley		Pine Level		Princeton		Selma		Smithfield		Wilson Mills		Total
		FTE	W/WW	FTE	W/WW	FTE	W/WW	FTE	W/WW	FTE	W/WW	FTE	W/WW	FTE	W/WW	FTE	W/WW	FTE	W/WW	FTE	W/WW	FTE	W/WW	FTE
1	Town Manager / Administrator	1	40%	1	40%	1	40%					1	40%	1	40%	1	40%	1	40%	1	40%	1	40%	9
2	Water/Wastewater Plant Staff			5	100%															10	100%			15
3	Lab Chief Operator (Backup ORC)			1	100%																			1
4	W/WW Plant Operator			3	100%	4	100%					1	100%					1	100%					9
5	Compliance Staff / Operator			1	60%	3																		4
6	Assistant / Assistant Superintendant			1	33%									1	100%									2
7	Public Works Superintendent			1	33%																			1
8	Public Service Worker			3	33%																			3
9	Pump Station Operator/Administrator			1	60%																			1
10	Project Manager			1	45%																			1
11	Customer Service Representative/Billing Technician			1	50%																			1
12	Water Reclamation					5	100%																	5
13	Operations Mechanic					6		1	100%															7
14	Operations Superintendent					1	100%																	1
15	Operations Crew Leader					1	100%											2	100%					3
16	Maintenance Superintendent					1																		1
17	Maintenance Crew Leader					1																		1
18	Maintenance Staff					4												2	100%					6
19	Water Treatment Plant Senior Operator					1	100%																	1
20	IT					4																		4
21	GIS Staff					2																		2
22	Data Analyst					1																		1
23	Mayor							1	100%															1
24	W/WW Staff	6.5	100%	2	100%			7.5	100%	95	100%	5	100%			6	100%							122
25	Director of Public Works / Utilities							1	100%			1	100%					1	100%		100%			3
26	W/WW Superintendent			1	100%	1	100%	1	100%					1	100%	0.5	100%							4.5
27	Equipment Operator							1	100%															1
28	General Laborer							1	100%					3	100%									4
29	Public Works Technician											3	100%											3
30	Administrator													1	30%									1
31	Clerk													1	15%									1
32	Deputy Clerk													1	50%									1
33	Administrative Assistant													1	30%									1
34	Supervisor																	1	100%					1
35	Collection System Staff																			10	100%			10
36	Engineering Technician																				100%			0
37	Total Employees	7.5		22		36		14		95		11		10		7.5		8		21		1		233
38	Total Adjusted FTE	6.9		16		13		14		95		10		6.7		6.9		7.4		20		0.4		197
39	**Unfilled Positions**			2		10		1				1		4										18

As reported by the Utility Systems, it is estimated that about 233 employees serve water and sewer roles within the County as reported during the initial meetings. On a "Full-Time-Employee" (FTE) basis, just under 200 FTEs are estimated to provide water and sewer services within the County. An FTE employee provides water and sewer services full-time for 2,080 hours served in the work year.

During the initial interviews, a prevailing theme was the need for additional staff to provide existing operations, maintenance, and administration services within the Utility Systems. In some cases, Utility Systems identified the total number of unfilled positions and the intent to fill these positions in short order. The unfilled positions represent reported staffing positions within the respective Utility Systems that have been budgeted but not filled. Most Utility Systems reported the need for more staffing, which is not budgeted to support and optimize existing operations. Consequently, Line 39 of **Table 9** details 18 unfilled positions as reported across the Utility Systems. This number is expected to increase with the anticipated retirement of key management and operational staff over the next 12-24 months at the JCPU and the Utility Systems.

The Utility Systems reported that all staff maintain the appropriate certifications and educational requirements to operate the existing water and sewer systems. There were no known violations when the interviews were conducted.

Considering a regionalization arrangement for water and sewer service within the County, the designation of the roles and responsibilities of existing staff per Utility System will provide great value in systematically aligning the existing staffing capabilities with existing operating requirements of the Utility Systems. Many staffing synergies exist around the uniformity and cross-functional training of common services provided by a Utility System, such as administrative services, maintenance services, and specific operational services, to name a few. In addition, the uniformity of services provided within a regionalized entity will support and potentially absorb certain unfilled positions and encourage the ability of a regionalized entity to be agile and responsive to customers and other requests and requirements.

5.2 Existing Water and Sewer Systems

The Town of Smithfield, the Town of Selma, the Town of Benson, and JCPU are the current water treatment services providers in the County. The Town of Clayton, the Town of Benson, the Town of Princeton, the Town of Kenly, and JCPU provide sewer treatment services within the County. JCPU maintains specific master water meters strategically located at specific connection points of the Utility Systems to read, monitor, and reconcile water service provided periodically. In all cases, Utility Systems maintain multiple master meters covering the existing service area and ETJ.

Figure 11 provides a layout of the Utility System ETJ, Master Meters, Water Treatment Plants, and Sewer Treatment Plants, as provided by the JCPU.

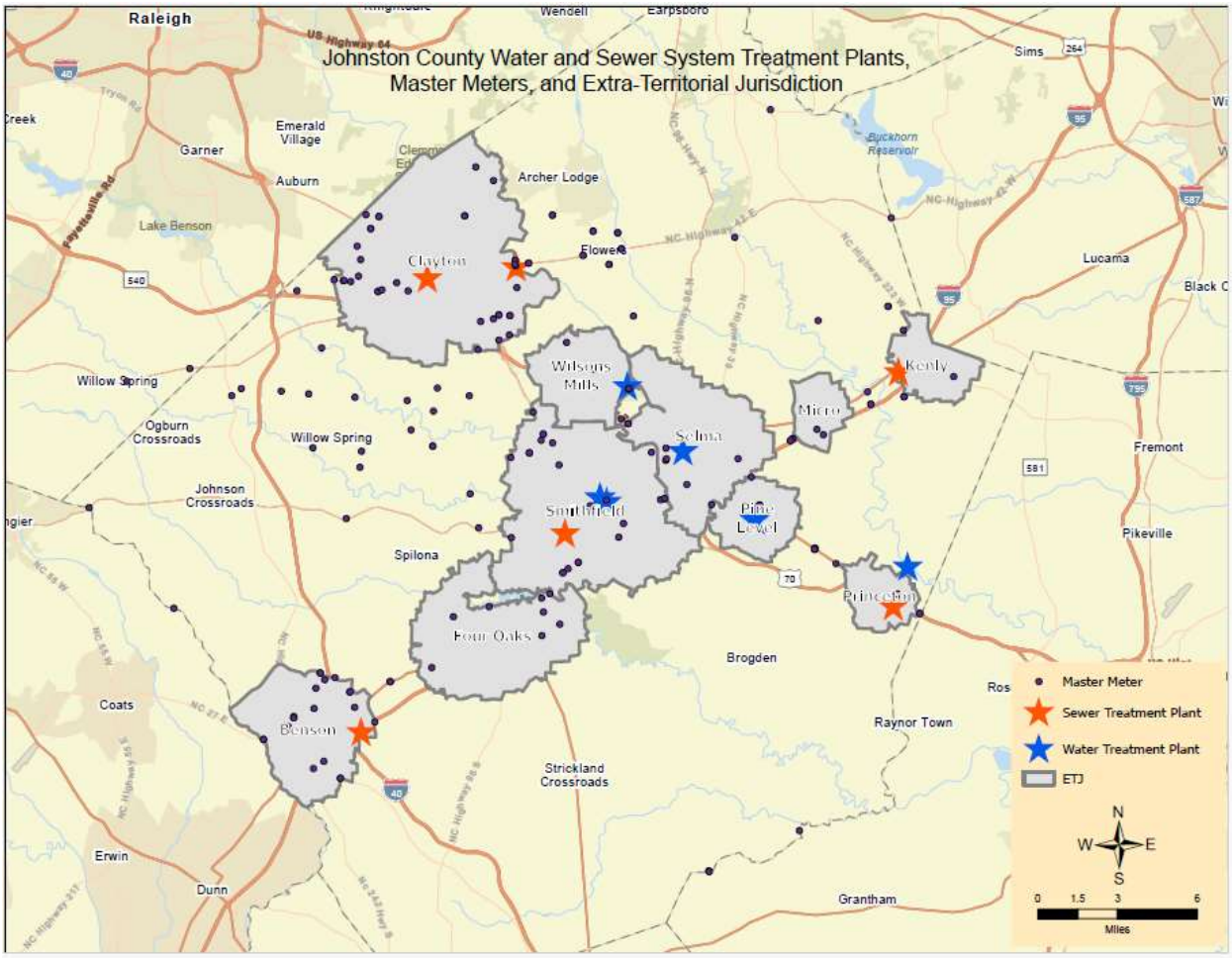

Figure 11 Johnston County ETJ, Master Meters, and Water and Sewer Treatment Plants

While the layout of master meters is scattered throughout the county and the respective utility system ETJ, the concentration of water treatment facilities is in the central and southeastern parts of the county. This can be attributed to the locations of the JCPU and the Town of Smithfield, the major water service providers in the County. An increasing proportion of growth and demand for water services is concentrated in the northern part of the county due to its proximity to Research Triangle Park and the City of Raleigh, major urban centers in the state's Coastal Plains region. Within the County, a challenge exists in serving the next increment of water demand at the lowest possible cost to existing and future anticipated customers. A regionalization arrangement can support stratifying and balancing the resources necessary to permit, design, construct, and implement the next increment of water system capacity at the lowest possible cost to existing and future anticipated customers.

On the other hand, the sewer systems are dispersed across the County. However, the nature of the existing sewer facilities, including the existence of septic tanks in some portions of the service area, requires the investment of significant resources to build out the existing sewer system infrastructure.

Figure 12 provides a layout of the Utility System ETJ, Master Meters, Sewer Treatment Plants, Water Treatment Plants, and Water and Sewer Lines, as provided by the JCPU.

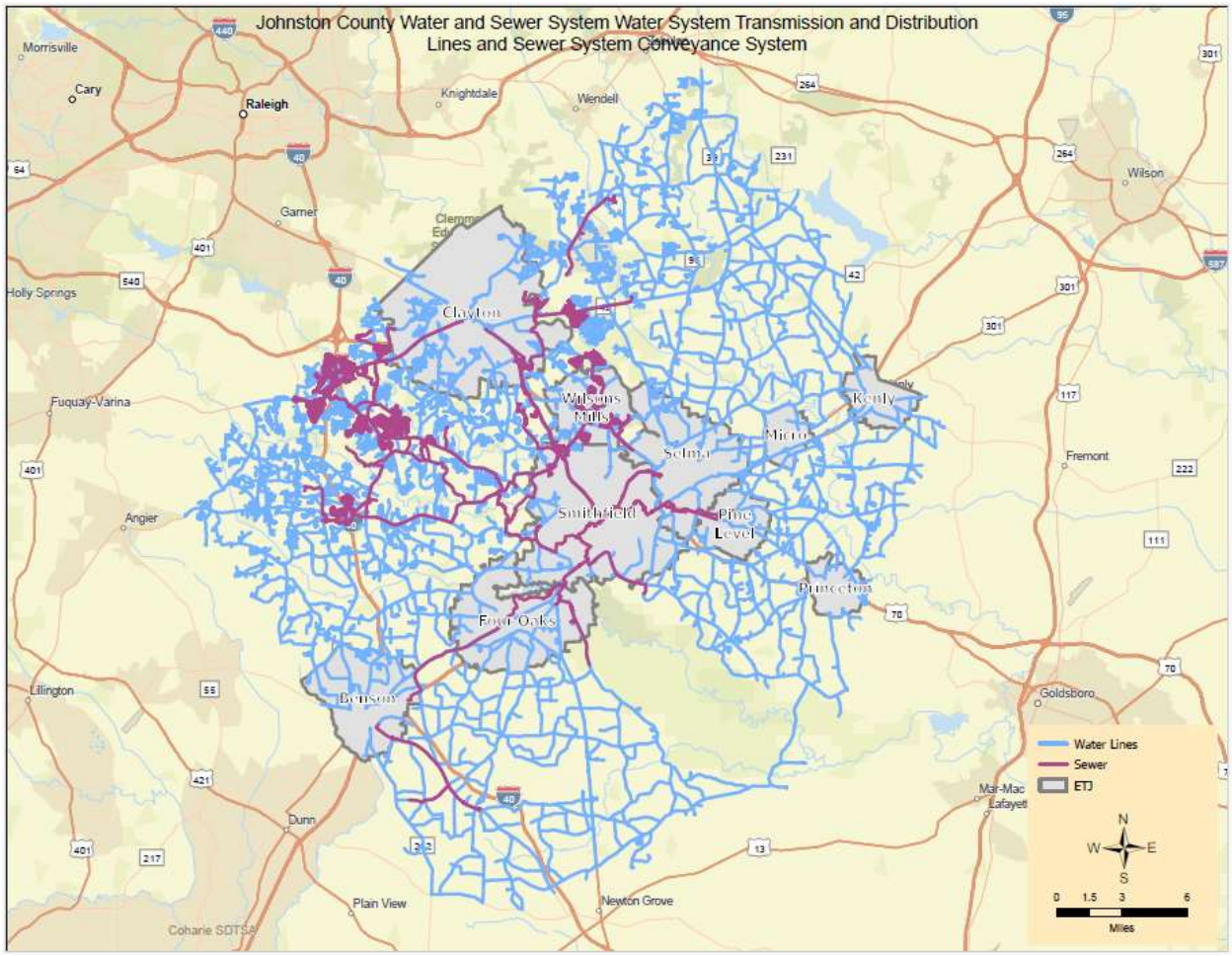

Figure 12 Johnston County ETJ and Water and Sewer Lines

The water transmission and distribution system cover most of the County's service area. In comparison, the sewer collection system covers more areas in the central and northern parts of the county's service area, which can be attributed to the on-site septic tanks in the eastern and southern parts.

In 2020, the collective total average daily demand for potable water service from customers within Johnston County was about 16 million gallons per day (MGD), plus an additional 4.0 MGD sold to Utility Systems outside of Johnston County. The JCPU has a permitted maximum daily withdrawal of 17 MGD from the Neuse River, an additional 7 MGD purchased from systems outside of Johnston County, and the Town of Smithfield can treat up to 8.5 MGD. The groundwater systems of Selma, Micro, and Pine Level contribute another 2 MGD, and Benson purchases 1.2 MGD from Dunn. While the JCPU doesn't currently have treatment capacity to match its 17 MGD withdrawal, it is in the planning stages of expanding the existing water treatment capacity. As such, Black & Veatch assumed the full 17MGD for a total collective water supply of about 36 MGD. Most of the collective water supply in the County is treated and/or provided by the JCPU and the Town of Smithfield.

In 2050, the projected collective demand is estimated to be about 44 MGD, and JCPU plans to develop additional water sources to make the collective supply about 62 MGD. If these future water sources are successfully developed, the collective demand will be about 70% of the collective supply for a reserve margin of about 30%. The collective demand in 2050 is estimated to be about 44 MGD.

Table 10 provides a summary of the estimated water system capacity in 2050.

Table 10 Summary of Water System Capacity

Line	System	Water System Capacity (MGD)		
		2020 Average Day Flow (MGD)	2050 Demand (MGD)	2050 Planned Capacity (MGD)
1	Johnston County Service Area	7.6	11.0758	50.16
2	Johnston County Outside Sales	4	15.4	N/A
3	Flowers Planation	0.5814	0.601	0
4	Archer Lodge	Included in County #s	Included in County #s	Included in County #s
5	Town of Clayton	4.3	12.586	0
6	Wilson's Mill	Included in County #s	Included in County #s	Included in County #s
7	Town of Selma	0.6026	0.6889	1.55
8	Town of Pine Level	0.1606	0.1864	0.3
9	Town of Princeton	0.133	0.1885	0
10	Town of Benson	0.883	1.0046	0
11	Benson From Dunn	N/A	N/A	1.2
12	Town of Four Oaks	0.2863	0.2731	0
13	Town of Smithfield	1.4835	1.6275	8.5
14	Town of Micro	0.0359	0.0832	0
15	Town of Kenly	0.215	0.2164	0.3
16	Total	20.2813	43.9314	62.01

Note:
The information provided herein is based on information provided by the JCPU, the Utility Systems, and Local Water Supply Plans at the time of the analysis.

As of 2020, the Johnston County collective annual average sewer discharge is about 12.0 MGD, and the annual permitted capacity of the collective system is about 20.0 MGD. The demand for Johnston County by 2050 is projected to be about 36 MGD, while the cumulative planned capacities of the collective systems are about 36 MGD. These levels are a concern because North Carolina requires sewer treatment facilities to be planned at less than 80% capacity or to maintain a minimum of a 20% reserve margin. Moreover, there is not yet a clear and understood path to develop the planned capacities to meet the

36 MGD demand requirement and the operational requirements associated with scaling any organization to meet this demand requirement must be considered. As detailed during the initial interviews, the JCPU and the Utility Systems understand the complexity and commitment of permitting and constructing new facilities in and around the County, specifically on the Neuse River. **Table 11** provides a summary of the sewer capacity for each Utility System.

Table 11 Summary of Sewer System Capacity

		Sewer System Capacity (MGD)	2020 Permitted Capacity	2050 Demand (MGD)	2050 Planned Discharge (MGD)
		2020 Average Annual Daily Discharge (MGD)			
1	Johnston County	7.07	13.50	18	20
2	Flowers Planation	0.33	0.75	0.8	0.75
3	Archer Lodge	Included w/County	0	1.11	0
4	Town of Clayton	1.64	2.50	12.6	10
	Clayton to Raleigh	0.347	1.000		
5	Wilson's Mill	Included w/County	0		0
6	Town of Selma				
7	Town of Pine Level				
8	Town of Princeton	0.25	0.28	0.5	0.5
9	Town of Benson	1.57	1.90	2.2	3.75
10	Town of Four Oaks				
11	Town of Smithfield		0		0
12	Town of Micro				
13	Town of Kenly	0.46	0.63	0.7	0.63
14	**Total**	**11.66**	**20.56**	**35.9**	**35.63**

Note:

1. The information provided herein is based on information provided by the JCPU, the respective Utility Systems, and the Local Water Supply Plans at the time of the analysis. While planning information, future demand, and other information were not provided for some Utility Systems, the summary indicates that sewer treatment capacity is a critical planning item for the collective County. Black & Veatch provides this information as a general outline of the planning efforts and considerations of the individual Utility Systems.

For the analysis conducted herein, the collective demand and collective supply are referred to as the total demand and supply within the County, including JCPU and the Utility Systems' demand.

5.3 Information Technology Infrastructure and Resources

The Utility Systems and JCPU reported varying levels of Information Technology (IT) infrastructure, capabilities, and resources as a part of the initial meetings. Several systems outsource or do not maintain specific technology functions across the respective water and sewer systems, increasing the cost of water and sewer services. The interviews indicate minimal uniformity and coinciding approaches to provide specific functions that require a significant penetration of technology, such as utility billing services, financial recording and reporting, system asset mapping and location, flow monitoring, and work order development, to name a few which provides opportunities to optimize the way these services are provided and reduce the aggregate cost to provide these services.

Table 12 summarizes the IT Infrastructure and Resources Utility Systems and JCPU utilize.

Table 12 Reported Information Technology Infrastructure and Resources

Line	Description	Archer Lodge	Benson	Clayton	Four Oaks	Johnston County	Kenley	Pine Level	Princeton	Selma	Smithfield	Wilson Mills
1	Financial System	Edmonds	Tyler Technologies	Tyler Technologies		Munis	Edmonds	Southern Software		Tyler Technologies	Tyler Technologies	
2	Asset Management		Tyler Technologies	CityWorks		Cityworks					GIS	
3	Work Orders		Tyler Technologies							Novo Share		
4	SCADA		Tyler Technologies	VT	SCADA	Ignition						
5	Board Information			iCompass								
6	Human Resources			NeoGov								
7	New Development Review and Inspections			Clarity								
8	Meter Reading	Manual	Manual	AMI	AMI	AMR	AMR	Badger Meters	Manual	AMI	Manual	Manual
9	Infrastructure Management				IMGIS							
10	Maintenance Management					Cityworks					GIS	
11	Project Management					Clarity						
12	Work Orders (Asset)					Cityworks						
13	Work Orders (Customer Accounts)					Munis						
14	IT							Guru Computer Solutions				
15	Billing/Customer Information Systems	Edmonds	Tyler Technologies	Tyler Technologies	Edmonds	Munis		Southern Software		Tyler Technologies	Tyler Technologies	

Footnote:
The information and details provided in Table 12 were reported and provided by the Utility Systems and JCPU during the Initial Interviews. Black & Veatch did not attempt to verify or perform any additional due diligence outside of documenting the information reported.

The Town of Benson, the Town of Clayton, the Town of Selma, and the Town of Smithfield utilize the Enterprise Risk Planning (ERP) system developed by Tyler Technologies, which includes financial management, human resources, resource management, and billing services, and utility services, to name a few. Across these four utility systems, as detailed in Table 12, each utility system utilizes specific components of the Tyler Technologies ERP and is in different stages of its IT life cycle. Still, it faces challenges that must be addressed when considering a regionalization arrangement.

The Town of Clayton and JCPU utilize Cityworks to provide Asset Management services to support the planning, maintenance, and replacement of existing water and sewer system assets. The challenges associated with providing asset maintenance services for small-scale, mid-scale, and large-scale water

and sewer systems differ. Most Utility Systems participating in the analysis are considered Small Drinking Water Systems as defined by the Environmental Protection Agency's Safe Water Drinking Act (SWDA). The SWDA defines a small water system with less than 10,000 active customers. The financial resources necessary to operate and maintain a small utility system and make the necessary financial investments in the water and sewer system infrastructure may be prohibitive and constraining because of the high incremental fixed cost associated with investing in the water and sewer system. Compounded with the high fixed cost of investment, the maintenance services provided by the Utility System focus heavily on corrective maintenance compared to predictive maintenance support. Several Utility Systems outsource certain maintenance components procured and ratified at a higher unit cost than self-performing maintenance services.

Across the Utility Systems, customer billing and meter reading services are provided by a combination of Manual Meter Reading, Automatic Meter Reading (AMR), and Automatic Meter Infrastructure (AMI), as reported in **Table 12** by the Utility Systems and JCPU. An opportunity exists for the Utility Systems and JCPU to convert to AMI and maintain a regional meter reading and customer billing program that will support the quality of water services provided to customers, enhance the revenue predictability over the typical fiscal year, serve to identify breaks and leaks within the water system which may become costly. Additionally, a regional meter reading and customer billing program will support an understanding of the water billing determinant characteristics, which will provide opportunities to optimize billing services to reduce the cost of operating the Utility Systems and JCPU. Finally, implementing a regional AMI system will support water flow monitoring and distribution system integrity to support the regional planning efforts necessary to implement the next increment of water supply appropriately.

Currently, most of the Utility Systems rely on the County's Geographic Information System (GIS). Given the nature of the service and the operational network associated with providing water and sewer service, it is logical that most of the Utility Systems rely on the County for GIS services.

Cybersecurity is a more prominent issue associated with operating water and sewer systems, given the need to protect physical assets and information technology. As such, a regionalization arrangement within the County must promulgate the security and resiliency of existing water and sewer system assets and drive the need for the Utility Systems to protect physical assets and information technology to provide the appropriate level of service to customers within the County. In addition, cybersecurity needs to protect against outside interference impacting the operations of infrastructure and the projection of sensitive customer, financial, and other jurisdictional information.

5.4 Water and Sewer System Operations

Black & Veatch reviewed existing System Operations for the Utility Systems and JCPU to understand the alignment of operating objectives and typical operating functions within the Water and Sewer System. Additionally, Black & Veatch assessed operations for areas of synergy/opportunity that require further research. Black and Veatch identified the following potential areas that must be researched and considered as a part of a Regionalization Arrangement:

- System Resiliency and Performance Monitoring
- Existing Cost of Operations
- Structured Planning Approach and Decision-Making Process
- Inflow and Infiltration Reduction Initiative

- Asset Maintenance Services

The following sections summarize the potential areas that must be researched and considered as a part of a Regionalization Arrangement.

5.4.1 System Resiliency and Performance Monitoring

The Utility Systems and the JCPU have provided stable and consistent water and sewer services to the residents within the County. Most of the Utility Systems in the County are small systems. As such, the limited resources of a smaller utility system and the current economic and labor challenges present existing utility systems and JCPU executives and managers mounting competing variables that must be understood in the county's operating water and sewer systems. The ability of the existing water and sewer system within the County to withstand adverse weather conditions, accept water and sewer usage over peak conditions (wet-weather events in the case of sewer), maintain the infrastructural integrity of the existing back-bone system, remain financially solvent, and maintain the appropriate levels of service with the addition and/or departure of significant use customers are fundamental components to achieve System Resiliency.

System Resiliency is embedded in making the necessary investment in the existing water and sewer system to maintain the appropriate levels of service through all operating conditions. The northeast and central sectors of the County maintain a higher buildout of water and sewer infrastructure. Additionally, the northeast and central sectors of the County are experiencing higher rates of new residential, industrial, and other customer additions. Subsequently, the respective utility systems within these regions must scale existing water and sewer service capacity to sustainably meet the demands of new and existing customers. The way this portion of the County sustainably absorbs growth will impact growth and buildout in the remainder of the County due to the sprawling effect of higher customer growth areas to lower customer growth areas within the County.

The integrity of the existing water and sewer system infrastructure must be understood as it relates to the condition, criticality, and cost of repairing and replacing existing assets. Based on the initial interviews conducted, the integrity of the existing water distribution systems, the integrity of the sewer collection system, the upgrade of water and sewer maintenance services, the conversion of septic to sewer in portions of the County, and the utilization of more systematic operating practices represent considerations that must be addressed to maintain a resilient and agile water and sewer system in the County. As such, the Utility Systems must systematically invest in the existing water and sewer system to preserve and enhance the existing infrastructure.

It is understood that the smaller utility systems' financial assets and other resources are limited and create evident challenges for utility executives and managers in meeting existing annual operating requirements. While the constraints around meeting annual operating and financial requirements exist, systematic planning and implementation approaches must be considered to absorb the burden associated with these requirements. A Regionalization Arrangement may serve to provide significant support to the Utility Systems and JCPU in maintaining the integrity of the existing infrastructure, preserving the financial integrity of all systems, managing and protecting the environment, and providing adequate levels of service for all customers in the County.

