NEW BUSINESS (NB3)	Lower Cape Fear Water & Sewer Authority

AGENDA ITEM

To: CHAIRMAN RIVENBARK AND BOARD MEMBERS

From: TIM H. HOLLOMAN, EXECUTIVE DIRECTOR

Date: December 12, 2022

Re: Resolution Awarding Water Rate Study and Shared Cost Methodology for the Lower Cape Fear Water and Sewer Authority

Reviewed and approved as to form: MATTHEW A. NICHOLS, AUTHORITY ATTORNEY

Background: The Lower Cape Fear Water and Sewer Authority (Authority) serves Brunswick, Bladen, Pender, New Hanover, Columbus Counties, and the City of Wilmington, with a Board of Directors representing those local governments. As the largest regional water system in Eastern North Carolina, the Authority's primary role is to provide raw water from Cape Fear to supply treatment facilities that serve 550,000 customers.

For the last two years, the Authority has been working with its partners and evaluating the rate structure regarding funding capital improvement needs and methodologies needed for initial new work and repair work that the Authority is not currently able to fund directly.

The Authority has been awarded funding the study and wishes to proceed with a more formal analysis of operation in relation to capital projects and how our partners participate.

Attached: Three Rate Study Proposals

Action Requested: Motion to approve

Resolution Awarding Water Rate Study and Shared Cost Methodology for the Lower Cape Fear Water and Sewer Authority

WHEREAS, the Lower Cape Fear Water and Sewer Authority ("Authority") serves Brunswick, Bladen, Pender, New Hanover, Columbus Counties, and the City of Wilmington with a Board of Directors representing those local governments. As the largest regional water system in Eastern North Carolina, the Authority's primary role is to provide raw water from the Cape Fear to supply treatment facilities that serve 550,000 customers: and,

WHEREAS, The Authority and its partners recognized the importance of financial planning in relation to infrastructure construction, maintenance and emergency work that takes place and,

WHEREAS, after advertising for proposals, the Authority received three; and

WHEREAS, The Authority received funding from the State Revolving Loan Fund to proceed with this project, and

WHEREAS, after review of the proposals, the recommendation is to grant the award to Willdan Financial Services.

NOW, THEREFORE, BE IT RESOLVED, by the Chairman and the Directors of the Lower Cape Fear awards the water rate study to Willdan Financial Services.

THEREFORE, BE IT FURTHER RESOLVED, that a copy of this Resolution be recorded in the permanent minutes of this Board.

Adopted this 12th day of December 2022.

_____
Charlie Rivenbark, Chairman

ATTEST:

_____
Harry Knight, Secretary

NewGen Strategies & Solutions

www.newgenstrategies.net

PROPOSAL

WATER RATE STUDY AND METHODOLOGY

NOVEMBER 21, 2022

Prepared for:
Lower Cape Fear Water and Sewer Authority
1107 New Pointe Blvd., Suite 17
Leland, North Carolina 28451

COVER LETTER

November 21, 2022

Ms. Danielle Hertzog
Finance Administrative Assistant
Lower Cape Fear Water and Sewer Authority
1107 New Pointe Boulevard, Suite 17
Leland, NC 28451

Subject: RFP – WATER RATE STUDY

Dear Ms. Hertzog:

The Lower Cape Fear Water and Sewer Authority operates in a complex and ever-evolving landscape to provide a public service that is affordable, reliable, and sustainable. At the same time, the pace of change in the utility market is accelerating, directly impacting your ability to provide quality service to your customers. Navigating the challenges of balancing long-term infrastructure investment, maintaining customer satisfaction, and the sheer amount of data available to drive decision-making is overwhelming. How do you optimize data analysis to identify and inform the best strategic approach to deliver the right services, address stakeholder demands, and ensure public trust?

Understanding your community, your organization, and your data are the three essential elements to developing actionable strategies to sustain your future service. NewGen Strategies and Solutions, LLC believes that strategy dictates everything. Our approach incorporates your data, market, and community to provide an integrated view that allows you to confidently make long-term decisions. Our personnel have extensive experience in all financial and management facets of municipal utilities. We leverage innovative modeling technology and market expertise to solve your most complicated issues. We design strategies to ensure they are responsive, transparent, and reliable while paving the way for successful buy-in across all your stakeholders.