5.4.2 Existing Cost of Operations

The Utility System and the JCPU are forced to prioritize and manage daily operating requirements, presenting specific challenges for each system. In the case of the water and sewer systems detailed as a

part of the analysis conducted herein, the smaller systems in the County are challenged with securing the next increment of water supply, performing timely and adequate corrective maintenance services, and building the necessary financial resources to reinvest and sustainably grow due to the increases in the cost of good and supplies and the current competitive labor market. On the other hand, larger systems within the County are burdened with the same issues. Their challenges reside in trying to commission the next increment of water and sewer supply at an incremental cost that is affordable to all customers in the County, given the cost of goods and services, competitive labor markets, and the rigors of securing significant use customers in the region.

Due to the lack of resources and the criticality of specific operating and maintenance requirements, several smaller systems have outsourced specific operating services, given the magnitude and criticality of these services. Most of the water and sewer systems within the County do not use systematic processes, tools, and resources to schedule and perform administrative, maintenance, and other renewal and replacement requirements, which drive up the cost of goods, equipment, and services required.

In 2021, the American Water Works Association (AWWA) conducted a water and sewer system benchmarking survey titled AWWA Utility Benchmarking, Performance Management for Water and Wastewater (AWWA Survey). The survey measured 61 key performance indicators from 168 United States and Canada participants who own and operate water and sewer systems.

Figure 13 and **Figure 14** provide a summary comparison of O&M cost per million gallons of water processed and sewer treated for the Utility Systems, JCPU, and National and Region II systems based on the results of the AWWA Survey. The National results represent all the participants in the survey, and the Region II results are specific to water and sewer systems that participated in the survey in the states of Alabama, Georgia, Kentucky, Mississippi, North Carolina, Puerto Rico, South Carolina, Tennessee, Virginia, and West Virginia.

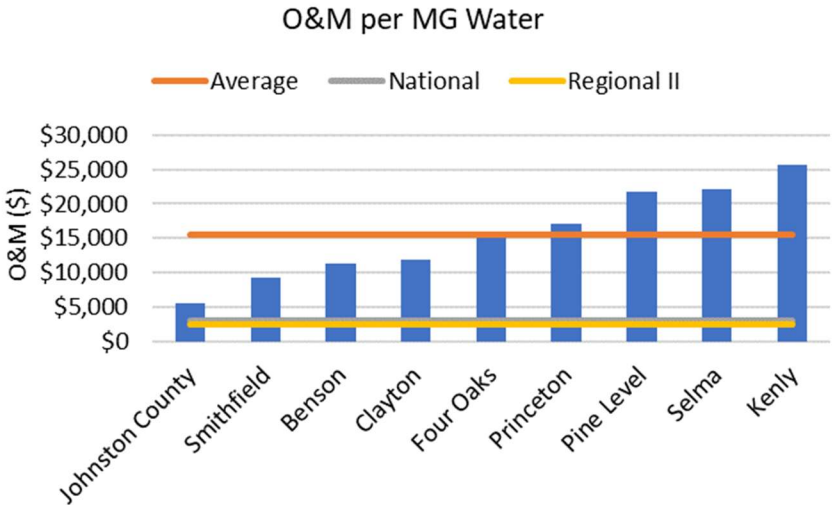

Figure 13 O&M per Million Gallons of Water Processed

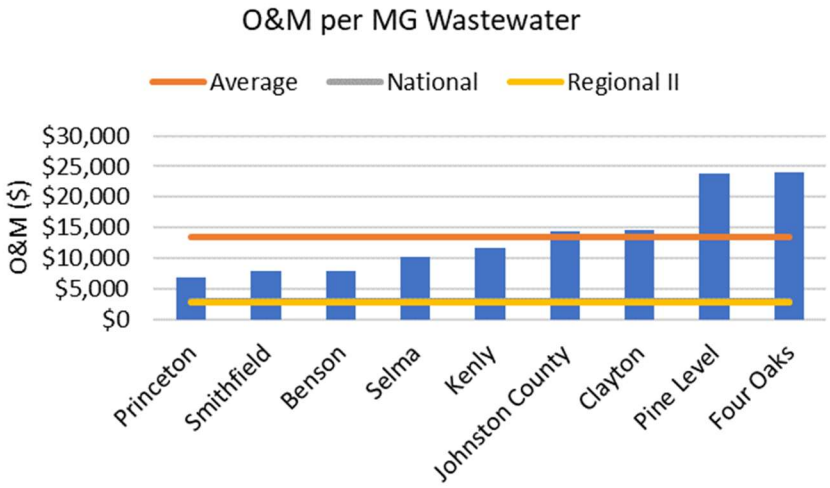

Figure 14 O&M per Million Gallons of Sewer Treated

Based on the results outlined in **Figure 13,** O&M per Million Gallons of Water processed, the total O&M cost to support potable water production for the Utility Systems, and JCPU is greater than the National and Region II average cost calculated in the AWWA Survey. In addition, JCPU, the Towns of Smithfield, Benson, and Clayton incur O&M cost per million gallons of water processed, which is lower than the calculated average of about $15,000.

The O&M cost per million gallons of sewer treated within the County is greater than the National and Region II average cost calculated in the AWWA Survey, as detailed in **Figure 14**. The Towns of Princeton, Smithfield, Benson, Selma, and Kenly incur O&M cost per million gallons of sewer treated, which is lower than the calculated average of under $14,000.

Figure 15 compares the Operating Ratios of the Utility Systems and the national average based on the AWWA Survey. The operating ratio is a metric that evaluates how much an organization's operating revenues support operating costs. JCPU and the Town of Clayton are the only two systems below the national average of 54%. The rest of the utility systems maintain operating ratio factors that are higher than the national average. The average operating ratio of the Utility Systems is 78%, which is higher than the national average.

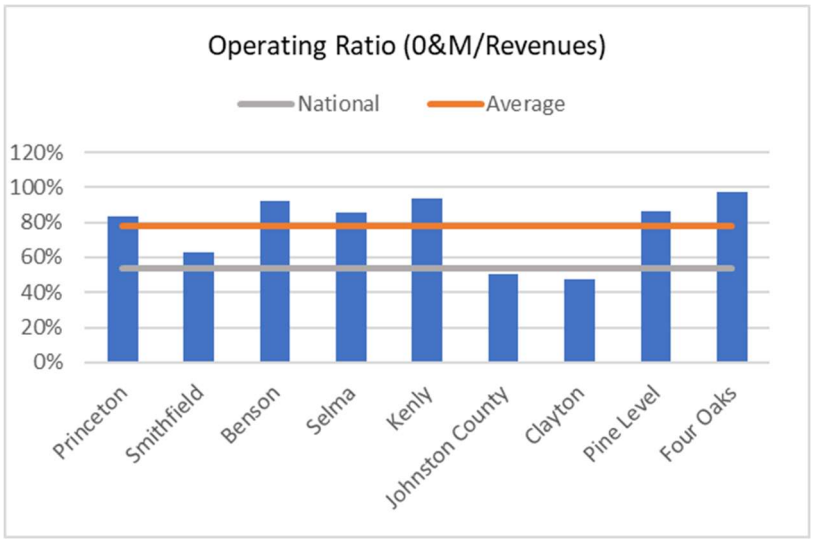

Figure 15 JCPU and Utility System Operating Ratio Comparison

While the results outlined in **Figure 13, Figure 14,** and **Figure 15** are higher compared to the results of the AWWA Survey, specific variables influence how small systems procure and plan for services and other requirements. For example, the financial aspects and other resources that drive redundancy purchases in goods and services may translate into a lower unit purchase cost. For example, bulk buying for economies of scale may be difficult for the small water and sewer system to achieve individually. This example may be extrapolated through varying components and sectors of operating a water and sewer system. It is not abnormal to see a higher unit cost of equipment and specific goods and services required for small water and sewer systems, especially if these purchases are driven by criticality and corrective needs that may hamper operations.

A regionalization arrangement may support the Utility Systems and JCPU in planning and appropriately scheduling O&M needs and requirements to reduce the burden of criticality and corrective purchases, which are implicitly more costly and burdensome to the Utility Systems and JCPU.

5.4.3 Structured Planning Approach and Decision-Making Process

Historically, the JCPU has served as the major water and sewer service provider within Johnston County. As such, Utility Systems rely heavily on the availability and readiness of water and sewer service capacity from the JCPU, placing less emphasis on individual systems developing a systematic long-term planning approach. The JCPU continues to experience an influx of competing requests for additional water and sewer service capacity that is driving all participants to diligently ratify the nature, location, and impact of the next increment of water and sewer capacity within the County. Additionally, the region maintains numerous water and sewer interconnections, some of which pass through certain jurisdictions within the County and extend outside of the County, so the necessary steps must be initiated to understand the implications of the next increments of water and sewer system treatment capacity especially with the additions of significant use and other industrial customers that demand significant incremental capacity. A holistic and dynamic planning approach is required, guided by specific policies and procedures that ratify and share the operating benefits through a road mapping process.

Figure 16 provides a Regionalization Implementation Approach that the Utility Systems and the JCPU may utilize to initiate the efforts necessary to consider and implement a Regionalization Arrangement.

Figure 16 Regionalization Implementation Approach

The nature of the existing water and sewer systems within the County is diverse as it relates to the size of the systems, age and integrity of the systems, operating and financial practices and resources, and how each system adds residential, commercial, and industrial customers. The eastern and southern regions of Johnston County maintain a lower population concentration than the central and northern regions, so the water and sewer infrastructure is not built to serve this region, especially the sewer infrastructure. As population growth drives population density within the County, the eastern and southern regions will require more infrastructure to support the necessary water and sewer capacity additions. As such, the integrity of the infrastructure and location of water and sewer capacity in the central and northern regions of the County must be understood and optimized. A regional approach to planning and decision-making through cross-functional teams implementing uniform processes and procedures may support a Regionalization Arrangement.

5.4.4 Inflow and Infiltration Reduction Initiative

To foster regional coordination and determine the associated synergies to combat Inflow and Infiltration (I&I) within Johnston County, a regional I&I reduction initiative must be formulated to ratify the integrity of the sewer collection system and manage wet weather peak flow. Within the County, the Utility Systems and JCPU must maintain provisions that allow them to understand the sewer usage and

collection system characteristics within the region, manage the operating practices, balance the cost exposure, and establish I&I mitigation efforts and benchmarks.

Table 13 briefly estimates the current I&I for some systems within the County. The information detailed is not complete and is based on the best-known information provided during the analysis. While this information provides a perspective on the level of I&I within the county, it must not be deemed absolute until a detailed mass balance analysis is performed.

Table 13 Sewer System Interconnections and Capacity

Line	System	FY 2021 County-Wide Inflow and Infiltration			
		Billed Sewer Flow (MGD)	Treated Sewer Flow (MGD)	Inflow and Infiltration (MGD)	Inflow and Infiltration (Percent)
1	JCPU	5.51	8.02	2.51	31%
2	Town of Clayton	3.38	3.37	N/A	N/A
3	Town of Wilson's Mills			N/A	N/A
4	Town of Selma	0.44	1.68	1.25	74%
5	Town of Pine Level	0.14	0.30	0.16	53%
6	Town of Princeton	0.11	0.35	0.24	69%
7	Town of Benson	0.73	1.94	1.21	62%
8	Town of Four Oaks	0.21	0.28	0.07	25%
9	Town of Smithfield	0.86	3.22	2.36	73%
10	Town of Micro	0.03	0.06	0.03	50%
11	Town of Kenly	0.18	0.61	0.43	70%
12	**Total**	**11.59**	**19.83**	**8.26**	**42%**

Note:

1. The billed and treated sewer flow information provided is incomplete, but it is based on the best-known information at the time of the study. The representation of I&I is presented to provide a perspective of the potential level of I&I treated within the County limits. A complete review must be performed to understand the total amount of I&I treated within the County limits.

For the systems reviewed in **Table 13**, the level of I&I on an individual system basis ranges from a low 25% (Town of Four Oaks) to a high of 73% (Town of Selma). On aggregate, 42% of the sewer flow treated within the County limits is attributable to I&I. The level of I&I detailed in **Table 13** provides significant opportunities for sewer systems within Johnston County to reduce operating costs. I&I, by nature, is representative of specific failures in the integrity of the collection system, which impacts the cost and the resources necessary to manage and treat the sewer system flow.

A detailed evaluation of I&I for the sewer system within the County limits must be performed to determine the locations on the collection system with high I&I flow and develop a regional approach to reduce I&I.

5.4.5 Asset Maintenance Services

Traditionally, water and sewer systems have combined the services related to operations and maintenance and applied the respective activities around these services based on the location of their respective facilities. Utilities in North America have taken the initiative to separate the operations and maintenance services to achieve improved operating efficiencies and economies. Small water and sewer systems often combine operations and maintenance services to maximize existing staffing and other resources.

Based on the initial interviews, several Utility Systems completely or partially outsource components of their respective maintenance services to a third-party contractor. Typically, third-party contractors are established to perform activities associated with corrective maintenance. Utility systems must focus on and progress toward completing preventative maintenance services to minimize the cost of asset repair and renewal. Outsourcing is typically utilized when a jurisdiction does not have adequate staffing resources. In the face of limited resources, the Utility Systems and JCPU have to prioritize maintenance service to maximize the effectiveness of staff and money spent (is it more effective to outsource the activity versus doing it in-house). Right now, limited labor is an issue for public and private sectors. Contractors are running 2-3x higher than in-house resources. However, finding and hiring qualified staff takes time and is a longer term solution. Hence, outsourcing maintenance services support the existing staffing challenges, but at a higher cost than completing these services in-house.

As the Utility Systems and JCPU move toward considering a regionalization arrangement, implementing industry best practices, such as developing and running a comprehensive asset management program, will support the development of a systematic approach to schedule, perform, and monitor required maintenance services. It will also allow managers and decision-makers to evaluate the true cost of maintaining an asset and modify, as necessary, operational protocols to support the effective use of limited dollars.

The Utility Systems and JCPU must consider establishing a dedicated maintenance group as part of a regionalization arrangement to perform preventive and corrective maintenance services. The dedicated maintenance group should possess its own planners, schedulers, and other management services tools to provide focused and precise allocation of existing resources. Within a utility, the commitment to implement and maintain a program of this nature requires dedicated resources from all organizational sectors. Sometimes, the required resources are unavailable, so the utility procures the maintenance services through other means. As the water and sewer service industry evolves and improved production processes and technologies are implemented, the need for improved maintenance management practices will be critical for utility organizations' long-term resilience and financial feasibility.

Table 14 summarizes maintenance services provided by the Utility System and JCPU as reported during the initial meeting.

Table 14 Maintenance Services Provided by the Utility Systems and JCPU

Characteristics	Archer Lodge	Benson	Clayton	Four Oaks[3]	JCPU	Kenly	Pine Level	Princeton	Selma	Smithfield	Wilson Mills[3]
Business Unit Leader[1]			■		■						
Dedicated Maintenance Group			■		■						
Services Provided by Geography											
Preventive Maintenance			■		■						
Corrective Maintenance	■	■	■	■	■	■	■	■	■	■	■
Control System Utilized[2]		■	■	■	■		■		■	■	

Notes:

1. The maintenance group has a dedicated leader that is solely responsible for all maintenance activities.
2. Existing water and/or sewer treatment plant control and maintenance management systems are utilized in the planning and scheduling of maintenance resources.
3. Maintenance services are provided by JCPU.

Table 14

Table 14 highlights the dependence on corrective maintenance services within the County, typically procured at a high cost. As such, focus must be placed on transitioning the water and sewer systems within the County to performing more preventative maintenance services to reduce the cost of life cycle repair and asset replacement.

Finally, when a jurisdiction serves a diverse and expanding customer base that has evolved over the life of service, specific rituals and practices must be preserved and codified, especially within the O&M business function, thereby maintaining the ability to document typical activities and best practices across all the business functions and facilities served becomes a critical activity to achieving sustainable operations. When implemented appropriately, asset maintenance services can achieve the proper standardization and documentation of maintenance activities, and all the factors detailed herein are critical to achieving synergies and cost savings as a part of a regionalization arrangement.

6.0 Summary of Stakeholder Matrix

Black & Veatch created an initial list of stakeholders for consideration by the JCPU and the Utility Systems. The list of stakeholders is prepared to provide a perspective on the groups and operating bodies that will be impacted and/or can impact the ratification of a regionalization arrangement across water and sewer services provided by the JCPU and the Utility Systems.

Table 15 summarizes the initial list of stakeholders, which is expected to increase as the JCPU, and the Utility Systems perform the necessary due diligence to ratify a regionalization arrangement.

Table 15 Stakeholder Matrix

Stakeholders	Operational	Infrastructure Stability	Financial	Regulatory	Legal
Residential Customers	■	■	■	■	■
Non-Residential Customers	■	■	■	■	■
Wholesale Customers	■	■	■	■	■
North Carolina General Assembly	■			■	■
North Carolina Department of Environmental Quality	■	■		■	■
North Carolina Environmental Management Commission	■	■		■	■
North Carolina Treasurer's Office of Local Government Commission	■	■	■	■	■
North Carolina Utilities Commission	■	■	■	■	■
Financial Institutions (Creditors)			■	■	■
Utility Systems' Employees	■	■	■	■	■

7.0 Financial Feasibility

The Owner is assessing the viability of a regionalization scenario between the water and sewer systems owned and operated by the Owner and the other Utility Systems within Johnston County, North Carolina ("County"). As a part of this assessment, a Financial Feasibility Review was prepared to examine the financial feasibility of a regionalization scenario for all water and sewer service providers within the County. The purpose of this section is to (1) understand the revenue impact for the Utility Systems, (2) understand the operating and capital cost implications of a regionalization scenario based on the current and known information, and (3) highlight specific financial and economic impacts that the JCPU and the Utility Systems must understand.

7.1 Analysis Methodology

The analysis detailed herein presents a high-level financial planning review that includes the review and projection of revenues and revenue requirements (costs) for the JCPU, each Utility System, and the Regionalized System. Revenue and revenue requirements are projected over a 20-year forecast period, recognizing the anticipated growth in the number of customers, water consumption patterns, and the escalation in cost throughout the County. In addition, the analysis recognizes specific infrastructure development and maintenance requirements, incremental operating and maintenance costs, and the cost of specific transition-related initiatives that must be undertaken over the forecast period, as determined per Utility System.

The financial plans developed support the JCPU and the Utility System in meeting scheduled operating requirements, financial metrics, and maintaining the water and sewer system's financial health over the forecast period. A Regionalized System's Financial Plan is developed to demonstrate the annual operating requirements and the ability of the combined JCPU and Utility System revenues to meet revenue requirements over the forecast period.

7.2 General Assumptions

General assumptions utilized in revenues and revenue requirements analyses are summarized on the following pages. Any substantial differences between the assumptions and the actual occurrences may affect the indicated revenue increases and proposed changes presented in this report.

7.2.1 General

A Base Case financial plan is developed for the JCPU and each Utility System to demonstrate the ability of existing revenues to meet annual operating requirements. Appendix A- of this Report provides the individual JCPU and Utility System financial plans.

The report details the financial plan results of the Regionalized System, which is a build-up of the JCPU and individual utility system requirements and other annual requirements.

The analysis's forecast period is FY 2025 through FY 2045.

As disclosed per Utility System during the initial Interviews, individual Utility System customer growth rates, cost escalation factors, financing criteria, and specific capital requirements were incorporated as a part of the analysis detailed herein per Utility System.

7.2.2 Revenues

The forecast of service revenues is based on audited FY 2023 service revenues, which serve as the base year, as provided by the respective Utility Systems. The Base Year serves as the most recent full year of audited service revenues before the beginning of the forecast period. Annual customer growth rates per Utility System are applied to the Base Year service revenues to determine the forecast of existing service revenues over the forecast period.

The projected forecast of other operating and non-operating revenues is based on the annual growth rate defined by the Utility System.

The forecast of total revenues is prepared and presented on a combined water and sewer systems basis for the Regionalized System.

7.2.3 Operating and Maintenance Expenses

Projected operations and maintenance expenses were forecasted for the JCPU and the Utility Systems' water and sewer systems, respectively. Specific escalatory factors were utilized and are summarized in **Table 16**.

Table 16 Operations and Maintenance Escalation Factors

Description	JCPU	Clayton	Smithfield	Pine Level	Selma	Town of Benson	Kenly	Town of Princeton	Four Oaks
System-Wide	6.5%		5.0%	5.0%	6.0%	5.0%	5.0%	6%	5.0%
Salaries & Benefits		5.0%							
Labor		5.0%							
Fuel & Energy		10.0%							
Chemicals		10.0%							
Materials		5.0%							
Supplies		5.0%							
Services		5.0%							
Other		5.0%							

Specific activities and tasks must be completed as a part of transitioning to a Regionalized System. The cost associated with certain transition activities and other one-time operating expenses are scheduled as incremental O&M and incorporated into the total Regionalized Entity O&M.

Listed below are specific categories of incremental O&M as summarized in the Report:

- New Water Treatment Plant O&M;
- PFAS Treatment Cost; and
- AMI Conversion.

7.2.4 Major Capital Improvements

Each Utility System financial plan includes CIPs identified by JCPU and each Utility System and/or an assignment of renewal and replacement projects' funding for FY 2025 through FY 2045.

7.2.5 Capital Improvement Financing

The CIP identified is funded over the forecast period with a combination of revenue bonds, state revolving funds, cash on hand, and other sources of funding estimated. The nature by which JCPU and each Utility System develop and track the progress of implementing capital projects is different, so the nature by which projects are scheduled and funded is determined on an individual Utility System basis and aggregated to the Regionalized System.

Revenue Bond requirements are estimated to utilize a 30-year amortization period with an average interest rate of 5.5 percent and equal annual principal and interest payments. Black & Veatch is not a registered municipal financial advisor; thus, actual debt structures for any proposed issuances must follow the guidance of the appointed financial advisors.

State Revolving Funds (SRF) requirements are estimated utilizing a 20-year amortization period, an average interest rate of about 3.15%, and equal annual principal and interest payments.

All bond issuance costs are estimated to be 1.0% of the issue amount.

As a note, the actual structuring of the proposed debt service will be determined by the financial advisors that is procured by the Regionalized Entity and the proposed debt service detailed herein provides a range of magnitude for the proposed debt service.

7.2.6 Operating Cash Flow

Beginning water and/or sewer system fund balances for each Utility System are utilized and aggregated to the Regionalized System to support the financing of capital projects.

Over the forecast period, each Utility System targets a minimum cash balance of 120 days by the end of the forecast period. Additionally, each Utility System targets a 1.50 in debt service coverage over the forecast period.

7.3 Forecast of Revenues

The Utility Systems derive revenue primarily from charges for treated water and sewer services along with other revenue sources, including income associated with billing fees, service charges, metering fees, connection fees, delinquent fees, and other miscellaneous revenue. For this assessment, revenues

are forecasted by individual system and aggregated to the Regionalized System's financial plan. The components of the revenue forecast are explained in this section of the Report.

7.3.1 Customers and Growth

The analysis of the customers and growth over the forecast period for JCPU and each Utility System indicates different growth levels in new customer connections over the forecast period. All the Utility Systems serve major customer groups such as residential, commercial, industrial, and irrigation customers, to name a few. In addition, specific utility systems maintain service agreements with neighboring jurisdictions to provide and take water and sewer services. Based on the direction provided by each Utility System, customer additions are forecasted on a total system basis and utilized to support the forecast of revenues.

Table 17 summarizes the customer growth rates utilized per Utility System over the forecast period.

Table 17 Annual Customer Growth Rates

Description	JCPU	Clayton	Smithfield	Pine Level	Selma	Benson	Kenly	Princeton	Four Oaks
Total System	2.5%		2.5%	2.5%	3.0%	2.5%	2.5%	3.0%	2.5%
FY 2025 – FY 2026		2.5%							
FY 2027 – FY 2030		3.2%							
FY 2031 – FY 2035		2.9%							
FY 2036 – FY 2045		1.4%							

7.3.2 Water and Sewer Revenues

Water and sewer sales revenue projections under existing rates are based on audited FY 2023 revenues and annual customer growth rates over the forecast period. The JCPU and Utility Systems furnish specific availability/customer charge (fixed) and volumetric rate (variable) revenues for water and sewer service. The combination of these two sources of revenue makes up the water and sewer system's user rate revenues. Additionally, utility systems generate revenues from other sources, including other operating, non-operating, and interest income.

For this analysis, the revenues generated by the JCPU and the Utility Systems are aggregated and presented based on the Regionalized System. The estimated revenues over the forecast period are provided in **Table 18.**

The existing revenue for the Regionalized System is forecasted to grow from $113.8 million in 2025 to $185.00 million in 2045.

Table 18 provides a summary of the existing combined systems revenues.

Table 18 Combined System Projected Revenue under Existing Rates (in millions)

Year	JCPU	Clayton	Smithfield	Pine Level	Selma	Benson	Kenly	Princeton	Four Oaks	Total
2025	$59.19	$29.36	$10.19	$1.11	$5.26	$4.30	$2.16	$0.75	$1.53	$113.82
2026	$60.67	$30.06	$10.44	$1.14	$5.41	$4.41	$2.22	$0.77	$1.57	$116.67
2027	$62.19	$31.04	$10.70	$1.17	$5.58	$4.52	$2.27	$0.80	$1.61	$119.84
2028	$63.74	$32.04	$10.97	$1.20	$5.74	$4.63	$2.33	$0.82	$1.65	$123.09
2029	$65.34	$33.04	$11.25	$1.23	$5.92	$4.74	$2.39	$0.85	$1.69	$126.40
2030	$66.97	$34.05	$11.53	$1.26	$6.09	$4.86	$2.45	$0.87	$1.73	$129.78
2031	$68.65	$35.08	$11.81	$1.29	$6.28	$4.98	$2.51	$0.90	$1.77	$133.24
2032	$70.36	$36.12	$12.11	$1.32	$6.46	$5.11	$2.57	$0.93	$1.82	$136.77
2033	$72.12	$37.17	$12.41	$1.36	$6.66	$5.24	$2.64	$0.95	$1.86	$140.37
2034	$73.92	$38.23	$12.72	$1.39	$6.86	$5.37	$2.70	$0.98	$1.91	$144.05
2035	$75.77	$39.30	$13.04	$1.42	$7.06	$5.50	$2.77	$1.01	$1.96	$147.81
2036	$77.67	$39.86	$13.37	$1.46	$7.28	$5.64	$2.84	$1.04	$2.00	$151.12
2037	$79.61	$40.43	$13.70	$1.50	$7.49	$5.78	$2.91	$1.07	$2.05	$154.51
2038	$81.60	$41.01	$14.04	$1.53	$7.72	$5.92	$2.98	$1.10	$2.11	$157.99
2039	$83.64	$41.60	$14.39	$1.57	$7.95	$6.07	$3.06	$1.14	$2.16	$161.54
2040	$85.73	$42.20	$14.75	$1.61	$8.19	$6.22	$3.13	$1.17	$2.21	$165.18
2041	$87.87	$42.80	$15.12	$1.65	$8.43	$6.38	$3.21	$1.21	$2.27	$168.91
2042	$90.07	$43.42	$15.50	$1.69	$8.69	$6.54	$3.29	$1.24	$2.33	$172.73
2043	$92.32	$44.04	$15.89	$1.74	$8.95	$6.70	$3.37	$1.28	$2.38	$176.63
2044	$94.63	$44.67	$16.29	$1.78	$9.22	$6.87	$3.46	$1.32	$2.44	$180.63
2045	$97.00	$45.31	$16.69	$1.09	$9.49	$7.04	$3.54	$1.36	$2.50	$184.72

Note:
1. All revenues are stated on a regionalized system basis throughout the analysis.

7.4 Forecast of Revenue Requirements

The revenue required to adequately provide for the continued operation of the JCPU and the Utility Systems must be sufficient to meet the annual revenue requirements (costs). Such revenue requirements include (1) operating and maintenance expenses; (2) debt service requirements, consisting of principal, interest, and any reserve fund payments on revenue bonds (3) and other expenditures and transfers. In addition, annual revenues need to be adequate to meet the debt service coverage requirements established by the bond ordinance applicable to existing and future revenue bond issues.

7.4.1 Operating and Maintenance Expenses

Operating and maintenance expenses include the annual expenses associated with all the operating functions of the Utility Systems. These expenses include the annual salaries and wages of personnel, costs for material and supplies, fuel and electric power costs, incremental O&M associated with the new WTP and PFAS Water Treatments, and other costs such as employee benefits, insurance, and contract services. Projections of future operating and maintenance expenses are based on the most recent budget information and an analysis of current and anticipated operating conditions and trends. Operating and maintenance expenses have increased in recent years primarily due to the combined effects of inflation, supply chain constraints, and rising fuel and energy prices.

Operating expenses for the Regionalized System are forecasted to grow from $89.6 million in 2025 to $305.2 million in 2045.

Table 19 lists the operations and maintenance expenses forecast for the Regionalized Entity over the forecast period.

Table 19 Forecast of Operations and Maintenance Expense (in millions)

Year	JCPU	Clayton	Smithfield	Pine Level	Selma	Benson	Kenly	Princeton	Four Oaks	Total
2025	$47.23	$19.76	$7.66	$1.07	$5.50	$3.85	$2.07	$0.71	$1.80	$89.66
2026	$51.98	$19.95	$8.34	$1.13	$5.89	$4.04	$2.18	$0.75	$1.89	$96.17
2027	$56.55	$21.19	$8.76	$1.19	$6.24	$4.24	$2.29	$0.80	$1.98	$103.25
2028	$60.22	$21.54	$9.20	$1.25	$6.62	$4.46	$2.41	$0.85	$2.08	$108.62
2029	$64.14	$22.18	$9.66	$1.31	$7.01	$4.68	$2.53	$0.90	$2.19	$114.59
2030	$68.31	$23.63	$10.14	$1.37	$7.43	$4.91	$2.65	$0.95	$2.29	$121.70
2031	$72.75	$25.19	$10.65	$1.44	$7.88	$5.16	$2.79	$1.01	$2.41	$129.27
2032	$77.48	$26.87	$11.18	$1.52	$8.35	$5.42	$2.93	$1.07	$2.53	$137.34
2033	$82.51	$28.68	$11.74	$1.59	$8.85	$5.69	$3.07	$1.13	$2.66	$145.93
2034	$87.88	$30.63	$12.33	$1.67	$9.39	$5.97	$3.23	$1.20	$2.79	$155.08
2035	$93.59	$32.71	$12.94	$1.75	$9.95	$6.27	$3.39	$1.27	$2.93	$164.81
2036	$99.67	$34.97	$13.59	$1.84	$10.55	$6.59	$3.56	$1.35	$3.08	$175.19
2037	$106.15	$37.41	$14.27	$1.93	$11.18	$6.91	$3.73	$1.43	$3.23	$186.25
2038	$113.05	$40.03	$14.98	$2.03	$11.85	$7.26	$3.92	$1.52	$3.39	$198.03
2039	$120.40	$42.85	$15.73	$2.13	$12.56	$7.62	$4.12	$1.61	$3.56	$210.58
2040	$128.22	$45.88	$16.52	$2.24	$13.31	$8.00	$4.32	$1.70	$3.74	$223.95
2041	$136.56	$49.15	$17.35	$2.35	$14.11	$8.40	$4.54	$1.81	$3.92	$238.19
2042	$145.43	$52.67	$18.21	$2.47	$14.96	$8.82	$4.77	$1.92	$4.12	$253.37
2042	$154.89	$56.46	$19.12	$2.59	$15.86	$9.27	$5.00	$2.03	$4.33	$269.55
2044	$164.96	$60.54	$20.08	$2.72	$16.81	$9.73	$5.25	$2.15	$4.54	$286.79
2045	$175.68	$64.95	$21.08	$2.86	$17.82	$10.22	$5.52	$2.28	$4.77	$305.17

7.4.2 Debt Service

The estimated debt service obligations forecasted for JCPU and each Utility System are utilized using information retained from bond obligations provided by JCPU and each Utility System for the forecast period. In addition, the forecast of proposed debt is based on the proposed financing plan and the aggregated share of debt over the forecast period.

Total debt service for the Regionalized System is forecasted to grow from $35.7 million in 2025 to $70.0 million in 2045.

Table 20 summarizes the debt service obligations on outstanding and proposed debt for the forecast period.

Table 20 Debt Service Obligations on Outstanding and Proposed Debt (in millions)

Year	JCPU	Clayton	Smithfield	Pine Level	Selma	Benson	Kenly	Princeton	Four Oaks	Existing Debt	Proposed Debt	Total Debt
2025	$25.04	$5.95	$1.02	$0.08	$0.25	$0.33	$-	$0.06	$0.05	$32.77	$2.91	$35.68
2026	$26.35	$15.57	$0.72	$0.08	$0.25	$0.33	$-	$0.06	$0.05	$43.40	$6.77	$50.17
2027	$25.51	$14.66	$0.71	$0.08	$0.25	$0.33	$-	$0.06	$0.05	$41.65	$10.47	$52.12
2028	$25.40	$14.60	$0.70	$0.08	$0.25	$0.41	$-	$0.06	$0.05	$41.55	$19.16	$60.71
2029	$29.90	$14.36	$0.70	$0.08	$0.25	$0.23	$-	$0.06	$0.05	$45.62	$24.77	$70.39
2030	$29.89	$14.30	$0.69	$0.04	$0.25	$0.23	$-	$0.06	$0.05	$45.50	$37.84	$83.34
2031	$24.31	$14.24	$0.68	$0.04	$0.25	$0.21	$-	$0.06	$0.05	$39.83	$38.14	$77.97
2032	$24.16	$14.19	$0.68	$0.04	$0.25	$0.23	$-	$0.06	$0.05	$39.64	$45.90	$85.53
2033	$23.80	$14.13	$0.67	$0.04	$0.25	$0.23	$-	$0.06	$0.05	$39.22	$46.25	$85.47
2034	$23.22	$14.07	$0.66	$0.04	$0.25	$0.18	$-	$0.06	$0.05	$38.51	$58.22	$96.73
2035	$23.17	$14.01	$0.66	$0.04	$0.25	$0.14	$-	$0.06	$0.05	$38.36	$58.49	$96.85
2036	$22.87	$13.68	$0.65	$0.04	$0.25	$0.14	$-	$0.06	$0.05	$37.72	$60.02	$97.74
2037	$21.73	$13.62	$0.64	$0.04	$0.25	$0.14	$-	$0.06	$0.05	$36.53	$60.24	$96.77
2038	$20.58	$-	$0.67	$0.04	$0.25	$0.14	$-	$0.06	$0.05	$21.78	$61.76	$83.54
2039	$-	$-	$0.67	$0.04	$0.25	$0.14	$-	$0.06	$0.05	$1.20	$64.26	$65.46
2040	$-	$-	$0.67	$0.04	$0.25	$0.14	$-	$0.06	$0.05	$1.20	$65.38	$66.58
2041	$-	$-	$0.67	$0.04	$0.25	$0.14	$-	$0.06	$0.05	$1.20	$65.61	$66.81
2042	$-	$-	$0.67	$0.04	$0.25	$0.14	$-	$0.06	$0.05	$1.20	$66.73	$67.93
2042	$-	$-	$0.67	$0.04	$0.25	$0.14	$-	$0.06	$0.05	$1.20	$66.97	$68.17
2044	$-	$-	$0.67	$0.04	$0.25	$0.14	$-	$0.06	$0.05	$1.20	$68.58	$69.78
2045	$-	$-	$0.67	$-	$0.25	$0.14	$-	$0.06	$0.05	$1.16	$68.82	$69.99

7.4.3 Other Expenditures and Transfers

Other expenditures and transfers include costs that the Utility Systems incur after fulfilling operating and maintenance and debt service obligations from each Utility System's revenues. These costs are typically funded by cash from operations and any other unrestricted sources of funds available to JCPU and each Utility System.

The current forecast of other expenditures and transfers includes four (3) distinct categories: capital outlay, renewal and replacement projects, and transfers to other funds such as the general fund and reserve fund. For several utility systems, no funds have been assigned to support other expenditures as a part of existing budget documents, so the magnitude of re-investment in the existing system is limited, creating potential issues related to maintenance and the cost of future capital investment. Upon meeting operations and maintenance requirements along with debt service requirements, the investment in other expenditures is representative of current system investment because the general nature of other expenditures is capital intensive.

Total other expenditures for the Regionalized System are forecasted to grow from $25.0 million in 2025 to $45.5 million in 2045.

Table 21 shows the annual expenditures and transfer totals for the Regionalized System.

Table 21 Projected Other Expenditures and Transfers (in millions)

Year	JCPU	Clayton	Smithfield	Pine Level	Selma	Benson	Kenly	Princeton	Four Oaks	Total
2025	$10.76	$12.08	$1.15	$0.13	$0.46	$0.24	$0.03	$0.09	$0.12	$25.06
2026	$11.24	$11.89	$1.17	$0.14	$0.46	$0.24	$0.05	$0.15	$0.12	$25.46
2027	$11.75	$11.99	$1.19	$0.15	$0.46	$0.24	$0.06	$0.17	$0.13	$26.13
2028	$12.28	$13.20	$1.36	$0.18	$0.46	$0.24	$0.08	$0.16	$0.13	$28.11
2029	$12.85	$12.70	$1.48	$0.19	$0.46	$0.24	$0.09	$0.21	$0.14	$28.37
2030	$13.44	$14.82	$1.71	$0.20	$0.46	$0.24	$0.11	$0.19	$0.15	$31.32
2031	$14.06	$14.93	$1.53	$0.21	$0.46	$0.24	$0.10	$0.21	$0.16	$31.90
2032	$14.71	$13.71	$1.56	$0.20	$0.46	$0.24	$0.10	$0.22	$0	$31.20
2033	$15.40	$13.68	$1.59	$0.21	$0.46	$0.24	$0.12	$0.29	$0	$31.99
2034	$16.13	$13.80	$1.62	$0.22	$0.46	$0.24	$0.11	$0.29	$0	$32.87
2035	$16.90	$13.93	$1.65	$0.23	$0.46	$0.24	$0.13	$0.33	$0	$33.88
2036	$17.71	$14.07	$1.68	$0.25	$0.46	$0.24	$0.13	$0.35	$0	$34.88
2037	$18.56	$14.21	$1.72	$0.29	$0.46	$0.24	$0.12	$0.36	$0	$35.95
2038	$19.45	$16.35	$1.85	$0.30	$0.46	$0.24	$0.14	$0.38	$0	$39.18
2039	$20.40	$16.48	$1.99	$0.34	$0.46	$0.24	$0.14	$0.39	$0	$40.45
2040	$21.40	$16.61	$2.13	$0.36	$0.46	$0.24	$0.14	$0.41	$0	$41.75
2041	$22.45	$18.75	$2.37	$0.38	$0.46	$0.24	$0.14	$0.44	$0	$45.23
2042	$23.57	$16.88	$2.51	$0.37	$0.46	$0.24	$0.15	$0.47	$0	$44.64
2042	$24.74	$15.02	$2.66	$0.38	$0.46	$0.24	$0.16	$0.49	$0	$44.15
2044	$25.98	$14.15	$2.91	$0.41	$0.46	$0.24	$0.14	$0.51	$0	$44.80
2045	$27.29	$13.29	$3.16	$0.39	$0.46	$0.24	$0.15	$0.55	$0	$45.52

7.4.4 Additional Revenue Requirements

As a part of transitioning and aligning the JCPU and the Utility System, specific actions have been proposed as a part of the proposed regionalization arrangement detailed in this Report. Provided is a summary of additional revenue requirement items detailed in the Financial Plan:

Renewal and Replacement Investment – Due to the lack of adequate reinvestment into the existing Utility System. Black & Veatch proposes considering an additional renewal and replacement investment for all utility systems that do not have one. A renewal and replacement investment range is developed per Utility System as a percentage of the current value of the total water and sewer system assets, which is based on the current rate of depreciation (floor) and the need/aptitude to procure and schedule the required investment (ceiling). The renewal and replacement investment are an annual capital investment starting in FY 2025. **Table 22** provides a summary of the level of renewal and replacement investment per Utility System. The JCPU and Clayton outlined a plan to adequately fund renewal and replacement requirements, so the requisite assignment was not completed for JCPU and Clayton.

Table 22 Additional Annual Renewal and Replacement Investment

Description	Johnston County	Clayton	Benson	Princeton	Kenly	Four Oaks	Selma	Smithfield	Pine Level
Utility Systems	0.0%	0.0%	12.0%	8.0%	9.0%	9.0%	18.0%	18.0%	18.0%

Per-and Polyfluoroalkyl Substances (PFAS) - The treatment of PFAS chemical compounds is under heavy regulatory scrutiny related to the protection of the current water supply and the quality of that water. Black & Veatch has developed a database to track and document the level of PFAS chemical compounds in wells throughout North Carolina and the related mitigations necessary to treat these water sources to the appropriate water quality levels.

Table 23 summarizes the estimated capital and operating and maintenance costs and includes them in the Regionalized System financial plan starting in FY 2025. Black & Veatch maintains a PFAS tracking database that simulated the capital and operating requirements associated with mitigating issues around PFAS. The Black & Veatch database was utilized as the source to determine the number utilized in **Table 23.**

Table 23 Annual Water System PFAS Capital and Operating Cost

Utility System	Water System 2025 Capacity (MGD)	Capital Cost (in millions)	Operating Cost (in millions)
JCPU	5.4	$80.00	$4.00
Selma	1.6	$2.50	$0.13
Pine Level	0.3	$0.50	$0.03
Smithfield	8.4	$12.50	$0.63

The PFAS-related cost opinions, as detailed in **Table 23**, are assigned at a high level considering the 2050 water system capacities. The cost opinions are based on Black & Veatch's experience designing and constructing water treatment plant modifications in North Carolina. It should be noted that the cost

opinions outlined herein are not based on a detailed design of any facility. They do not consider the existing facilities, space availability, or the individual goals the JCPU and Utility Systems may adopt in the context of PFAS treatment.

Regional AMI - The JCPU and the Utility System utilize a combination of manual meter readers, automated meter readers (AMR), and automated meter infrastructure (AMI) to provide meter reading and billing services within the respective jurisdictions. JCPU and the Utility Systems should consider a regional meter reading and billing services approach, which would facilitate converting all meter reading services to AMI.

For all systems that utilize manual meter readers and/or AMR, a proposed capital-related conversion cost and operating and maintenance-related conversion cost are estimated in **Table 24**.

Table 24 Automated Meter Infrastructure Conversion Cost

Description	Capital Cost (per Meter)	Operating Cost (Per Meter)
Convert from Manual Reads to AMI	$700.00	
Convert from AMR to AMI		$400.00

The proposed manual reader conversion to AMI is $700.00 per meter in capital cost, scheduled starting in FY 2025 for the Towns of Archer Lodge, Benson, Smithfield, Wilson Mills, and Princeton. In addition, the transition from AMR to AMI requires the installation of the required AMI network to the existing AMR system, which is recognized as an operating and maintenance expense annually over the forecast period in the amount of $400.00 per meter for JCPU and the Town of Kenly. The Black & Veatch AMI team tracks the current cost of AMI related activities and these cost were utilized as the source to complete the analysis detailed herein.

7.4.5 Major Capital Improvement

A summary of the proposed regionalized entity's capital improvements, totaling $2.10 billing, over the forecast period, is shown in **Table 25**.

The capital improvement projects were identified based on future needs and current regulatory mandates. Additional projects may also be required to meet current regulatory regulations and the growth of retail and industrial customer requirements within the respective jurisdictions. The nature and magnitude of these potential projects are not known, but should they be required, additional financing beyond that indicated herein will be required.

Table 25 Capital Improvement Projects (in millions) FY 2025 – FY 2045

Description	Total CIP ($M)
JCPU	$1,064.0
Clayton	$690.2
Smithfield	$103.3
Pine Level	$16.2
Selma	$83.0

Description	Total CIP ($M)
Benson	$68.0
Kenly	$15.5
Princeton	$12.7
Four Oaks	$13.5
Total (Regionalized System)	**$2,066.3**

7.5 Projected Operating Results

The project operating results summarize the total Utility Systems' revenues against the respective revenue requirements. Total revenue requirements, including O&M expenses, debt service obligations, and other expenditures and transfers, are forecasted to increase in excess of the forecasted revenue under existing rates that will be generated from the collective JCPU and the Utility Systems, the proposed regionalized entity, as shown in **Figure 17. Figure 17** compares existing and proposed revenues and revenue requirements over the forecast period.

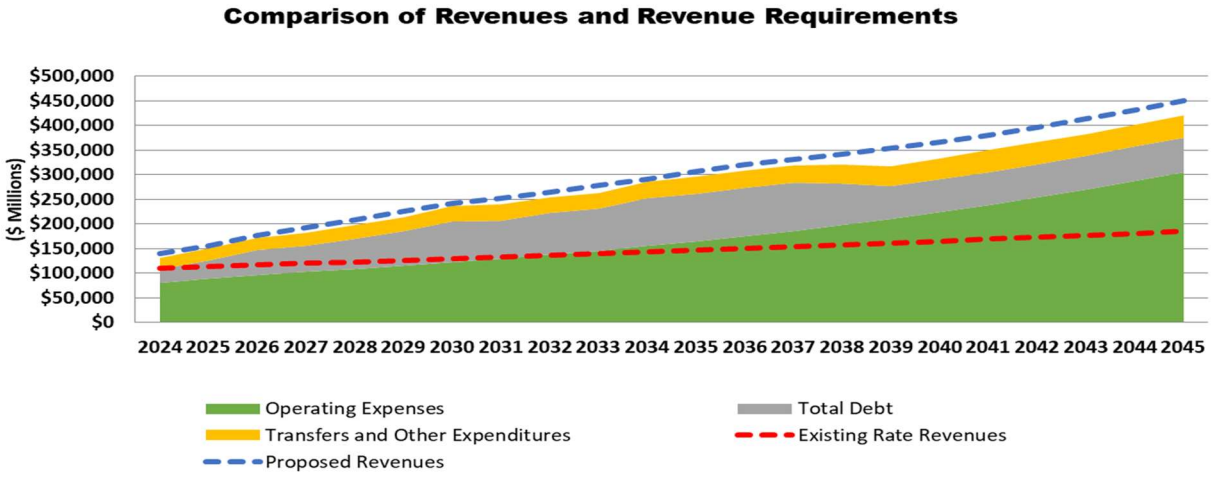

Figure 17 Comparison of Revenues and Revenue Requirements

As detailed in **Figure 17,** the existing revenue estimate is insufficient to meet revenue requirements over the forecast period. Existing revenues are sufficient to meet a portion of operating and maintenance expenses over the forecast period but do not meet the debt service estimate and other expenditures over the forecast period.

Consequently, proposed revenue increases are required over the forecast period to meet the Regionalized Systems' obligations because of the organic operating requirements before the consideration of a regionalization scenario and the additional cost requirements as a result of the regionalization scenario. As previously stated, specific activities and initiatives may be undertaken to realize specific operating synergies and operating cost reduction because of a regionalization scenario that will reduce the cost of operating the regionalized system.

Table 26 summarizes the proposed annual combined systems revenue increases needed for the JCPU and the Utility System. The estimate of the individual revenue increases by jurisdiction provides a perspective on the JCPU's and Utility System's revenue generation needs without a regionalization scenario. Table 26 provides the revenue increases for the Regionalized System and the aggregate of the individual system revenue increases plus the needed/additional revenue increases required because of the regionalization scenario.

Table 26 Proposed Revenue Increases

Year	JCPU	Clayton	Smithfield	Pine Level	Selma	Benson	Kenly	Princeton	Four Oaks	Regionalized System
2025	9.0%	14.0%	6.0%	14.0%	10.0%	9.0%	6.0%	14.0%	12.0%	12.0%
2026	12.0%	13.0%	8.0%	10.0%	9.0%	7.0%	6.0%	10.0%	8.0%	12.0%
2027	8.0%	10.0%	7.0%	7.0%	7.0%	6.0%	5.0%	8.0%	6.0%	8.0%
2028	7.0%	8.0%	5.0%	6.0%	6.0%	6.0%	5.0%	8.0%	5.0%	6.0%
2029	7.0%	7.0%	4.0%	4.0%	5.0%	5.0%	5.0%	6.0%	5.0%	6.0%
2030	5.0%	6.0%	4.0%	4.0%	4.0%	5.0%	4.0%	6.0%	3.0%	5.0%
2031	3.0%	5.0%	2.0%	4.0%	4.0%	4.0%	3.0%	5.0%	2.0%	2.0%
2032	2.0%	3.0%	2.0%	4.0%	4.0%	3.0%	2.0%	5.0%	2.0%	2.0%
2033	2.0%	2.0%	2.0%	3.0%	4.0%	3.0%	4.0%	5.0%	2.0%	2.0%
2034	2.0%	0.0%	2.0%	3.0%	4.0%	3.0%	4.0%	4.0%	2.0%	2.0%
2035	2.0%	0.0%	2.0%	3.0%	3.0%	3.0%	3.0%	4.0%	2.0%	2.0%
2036	2.0%	0.0%	2.0%	3.0%	3.0%	3.0%	3.0%	3.0%	2.0%	2.0%
2037	2.0%	0.0%	2.0%	2.0%	3.0%	3.0%	2.0%	3.0%	6.0%	0.0%
2038	0.0%	0.0%	2.0%	2.0%	3.0%	3.0%	2.0%	3.0%	2.0%	0.0%
2039	0.0%	0.0%	0.0%	2.0%	3.0%	3.0%	2.0%	2.0%	2.0%	0.0%
2040	0.0%	0.0%	0.0%	2.0%	3.0%	3.0%	2.0%	2.0%	2.0%	0.0%
2041	0.0%	0.0%	0.0%	2.0%	3.0%	3.0%	2.0%	2.0%	2.0%	0.0%
2042	0.0%	0.0%	0.0%	2.0%	3.0%	3.0%	2.0%	2.0%	2.0%	0.0%
2042	0.0%	0.0%	0.0%	2.0%	2.0%	3.0%	2.0%	2.0%	0.0%	0.0%
2044	0.0%	0.0%	0.0%	2.0%	2.0%	3.0%	2.0%	2.0%	0.0%	0.0%
2045	0.0%	0.0%	0.0%	2.0%	2.0%	3.0%	2.0%	2.0%	0.0%	0.0%

The proposed revenue increases will support existing JCPU and Utility Systems operations and the estimated transition and integration requirements associated with the regionalization scenario.

The combined water and sewer system financial plan for the Regionalized System details the estimated level of revenues, the revenue requirements, and the revenue increases necessary to support operations and the transition to a Regionalized System.

It is estimated that additional cost-saving economies would be available. However, further investigation and analyses are required to quantify operating and other cost savings available to the Regionalized System.

The financial plan for the Regionalized System is shown in **Table 27**.

Table 27 Regionalized System Financial Plan

Line	Description	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045
	Regionalized System Financial Plan	Projected																				
1	Combined - Existing Rates	$113.82	$116.67	$119.84	$123.09	$126.40	$129.78	$133.24	$136.77	$140.37	$144.05	$147.81	$151.12	$154.51	$157.99	$161.54	$165.18	$168.91	$172.73	$176.63	$ 180.63	$ 184.72
2	**Total Service Revenue - Existing Rates**	**$113.82**	**$116.67**	**$119.84**	**$123.09**	**$126.40**	**$129.78**	**$133.24**	**$136.77**	**$140.37**	**$144.05**	**$147.81**	**$151.12**	**$154.51**	**$157.99**	**$161.54**	**$165.18**	**$168.91**	**$172.73**	**$176.63**	**$ 180.63**	**$ 184.72**
	Additional Revenue Required (Rate increases):																					
3	**Rate Increases**	**12.0%**	**12.0%**	**8.0%**	**6.0%**	**6.0%**	**5.0%**	**2.0%**	**2.0%**	**2.0%**	**2.0%**	**2.0%**	**2.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**
4	**Total Additional Revenue Required**	$ 13.7	$ 29.7	$ 42.5	$ 53.7	$ 66.0	$ 77.6	$ 84.0	$ 90.7	$ 97.7	$ 105.2	$ 113.0	$ 120.9	$ 123.6	$ 126.4	$ 129.2	$ 132.1	$ 135.1	$ 138.2	$ 141.3	$ 144.5	$ 147.8
5	**Other Revenue and Adjustments**	$ 28.99	$ 29.98	$ 30.72	$ 31.55	$ 32.80	$ 34.10	$ 35.63	$ 37.49	$ 39.70	$ 42.23	$ 45.07	$ 48.40	$ 52.31	$ 56.82	$ 62.34	$ 69.01	$ 76.57	$ 85.10	$ 94.74	$ 105.63	$ 117.93
6	**Total Revenues**	**$156.47**	**$176.33**	**$193.08**	**$208.31**	**$225.21**	**$241.53**	**$252.85**	**$264.92**	**$277.79**	**$291.44**	**$305.91**	**$320.41**	**$330.43**	**$341.19**	**$353.11**	**$366.34**	**$380.60**	**$396.00**	**$412.67**	**$ 430.75**	**$ 450.41**
7	Operating Expense	$ 89.66	$ 96.17	$103.25	$108.62	$114.59	$121.70	$129.27	$137.34	$145.93	$155.08	$164.81	$175.19	$186.25	$198.03	$210.58	$223.95	$238.19	$253.37	$269.55	$ 286.79	$ 305.17
8	**Net Revenues after Operations**	**$ 66.82**	**$ 80.17**	**$ 89.84**	**$ 99.69**	**$110.62**	**$119.83**	**$123.57**	**$127.58**	**$131.87**	**$136.36**	**$141.09**	**$145.22**	**$144.18**	**$143.16**	**$142.53**	**$142.39**	**$142.41**	**$142.63**	**$143.12**	**$ 143.96**	**$ 145.24**
9	Outstanding Debt Service	$ 32.77	$ 43.40	$ 41.65	$ 41.55	$ 45.62	$ 45.50	$ 39.83	$ 39.64	$ 39.22	$ 38.51	$ 38.36	$ 37.72	$ 36.53	$ 21.78	$ 1.20	$ 1.20	$ 1.20	$ 1.20	$ 1.20	$ 1.20	$ 1.16
10	Projected Future Debt Service	$ 2.91	$ 6.77	$ 10.47	$ 19.16	$ 24.77	$ 37.84	$ 38.14	$ 45.90	$ 46.25	$ 58.22	$ 58.49	$ 60.02	$ 60.24	$ 61.76	$ 64.26	$ 65.38	$ 65.61	$ 66.73	$ 66.97	$ 68.58	$ 68.82
11	**Total Debt Service**	**$ 35.68**	**$ 50.17**	**$ 52.12**	**$ 60.71**	**$ 70.39**	**$ 83.34**	**$ 77.97**	**$ 85.53**	**$ 85.47**	**$ 96.73**	**$ 96.85**	**$ 97.74**	**$ 96.77**	**$ 83.54**	**$ 65.46**	**$ 66.58**	**$ 66.81**	**$ 67.93**	**$ 68.17**	**$ 69.78**	**$ 69.99**
	Cash Funded CIP from Current Revenues																					
12	**Transfers and Other Expenditures**	$ 25.06	$ 25.46	$ 26.13	$ 28.11	$ 28.37	$ 31.32	$ 31.90	$ 31.20	$ 31.99	$ 32.87	$ 33.88	$ 34.88	$ 35.95	$ 39.18	$ 40.45	$ 41.75	$ 45.23	$ 44.64	$ 44.15	$ 44.80	$ 45.52
	Capital Outlay																					
13	**Annual Operating Balance**	**$ 6.31**	**$ 4.79**	**$ 11.78**	**$ 11.07**	**$ 12.06**	**$ 5.37**	**$ 13.89**	**$ 11.04**	**$ 14.61**	**$ 6.95**	**$ 10.57**	**$ 12.79**	**$ 11.67**	**$ 20.64**	**$ 36.82**	**$ 34.26**	**$ 30.56**	**$ 30.25**	**$ 30.99**	**$ 29.58**	**$ 29.93**
14	**Debt Service Coverage Ratio**	**1.88**	**1.60**	**1.73**	**1.65**	**1.57**	**1.44**	**1.59**	**1.49**	**1.55**	**1.41**	**1.46**	**1.49**	**1.49**	**1.72**	**2.18**	**2.14**	**2.13**	**2.10**	**2.10**	**2.07**	**2.08**
	Funds on Hand:																					
15	**Beginning Fund Balance**	**$ 91.51**	**$ 92.09**	**$ 90.18**	**$ 91.55**	**$ 91.32**	**$ 96.67**	**$ 92.76**	**$ 95.77**	**$ 98.27**	**$103.71**	**$105.46**	**$108.68**	**$115.70**	**$121.41**	**$131.12**	**$160.37**	**$186.76**	**$207.08**	**$228.81**	**$ 252.82**	**$ 276.01**
16	Remaining Operating Balance	$ 6.31	$ 4.79	$ 11.78	$ 11.07	$ 12.06	$ 5.37	$ 13.89	$ 11.04	$ 14.61	$ 6.95	$ 10.57	$ 12.79	$ 11.67	$ 20.64	$ 36.82	$ 34.26	$ 30.56	$ 30.25	$ 30.99	$ 29.58	$ 29.93
17	Capital Expenses Funded From Surplus Fund	$ (5.73)	$ (6.69)	$ (10.41)	$ (11.30)	$ (6.71)	$ (9.29)	$ (10.88)	$ (8.54)	$ (9.17)	$ (5.20)	$ (7.35)	$ (5.77)	$ (5.95)	$ (10.92)	$ (7.57)	$ (7.87)	$ (10.25)	$ (8.53)	$ (6.98)	$ (6.40)	$ (5.87)
18	**Ending Operating Fund Balance**	**$ 92.09**	**$ 90.18**	**$ 91.55**	**$ 91.32**	**$ 96.67**	**$ 92.76**	**$ 95.77**	**$ 98.27**	**$103.71**	**$105.46**	**$108.68**	**$115.70**	**$121.41**	**$131.12**	**$160.37**	**$186.76**	**$207.08**	**$228.81**	**$252.82**	**$ 276.01**	**$ 300.07**

Note:

1. The Financial Plan detailed herein is preliminary and represents the Base Case Financial Plan with no revenue increases.

2. The attached Financial Plan must be verified and validated with the respective Utility System.

The proposed financial plan meets specific financial metrics targets by the end of the forecast period, which include a 1.50 in debt service coverage (1.5 times debt service of net revenues) and a minimum of 120 days in fund balance (unrestricted cash on hand) by the end of the forecast period.

7.6 Rates and Bill Comparison

All Utility Systems' rate structure includes a fixed or minimum charge and a volumetric charge. However, JCPU and the Towns of Clayton, Smithfield, and Princeton have an inclining block volumetric rate, while the others have a uniform volumetric rate.

A bulleted summary description of the rate structure components is provided in **Table 28**.

- Fixed Charge:
  - Availability Charge – a charge assessed per customer and/or by meter size for making water and/or sewer service available to a customer.
- Volumetric Rate:
  - Uniform Rate – one volumetric rate paid by the customer for all water and sewer usage regardless of the quantity of the service used.
  - Increasing Block Rate – an increasing volumetric rate paid per customer as that customer's water and/or sewer usage increases through the established water and sewer usage block.
  - Declining Block Rate - a decreasing volumetric rate paid per customer as that customer's water and/or sewer usage increases through the established water and sewer usage block.

Table 28Table 28 Utility Systems' Rate Structure

Description	JCPU	Clayton	Smithfield	Pine Level	Selma	Benson	Kenly	Princeton	Four Oaks
Fixed Charge:									
Availability	■	■	■	■	■	■	■	■	■
Volumetric:									
Uniform				■	■	■	■		■
Increasing Block	■	■	■					■	
Declining Block									

Using different rate structure designs for a Regionalized System can create inequities. Consideration should be given to establishing a rate structure implementation plan that shifts the rate structure of the JCPU and the Utility Systems to one unified rate structure over time. This approach will provide uniformity related to the contribution of revenues by the respective jurisdictions and how the JCPU and the Utility Systems incur and recover the cost.

Black & Veatch developed a comparison of inside city residential water and sewer utility bills for the JCPU and the Utility Systems. As detailed in **Figure 18** and **Figure 19**, the average water and sewer bill is assessed at 5,984 gallons (8 hundred cubic feet) of consumption. It produces an average water and sewer bill for the JCPU and the Utility System of $126.05.

RATE COMPARISON WITH NEIGHBORING UTILITIES
COMBINED RESIDENTIAL WATER AND SEWER BILLS

Volume		Johnston County	Clayton	Smithfield	Selma	Pine Level	Benson	Four Oaks	Kenly	Princeton	Average
Cubic Ft	Gallons	Inside	Inside	Inside	Inside	Inside	Inside	Inside	Inside	Inside	
0	0	$ 55.00	$ 55.26	$ 25.08	$ 35.35	$ 39.47	$ 30.00	$ 57.08	$ 13.50	$ 47.88	$ 39.85
100	748	$ 64.16	$ 67.21	$ 35.46	$ 50.89	$ 47.84	$ 39.05	$ 57.08	$ 25.17	$ 59.47	$ 49.59
200	1,496	$ 73.33	$ 79.15	$ 45.84	$ 66.44	$ 56.21	$ 48.10	$ 57.08	$ 36.84	$ 71.05	$ 59.34
300	2,244	$ 82.49	$ 91.16	$ 56.23	$ 81.98	$ 64.58	$ 57.15	$ 57.71	$ 48.51	$ 83.46	$ 69.25
400	2,992	$ 91.65	$ 103.30	$ 66.61	$ 97.52	$ 72.95	$ 66.20	$ 68.39	$ 60.18	$ 97.58	$ 80.49
500	3,740	$ 100.82	$ 115.44	$ 76.99	$ 113.07	$ 81.32	$ 75.25	$ 79.07	$ 71.84	$ 111.69	$ 91.72
600	4,488	$ 109.98	$ 127.70	$ 87.88	$ 128.61	$ 89.69	$ 84.30	$ 89.75	$ 83.51	$ 125.81	$ 103.03
700	5,236	$ 119.39	$ 140.03	$ 99.03	$ 144.15	$ 98.06	$ 93.36	$ 100.43	$ 95.18	$ 140.42	$ 114.45
800	5,984	$ 129.34	$ 152.36	$ 110.18	$ 159.70	$ 106.43	$ 102.41	$ 111.12	$ 106.85	$ 156.10	$ 126.05
900	6,732	$ 139.29	$ 165.05	$ 121.33	$ 175.24	$ 114.80	$ 111.46	$ 121.80	$ 118.52	$ 171.79	$ 137.70
1,000	7,480	$ 149.24	$ 177.75	$ 132.49	$ 190.78	$ 123.17	$ 120.51	$ 132.48	$ 130.19	$ 187.48	$ 149.34
1,100	8,228	$ 159.18	$ 190.45	$ 143.64	$ 206.33	$ 131.54	$ 129.56	$ 143.16	$ 141.86	$ 204.70	$ 161.16
1,200	8,976	$ 169.13	$ 203.15	$ 154.79	$ 221.87	$ 139.91	$ 138.61	$ 153.84	$ 153.53	$ 221.96	$ 172.98
1,300	9,724	$ 179.08	$ 215.85	$ 165.94	$ 237.41	$ 148.28	$ 147.66	$ 164.52	$ 165.19	$ 239.22	$ 184.80
1,400	10,472	$ 189.55	$ 228.55	$ 177.53	$ 252.96	$ 156.65	$ 156.71	$ 175.20	$ 176.86	$ 256.49	$ 196.72
1,500	11,220	$ 200.32	$ 241.26	$ 189.36	$ 268.50	$ 165.02	$ 165.76	$ 185.89	$ 188.53	$ 273.75	$ 208.71

Figure 18 **Water and Sewer Rate Bill Comparison**

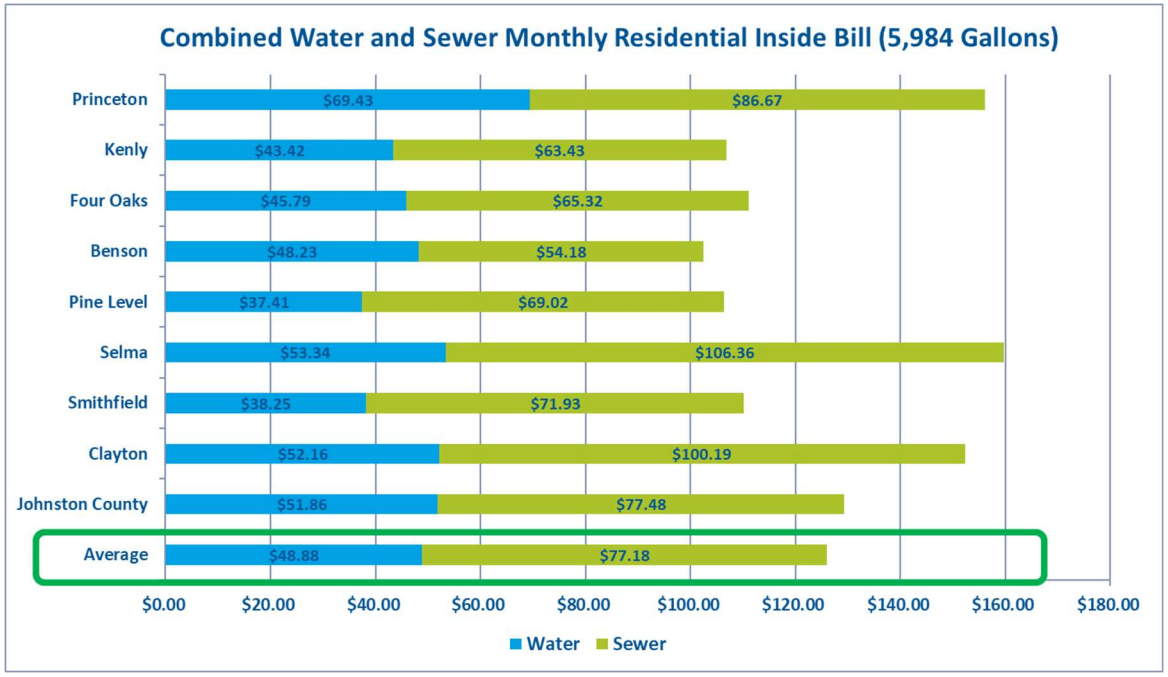

Figure 19 **Inside City Combined Water and Sewer Residential Bill**

As illustrated in **Figure 18** and **Figure 19**, the Utility System with the highest residential bill is the Town of Selma, followed by the Towns of Princeton and Clayton. The Utility System with the lowest residential bill is the Town of Benson, followed by the Towns of Pine Level and Kenly.

8.0 Proposed Regionalization Scenario

As detailed in **Figure 20** of the Report, the four typical forms of regionalization maintain specific risks and benefits for a regionalized entity. Currently, water and sewer services within the County are established by a combination of interlocal and other service agreements constituting the nature and magnitude of the service provided. This form of coordination between jurisdictions is also recognized as the Inter-Governmental Cooperation Form of Regionalization.

Figure 20 outlines the progression of risk through the typical forms of regionalization with a directional summary of the comparative risk and benefit associated with each regionalization alternative. The risk profile is greater, and the sharing of benefits is less for the Inter-Governmental Cooperation form of regionalization as compared to a Merged Utility Entity because the nature of the service and benefits to be gained by the respective Utility Systems are limited to the agreed-upon contractual terms. In addition, the optimization of resources to target specific operational, financial, and other benefits is limited to the contractual terms of the arrangement.

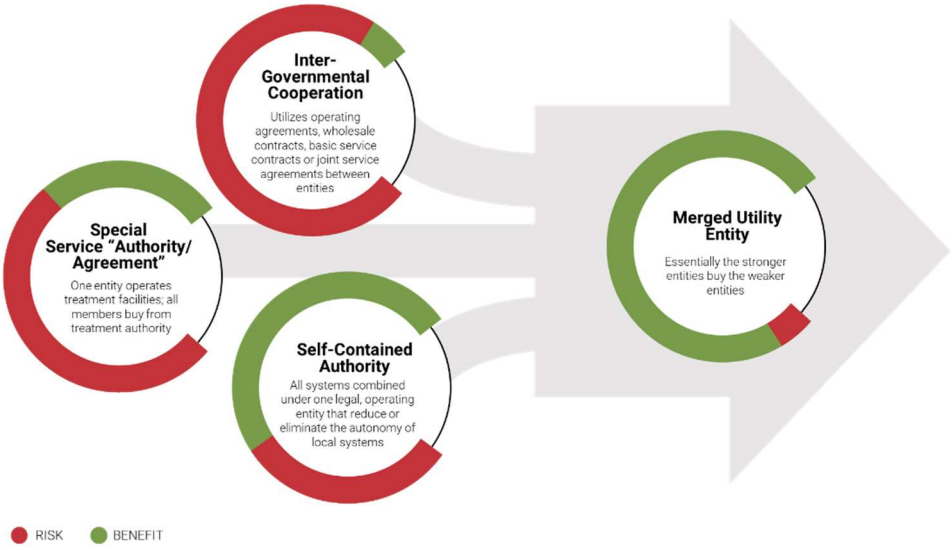

Figure 20 Progression of Risk through the Typical Forms of Regionalization

Based on the existing contractual arrangements and the growing demand for water and sewer services within the County, there is an implicit need for the JCPU and the Utility Systems to explore a deeper form of regionalization as compared to the current form of Inter-Governmental Cooperation that constitutes existing service. As detailed in Figure 1, the risk profile for JCPU and the Utility System is less under the current form of regionalization than the other regionalization alternatives, with the Merged Utility Entity form of regionalization maintaining the lowest risk. For the analysis conducted herein, risk is defined as:

"Any adverse or unfavorable conditions that may alter the ability for JCPU and the Utility System to maintain the level of water and/or sewer services provided to existing customers and adequately meet annual operating requirements."

The water and sewer systems maintain specific, separate, competing, and converging considerations. **Table 29** outlines specific considerations driving the nature of the proposed form of regionalization.

The JCPU and the Utility Systems should consider a Self-Contained Authority form of regionalization. The ability of the Self-Contained Authority to optimize potential cost savings, establish operating synergies, and outline systematic solutions to system capacity and financial planning will provide great value to all water and sewer customers and residents within the County.

Table 29 summarizes separate and combined water and sewer system considerations that must be understood as a part of establishing a Self-Contained Authority.

Table 29 Regionalization Considerations

Line	Water System	Sewer System
1	Sharing of Risk	
2	Systematic Solution to Capacity	
3	Availability of Staffing Resources	
4	Significant Use Customer Demand	
5	Shared Maintenance Services	
6	Intra-Generational Rates (uniformity)	
7	Designation of Service Area	
8	Infrastructure Integrity	
9	Diversity in Water Treatment Resources	
10		Build out of Sewer System Conveyance
11		Inflow and Infiltration
12		Septic to Sewer Transition
13	Source of Supply Permitting	
14		Flow Discharge Permitting
15	Location of All Service Meters	

The water and sewer systems within the County have different and specific requirements that must be understood and managed accordingly. Black & Veatch proposes an organizational structure of the Self-Contained Authority that recognizes and prioritizes the requirements of each system.

The water and sewer systems within the County maintain critical and separate issues that must be recognized and facilitated accordingly.

Figure 21 presents the proposed organizational structure of the Self-Contained Authority.

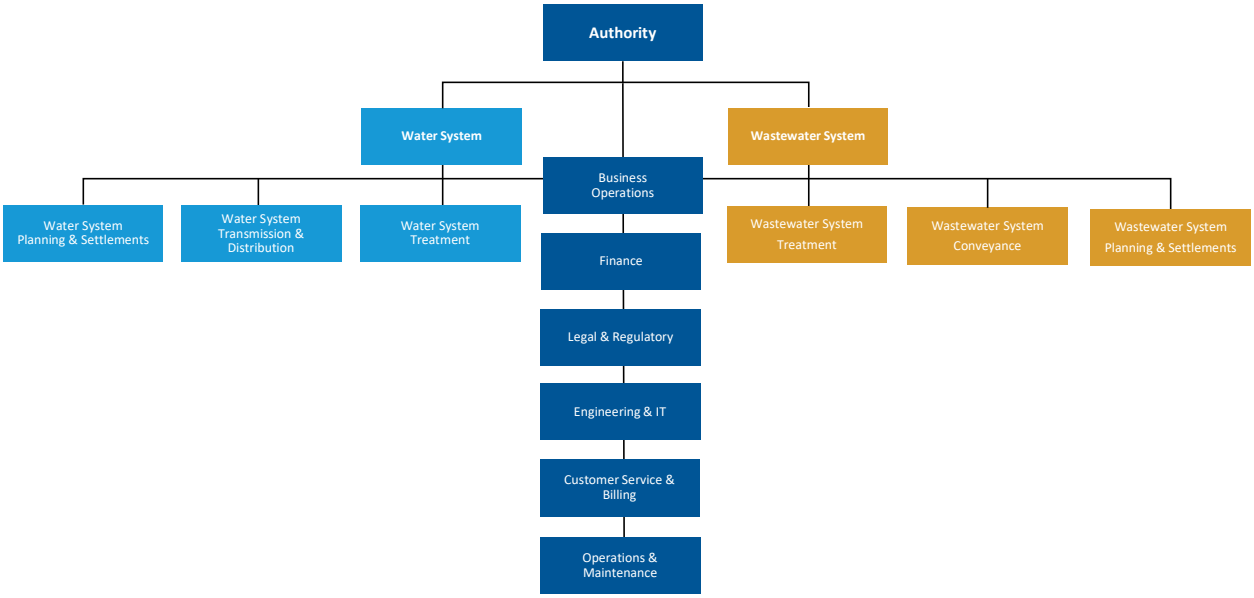

Figure 21 Proposed Organizational Structure of the Self-Contained Authority

Note:
The proposed organization structure was formulated to recognize and elevate the separate and relevant issues driving the current operations and planning of the water and sewer system.

Figure 21 depicts an organization with three business units, where the water and sewer systems operate as two separate business units within the Self-Contained Authority, which are supported by the business operations business unit. Listed below are the descriptions of each business unit:

Water System – to operate as a business unit focused on planning, operating, and monitoring the business functions related to water treatment, water transmission and distribution, and specific long-term planning and settlement activities of the water system. As a part of the Self-Contained Authority, the operating agreements that constitute the nature of service will include specific service, operations, financial, and regulatory requirements, to name a few, which must be monitored and settled periodically to ratify the services provided to JCPU and the Utility Systems which will be assumed by the planning and settlements group;

Sewer System – to operate as a business unit focused on planning, operating, and monitoring the business functions related to sewer treatment, sanitary sewer conveyance, and specific long-term planning and settlements of the sewer system. As a part of the Self-Contained Authority, the operating agreements that constitute the nature of service will include specific service, operations, financial, and regulatory requirements, to name a few, which must be monitored and settled periodically to ratify the services provided to JCPU and the Utility Systems which will be assumed by the planning and settlements group within each business unit;

Business Operations – to provide shared business services to the water and sewer systems. The business operations group will operate as the engine of the Self-Contained Authority to structure each system's business requirements, facilitate each system's planning needs, and support each system's operating requirements. Through the business operations group, the Self-Contained Authority will procure external services and resources as one entity and facilitate the transition of knowledge and the uniformity of operating procedures and practices.

Under the proposed organizational structure, the individual needs of the water and sewer systems will be prioritized and driven by the operating charter of each business unit. In addition, each business unit will be supported by the resources, knowledge base, and trained business operations staff.

For the reasons detailed in the previous section of this Report, the JCPU and all the Utility Systems may consider the formation of a Self-Contained Authority to manage and operate the existing water and sewer assets and services provided within Johnston County. The manner under which the Self-Contained Authority may operate can take varying forms. However, the proposed organizational structure provides great flexibility and agility to support the separate and complex issues faced by the water and sewer systems.

As a note, upon the formation of the Self-Contained Authority, the complete pooling of resources and transfer of assets to the new entity may be considered. These actions are not required to form, operate, and manage the water and sewer services to be provided by the Self-Contained Authority.

In 2019, the University of North Carolina at Chapel Hill Environmental Finance Center (EFC) published Crafting Interlocal Water and Wastewater Agreements, which outlines specific topics and items that must be considered as a part of any Interlocal Agreement or other agreement to commission water and sewer services. While all the topics and items detailed in the EFC publication apply to water and sewer systems, some items may have varying impacts, which must be understood and prioritized in assessing regionalization arrangements.

Table 30 outlines the EFC publication's topics and items for consideration.

Table 30 Crafting Interlocal Water and Wastewater Agreements – Topics and Items

Line	Topics and Items for Consideration
A	Ambiguities Related to Current and Future Service Areas
B	Annexation and Growth
C	Precisely Defined Key Usage Thresholds and Limits
D	Meter Maintenance and Ownership Responsibilities
E	Water Quality Concerns
F	Transferability of Wastewater Pretreatment Requirements and Industrial Discharge Permits
G	Compliance of Wastewater Agreements with State and Local Ordinances and Regulations
H	Water Pressure
I	Adequate Payment for Use of Capital
J	Changes to Capital Costs Associated with Expanding Capacity Needs
K	Calculation and Modification of Commodity Charges
L	Consideration of Impact of Retail Increases on Wholesale Rates
M	Reselling Water and Capacity
N	Communicating and Handling Supply Interruptions or Shortages
O	Transferability of Conservation Status, Measures, and Emergency Reduction

Line	Topics and Items for Consideration
P	Non-Revenue Water
Q	Excessive Inflow and Infiltration
R	Variations Due to Emergencies
S	Ground Rules for Negotiating: Financial Mediation
T	Addressing Failure to Pay for Wastewater System
U	Look Ahead – Leaving Open the Potential for Consolidation

As a part of commissioning any regionalization arrangement, specific topics/items detailed in **Table 30** should be analyzed and prioritized to determine the nature, conditions, and opportunities associated with the services to be provided by the Self-Contained Authority. The consideration of the form of governance is not limited to the items listed in **Table 30** because the County and Utility Systems maintain specific and unique operating characteristics that must be understood.

8.1 Governance Considerations

To transition to a Self-Contained Authority form of governance, specific actions, and due diligence must be completed and understood to determine the impact on the Self-Contained Authority. The following section provides a bulleted summary of specific considerations that must be understood prior to forming a Self-Contained Authority.

The bulleted list provided is not complete, but it provides a perspective of the nature of the research and activities that must be completed:

- Establishment of a Regionalization Committee – This committee will guide the Regionalization due diligence and formation process and report directly to the Owner and the Participating Utility Systems.
- Outline the Legislative and Other Steps necessary to form a Self-Contained Authority.
    - Development of Self-Contained Authority Resolution
    - Name of Self-Contained Authority
    - Outline the Participating Utility Systems
    - Self-Contained Authority Purpose
    - Powers of the Self-Contained Authority
    - Board Function and Members
    - Participating Utility Systems' Roles & Responsibility
    - Hierarchy of Self-Contained Authority
    - Formation of the Self-Contained Authority – The pooling of resources, assets, and services as agreed upon by the JCPU and the Utility Systems. Along with outlining the legislative and legal steps necessary to form the Self-Contained Authority.
    - Outline the Planning Requirements associated with forming and operating the Self-Contained Authority.

- Outline the technical, operating, maintenance, regulatory, and financial requirements of the Self-Contained Authority.
- Procurement of funding, services, and resources associated with the Self-Contained Authority.
- Reporting Requirements of the Self-Contained Authority.

- Complete the Deep Dive Evaluation associated with the Infrastructure, Organization, Financial, and Stakeholder requirements of the systems owned, operated, and maintained by the JCPU and the Utility Systems. Provided is a list of Focus Areas that must be reviewed as a part of the Deep Dive Evaluations (the reviews to be conducted are not limited to the list provided):

  Infrastructure:

  - Adequacy of Water Treatment Capacity in the County over the next 25 years
    - Establish a parcel-based planning effort
    - Determine the feasibility and requisite cost of future water sources
    - Determine the necessary water quality mitigations related to emerging contaminants, disinfection by-products, PFAS, and the Lead and Copper Rule, to name a few
  - Adequacy of Sewer Collection, Treatment, and Discharge Capacity in the County over the next 25 years
    - Estimated/outstanding discharge capacity and location in the Neuse River
    - Development of a County I&I Reduction Plan
  - Identify and map the existing water and sewer system interconnections maintained within the County

  Organization:

  - Asses the operating and legislative requirements associated with integrating the existing people, processes, and technology maintained by JCPU and the Utility Systems into one Self-Contained Authority

  Financial:

  - Maintain and codify a financial planning roadmap to guide the financial aspects associated with establishing and operating a Self-Contained Authority
  - Update and commission existing Interlocal Agreements utilized to ratify existing water and sewer services provided within the County. In addition, the updated Interlocal Agreements must be transferable to the Self-Contained Authority because the Interlocal Agreement may be commissioned prior to the finalization of the Self-Contained Authority:
    - Nature of Services
    - Roles & Responsibilities
    - Term of Service
    - Measurement of Service

- Operating Procedures
- Management and Maintenance of Services
- Financial Responsibility
  - Cost Basis
    - Capital Related Cost
      - Procedure to assess Capital Requirements
      - One-time Capacity Reservation Charges
      - Annual Capital Cost
      - Incremental Capital Expansion Cost
    - Operating Cost
      - Procedures, Basis, and Allocation of Service Responsibility
      - Annual Designation of Cost Responsibility
      - Annual Reporting Requirements
- Dispute Resolution

- Develop a Customer and Stakeholder Communication Plan
- Develop a Milestone Schedule to commission the formation of the Self-Contained Authority

8.2 Organizational Considerations

To integrate the JCPU and the Utility Systems into a self-contained authority form of governance, specific actions and due diligence must be completed and understood to align the organizations appropriately and optimize specific synergies and benefits within the newly formed entity. The following section provides a bulleted summary of specific considerations that must be understood prior to forming a Self-Contained Authority.

The bulleted list provided is not complete, but it provides a perspective of the nature of the research and activities that must be completed:

- Regional Water and Sewer System Master Plan – to determine the ability of the collective system to meet the collective water and sewer demand over the next 25 years.
- Staffing assessment will determine the skill sets, certifications, and total number of existing JCPU and Utility System staff that will be integrated into the Self-Contained Authority.
- Complete a technology integration assessment of the systems utilized by the JCPU and the Utility Systems.
- Established a structured operational planning and reporting process to assess and determine water and sewer system capacity requirements for the JCPU and the Utility Systems, which should be incorporated into the annual budgeting process of the respective jurisdictions.

- Develop a maintenance services plan to establish uniformity across all maintenance services to reduce the cost of maintenance for the JCPU and the Utility Systems.
- Complete an Inflow and Infiltration reduction assessment and develop a plan to rectify and maintain the integrity of the sewer conveyance systems for the JCPU and the Utility Systems.

8.3 Financial Considerations

As a part of integrating the JCPU and the Utility Systems into a self-contained authority, understanding the financial capacity and the annual revenue requirements (cost) of the self-contained authority is critical to determining the magnitude of cost savings and synergies. In addition, detailing the financial capacity of the JCPU and the Utility Systems will support the plan to structure and outline the impact on existing water and sewer bills over the planning period for customers served by the JCPU and the Utility Systems. The following section provides a bulleted summary of specific considerations that must be understood prior to forming a Self-Contained Authority.

The bulleted list provided is not complete, but it provides a perspective of the nature of the research and activities that must be completed:

- Complete a comprehensive Financial Plan, Cost of Service, and Rate Design Study to understand the revenue capacity, annual cost requirements, and the nature by which customers served by the JCPU and the Utility Systems incur costs and develop a water and sewer system rate consolidation plan.
- Develop an alternative funding plan to target specific sources of funds that may be available to the Self-Contained Authority.
- Establish a plan to integrate the water and sewer rates of the JCPU and the Utility Systems into one system-wide (regional) rate structure for the water and sewer systems, respectively.

9.0 Regionalization Roadmap

The following section of the report outlines a high-level schedule and roadmap to create and transition into a Self-Contained Authority.

9.1 Proposed Roadmap to Forming the Self-Contained Authority

Black & Veatch proposes a 36-month schedule to form and implement the Self-Contained Authority. The proposed roadmap provides a strategic and structural implementation framework to perform deeper due diligence around ratifying a Self-Contained Authority. Specific due diligence activities are required across the organization, infrastructure, and financial functions of JCPU and the Utility Systems. In addition, specific legal and regulatory due diligence not contained in the analysis performed herein, to name a few, must be conducted to understand the legal and regulatory requirements and exposure of the JCPU and the Utility Systems.

summary of the 36-month schedule:

Year 1 (months 1 – 12) – Organization Development;

Year 2 (months 13 – 24) – Organizational Alignment; and

Year 3 (months 25 – 36) – Implementation.

Figure 22 outlines the roadmap to form the Self-Contained Authority.

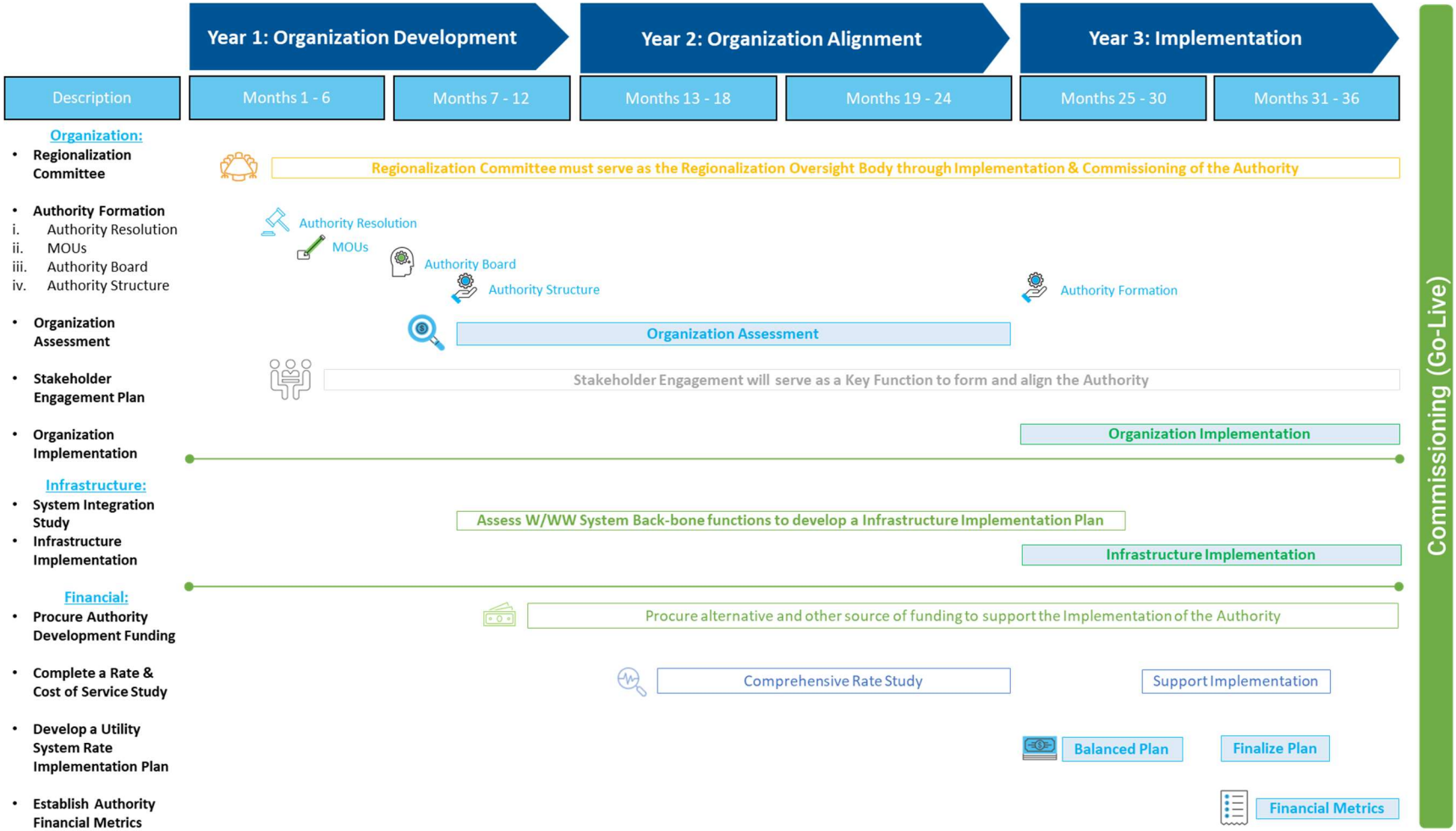

Figure 22 Roadmap to Form the Self-Contained Authority

The following section summarizes the activities necessary to form the Self-Contained Authority.

9.2 The Organization Development Phase (Months 1 – 12)

The Organizational Development Phase entails establishing the governance structure required to appropriately monitor and implement the activities and requirements of forming a Self-Contained Authority. The regionalization process will be led by a regionalization committee overseeing all activities associated with forming and commissioning the Self-Contained Authority. The regionalization committee will report directly to the Owner when established and/or any other oversight authority as determined by the Owner and the Utility Systems. The formation of the regionalization committee is a critical first step in initiating the formation of a self-contained authority. Upon the commissioning of the Self-Contained Authority, then the activities and charter of the regionalization committee will end.

The activities that will be started and completed in the Organization Development Phase of the Roadmap are listed below.

Organization Development Phase Activities:

- Establish a Regionalization Committee
- Develop a Regionalization Resolution by JCPU and the Utility Systems
- Establish Memorandums of Understanding (MOUs) to ratify the needs and requirements of the regionalization process along with the formation of a Self-Contained Authority
- Form the Self-Contained Authority Board
- Develop the Self-Contained Authority Organization Structure
- Initiate Organization Assessments
    - Business Integration Assessment
    - Legal and Regulatory Due Diligence
- Initiate Stakeholder Engagement
    - Develop a Stakeholder Engagement Plan
    - Consult with the respective stakeholders
        - Existing Customers
        - North Carolina General Assembly
        - North Carolina Department of Environmental Quality
        - North Carolina Environmental Management Commission
        - North Carolina Treasurer's Office of Local Government Commission
        - North Carolina Utilities Commission

        [The list provided herein is not complete, but it outlines initial stakeholders that must be contacted and briefed on the JCPU's and Utility Systems' plans to establish a Self-Contained Authority]
- Initiate Infrastructure Assessments

  - Water and Sewer System Treatment Capacity Study
  - Water and Sewer System Asset Condition Assessment
  - Long-Term Regional Water Supply Plan
  - Inflow and Infiltration Study
  - Asset Integration Study
- Initiate the Procurement of Financing for the Self-Contained Authority.
  - Development of an alternative financing matrix with focused funding categories
    - Utility Authority Formation
    - Asset Integrity and Optimization
    - Emerging Contaminants
    - Utility Operations Efficiencies

9.3 The Organization Alignment Phase (Months 13 – 24)

The Organization Alignment Phase will process the results of the organization assessment and infrastructure assessments along with the stakeholder feedback and the understood financial capacity of the Self-Contained Authority to align the objectives and requirements of the Self-Contained Authority.

Listed below are the activities that will be undertaken as a part of the Organization Alignment Phase of the Roadmap.

Organization Alignment Phase Activities:

- Continue the Organizational Assessments
- Continue to engage stakeholders
- Continue the Infrastructure Assessments
- Continue to procure Financing for the Self-Contained Authority
- Initiate and complete a comprehensive Water and Sewer Rate Study
  - Determine the revenue contribution of the JCPU and the Utility Systems
  - Understand the annual cost requirements for the Self-Contained Authority
  - Develop a Financial Plan to finance all the requirements of the Self-Contained Authority
  - Determine a roadmap to achieve water and sewer system rate uniformity for the Self-Contained Authority

9.4 The Implementation Phase (Months 25 – 36)

The Implementation Phase entails commissioning specific activities related to all the business, operational, infrastructure, and other functional areas necessary to implement the organization structure of the Self-Contained Authority.

Listed below are the activities necessary for the Implementation Phase of the Roadmap.

Implementation Phase Activities:

- Self-Contained Authority Formation
- Continue to engage stakeholders
- Implementation of Organization Requirements
- Complete Infrastructure Assessments
- Initiate the implementation of Infrastructure Requirements
- Implementation of a Water and Sewer Rate Consolidation Plan
- Develop and implement Financial and Operating Metrics for the Self-Contained Authority

The activities to be completed in performing the necessary due diligence around forming a Self-Contained Authority are not limited to the activities outlined herein. The list of activities outlined herein is to be utilized as a guide to assessing the feasibility of forming a Self-Contained Authority.

10.0 Findings

Provided herein is a bulleted summary of the findings associated with the Regionalization Feasibility Analysis:

- Black & Veatch proposes that the JCPU and the Utility System must complete further due diligence and the related activities to form a Self-Contained Authority. Given the nature and manner by which water and sewer service is provided to customers in the County, the Self-Contained Authority can provide consistency, can provide a smooth transitions from existing operations, and facilitate the operations of existing Enterprise Funds and business units within the JCPU and the Utility Systems.

- The existing form of governance that ratifies services between the JCPU and the Utility Systems is embedded in a limited form Inter-Governmental Cooperation which is based on Interlocal/Service Agreements. As such, transferring and updating these Interlocal/Service Agreements to capture the characteristics of the current operating landscape is a critical task that must be completed by the JCPU and the Utility Systems especially with the addition of critical water and sewer infrastructure. Finally, with updating the Interlocal/Service Agreement, the transferability of these contract mechanism to the Self-Contained Authority must be considered.

- The JCPU and the Utility Systems should undertake the activities detailed in the Report to form the Self-Contained Authority as a regional planning, operations, and implementation effort. The benefits to the region are evident, but deep coordination and collaboration is necessary to successfully establish a Self-Contained Authority.

- During the Initial Interview conducted by Black & Veatch, the JCPU and the Utility System highlighted competitive landscape around hiring new team members and constantly operating at a staffing resource deficit. In addition, it is anticipated that a significant portion of the current workforce will retire very soon and significant knowledge capture activities must be conducted to preserve and maintain the knowledge and procedure utilized to operate water and sewer systems in the County.

- The JCPU and the Utility Systems utilize a varying range of information technology tools and resources to provide water and sewer service. To integrate these tools as a part of a Self-Contained Authority, deep due diligence must be completed around the integration and compatibility of these tools and resources to facilitate the transition to a Self-Contained Authority.

- Maintenance services are not always planned and are procured based on the criticality of the event at the time of occurrence, so the cost to procure and complete these services retain specific considerations that may not be favorable to the Utility Systems. As such, a focus must be placed on targeting preventive maintenance activity and elevating the importance of planning, scheduling, and performing timely maintenance services through the Self-Contained Authority to minimize the current cost exposure associated with providing maintenance services.

- Given the importance of appropriately tracking, reconciling, and settling customer usage and demand information, Black & Veatch proposes a regional AMI approach that allows the JCPU to

track all bill determinant information, appropriately and timely asses customer demand as the next increment of water and sewer capacity is requirement, detect and isolate infrastructure integrity issues in the system which will support the maintenance functions, and provide timely utility billing and other billing determinant information to existing customers. The current metering and billing functions of water and sewer service support critical aspects of providing water and sewer service and this function must be elevated to provide the understood value to existing customers.

- Based on the analysis completed herein, specific system integrity and operating cost exposure reside with I&I issues. As such, Black & Veatch proposes the implementation of a I&I reduction program to understand the nature of system integrity issues with existing sewer conveyance systems and reduce the operating cost exposure faced by the JCPU and the Utility System.

- Black & Veatch proposes the completion of a detailed Water and Sewer Cost of Service and Rate Design Study to understand the manner by which cost is incurred by specific customer groups across the JCPU and the Utility Systems in order to implement a financial plan to meet annual requirements and achieve rate uniformity over time with the implementation of the Self-Contained Authority

- The proposed organization structure recognizes the separate and important challenges of providing water and sewer service on an individual basis which is critical given the nature of the respective service in the County. In addition, the operations functions associated with providing water and sewer service is the critical and important business function that will drive the management of risk and realization of savings within the region, so the proposed organization structure elevates this function in providing water and sewer service in the region.

- The proposed Regionalization Roadmap outlines a three year plan that must be undertaken to ratify the formation of a Self-Contained Authority.

11.0 Appendix

11.1 Johnston County

Johnston County - Financial Assumptions & Metrics

Line	General Assumptions	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045
1	Customer Growth	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
2	Other Revenues Escalation Factor	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
3	System Wide - O&M Escalation Factor	6.50%	6.50%	6.50%	6.50%	6.50%	6.50%	6.50%	6.50%	6.50%	6.50%	6.50%	6.50%	6.50%	6.50%	6.50%	6.50%	6.50%	6.50%	6.50%	6.50%	6.50%
	Financing Terms																					
	Revenue Bonds																					
4	Term	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
5	Rate	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%
	SRF																					
6	Term	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
7	Rate	3.14%	3.14%	3.14%	3.14%	3.14%	3.14%	3.14%	3.14%	3.14%	3.14%	3.14%	3.14%	3.14%	3.14%	3.14%	3.14%	3.14%	3.14%	3.14%	3.14%	3.14%
8	Debt Service Coverage Target	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50
9	Funds on Hand Target (days)	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120

Johnston County - Financial Plan (in millions)

		Projected																				
Line	Description	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045
1	Water Fund - Existing Rates	$ 20.09	$ 20.59	$ 21.11	$ 21.63	$ 22.18	$ 22.73	$ 23.30	$ 23.88	$ 24.48	$ 25.09	$ 25.72	$ 26.36	$ 27.02	$ 27.69	$ 28.39	$ 29.10	$ 29.82	$ 30.57	$ 31.33	$ 32.12	$ 32.92
2	Wastewater Fund - Existing Rates	$ 15.09	$ 15.46	$ 15.85	$ 16.25	$ 16.65	$ 17.07	$ 17.50	$ 17.93	$ 18.38	$ 18.84	$ 19.31	$ 19.80	$ 20.29	$ 20.80	$ 21.32	$ 21.85	$ 22.40	$ 22.96	$ 23.53	$ 24.12	$ 24.72
3	Water Distructs Fund - Existing Rates	$ 24.02	$ 24.62	$ 25.23	$ 25.86	$ 26.51	$ 27.17	$ 27.85	$ 28.55	$ 29.26	$ 29.99	$ 30.74	$ 31.51	$ 32.30	$ 33.11	$ 33.93	$ 34.78	$ 35.65	$ 36.54	$ 37.46	$ 38.39	$ 39.35
4	**Total Service Revenue - Existing Rates**	**$ 59.19**	**$ 60.67**	**$ 62.19**	**$ 63.74**	**$ 65.34**	**$ 66.97**	**$ 68.65**	**$ 70.36**	**$ 72.12**	**$ 73.92**	**$ 75.77**	**$ 77.67**	**$ 79.61**	**$ 81.60**	**$ 83.64**	**$ 85.73**	**$ 87.87**	**$ 90.07**	**$ 92.32**	**$ 94.63**	**$ 97.00**
	Additional Revenue Required (Rate increases):																					
5	**Rate Increases**	9.0%	12.0%	8.0%	7.0%	7.0%	5.0%	3.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
6	**Total Additional Revenue Required**	$ 8.9	$ 15.0	$ 21.5	$ 28.1	$ 35.4	$ 41.4	$ 45.8	$ 49.3	$ 53.0	$ 56.9	$ 61.0	$ 65.3	$ 69.8	$ 71.6	$ 73.4	$ 75.2	$ 77.1	$ 79.0	$ 81.0	$ 83.0	$ 85.1
7	**Other Revenue and Adjustments**	$ 22.90	$ 23.79	$ 24.45	$ 25.20	$ 26.34	$ 27.51	$ 28.91	$ 30.64	$ 32.70	$ 35.05	$ 37.71	$ 40.85	$ 44.58	$ 48.89	$ 54.19	$ 60.61	$ 67.91	$ 76.19	$ 85.57	$ 96.20	$ 108.22
8	**Total Revenues**	**$ 90.97**	**$ 99.43**	**$ 108.18**	**$ 117.03**	**$ 127.05**	**$ 135.90**	**$ 143.34**	**$ 150.28**	**$ 157.79**	**$ 165.83**	**$ 174.43**	**$ 183.80**	**$ 194.03**	**$ 202.08**	**$ 211.21**	**$ 221.56**	**$ 232.88**	**$ 245.28**	**$ 258.89**	**$ 273.85**	**$ 290.31**
9	Operating Expense	$ 47.23	$ 51.98	$ 56.55	$ 60.22	$ 64.14	$ 68.31	$ 72.75	$ 77.48	$ 82.51	$ 87.88	$ 93.59	$ 99.67	$ 106.15	$ 113.05	$ 120.40	$ 128.22	$ 136.56	$ 145.43	$ 154.89	$ 164.96	$ 175.68
10	**Net Revenues after Operations**	**$ 43.73**	**$ 47.44**	**$ 51.63**	**$ 56.80**	**$ 62.91**	**$ 67.59**	**$ 70.59**	**$ 72.80**	**$ 75.27**	**$ 77.95**	**$ 80.84**	**$ 84.13**	**$ 87.88**	**$ 89.03**	**$ 90.81**	**$ 93.33**	**$ 96.32**	**$ 99.85**	**$ 104.00**	**$ 108.89**	**$ 114.63**
11	Outstanding Debt Service	$ 25.04	$ 26.35	$ 25.51	$ 25.40	$ 29.90	$ 29.89	$ 24.31	$ 24.16	$ 23.80	$ 23.22	$ 23.17	$ 22.87	$ 21.73	$ 20.58	$ -	$ -	$ -	$ -	$ -	$ -	$ -
12	Projected Future Debt Service	$ 3.98	$ 6.96	$ 9.65	$ 9.74	$ 14.83	$ 20.19	$ 20.19	$ 20.19	$ 20.19	$ 30.07	$ 30.07	$ 30.07	$ 30.07	$ 30.07	$ 30.07	$ 30.07	$ 30.07	$ 30.07	$ 30.07	$ 30.07	$ 30.07
13	**Total Debt Service**	**$ 29.02**	**$ 33.31**	**$ 35.16**	**$ 35.13**	**$ 44.72**	**$ 50.08**	**$ 44.51**	**$ 44.35**	**$ 44.00**	**$ 53.28**	**$ 53.23**	**$ 52.93**	**$ 51.80**	**$ 50.65**	**$ 30.07**	**$ 30.07**	**$ 30.07**	**$ 30.07**	**$ 30.07**	**$ 30.07**	**$ 30.07**
14	**Cash Funded CIP from Current Revenues**																					
15	**Transfers and Other Expenditures**	$ 6.18	$ 6.37	$ 6.56	$ 6.76	$ 6.96	$ 7.17	$ 7.38	$ 7.60	$ 7.83	$ 8.07	$ 8.31	$ 8.56	$ 8.82	$ 9.08	$ 9.35	$ 9.63	$ 9.92	$ 10.22	$ 10.53	$ 10.84	$ 11.17
16	**Capital Outlay**	$ 4.58	$ 4.87	$ 5.19	$ 5.53	$ 5.89	$ 6.27	$ 6.68	$ 7.11	$ 7.57	$ 8.06	$ 8.59	$ 9.15	$ 9.74	$ 10.37	$ 11.05	$ 11.77	$ 12.53	$ 13.35	$ 14.21	$ 15.14	$ 16.12
17	**Annual Operating Balance**	**$ 3.96**	**$ 2.89**	**$ 4.72**	**$ 9.39**	**$ 5.34**	**$ 4.07**	**$ 12.03**	**$ 13.74**	**$ 15.87**	**$ 8.53**	**$ 10.71**	**$ 13.49**	**$ 17.52**	**$ 18.93**	**$ 40.34**	**$ 41.87**	**$ 43.80**	**$ 46.21**	**$ 49.19**	**$ 52.85**	**$ 57.28**
18	**Debt Service Coverage Ratio**	**1.51**	**1.43**	**1.47**	**1.62**	**1.41**	**1.35**	**1.59**	**1.65**	**1.72**	**1.47**	**1.52**	**1.59**	**1.70**	**1.76**	**3.03**	**3.11**	**3.21**	**3.33**	**3.47**	**3.63**	**3.82**
	Funds on Hand:																					
19	**Beginning Fund Balance**	**$ 98.44**	**$ 102.62**	**$ 105.76**	**$ 110.68**	**$ 75.06**	**$ 41.55**	**$ 45.82**	**$ 58.05**	**$ 71.99**	**$ 19.73**	**$ 28.47**	**$ 39.38**	**$ 53.07**	**$ 70.79**	**$ 59.10**	**$ 53.64**	**$ 49.70**	**$ 47.70**	**$ 48.11**	**$ 51.51**	**$ 58.55**
20	Remaining Operating Balance	**$ 4.18**	**$ 3.14**	**$ 4.92**	**$ 9.59**	**$ 5.54**	**$ 4.27**	**$ 12.23**	**$ 13.94**	**$ 16.07**	**$ 8.73**	**$ 10.91**	**$ 13.69**	**$ 17.72**	**$ 19.13**	**$ 40.54**	**$ 42.07**	**$ 44.00**	**$ 46.41**	**$ 49.39**	**$ 53.05**	**$ 57.48**
21	Capital Expenses Funded From Surplus Fur	$ -	$ -	**$ (0.00)**	**$ (45.21)**	**$ (39.05)**	$ -	$ -	$ -	**$ (68.33)**	$ -	$ -	$ -	$ -	**$ (30.83)**	**$ (46.00)**	**$ (46.00)**	**$ (46.00)**	**$ (46.00)**	**$ (46.00)**	**$ (46.00)**	**$ (46.00)**
22	Capital Expenses Funded From Surplus Fund																					
23	**Ending Operating Fund Balance**	**$ 102.62**	**$ 105.76**	**$ 110.68**	**$ 75.06**	**$ 41.55**	**$ 45.82**	**$ 58.05**	**$ 71.99**	**$ 19.73**	**$ 28.47**	**$ 39.38**	**$ 53.07**	**$ 70.79**	**$ 59.10**	**$ 53.64**	**$ 49.70**	**$ 47.70**	**$ 48.11**	**$ 51.51**	**$ 58.55**	**$ 70.03**

Note:

1. The Financial Plan detailed herein is preliminary and represents the Base Case Financial Plan with no revenue increases.

2. The attached Financial Plan must be verified and validated with the respective Entity.

11.2 Clayton

Town of Clayton - Financial Assumptions & Metrics

Line	General Assumptions	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045
1	System Customer Growth	2.60%	2.41%	3.26%	3.21%	3.12%	3.07%	3.03%	2.96%	2.92%	2.84%	2.82%	1.41%	1.43%	1.43%	1.43%	1.43%	1.43%	1.43%	1.43%	1.43%	1.43%
2	Other Revenues Escalation Factor	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
3	System Wide - O&M Escalation Factor	19.66%	1.97%	6.38%	2.15%	3.02%	6.47%	6.50%	6.53%	6.54%	6.58%	6.56%	6.59%	6.62%	6.62%	6.62%	6.62%	6.62%	6.62%	6.62%	6.62%	6.62%
	Financing Terms																					
	Revenue Bonds																					
4	Term	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25
5	Rate	4.0%	5.0%	4.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%
	SRF																					
6	Term	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
7	Rate	1.11%	1.11%	1.38%	1.38%	1.38%	1.38%	1.38%	1.38%	1.38%	1.38%	1.38%	1.38%	1.38%	1.38%	1.38%	1.38%	1.38%	1.38%	1.38%	1.38%	1.38%
8	Debt Service Coverage Target	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50
9	Funds on Hand Target (days)	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120

Town of Clayton - Financial Plan (in millions)

Line	Description	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045
		Projected																				
1	Water Service - Existing Rates	$ 13.39	$ 13.71	$ 14.16	$ 14.62	$ 15.08	$ 15.55	$ 16.02	$ 16.50	$ 16.98	$ 17.47	$ 17.96	$ 18.20	$ 18.44	$ 18.69	$ 18.94	$ 19.19	$ 19.45	$ 19.71	$ 19.98	$ 20.25	$ 20.52
2	Wastewater Service - Existing Rates	$ 15.97	$ 16.35	$ 16.88	$ 17.42	$ 17.96	$ 18.50	$ 19.06	$ 19.62	$ 20.19	$ 20.76	$ 21.35	$ 21.67	$ 21.99	$ 22.32	$ 22.66	$ 23.00	$ 23.35	$ 23.70	$ 24.06	$ 24.42	$ 24.79
3	**Total Service Revenue - Existing Rates**	**$ 29.36**	**$ 30.06**	**$ 31.04**	**$ 32.04**	**$ 33.04**	**$ 34.05**	**$ 35.08**	**$ 36.12**	**$ 37.17**	**$ 38.23**	**$ 39.30**	**$ 39.86**	**$ 40.43**	**$ 41.01**	**$ 41.60**	**$ 42.20**	**$ 42.80**	**$ 43.42**	**$ 44.04**	**$ 44.67**	**$ 45.31**
	Additional Revenue Required (Rate increases):																					
4	**Rate Increases**	14.0%	13.0%	10.0%	8.0%	7.0%	6.0%	5.0%	3.0%	2.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
5	**Total Additional Revenue Required**	$ 9.3	$ 15.2	$ 20.3	$ 25.2	$ 30.2	$ 35.0	$ 39.6	$ 43.1	$ 46.0	$ 47.3	$ 48.6	$ 49.3	$ 50.0	$ 50.7	$ 51.4	$ 52.2	$ 52.9	$ 53.7	$ 54.5	$ 55.2	$ 56.0
6	**Other Revenue and Adjustments**	$ 4.13	$ 4.13	$ 4.13	$ 4.13	$ 4.14	$ 4.15	$ 4.15	$ 4.14	$ 4.15	$ 4.18	$ 4.22	$ 4.23	$ 4.25	$ 4.26	$ 4.29	$ 4.34	$ 4.38	$ 4.41	$ 4.43	$ 4.45	$ 4.46
7	**Total Revenues**	**$ 42.75**	**$ 49.37**	**$ 55.52**	**$ 61.41**	**$ 67.33**	**$ 73.19**	**$ 78.84**	**$ 83.35**	**$ 87.30**	**$ 89.69**	**$ 92.13**	**$ 93.39**	**$ 94.69**	**$ 95.99**	**$ 97.34**	**$ 98.72**	**$ 100.12**	**$ 101.52**	**$ 102.93**	**$ 104.36**	**$ 105.80**
8	Operating Expense	$ 19.76	$ 19.95	$ 21.19	$ 21.54	$ 22.18	$ 23.63	$ 25.19	$ 26.87	$ 28.68	$ 30.63	$ 32.71	$ 34.97	$ 37.41	$ 40.03	$ 42.85	$ 45.88	$ 49.15	$ 52.67	$ 56.46	$ 60.54	$ 64.95
9	**Net Revenues after Operations**	**$ 22.99**	**$ 29.42**	**$ 34.33**	**$ 39.87**	**$ 45.16**	**$ 49.56**	**$ 53.65**	**$ 56.48**	**$ 58.62**	**$ 59.06**	**$ 59.42**	**$ 58.43**	**$ 57.28**	**$ 55.96**	**$ 54.49**	**$ 52.84**	**$ 50.97**	**$ 48.85**	**$ 46.47**	**$ 43.82**	**$ 40.86**
10	Outstanding Debt Service	$ 5.95	$ 15.57	$ 14.66	$ 14.60	$ 14.36	$ 14.30	$ 14.24	$ 14.19	$ 14.13	$ 14.07	$ 14.01	$ 13.68	$ 13.62	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
11	Projected Future Debt Service	$ -	$ -	$ 2.85	$ 5.70	$ 9.49	$ 13.29	$ 17.19	$ 21.09	$ 21.09	$ 22.94	$ 22.94	$ 22.94	$ 22.94	$ 22.94	$ 22.94	$ 22.94	$ 22.94	$ 22.94	$ 22.94	$ 22.94	$ 22.94
12	**Total Debt Service**	**$ 5.95**	**$ 15.57**	**$ 17.51**	**$ 20.30**	**$ 23.85**	**$ 27.59**	**$ 31.43**	**$ 35.28**	**$ 35.22**	**$ 37.00**	**$ 36.95**	**$ 36.62**	**$ 36.56**	**$ 22.94**	**$ 22.94**	**$ 22.94**	**$ 22.94**	**$ 22.94**	**$ 22.94**	**$ 22.94**	**$ 22.94**
13	**Cash Funded CIP from Current Revenues**	$ 0.9	$ 1.0	$ 1.0	$ 2.1	$ 1.5	$ 3.5	$ 3.5	$ 2.2	$ 2.0	$ 2.0	$ 2.0	$ 2.0	$ 2.0	$ 4.0	$ 4.0	$ 4.0	$ 6.0	$ 4.0	$ 2.0	$ 1.0	$ -
14	**Transfers and Other Expenditures**	$ 11.15	$ 10.88	$ 10.99	$ 11.09	$ 11.20	$ 11.32	$ 11.43	$ 11.55	$ 11.68	$ 11.80	$ 11.93	$ 12.07	$ 12.21	$ 12.35	$ 12.48	$ 12.61	$ 12.75	$ 12.88	$ 13.02	$ 13.15	$ 13.29
15	**Capital Outlay**																					
16	**Annual Operating Balance**	**$ 4.96**	**$ 1.97**	**$ 4.83**	**$ 6.36**	**$ 8.60**	**$ 7.15**	**$ 7.28**	**$ 7.49**	**$ 9.72**	**$ 8.26**	**$ 8.54**	**$ 7.74**	**$ 6.52**	**$ 16.68**	**$ 15.08**	**$ 13.29**	**$ 9.28**	**$ 9.03**	**$ 8.52**	**$ 6.73**	**$ 4.63**
17	**Debt Service Coverage Ratio**	**3.87**	**1.89**	**1.96**	**1.96**	**1.89**	**1.80**	**1.71**	**1.60**	**1.66**	**1.60**	**1.61**	**1.60**	**1.57**	**2.44**	**2.38**	**2.30**	**2.22**	**2.13**	**2.03**	**1.91**	**1.78**
	Funds on Hand:																					
18	**Beginning Fund Balance**	**$ 5.86**	**$ 7.83**	**$ 6.47**	**$ 8.30**	**$ 8.93**	**$ 10.53**	**$ 10.27**	**$ 8.56**	**$ 14.55**	**$ 20.31**	**$ 28.57**	**$ 26.14**	**$ 33.89**	**$ 29.44**	**$ 46.12**	**$ 50.23**	**$ 63.52**	**$ 61.85**	**$ 70.88**	**$ 68.44**	**$ 75.16**
19	Remaining Operating Balance	**$ 4.96**	**$ 1.97**	**$ 4.83**	**$ 6.36**	**$ 8.60**	**$ 7.15**	**$ 7.28**	**$ 7.49**	**$ 9.72**	**$ 8.26**	**$ 8.54**	**$ 7.74**	**$ 6.52**	**$ 16.68**	**$ 15.08**	**$ 13.29**	**$ 9.28**	**$ 9.03**	**$ 8.52**	**$ 6.73**	**$ 4.63**
20	Transfer to Construction Fund	**$ (3.00)**	**$ (3.32)**	**$ (3.00)**	**$ (5.73)**	**$ (7.00)**	**$ (7.41)**	**$ (9.00)**	**$ (1.50)**	**$ (3.96)**	**$ -**	**$ (10.96)**	**$ -**	**$ (10.96)**	**$ -**	**$ (10.96)**	**$ -**	**$ (10.96)**	**$ -**	**$ (10.96)**	**$ -**	**$ (10.96)**
21	Transfer to Operations	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**
22	**Ending Operating Fund Balance**	**$ 7.83**	**$ 6.47**	**$ 8.30**	**$ 8.93**	**$ 10.53**	**$ 10.27**	**$ 8.56**	**$ 14.55**	**$ 20.31**	**$ 28.57**	**$ 26.14**	**$ 33.89**	**$ 29.44**	**$ 46.12**	**$ 50.23**	**$ 63.52**	**$ 61.85**	**$ 70.88**	**$ 68.44**	**$ 75.16**	**$ 68.83**

Note:

1. The Financial Plan detailed herein is preliminary and represents the Base Case Financial Plan with no revenue increases.

2. The attached Financial Plan must be verified and validated with the respective Entity.

11.3 Smithfield

Smithfield - Financial Assumptions & Metrics

Line	General Assumptions	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045
1	Customer Growth	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
2	Other Revenues Escalation Factor	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%
3	System Wide - O&M Escalation Factor	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
	Financing Terms																					
	Revenue Bonds																					
4	Term	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
5	Rate	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%
	SRF																					
6	Term	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
7	Rate	3.14%	3.14%	3.14%	3.14%	3.14%	3.14%	3.14%	3.14%	3.14%	3.14%	3.14%	3.14%	3.14%	3.14%	3.14%	3.14%	3.14%	3.14%	3.14%	3.14%	3.14%
8	Debt Service Coverage Target	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50
9	Funds on Hand Target (days)	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120

Smithfield - Financial Plan (in millions)

		Projected																				
Line	Description	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045
1	Water Service - Existing Rates	$ 5.16	$ 5.29	$ 5.42	$ 5.56	$ 5.70	$ 5.84	$ 5.98	$ 6.13	$ 6.29	$ 6.44	$ 6.60	$ 6.77	$ 6.94	$ 7.11	$ 7.29	$ 7.47	$ 7.66	$ 7.85	$ 8.05	$ 8.25	$ 8.45
2	Wastewater Service - Existing Rates	$ 5.03	$ 5.15	$ 5.28	$ 5.41	$ 5.55	$ 5.69	$ 5.83	$ 5.98	$ 6.13	$ 6.28	$ 6.44	$ 6.60	$ 6.76	$ 6.93	$ 7.10	$ 7.28	$ 7.46	$ 7.65	$ 7.84	$ 8.04	$ 8.24
3	**Total Service Revenue - Existing Rates**	**$ 10.19**	**$ 10.44**	**$ 10.70**	**$ 10.97**	**$ 11.25**	**$ 11.53**	**$ 11.81**	**$ 12.11**	**$ 12.41**	**$ 12.72**	**$ 13.04**	**$ 13.37**	**$ 13.70**	**$ 14.04**	**$ 14.39**	**$ 14.75**	**$ 15.12**	**$ 15.50**	**$ 15.89**	**$ 16.29**	**$ 16.69**
	Additional Revenue Required (Rate increases):																					
4	**Rate Increases**	6.0%	8.0%	7.0%	5.0%	4.0%	4.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
5	**Total Additional Revenue Required**	$ 0.6	$ 1.5	$ 2.4	$ 3.1	$ 3.8	$ 4.5	$ 4.9	$ 5.4	$ 5.9	$ 6.4	$ 7.0	$ 7.6	$ 8.2	$ 8.8	$ 9.1	$ 9.3	$ 9.5	$ 9.8	$ 10.0	$ 10.3	$ 10.5
6	**Other Revenue and Adjustments**	$ 0.47	$ 0.50	$ 0.50	$ 0.50	$ 0.53	$ 0.56	$ 0.60	$ 0.63	$ 0.67	$ 0.71	$ 0.75	$ 0.80	$ 0.85	$ 0.90	$ 0.95	$ 1.01	$ 1.07	$ 1.14	$ 1.20	$ 1.28	$ 1.35
7	**Total Revenues**	**$ 11.27**	**$ 12.45**	**$ 13.61**	**$ 14.61**	**$ 15.57**	**$ 16.60**	**$ 17.36**	**$ 18.16**	**$ 19.00**	**$ 19.87**	**$ 20.78**	**$ 21.74**	**$ 22.74**	**$ 23.79**	**$ 24.42**	**$ 25.06**	**$ 25.72**	**$ 26.40**	**$ 27.10**	**$ 27.82**	**$ 28.56**
8	Operating Expense	$ 7.66	$ 8.34	$ 8.76	$ 9.20	$ 9.66	$ 10.14	$ 10.65	$ 11.18	$ 11.74	$ 12.33	$ 12.94	$ 13.59	$ 14.27	$ 14.98	$ 15.73	$ 16.52	$ 17.35	$ 18.21	$ 19.12	$ 20.08	$ 21.08
9	**Net Revenues after Operations**	**$ 3.61**	**$ 4.11**	**$ 4.85**	**$ 5.41**	**$ 5.91**	**$ 6.46**	**$ 6.71**	**$ 6.98**	**$ 7.26**	**$ 7.54**	**$ 7.84**	**$ 8.15**	**$ 8.47**	**$ 8.80**	**$ 8.68**	**$ 8.54**	**$ 8.37**	**$ 8.19**	**$ 7.98**	**$ 7.74**	**$ 7.48**
10	Outstanding Debt Service	$ 1.02	$ 0.72	$ 0.71	$ 0.70	$ 0.70	$ 0.69	$ 0.68	$ 0.68	$ 0.67	$ 0.66	$ 0.66	$ 0.65	$ 0.64	$ 0.67	$ 0.67	$ 0.67	$ 0.67	$ 0.67	$ 0.67	$ 0.67	$ 0.67
11	Projected Future Debt Service	$ -	$ 0.48	$ 1.09	$ 1.36	$ 1.57	$ 1.57	$ 1.57	$ 1.57	$ 1.57	$ 1.57	$ 1.57	$ 1.57	$ 1.57	$ 1.57	$ 1.57	$ 1.57	$ 1.57	$ 1.57	$ 1.57	$ 1.57	$ 1.57
12	**Total Debt Service**	**$ 1.02**	**$ 1.19**	**$ 1.80**	**$ 2.06**	**$ 2.26**	**$ 2.26**	**$ 2.25**	**$ 2.24**	**$ 2.24**	**$ 2.23**	**$ 2.22**	**$ 2.22**	**$ 2.21**	**$ 2.24**	**$ 2.24**	**$ 2.24**	**$ 2.24**	**$ 2.24**	**$ 2.24**	**$ 2.24**	**$ 2.24**
13	**Cash Funded CIP from Current Revenues**	$ 0.8	$ 0.8	$ 0.8	$ 0.9	$ 1.0	$ 1.2	$ 1.0	$ 1.0	$ 1.0	$ 1.0	$ 1.0	$ 1.0	$ 1.0	$ 1.1	$ 1.2	$ 1.3	$ 1.5	$ 1.6	$ 1.7	$ 1.9	$ 2.1
14	**Transfers and Other Expenditures**	$ 0.40	$ 0.42	$ 0.44	$ 0.46	$ 0.48	$ 0.51	$ 0.53	$ 0.56	$ 0.59	$ 0.62	$ 0.65	$ 0.68	$ 0.72	$ 0.75	$ 0.79	$ 0.83	$ 0.87	$ 0.91	$ 0.96	$ 1.01	$ 1.06
15	**Capital Outlay**																					
16	**Annual Operating Balance**	**$ 1.44**	**$ 1.75**	**$ 1.86**	**$ 1.99**	**$ 2.17**	**$ 2.49**	**$ 2.93**	**$ 3.18**	**$ 3.43**	**$ 3.70**	**$ 3.97**	**$ 4.25**	**$ 4.55**	**$ 4.72**	**$ 4.46**	**$ 4.17**	**$ 3.77**	**$ 3.44**	**$ 3.08**	**$ 2.60**	**$ 2.08**
17	**Debt Service Coverage Ratio**	✓ **3.53**	✓ **3.44**	✓ **2.70**	✓ **2.62**	✓ **2.61**	✓ **2.86**	✓ **2.99**	✓ **3.11**	✓ **3.25**	✓ **3.38**	✓ **3.53**	✓ **3.68**	✓ **3.84**	✓ **3.94**	✓ **3.88**	✓ **3.82**	✓ **3.75**	✓ **3.66**	✓ **3.57**	✓ **3.46**	✓ **3.34**
	Funds on Hand:																					
18	**Beginning Fund Balance**	**$ 3.74**	**$ 2.33**	**$ 1.83**	**$ 2.21**	**$ 3.09**	**$ 1.83**	**$ 2.12**	**$ 2.42**	**$ 2.81**	**$ 4.18**	**$ 5.66**	**$ 7.26**	**$ 8.97**	**$ 10.80**	**$ 12.71**	**$ 14.27**	**$ 15.44**	**$ 16.19**	**$ 16.48**	**$ 16.28**	**$ 15.54**
19	Remaining Operating Balance	**$ 1.44**	**$ 1.75**	**$ 1.86**	**$ 1.99**	**$ 2.17**	**$ 2.49**	**$ 2.93**	**$ 3.18**	**$ 3.43**	**$ 3.70**	**$ 3.97**	**$ 4.25**	**$ 4.55**	**$ 4.72**	**$ 4.46**	**$ 4.17**	**$ 3.77**	**$ 3.44**	**$ 3.08**	**$ 2.60**	**$ 2.08**
20	Transfer to Construction Fund	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**
21	Transfer to Operations	**$ (2.85)**	**$ (2.25)**	**$ (1.48)**	**$ (1.11)**	**$ (3.42)**	**$ (2.21)**	**$ (2.63)**	**$ (2.79)**	**$ (2.06)**	**$ (2.21)**	**$ (2.37)**	**$ (2.54)**	**$ (2.72)**	**$ (2.80)**	**$ (2.90)**	**$ (3.00)**	**$ (3.02)**	**$ (3.15)**	**$ (3.28)**	**$ (3.33)**	**$ (3.39)**
22	**Ending Operating Fund Balance**	**$ 5.18**	**$ 4.08**	**$ 3.69**	**$ 4.20**	**$ 5.25**	**$ 4.32**	**$ 5.05**	**$ 5.59**	**$ 6.24**	**$ 7.87**	**$ 9.63**	**$ 11.51**	**$ 13.52**	**$ 15.52**	**$ 17.17**	**$ 18.44**	**$ 19.21**	**$ 19.63**	**$ 19.56**	**$ 18.88**	**$ 17.63**

Note:

1. The Financial Plan detailed herein is preliminary and represents the Base Case Financial Plan with no revenue increases.

2. The attached Financial Plan must be verified and validated with the respective Entity.

11.4 Pine Level

Town of Pine Level - Financial Assumptions & Metrics

Line	General Assumptions	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045
1	Customer Growth	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
2	Other Revenues Escalation Factor	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%
3	System Wide - O&M Escalation Factor	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
	Financing Terms																					
	Revenue Bonds																					
4	Term	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
5	Rate	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%
	SRF																					
6	Term	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
7	Rate	3.14%	3.14%	3.14%	3.14%	3.14%	3.14%	3.14%	3.14%	3.14%	3.14%	3.14%	3.14%	3.14%	3.14%	3.14%	3.14%	3.14%	3.14%	3.14%	3.14%	3.14%
8	**Debt Service Coverage Target**	**1.50**	**1.50**	**1.50**	**1.50**	**1.50**	**1.50**	**1.50**	**1.50**	**1.50**	**1.50**	**1.50**	**1.50**	**1.50**	**1.50**	**1.50**	**1.50**	**1.50**	**1.50**	**1.50**	**1.50**	**1.50**
9	**Funds on Hand Target (days)**	**120**	**120**	**120**	**120**	**120**	**120**	**120**	**120**	**120**	**120**	**120**	**120**	**120**	**120**	**120**	**120**	**120**	**120**	**120**	**120**	**120**

Town of Pine Level - Financial Plan (in millions)

Line	Description	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045
		Projected																				
1	Water Service - Existing Rates	$ 0.42	$ 0.43	$ 0.45	$ 0.46	$ 0.47	$ 0.48	$ 0.49	$ 0.50	$ 0.52	$ 0.53	$ 0.54	$ 0.56	$ 0.57	$ 0.58	$ 0.60	$ 0.61	$ 0.63	$ 0.65	$ 0.66	$ 0.68	$ 0.70
2	Wastewater Service - Existing Rates	$ 0.66	$ 0.68	$ 0.69	$ 0.71	$ 0.73	$ 0.75	$ 0.77	$ 0.79	$ 0.81	$ 0.83	$ 0.85	$ 0.87	$ 0.89	$ 0.91	$ 0.93	$ 0.96	$ 0.98	$ 1.01	$ 1.03	$ 1.06	$ 1.08
3	**Total Service Revenue - Existing Rates**	**$ 1.09**	**$ 1.11**	**$ 1.14**	**$ 1.17**	**$ 1.20**	**$ 1.23**	**$ 1.26**	**$ 1.29**	**$ 1.32**	**$ 1.36**	**$ 1.39**	**$ 1.42**	**$ 1.46**	**$ 1.50**	**$ 1.53**	**$ 1.57**	**$ 1.61**	**$ 1.65**	**$ 1.69**	**$ 1.74**	**$ 1.78**
	Additional Revenue Required (Rate increases):																					
4	**Rate Increases**	14.0%	10.0%	7.0%	6.0%	4.0%	4.0%	4.0%	4.0%	3.0%	3.0%	3.0%	3.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
5	**Total Additional Revenue Required**	$ 0	$ 0	$ 0	$ 0	$ 1	$ 1	$ 1	$ 1	$ 1	$ 1	$ 1	$ 1	$ 1	$ 1	$ 2	$ 2	$ 2	$ 2	$ 2	$ 2	$ 2
6	**Other Revenue and Adjustments**	$ 0.11	$ 0.12	$ 0.13	$ 0.14	$ 0.14	$ 0.15	$ 0.16	$ 0.17	$ 0.18	$ 0.19	$ 0.20	$ 0.22	$ 0.23	$ 0.24	$ 0.26	$ 0.27	$ 0.29	$ 0.31	$ 0.33	$ 0.35	$ 0.37
7	**Total Revenues**	**$ 1.35**	**$ 1.52**	**$ 1.66**	**$ 1.80**	**$ 1.92**	**$ 2.04**	**$ 2.18**	**$ 2.32**	**$ 2.45**	**$ 2.59**	**$ 2.73**	**$ 2.88**	**$ 3.02**	**$ 3.16**	**$ 3.31**	**$ 3.46**	**$ 3.62**	**$ 3.79**	**$ 3.97**	**$ 4.15**	**$ 4.35**
8	Operating Expense	$ 1.07	$ 1.13	$ 1.19	$ 1.25	$ 1.31	$ 1.37	$ 1.44	$ 1.52	$ 1.59	$ 1.67	$ 1.75	$ 1.84	$ 1.93	$ 2.03	$ 2.13	$ 2.24	$ 2.35	$ 2.47	$ 2.59	$ 2.72	$ 2.86
9	**Net Revenues after Operations**	**$ 0.29**	**$ 0.39**	**$ 0.47**	**$ 0.55**	**$ 0.61**	**$ 0.67**	**$ 0.73**	**$ 0.80**	**$ 0.86**	**$ 0.91**	**$ 0.98**	**$ 1.04**	**$ 1.08**	**$ 1.13**	**$ 1.17**	**$ 1.22**	**$ 1.27**	**$ 1.32**	**$ 1.38**	**$ 1.43**	**$ 1.49**
10	Outstanding Debt Service	$ 0.08	$ 0.08	$ 0.08	$ 0.08	$ 0.08	$ 0.04	$ 0.04	$ 0.04	$ 0.04	$ 0.04	$ 0.04	$ 0.04	$ 0.04	$ 0.04	$ 0.04	$ 0.04	$ 0.04	$ 0.04	$ 0.04	$ 0.04	$ -
11	Projected Future Debt Service	$ -	$ 0.04	$ 0.09	$ 0.13	$ 0.15	$ 0.18	$ 0.20	$ 0.23	$ 0.26	$ 0.29	$ 0.33	$ 0.36	$ 0.40	$ 0.44	$ 0.48	$ 0.52	$ 0.56	$ 0.60	$ 0.65	$ 0.70	$ 0.75
12	**Total Debt Service**	**$ 0.08**	**$ 0.12**	**$ 0.17**	**$ 0.21**	**$ 0.23**	**$ 0.21**	**$ 0.24**	**$ 0.27**	**$ 0.30**	**$ 0.33**	**$ 0.36**	**$ 0.40**	**$ 0.44**	**$ 0.47**	**$ 0.51**	**$ 0.55**	**$ 0.59**	**$ 0.63**	**$ 0.68**	**$ 0.73**	**$ 0.75**
13	**Cash Funded CIP from Current Revenues**																					
14	**Transfers and Other Expenditures**																					
15	**Capital Outlay**	$ 0.03	$ 0.03	$ 0.03	$ 0.04	$ 0.04	$ 0.04	$ 0.04	$ 0.04	$ 0.05	$ 0.05	$ 0.05	$ 0.05	$ 0.06	$ 0.06	$ 0.06	$ 0.07	$ 0.07	$ 0.07	$ 0.08	$ 0.08	$ 0.08
16	**Annual Operating Balance**	**$ 0.17**	**$ 0.23**	**$ 0.26**	**$ 0.30**	**$ 0.33**	**$ 0.41**	**$ 0.45**	**$ 0.49**	**$ 0.51**	**$ 0.54**	**$ 0.56**	**$ 0.59**	**$ 0.59**	**$ 0.60**	**$ 0.60**	**$ 0.60**	**$ 0.61**	**$ 0.62**	**$ 0.62**	**$ 0.62**	**$ 0.66**
17	**Debt Service Coverage Ratio**	**3.48**	**3.28**	**2.74**	**2.61**	**2.59**	**3.12**	**3.05**	**3.00**	**2.88**	**2.77**	**2.68**	**2.61**	**2.48**	**2.38**	**2.29**	**2.22**	**2.15**	**2.08**	**2.02**	**1.96**	**1.99**
	Funds on Hand:																					
18	**Beginning Fund Balance**	**$ 0.04**	**$ 0.12**	**$ 0.24**	**$ 0.39**	**$ 0.55**	**$ 0.73**	**$ 0.98**	**$ 1.27**	**$ 1.60**	**$ 1.95**	**$ 2.32**	**$ 2.70**	**$ 3.09**	**$ 3.45**	**$ 3.80**	**$ 4.12**	**$ 4.43**	**$ 4.74**	**$ 5.06**	**$ 5.37**	**$ 5.66**
19	Remaining Operating Balance	$ 0.07	$ 0.13	$ 0.15	$ 0.16	$ 0.18	$ 0.25	$ 0.28	$ 0.33	$ 0.35	$ 0.37	$ 0.38	$ 0.39	$ 0.36	$ 0.36	$ 0.32	$ 0.31	$ 0.30	$ 0.32	$ 0.31	$ 0.29	$ 0.35
20	Capital Expenses Funded From Surplus Fur	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
21	**Ending Operating Fund Balance**	**$ 0.12**	**$ 0.24**	**$ 0.39**	**$ 0.55**	**$ 0.73**	**$ 0.98**	**$ 1.27**	**$ 1.60**	**$ 1.95**	**$ 2.32**	**$ 2.70**	**$ 3.09**	**$ 3.45**	**$ 3.80**	**$ 4.12**	**$ 4.43**	**$ 4.74**	**$ 5.06**	**$ 5.37**	**$ 5.66**	**$ 6.01**

Note:

1. The Financial Plan detailed herein is preliminary and represents the Base Case Financial Plan with no revenue increases.

2. The attached Financial Plan must be verified and validated with the respective Entity.

11.5 Selma

Town of Selma - Financial Assumptions & Metrics

Line	General Assumptions	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045
1	Customer Growth	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
2	Other Revenues Escalation Factor	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%
3	System Wide - O&M Escalation Factor	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%
	Financing Terms																					
	Revenue Bonds																					
4	Term	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
5	Rate	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%
	SRF																					
6	Term	20	20	20	20	20	20	20	15	20	20	20	20	20	20	20	20	20	20	20	20	20
7	Rate	3.14%	3.14%	3.14%	3.14%	3.14%	3.14%	3.14%	5.00%	3.14%	3.14%	3.14%	3.14%	3.14%	3.14%	3.14%	3.14%	3.14%	3.14%	3.14%	3.14%	3.14%
8	**Debt Service Coverage Target**	**1.50**	**1.50**	**1.50**	**1.50**	**1.50**	**1.50**	**1.50**	**1.50**	**1.50**	**1.50**	**1.50**	**1.50**	**1.50**	**1.50**	**1.50**	**1.50**	**1.50**	**1.50**	**1.50**	**1.50**	**1.50**
9	**Funds on Hand Target (days)**	**120**	**120**	**120**	**120**	**120**	**120**	**120**	**120**	**120**	**120**	**120**	**120**	**120**	**120**	**120**	**120**	**120**	**120**	**120**	**120**	**120**

Town of Selma - Financial Plan (in millions)

Line	Description	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Projected 2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045
1	Water Service - Existing Rates	$ 1.83	$ 1.89	$ 1.95	$ 2.00	$ 2.06	$ 2.13	$ 2.19	$ 2.26	$ 2.32	$ 2.39	$ 2.46	$ 2.54	$ 2.61	$ 2.69	$ 2.77	$ 2.86	$ 2.94	$ 3.03	$ 3.12	$ 3.22	$ 3.31
2	Wastewater Service - Existing Rates	$ 3.42	$ 3.52	$ 3.63	$ 3.74	$ 3.85	$ 3.97	$ 4.09	$ 4.21	$ 4.33	$ 4.46	$ 4.60	$ 4.74	$ 4.88	$ 5.03	$ 5.18	$ 5.33	$ 5.49	$ 5.66	$ 5.83	$ 6.00	$ 6.18
3	**Total Service Revenue - Existing Rates**	**$ 5.26**	**$ 5.41**	**$ 5.58**	**$ 5.74**	**$ 5.92**	**$ 6.09**	**$ 6.28**	**$ 6.46**	**$ 6.66**	**$ 6.86**	**$ 7.06**	**$ 7.28**	**$ 7.49**	**$ 7.72**	**$ 7.95**	**$ 8.19**	**$ 8.43**	**$ 8.69**	**$ 8.95**	**$ 9.22**	**$ 9.49**
	Additional Revenue Required (Rate increases):																					
4	**Rate Increases**	**10.0%**	**9.0%**	**7.0%**	**6.0%**	**5.0%**	**4.0%**	**4.0%**	**4.0%**	**4.0%**	**4.0%**	**3.0%**	**3.0%**	**3.0%**	**3.0%**	**3.0%**	**3.0%**	**3.0%**	**3.0%**	**2.0%**	**2.0%**	**2.0%**
5	**Total Additional Revenue Required**	$ 1	$ 1	$ 2	$ 2	$ 3	$ 3	$ 3	$ 4	$ 4	$ 5	$ 6	$ 6	$ 7	$ 7	$ 8	$ 9	$ 10	$ 10	$ 11	$ 12	$ 13
6	**Other Revenue and Adjustments**	$ 0.77	$ 0.80	$ 0.83	$ 0.86	$ 0.90	$ 0.93	$ 0.97	$ 1.01	$ 1.05	$ 1.09	$ 1.13	$ 1.18	$ 1.23	$ 1.28	$ 1.33	$ 1.38	$ 1.44	$ 1.49	$ 1.55	$ 1.61	$ 1.68
7	**Total Revenues**	**$ 6.55**	**$ 7.29**	**$ 7.98**	**$ 8.67**	**$ 9.34**	**$ 9.98**	**$ 10.66**	**$ 11.39**	**$ 12.17**	**$ 13.00**	**$ 13.77**	**$ 14.59**	**$ 15.45**	**$ 16.37**	**$ 17.34**	**$ 18.37**	**$ 19.46**	**$ 20.61**	**$ 21.64**	**$ 22.72**	**$ 23.85**
8	Operating Expense	$ 5.50	$ 5.89	$ 6.24	$ 6.62	$ 7.01	$ 7.43	$ 7.88	$ 8.35	$ 8.85	$ 9.39	$ 9.95	$ 10.55	$ 11.18	$ 11.85	$ 12.56	$ 13.31	$ 14.11	$ 14.96	$ 15.86	$ 16.81	$ 17.82
9	**Net Revenues after Operations**	**$ 1.05**	**$ 1.40**	**$ 1.74**	**$ 2.06**	**$ 2.33**	**$ 2.55**	**$ 2.78**	**$ 3.04**	**$ 3.32**	**$ 3.62**	**$ 3.82**	**$ 4.04**	**$ 4.27**	**$ 4.52**	**$ 4.78**	**$ 5.05**	**$ 5.34**	**$ 5.65**	**$ 5.78**	**$ 5.91**	**$ 6.03**
10	Outstanding Debt Service	$ 0.25	$ 0.25	$ 0.25	$ 0.25	$ 0.25	$ 0.25	$ 0.25	$ 0.25	$ 0.25	$ 0.25	$ 0.25	$ 0.25	$ 0.25	$ 0.25	$ 0.25	$ 0.25	$ 0.25	$ 0.25	$ 0.25	$ 0.25	$ 0.25
11	Projected Future Debt Service	$ -	$ 0.23	$ 0.40	$ 0.57	$ 0.71	$ 0.88	$ 1.01	$ 1.15	$ 1.51	$ 1.71	$ 1.88	$ 2.00	$ 2.13	$ 2.24	$ 2.37	$ 2.49	$ 2.61	$ 2.74	$ 2.87	$ 2.99	$ 3.11
12	**Total Debt Service**	**$ 0.25**	**$ 0.48**	**$ 0.65**	**$ 0.82**	**$ 0.96**	**$ 1.13**	**$ 1.27**	**$ 1.40**	**$ 1.76**	**$ 1.96**	**$ 2.13**	**$ 2.26**	**$ 2.38**	**$ 2.49**	**$ 2.62**	**$ 2.74**	**$ 2.86**	**$ 2.99**	**$ 3.12**	**$ 3.24**	**$ 3.36**
13	**Cash Funded CIP from Current Revenues**																					
14	**Transfers and Other Expenditures**	$ 0.46	$ 0.46	$ 0.46	$ 0.46	$ 0.46	$ 0.46	$ 0.46	$ 0.46	$ 0.46	$ 0.46	$ 0.46	$ 0.46	$ 0.46	$ 0.46	$ 0.46	$ 0.46	$ 0.46	$ 0.46	$ 0.46	$ 0.46	$ 0.46
15	**Capital Outlay**	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
16	**Annual Operating Balance**	**$ 0.33**	**$ 0.45**	**$ 0.63**	**$ 0.77**	**$ 0.91**	**$ 0.95**	**$ 1.05**	**$ 1.17**	**$ 1.10**	**$ 1.19**	**$ 1.23**	**$ 1.32**	**$ 1.43**	**$ 1.56**	**$ 1.70**	**$ 1.85**	**$ 2.02**	**$ 2.20**	**$ 2.20**	**$ 2.21**	**$ 2.21**
17	**Debt Service Coverage Ratio**	**4.2**	**2.9**	**2.7**	**2.5**	**2.4**	**2.3**	**2.2**	**2.2**	**1.9**	**1.8**	**1.8**	**1.8**	**1.8**	**1.8**	**1.8**	**1.8**	**1.9**	**1.9**	**1.9**	**1.8**	**1.8**
	Funds on Hand:																					
18	**Beginning Fund Balance**	**$ 5.82**	**$ 5.83**	**$ 5.08**	**$ 5.30**	**$ 5.64**	**$ 6.08**	**$ 6.46**	**$ 6.77**	**$ 7.04**	**$ 7.46**	**$ 7.65**	**$ 7.78**	**$ 7.87**	**$ 7.81**	**$ 7.81**	**$ 7.79**	**$ 7.75**	**$ 7.73**	**$ 7.76**	**$ 7.48**	**$ 6.99**
19	Remaining Operating Balance	$ 0.33	$ 0.45	$ 0.63	$ 0.77	$ 0.91	$ 0.95	$ 1.05	$ 1.17	$ 1.10	$ 1.19	$ 1.23	$ 1.32	$ 1.43	$ 1.56	$ 1.70	$ 1.85	$ 2.02	$ 2.20	$ 2.20	$ 2.21	$ 2.21
20	Capital Expenses Funded From Surplus Fur	$ (0.32)	$ (1.20)	$ (0.41)	$ (0.43)	$ (0.46)	$ (0.58)	$ (0.74)	$ (0.90)	$ (0.68)	$ (1.00)	$ (1.10)	$ (1.24)	$ (1.49)	$ (1.55)	$ (1.72)	$ (1.90)	$ (2.03)	$ (2.18)	$ (2.48)	$ (2.69)	$ (2.92)
21	**Ending Operating Fund Balance**	**$ 5.83**	**$ 5.08**	**$ 5.30**	**$ 5.64**	**$ 6.08**	**$ 6.46**	**$ 6.77**	**$ 7.04**	**$ 7.46**	**$ 7.65**	**$ 7.78**	**$ 7.87**	**$ 7.81**	**$ 7.81**	**$ 7.79**	**$ 7.75**	**$ 7.73**	**$ 7.76**	**$ 7.48**	**$ 6.99**	**$ 6.27**

Note:

1. The Financial Plan detailed herein is preliminary and represents the Base Case Financial Plan with no revenue increases.

2. The attached Financial Plan must be verified and validated with the respective Entity.

11.6 Benson

Town of Benson - Financial Assumptions & Metrics

Line	General Assumptions	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045
1	Customer Growth	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
2	Other Revenues Escalation Factor	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%
3	System Wide - O&M Escalation Factor	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
	Financing Terms																					
	Revenue Bonds																					
4	Term	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
5	Rate	5.50%	5.50%	5.50%	5.50%	5.50%	5.50%	5.50%	5.50%	5.50%	5.50%	5.50%	5.50%	5.50%	5.50%	5.50%	5.50%	5.50%	5.50%	5.50%	5.50%	5.50%
	SRF																					
6	Term	10	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
7	Rate	3.14%	3.14%	3.14%	3.14%	3.14%	3.14%	3.14%	3.14%	3.14%	3.14%	3.14%	3.14%	3.14%	3.14%	3.14%	3.14%	3.14%	3.14%	3.14%	3.14%	3.14%
8	Debt Service Coverage Target	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50
9	Funds on Hand Target	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120

Town of Benson - Financial Plan (in millions)

Line	Description	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045
		Projected																				
1	Water Service - Existing Rates	$ 2.08	$ 2.13	$ 2.18	$ 2.23	$ 2.29	$ 2.35	$ 2.41	$ 2.47	$ 2.53	$ 2.59	$ 2.66	$ 2.72	$ 2.79	$ 2.86	$ 2.93	$ 3.01	$ 3.08	$ 3.16	$ 3.24	$ 3.32	$ 3.40
2	Wastewater Service - Existing Rates	$ 2.22	$ 2.28	$ 2.34	$ 2.39	$ 2.45	$ 2.51	$ 2.58	$ 2.64	$ 2.71	$ 2.78	$ 2.85	$ 2.92	$ 2.99	$ 3.06	$ 3.14	$ 3.22	$ 3.30	$ 3.38	$ 3.47	$ 3.55	$ 3.64
3	**Total Service Revenue - Existing Rates**	**$ 4.30**	**$ 4.41**	**$ 4.52**	**$ 4.63**	**$ 4.74**	**$ 4.86**	**$ 4.98**	**$ 5.11**	**$ 5.24**	**$ 5.37**	**$ 5.50**	**$ 5.64**	**$ 5.78**	**$ 5.92**	**$ 6.07**	**$ 6.22**	**$ 6.38**	**$ 6.54**	**$ 6.70**	**$ 6.87**	**$ 7.04**
	Additional Revenue Required (Rate increases):																					
4	**Rate Increases**	**9.0%**	**7.0%**	**6.0%**	**6.0%**	**5.0%**	**5.0%**	**4.0%**	**3.0%**	**3.0%**	**3.0%**	**3.0%**	**3.0%**	**3.0%**	**3.0%**	**3.0%**	**3.0%**	**2.0%**	**2.0%**	**2.0%**	**2.0%**	**2.0%**
5	**Total Additional Revenue Required**	$ 0.4	$ 0.7	$ 1.1	$ 1.4	$ 1.8	$ 2.2	$ 2.5	$ 2.8	$ 3.1	$ 3.4	$ 3.8	$ 4.2	$ 4.6	$ 5.0	$ 5.5	$ 6.0	$ 6.4	$ 6.8	$ 7.2	$ 7.7	$ 8.2
6	**Other Revenue and Adjustments**	$ 0.26	$ 0.27	$ 0.28	$ 0.29	$ 0.31	$ 0.33	$ 0.35	$ 0.37	$ 0.39	$ 0.41	$ 0.44	$ 0.46	$ 0.49	$ 0.52	$ 0.55	$ 0.59	$ 0.62	$ 0.66	$ 0.70	$ 0.74	$ 0.78
7	**Total Revenues**	**$ 4.94**	**$ 5.41**	**$ 5.86**	**$ 6.36**	**$ 6.84**	**$ 7.35**	**$ 7.84**	**$ 8.27**	**$ 8.74**	**$ 9.23**	**$ 9.74**	**$ 10.29**	**$ 10.86**	**$ 11.47**	**$ 12.11**	**$ 12.79**	**$ 13.38**	**$ 14.00**	**$ 14.64**	**$ 15.32**	**$ 16.03**
8	Operating Expense	$ 3.85	$ 4.04	$ 4.24	$ 4.46	$ 4.68	$ 4.91	$ 5.16	$ 5.42	$ 5.69	$ 5.97	$ 6.27	$ 6.59	$ 6.91	$ 7.26	$ 7.62	$ 8.00	$ 8.40	$ 8.82	$ 9.27	$ 9.73	$ 10.22
9	**Net Revenues after Operations**	**$ 1.09**	**$ 1.36**	**$ 1.62**	**$ 1.90**	**$ 2.16**	**$ 2.44**	**$ 2.68**	**$ 2.86**	**$ 3.05**	**$ 3.25**	**$ 3.47**	**$ 3.70**	**$ 3.95**	**$ 4.21**	**$ 4.49**	**$ 4.79**	**$ 4.98**	**$ 5.17**	**$ 5.38**	**$ 5.59**	**$ 5.81**
10	Outstanding Debt Service	$ 0.33	$ 0.33	$ 0.33	$ 0.41	$ 0.23	$ 0.23	$ 0.21	$ 0.23	$ 0.23	$ 0.18	$ 0.14	$ 0.14	$ 0.14	$ 0.14	$ 0.14	$ 0.14	$ 0.14	$ 0.14	$ 0.14	$ 0.14	$ 0.14
11	Projected Future Debt Service	$ -	$ -	$ 0.10	$ 0.23	$ 0.37	$ 0.49	$ 0.61	$ 0.74	$ 0.75	$ 0.82	$ 0.89	$ 0.95	$ 1.02	$ 1.09	$ 1.16	$ 1.23	$ 1.29	$ 1.36	$ 1.43	$ 1.50	$ 1.57
12	**Total Debt Service**	**$ 0.33**	**$ 0.33**	**$ 0.43**	**$ 0.64**	**$ 0.60**	**$ 0.72**	**$ 0.82**	**$ 0.96**	**$ 0.98**	**$ 1.00**	**$ 1.03**	**$ 1.09**	**$ 1.16**	**$ 1.23**	**$ 1.30**	**$ 1.37**	**$ 1.44**	**$ 1.50**	**$ 1.57**	**$ 1.64**	**$ 1.71**
13	**Cash Funded CIP from Current Revenues**	$ 0.4	$ 0.5	$ 0.5	$ 0.5	$ 0.6	$ 0.7	$ 2.4	$ 1.7	$ 1.8	$ 1.9	$ 2.1	$ 2.2	$ 2.4	$ 2.5	$ 2.7	$ 2.9	$ 2.9	$ 3.1	$ 3.3	$ 3.5	$ 3.8
14	**Transfers and Other Expenditures**	$ 0.03	$ 0.03	$ 0.03	$ 0.03	$ 0.03	$ 0.03	$ 0.03	$ 0.03	$ 0.03	$ 0.03	$ 0.03	$ 0.03	$ 0.03	$ 0.03	$ 0.03	$ 0.03	$ 0.03	$ 0.03	$ 0.03	$ 0.03	$ 0.03
15	**Capital Outlay**	$ 0.21	$ 0.21	$ 0.21	$ 0.21	$ 0.21	$ 0.21	$ 0.21	$ 0.21	$ 0.21	$ 0.21	$ 0.21	$ 0.21	$ 0.21	$ 0.21	$ 0.21	$ 0.21	$ 0.21	$ 0.21	$ 0.21	$ 0.21	$ 0.21
16	**Annual Operating Balance**	**$ 0.14**	**$ 0.26**	**$ 0.46**	**$ 0.56**	**$ 0.76**	**$ 0.81**	**$ (0.77)**	**$ (0.02)**	**$ 0.03**	**$ 0.08**	**$ 0.13**	**$ 0.14**	**$ 0.17**	**$ 0.20**	**$ 0.24**	**$ 0.29**	**$ 0.38**	**$ 0.31**	**$ 0.24**	**$ 0.17**	**$ 0.09**
17	**Debt Service Coverage Ratio**	**3.30**	**4.12**	**3.74**	**2.97**	**3.62**	**3.40**	**3.26**	**2.97**	**3.12**	**3.27**	**3.38**	**3.38**	**3.40**	**3.42**	**3.46**	**3.50**	**3.47**	**3.44**	**3.42**	**3.41**	**3.41**
	Funds on Hand:																					
18	**Beginning Fund Balance**	**$ 0.04**	**$ 0.18**	**$ 0.44**	**$ 0.90**	**$ 1.47**	**$ 2.23**	**$ 3.04**	**$ 2.27**	**$ 2.24**	**$ 2.27**	**$ 2.35**	**$ 2.48**	**$ 2.62**	**$ 2.79**	**$ 2.98**	**$ 3.22**	**$ 3.51**	**$ 3.88**	**$ 4.20**	**$ 4.44**	**$ 4.61**
19	Remaining Operating Balance	**$ 0.52**	**$ 0.79**	**$ 0.94**	**$ 1.02**	**$ 1.32**	**$ 1.48**	**$ 1.61**	**$ 1.65**	**$ 1.83**	**$ 2.02**	**$ 2.20**	**$ 2.37**	**$ 2.54**	**$ 2.74**	**$ 2.95**	**$ 3.18**	**$ 3.30**	**$ 3.43**	**$ 3.57**	**$ 3.71**	**$ 3.86**
20	Transfer to Construction Fund	**$ (0.38)**	**$ (0.53)**	**$ (0.48)**	**$ (0.45)**	**$ (0.56)**	**$ (0.67)**	**$ (2.38)**	**$ (1.68)**	**$ (1.80)**	**$ (1.94)**	**$ (2.08)**	**$ (2.22)**	**$ (2.38)**	**$ (2.54)**	**$ (2.71)**	**$ (2.89)**	**$ (2.92)**	**$ (3.12)**	**$ (3.32)**	**$ (3.54)**	**$ (3.77)**
21	Transfer to Operations	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**
22	**Ending Operating Fund Balance**	**$ 0.18**	**$ 0.44**	**$ 0.90**	**$ 1.47**	**$ 2.23**	**$ 3.04**	**$ 2.27**	**$ 2.24**	**$ 2.27**	**$ 2.35**	**$ 2.48**	**$ 2.62**	**$ 2.79**	**$ 2.98**	**$ 3.22**	**$ 3.51**	**$ 3.88**	**$ 4.20**	**$ 4.44**	**$ 4.61**	**$ 4.70**

Note:

1. The Financial Plan detailed herein is preliminary and represents the Base Case Financial Plan with no revenue increases.

2. The attached Financial Plan must be verified and validated with the respective Entity.

11.7 Kenly

Kenly - Financial Assumptions & Metrics

Line	General Assumptions	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045
1	Customer Growth	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
2	Other Revenues Escalation Factor	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%
3	System Wide - O&M Escalation Factor	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
	Financing Terms																					
	Revenue Bonds																					
4	Term	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
5	Rate	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%
	SRF																					
6	Term	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
7	Rate	3.14%	3.14%	3.14%	3.14%	3.14%	3.14%	3.14%	3.14%	3.14%	3.14%	3.14%	3.14%	3.14%	3.14%	3.14%	3.14%	3.14%	3.14%	3.14%	3.14%	3.14%
8	**Debt Service Coverage Target**	**1.50**	**1.50**	**1.50**	**1.50**	**1.50**	**1.50**	**1.50**	**1.50**	**1.50**	**1.50**	**1.50**	**1.50**	**1.50**	**1.50**	**1.50**	**1.50**	**1.50**	**1.50**	**1.50**	**1.50**	**1.50**
9	**Funds on Hand Target (days)**	**120**	**120**	**120**	**120**	**120**	**120**	**120**	**120**	**120**	**120**	**120**	**120**	**120**	**120**	**120**	**120**	**120**	**120**	**120**	**120**	**120**

Kenly - Financial Plan (in millions)

Line	Description	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045
1	Water Fund - Existing Rates	$ 1.08	$ 1.11	$ 1.14	$ 1.16	$ 1.19	$ 1.22	$ 1.25	$ 1.29	$ 1.32	$ 1.35	$ 1.38	$ 1.42	$ 1.45	$ 1.49	$ 1.53	$ 1.57	$ 1.61	$ 1.65	$ 1.69	$ 1.73	$ 1.77
2	Wastewater Fund - Existing Rates	$ 1.08	$ 1.11	$ 1.14	$ 1.16	$ 1.19	$ 1.22	$ 1.25	$ 1.29	$ 1.32	$ 1.35	$ 1.38	$ 1.42	$ 1.45	$ 1.49	$ 1.53	$ 1.57	$ 1.61	$ 1.65	$ 1.69	$ 1.73	$ 1.77
3	**Total Service Revenue - Existing Rates**	**$ 2.16**	**$ 2.22**	**$ 2.27**	**$ 2.33**	**$ 2.39**	**$ 2.45**	**$ 2.51**	**$ 2.57**	**$ 2.64**	**$ 2.70**	**$ 2.77**	**$ 2.84**	**$ 2.91**	**$ 2.98**	**$ 3.06**	**$ 3.13**	**$ 3.21**	**$ 3.29**	**$ 3.37**	**$ 3.46**	**$ 3.54**
	Additional Revenue Required (Rate increases):																					
4	**Rate Increases**	**6.0%**	**6.0%**	**5.0%**	**5.0%**	**5.0%**	**4.0%**	**3.0%**	**2.0%**	**4.0%**	**4.0%**	**3.0%**	**3.0%**	**2.0%**	**2.0%**	**2.0%**	**2.0%**	**2.0%**	**2.0%**	**2.0%**	**2.0%**	**2.0%**
5	**Total Additional Revenue Required**	$ 0.1	$ 0.3	$ 0.4	$ 0.6	$ 0.7	$ 0.9	$ 1.0	$ 1.1	$ 1.3	$ 1.5	$ 1.6	$ 1.8	$ 1.9	$ 2.1	$ 2.2	$ 2.4	$ 2.6	$ 2.8	$ 2.9	$ 3.1	$ 3.4
6	**Other Revenue and Adjustments**																					
7	**Total Revenues**	**$ 2.29**	**$ 2.49**	**$ 2.68**	**$ 2.89**	**$ 3.11**	**$ 3.31**	**$ 3.49**	**$ 3.65**	**$ 3.89**	**$ 4.15**	**$ 4.38**	**$ 4.63**	**$ 4.84**	**$ 5.06**	**$ 5.29**	**$ 5.53**	**$ 5.78**	**$ 6.04**	**$ 6.32**	**$ 6.61**	**$ 6.91**
8	Operating Expense	$ 2.07	$ 2.18	$ 2.29	$ 2.41	$ 2.53	$ 2.65	$ 2.79	$ 2.93	$ 3.07	$ 3.23	$ 3.39	$ 3.56	$ 3.73	$ 3.92	$ 4.12	$ 4.32	$ 4.54	$ 4.77	$ 5.00	$ 5.25	$ 5.52
9	**Net Revenues after Operations**	**$ 0.22**	**$ 0.31**	**$ 0.39**	**$ 0.48**	**$ 0.58**	**$ 0.66**	**$ 0.71**	**$ 0.73**	**$ 0.82**	**$ 0.93**	**$ 1.00**	**$ 1.07**	**$ 1.10**	**$ 1.14**	**$ 1.17**	**$ 1.21**	**$ 1.24**	**$ 1.28**	**$ 1.32**	**$ 1.35**	**$ 1.39**
10	Outstanding Debt Service	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
11	Projected Future Debt Service	$ -	$ 0.02	$ 0.03	$ 0.05	$ 0.07	$ 0.09	$ 0.09	$ 0.09	$ 0.09	$ 0.09	$ 0.09	$ 0.09	$ 0.09	$ 0.09	$ 0.09	$ 0.09	$ 0.09	$ 0.09	$ 0.09	$ 0.09	$ 0.09
12	**Total Debt Service**	**$ -**	**$ 0.02**	**$ 0.03**	**$ 0.05**	**$ 0.07**	**$ 0.09**	**$ 0.09**	**$ 0.09**	**$ 0.09**	**$ 0.09**	**$ 0.09**	**$ 0.09**	**$ 0.09**	**$ 0.09**	**$ 0.09**	**$ 0.09**	**$ 0.09**	**$ 0.09**	**$ 0.09**	**$ 0.09**	**$ 0.09**
13	**Cash Funded CIP from Current Revenues**																					
14	**Transfers and Other Expenditures**	$ 0.03	$ 0.05	$ 0.06	$ 0.08	$ 0.09	$ 0.11	$ 0.10	$ 0.10	$ 0.12	$ 0.11	$ 0.13	$ 0.13	$ 0.12	$ 0.14	$ 0.14	$ 0.14	$ 0.14	$ 0.15	$ 0.16	$ 0.14	$ 0.15
15	**Capital Outlay**	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
16	**Annual Operating Balance**	**$ 0.19**	**$ 0.24**	**$ 0.29**	**$ 0.35**	**$ 0.42**	**$ 0.46**	**$ 0.52**	**$ 0.55**	**$ 0.62**	**$ 0.73**	**$ 0.78**	**$ 0.85**	**$ 0.90**	**$ 0.91**	**$ 0.95**	**$ 0.99**	**$ 1.02**	**$ 1.05**	**$ 1.07**	**$ 1.13**	**$ 1.16**
17	**Debt Service Coverage Ratio**		**18.08**	**11.41**	**9.37**	**8.49**	**7.71**	**8.32**	**8.55**	**9.67**	**10.88**	**11.71**	**12.59**	**12.98**	**13.37**	**13.77**	**14.18**	**14.60**	**15.02**	**15.45**	**15.89**	**16.33**
	Funds on Hand:																					
18	**Beginning Fund Balance**	**$ 0.26**	**$ 0.30**	**$ 0.39**	**$ 0.51**	**$ 0.69**	**$ 0.92**	**$ 0.94**	**$ 0.98**	**$ 1.02**	**$ 1.12**	**$ 1.29**	**$ 1.49**	**$ 1.74**	**$ 1.98**	**$ 2.22**	**$ 2.44**	**$ 2.67**	**$ 2.88**	**$ 3.08**	**$ 3.27**	**$ 3.44**
19	Remaining Operating Balance	**$ 0.19**	**$ 0.24**	**$ 0.29**	**$ 0.35**	**$ 0.42**	**$ 0.46**	**$ 0.52**	**$ 0.55**	**$ 0.62**	**$ 0.73**	**$ 0.78**	**$ 0.85**	**$ 0.90**	**$ 0.91**	**$ 0.95**	**$ 0.99**	**$ 1.02**	**$ 1.05**	**$ 1.07**	**$ 1.13**	**$ 1.16**
20	Capital Expenses Funded From Surplus Fund	**$ (0.15)**	**$ (0.16)**	**$ (0.17)**	**$ (0.18)**	**$ (0.18)**	**$ (0.44)**	**$ (0.48)**	**$ (0.51)**	**$ (0.52)**	**$ (0.56)**	**$ (0.57)**	**$ (0.61)**	**$ (0.66)**	**$ (0.68)**	**$ (0.72)**	**$ (0.76)**	**$ (0.81)**	**$ (0.85)**	**$ (0.88)**	**$ (0.96)**	**$ (1.00)**
21	**Ending Operating Fund Balance**	**$ 0.30**	**$ 0.39**	**$ 0.51**	**$ 0.69**	**$ 0.92**	**$ 0.94**	**$ 0.98**	**$ 1.02**	**$ 1.12**	**$ 1.29**	**$ 1.49**	**$ 1.74**	**$ 1.98**	**$ 2.22**	**$ 2.44**	**$ 2.67**	**$ 2.88**	**$ 3.08**	**$ 3.27**	**$ 3.44**	**$ 3.60**

Note:

1. The Financial Plan detailed herein is preliminary and represents the Base Case Financial Plan with no revenue increases.

2. The attached Financial Plan must be verified and validated with the respective Entity.

11.8 Princeton

Town of Princeton - Financial Assumptions & Metrics

Line	General Assumptions	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045
1	Customer Growth	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
2	Other Revenues Escalation Factor	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%
3	System Wide - O&M Escalation Factor	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%
	Financing Terms:																					
	Revenue Bonds																					
4	Term	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
5	Rate	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%
	State Revolving Fund																					
6	Term	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
7	Rate	3.14%	3.14%	3.14%	3.14%	3.14%	3.14%	3.14%	3.14%	3.14%	3.14%	3.14%	3.14%	3.14%	3.14%	3.14%	3.14%	3.14%	3.14%	3.14%	3.14%	3.14%
8	Debt Service Coverage Target	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50
9	Funds on Hand Target (days)	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120

Town of Princeton - Financial Plan (in millions)

Line	Description	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045
	Projected																					
1	Water and Sewer Service - Existing Rates	$ 0.75	$ 0.77	$ 0.80	$ 0.82	$ 0.85	$ 0.87	$ 0.90	$ 0.93	$ 0.95	$ 0.98	$ 1.01	$ 1.04	$ 1.07	$ 1.10	$ 1.14	$ 1.17	$ 1.21	$ 1.24	$ 1.28	$ 1.32	$ 1.36
2	**Total Service Revenue - Existing Rates**	**$ 0.75**	**$ 0.77**	**$ 0.80**	**$ 0.82**	**$ 0.85**	**$ 0.87**	**$ 0.90**	**$ 0.93**	**$ 0.95**	**$ 0.98**	**$ 1.01**	**$ 1.04**	**$ 1.07**	**$ 1.10**	**$ 1.14**	**$ 1.17**	**$ 1.21**	**$ 1.24**	**$ 1.28**	**$ 1.32**	**$ 1.36**
	Additional Revenue Required:																					
3	Rate Increases	14.0%	10.0%	8.0%	8.0%	6.0%	6.0%	5.0%	5.0%	5.0%	4.0%	4.0%	3.0%	3.0%	3.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
4	**Total Additional Revenue Required**	$ 0	$ 0	$ 0	$ 0	$ 0	$ 1	$ 1	$ 1	$ 1	$ 1	$ 1	$ 1	$ 1	$ 1	$ 1	$ 2	$ 2	$ 2	$ 2	$ 2	$ 2
5	**Other Revenue and Adjustments**	$ 0.08	$ 0.08	$ 0.08	$ 0.09	$ 0.09	$ 0.09	$ 0.10	$ 0.10	$ 0.11	$ 0.11	$ 0.11	$ 0.12	$ 0.12	$ 0.13	$ 0.13	$ 0.14	$ 0.14	$ 0.15	$ 0.16	$ 0.16	$ 0.17
6	**Total Revenues**	**$ 0.93**	**$ 1.05**	**$ 1.16**	**$ 1.29**	**$ 1.40**	**$ 1.53**	**$ 1.65**	**$ 1.78**	**$ 1.92**	**$ 2.05**	**$ 2.19**	**$ 2.33**	**$ 2.46**	**$ 2.61**	**$ 2.74**	**$ 2.88**	**$ 3.02**	**$ 3.18**	**$ 3.34**	**$ 3.50**	**$ 3.68**
7	Operating Expense	$ 0.71	$ 0.75	$ 0.80	$ 0.85	$ 0.90	$ 0.95	$ 1.01	$ 1.07	$ 1.13	$ 1.20	$ 1.27	$ 1.35	$ 1.43	$ 1.52	$ 1.61	$ 1.70	$ 1.81	$ 1.92	$ 2.03	$ 2.15	$ 2.28
8	**Net Revenues after Operations**	**$ 0.22**	**$ 0.30**	**$ 0.36**	**$ 0.44**	**$ 0.50**	**$ 0.57**	**$ 0.64**	**$ 0.71**	**$ 0.78**	**$ 0.85**	**$ 0.92**	**$ 0.98**	**$ 1.03**	**$ 1.09**	**$ 1.13**	**$ 1.18**	**$ 1.22**	**$ 1.26**	**$ 1.30**	**$ 1.35**	**$ 1.40**
9	Outstanding Debt Service	$ 0.06	$ 0.06	$ 0.06	$ 0.06	$ 0.06	$ 0.06	$ 0.06	$ 0.06	$ 0.06	$ 0.06	$ 0.06	$ 0.06	$ 0.06	$ 0.06	$ 0.06	$ 0.06	$ 0.06	$ 0.06	$ 0.06	$ 0.06	$ 0.06
10	Projected Future Debt Service	$ -	$ 0.02	$ 0.05	$ 0.08	$ 0.09	$ 0.10	$ 0.11	$ 0.12	$ 0.13	$ 0.13	$ 0.13	$ 0.13	$ 0.13	$ 0.13	$ 0.13	$ 0.13	$ 0.13	$ 0.13	$ 0.13	$ 0.13	$ 0.13
11	**Total Debt Service**	**$ 0.06**	**$ 0.08**	**$ 0.10**	**$ 0.13**	**$ 0.14**	**$ 0.15**	**$ 0.16**	**$ 0.17**	**$ 0.18**	**$ 0.18**	**$ 0.18**	**$ 0.18**	**$ 0.18**	**$ 0.18**	**$ 0.18**	**$ 0.18**	**$ 0.18**	**$ 0.18**	**$ 0.18**	**$ 0.18**	**$ 0.18**
12	**Cash Funded CIP from Current Revenues**																					
13	**Transfers and Other Expenditures**	$ 0.01	$ 0.07	$ 0.08	$ 0.07	$ 0.11	$ 0.09	$ 0.11	$ 0.11	$ 0.18	$ 0.17	$ 0.21	$ 0.22	$ 0.23	$ 0.24	$ 0.25	$ 0.26	$ 0.29	$ 0.31	$ 0.33	$ 0.34	$ 0.37
14	**Capital Outlay**	$ 0.08	$ 0.09	$ 0.09	$ 0.09	$ 0.10	$ 0.10	$ 0.10	$ 0.11	$ 0.11	$ 0.12	$ 0.12	$ 0.13	$ 0.13	$ 0.14	$ 0.14	$ 0.15	$ 0.15	$ 0.16	$ 0.17	$ 0.17	$ 0.18
15	**Annual Operating Balance**	**$ 0.08**	**$ 0.07**	**$ 0.10**	**$ 0.15**	**$ 0.15**	**$ 0.23**	**$ 0.27**	**$ 0.32**	**$ 0.32**	**$ 0.38**	**$ 0.41**	**$ 0.45**	**$ 0.49**	**$ 0.53**	**$ 0.56**	**$ 0.58**	**$ 0.59**	**$ 0.61**	**$ 0.63**	**$ 0.66**	**$ 0.67**
16	**Debt Service Coverage Ratio**	**4.05**	**3.94**	**3.55**	**3.38**	**3.50**	**3.75**	**3.91**	**4.09**	**4.31**	**4.67**	**5.05**	**5.35**	**5.67**	**6.01**	**6.23**	**6.46**	**6.69**	**6.92**	**7.16**	**7.41**	**7.67**
	Funds on Hand:																					
17	**Beginning Fund Balance**	**$ (0.00)**	**$ 0.07**	**$ 0.14**	**$ 0.24**	**$ 0.29**	**$ 0.29**	**$ 0.35**	**$ 0.42**	**$ 0.51**	**$ 0.51**	**$ 0.53**	**$ 0.59**	**$ 0.67**	**$ 0.76**	**$ 0.88**	**$ 0.99**	**$ 1.09**	**$ 1.18**	**$ 1.26**	**$ 1.33**	**$ 1.39**
18	Remaining Operating Balance	$ 0.08	$ 0.07	$ 0.10	$ 0.15	$ 0.15	$ 0.23	$ 0.27	$ 0.32	$ 0.32	$ 0.38	$ 0.41	$ 0.45	$ 0.49	$ 0.53	$ 0.56	$ 0.58	$ 0.59	$ 0.61	$ 0.63	$ 0.66	$ 0.67
19	Capital Expenses Funded From Surplus Fund	$ -	$ -	$ -	$ (0.10)	$ (0.15)	$ (0.18)	$ (0.20)	$ (0.22)	$ (0.32)	$ (0.35)	$ (0.35)	$ (0.37)	$ (0.40)	$ (0.42)	$ (0.45)	$ (0.48)	$ (0.50)	$ (0.53)	$ (0.56)	$ (0.60)	$ (0.63)
20	**Ending Operating Fund Balance**	**$ 0.07**	**$ 0.14**	**$ 0.24**	**$ 0.29**	**$ 0.29**	**$ 0.35**	**$ 0.42**	**$ 0.51**	**$ 0.51**	**$ 0.53**	**$ 0.59**	**$ 0.67**	**$ 0.76**	**$ 0.88**	**$ 0.99**	**$ 1.09**	**$ 1.18**	**$ 1.26**	**$ 1.33**	**$ 1.39**	**$ 1.43**

Note:

1. The Financial Plan detailed herein is preliminary and represents the Base Case Financial Plan with no revenue increases.

2. The attached Financial Plan must be verified and validated with the respective Entity.

11.9 Four Oaks

Four Oaks - Financial Assumptions & Metrics

Line	General Assumptions	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045
1	Customer Growth	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
2	Other Revenues Escalation Factor	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%
3	System Wide - O&M Escalation Factor	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
	Financing Terms																					
	Revenue Bonds																					
4	Term	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
5	Rate	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%
	SRF																					
6	Term	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
7	Rate	3.14%	3.14%	3.14%	3.14%	3.14%	3.14%	3.14%	3.14%	3.14%	3.14%	3.14%	3.14%	3.14%	3.14%	3.14%	3.14%	3.14%	3.14%	3.14%	3.14%	3.14%
8	**Debt Service Coverage Target**	**1.50**	**1.50**	**1.50**	**1.50**	**1.50**	**1.50**	**1.50**	**1.50**	**1.50**	**1.50**	**1.50**	**1.50**	**1.50**	**1.50**	**1.50**	**1.50**	**1.50**	**1.50**	**1.50**	**1.50**	**1.50**
9	**Funds on Hand Target (days)**	**120**	**120**	**120**	**120**	**120**	**120**	**120**	**120**	**120**	**120**	**120**	**120**	**120**	**120**	**120**	**120**	**120**	**120**	**120**	**120**	**120**

Four Oaks - Financial Plan (in millions)

Line	Description	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045
1	Water Fund - Existing Rates	$ 0.68	$ 0.70	$ 0.72	$ 0.74	$ 0.76	$ 0.77	$ 0.79	$ 0.81	$ 0.83	$ 0.85	$ 0.88	$ 0.90	$ 0.92	$ 0.94	$ 0.97	$ 0.99	$ 1.02	$ 1.04	$ 1.07	$ 1.09	$ 1.12
2	Wastewater Fund - Existing Rates	$ 0.84	$ 0.86	$ 0.89	$ 0.91	$ 0.93	$ 0.95	$ 0.98	$ 1.00	$ 1.03	$ 1.05	$ 1.08	$ 1.11	$ 1.13	$ 1.16	$ 1.19	$ 1.22	$ 1.25	$ 1.28	$ 1.32	$ 1.35	$ 1.38
3	**Total Service Revenue - Existing Rates**	**$ 1.53**	**$ 1.57**	**$ 1.61**	**$ 1.65**	**$ 1.69**	**$ 1.73**	**$ 1.77**	**$ 1.82**	**$ 1.86**	**$ 1.91**	**$ 1.96**	**$ 2.00**	**$ 2.05**	**$ 2.11**	**$ 2.16**	**$ 2.21**	**$ 2.27**	**$ 2.33**	**$ 2.38**	**$ 2.44**	**$ 2.50**
	Additional Revenue Required (Rate increases):																					
4	**Rate Increases**	**12.0%**	**8.0%**	**6.0%**	**5.0%**	**5.0%**	**3.0%**	**2.0%**	**2.0%**	**2.0%**	**2.0%**	**2.0%**	**2.0%**	**6.0%**	**2.0%**	**2.0%**	**2.0%**	**2.0%**	**2.0%**	**0.0%**	**0.0%**	**0.0%**
5	**Total Additional Revenue Required**	$ 0.2	$ 0.3	$ 0.5	$ 0.6	$ 0.7	$ 0.8	$ 0.9	$ 0.9	$ 1.0	$ 1.1	$ 1.2	$ 1.3	$ 1.4	$ 1.5	$ 1.6	$ 1.7	$ 1.8	$ 2.0	$ 2.0	$ 2.1	$ 2.1
6	**Other Revenue and Adjustments**	$ 0.3	$ 0.3	$ 0.3	$ 0.3	$ 0.4	$ 0.4	$ 0.4	$ 0.4	$ 0.4	$ 0.5	$ 0.5	$ 0.5	$ 0.6	$ 0.6	$ 0.6	$ 0.7	$ 0.7	$ 0.8	$ 0.8	$ 0.9	$ 0.9
7	**Total Revenues**	**$ 1.99**	**$ 2.19**	**$ 2.37**	**$ 2.55**	**$ 2.74**	**$ 2.89**	**$ 3.03**	**$ 3.17**	**$ 3.32**	**$ 3.48**	**$ 3.65**	**$ 3.82**	**$ 4.00**	**$ 4.19**	**$ 4.39**	**$ 4.60**	**$ 4.82**	**$ 5.05**	**$ 5.20**	**$ 5.36**	**$ 5.53**
8	Operating Expense	$ 1.80	$ 1.89	$ 1.98	$ 2.08	$ 2.19	$ 2.29	$ 2.41	$ 2.53	$ 2.66	$ 2.79	$ 2.93	$ 3.08	$ 3.23	$ 3.39	$ 3.56	$ 3.74	$ 3.92	$ 4.12	$ 4.33	$ 4.54	$ 4.77
9	**Net Revenues after Operations**	**$ 0.19**	**$ 0.30**	**$ 0.39**	**$ 0.47**	**$ 0.55**	**$ 0.60**	**$ 0.62**	**$ 0.64**	**$ 0.67**	**$ 0.69**	**$ 0.72**	**$ 0.75**	**$ 0.77**	**$ 0.80**	**$ 0.83**	**$ 0.86**	**$ 0.90**	**$ 0.93**	**$ 0.88**	**$ 0.82**	**$ 0.75**
10	Outstanding Debt Service	$ 0.05	$ 0.05	$ 0.05	$ 0.05	$ 0.05	$ 0.05	$ 0.05	$ 0.05	$ 0.05	$ 0.05	$ 0.05	$ 0.05	$ 0.05	$ 0.05	$ 0.05	$ 0.05	$ 0.05	$ 0.05	$ 0.05	$ 0.05	$ 0.05
11	Projected Future Debt Service	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
12	**Total Debt Service**	**$ 0.05**	**$ 0.05**	**$ 0.05**	**$ 0.05**	**$ 0.05**	**$ 0.05**	**$ 0.05**	**$ 0.05**	**$ 0.05**	**$ 0.05**	**$ 0.05**	**$ 0.05**	**$ 0.05**	**$ 0.05**	**$ 0.05**	**$ 0.05**	**$ 0.05**	**$ 0.05**	**$ 0.05**	**$ 0.05**	**$ 0.05**
13	**Cash Funded CIP from Current Revenues**																					
14	**Transfers and Other Expenditures**	$ 0.12	$ 0.12	$ 0.13	$ 0.13	$ 0.14	$ 0.15	$ 0.16	$ 0.16	$ 0.17	$ 0.18	$ 0.19	$ 0.20	$ 0.21	$ 0.22	$ 0.23	$ 0.24	$ 0.25	$ 0.27	$ 0.28	$ 0.29	$ 0.31
15	**Capital Outlay**	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
16	**Annual Operating Balance**	**$ 0.03**	**$ 0.14**	**$ 0.22**	**$ 0.29**	**$ 0.37**	**$ 0.40**	**$ 0.42**	**$ 0.43**	**$ 0.45**	**$ 0.47**	**$ 0.48**	**$ 0.50**	**$ 0.52**	**$ 0.54**	**$ 0.56**	**$ 0.58**	**$ 0.60**	**$ 0.62**	**$ 0.55**	**$ 0.48**	**$ 0.40**
17	**Debt Service Coverage Ratio**	**4.21**	**6.60**	**8.49**	**10.15**	**11.99**	**12.97**	**13.45**	**13.96**	**14.48**	**15.02**	**15.58**	**16.16**	**16.76**	**17.39**	**18.04**	**18.71**	**19.41**	**20.13**	**18.98**	**17.72**	**16.35**
	Funds on Hand:																					
18	**Beginning Fund Balance**	**$ 1.27**	**$ 1.04**	**$ 0.90**	**$ 0.83**	**$ 0.82**	**$ 0.87**	**$ 0.94**	**$ 1.00**	**$ 1.23**	**$ 1.47**	**$ 1.71**	**$ 1.96**	**$ 2.21**	**$ 2.47**	**$ 2.73**	**$ 3.00**	**$ 3.28**	**$ 3.56**	**$ 3.84**	**$ 4.04**	**$ 4.15**
19	Remaining Operating Balance	**$ 0.03**	**$ 0.14**	**$ 0.22**	**$ 0.29**	**$ 0.37**	**$ 0.40**	**$ 0.42**	**$ 0.60**	**$ 0.62**	**$ 0.65**	**$ 0.67**	**$ 0.70**	**$ 0.73**	**$ 0.76**	**$ 0.79**	**$ 0.82**	**$ 0.85**	**$ 0.88**	**$ 0.83**	**$ 0.77**	**$ 0.71**
20	Capital Expenses Funded From Surplus Fund	**$ (0.26)**	**$ (0.27)**	**$ (0.29)**	**$ (0.30)**	**$ (0.32)**	**$ (0.33)**	**$ (0.35)**	**$ (0.37)**	**$ (0.39)**	**$ (0.41)**	**$ (0.43)**	**$ (0.45)**	**$ (0.47)**	**$ (0.49)**	**$ (0.52)**	**$ (0.54)**	**$ (0.57)**	**$ (0.60)**	**$ (0.63)**	**$ (0.66)**	**$ (0.69)**
21	**Ending Operating Fund Balance**	**$ 1.04**	**$ 0.90**	**$ 0.83**	**$ 0.82**	**$ 0.87**	**$ 0.94**	**$ 1.00**	**$ 1.23**	**$ 1.47**	**$ 1.71**	**$ 1.96**	**$ 2.21**	**$ 2.47**	**$ 2.73**	**$ 3.00**	**$ 3.28**	**$ 3.56**	**$ 3.84**	**$ 4.04**	**$ 4.15**	**$ 4.17**

Note:

1. The Financial Plan detailed herein is preliminary and represents the Base Case Financial Plan with no revenue increases.

2. The attached Financial Plan must be verified and validated with the respective Entity.