The NewGen team is uniquely qualified to provide a Water Rate Study for LCFWASA. We have analyzed, calculated, and benchmarked rates and agreements for numerous water and sewer utilities. We are pleased to submit our proposal to provide a Water Rate Study for LCFWASA. While the enclosure to this letter sets forth our experience, qualifications, and approach, there are a few key points we would like to stress:

- ***Operational Insights*** – NewGen makes data operational resulting in actionable decisions with defensible results. We harness existing and untapped data to optimize operations, develop demand management strategies, estimate the impacts of capital investments, and identify the rational nexus underlying rate structure decisions. NewGen has helped our clients recover costs, improve service delivery, and respond to changing market conditions. Our clients rely on us as trusted advisors on both formal and informal bases.

- ***Industry Expertise*** – Our Project Manager, Michael Maker, is the Deputy Director of NewGen's Water Practice and has managed numerous management and financial studies for municipal water, sewer, solid waste, and stormwater utilities. He is an active member of AWWA's Finance, Accounting & Management Controls Committee and AWWA's Workforce Strategies Committee. He is a co-author of the latest edition of AWWA's Manual M29, *Capital Financing* and Manual M5, *Water Utility Management*.
- ***Demonstrated Performance*** – The issues being faced by LCFWASA are like those faced by NewGen's clients throughout the country. NewGen has successfully completed cost of service and other projects for hundreds of municipalities.
- ***Stakeholder Communication*** – NewGen simplifies complex concepts by combining visual tools and our training expertise to ensure that clients gain a deep understanding of how the issues and underlying data drive our recommendations and scenarios. This directly impacts the evaluation of the scenarios we present, streamlines decision making, and successfully obtains buy-in from elected officials, advisory committees, regulatory bodies, utility senior management, and utility customers. We have extensive experience presenting information in simple terms to both oversight boards and stakeholder groups.
- ***Client Endorsements*** – We have included several references in our proposal and strongly encourage LCFWASA to contact them to learn more about our firm and specific project team members.

We look forward to working with you on this important and interesting study. Please contact me on my direct line at (443) 951-0355 or by e-mail at mmaker@newgenstrategies.net if you would like to discuss our project team and approach.

Sincerely,

DocuSigned by:
Michael Maker
F8F7668E220E404...

Michael Maker
NewGen Strategies & Solutions, LLC
Partner

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1. PROJECT UNDERSTANDING & APPROACH

UNDERSTANDING

LOWER CAPE FEAR WATER AND SEWER AUTHORITY

In order to develop a dependable surface water supply to meet the needs of local government and industry, the Wilmington-New Hanover County Water and Sewer Authority was created in 1970. In 1972, the name was changed to the Lower Cape Fear Water and Sewer Authority (LCFWASA) to recognize the regional nature and objectives of the organization. Membership of the Authority consists of Bladen, Brunswick, Columbus, New Hanover, and Pender Counties, and the City of Wilmington.

As a non-profit public agency organized under the North Carolina Water and Sewer Authorities Act, the Authority is authorized to perform the following activities:

- Construct and operate water and sewer systems located within its service area
- Issue revenue bonds
- Fix and collect rates, fees, and charges for services provided by any water and sewer system operated by the Authority

LCFWASA is governed by a 14-member Board of Directors. The six governing bodies appoint Board members to three-year terms. The Board hires an Executive Director (and administrative assistant) to oversee and manage daily operations.

The Authority owns and operates two facilities:

- Kings Bluff Raw Water Pump Station – With a pumping capacity of 100 MGD, Kings Bluff obtains raw water from the Cape River and delivers it through various transmission mains to its governmental and industrial customers. Kings Bluff is owned by LCFWASA and operated under contract by the Brunswick County Public Utilities Department.
- Bladen Bluff Regional Surface Water System – Bladen Bluff is a 6 MGD drinking water facility. Bladen Bluff is owned and operated by LCFWASA in partnership with the Smithfield Farmland Company. The facility is located near the Town of Tarheel in Bladen County.

LCFWASA desires to hire a qualified consultant to assist with aligning its capital projects more closely with a sustaining rate schedule.

FEDERAL AND STATE REGULATIONS

The first significant regulation affecting the pricing and costs of water and wastewater was set forth in Section 204(b)1 of the Clean Water Act of 1972, which specifies that any publicly owned treatment works (POTW) that accepted federal grant funds under the Clean Water Act must impose a series of user charges that recover the operating, maintenance and replacement costs of the POTW from all dischargers to the POTW and that such use charges must be based on the volume and strength of the discharges of each user or user class. The Clean Water Act was followed by the Safe Drinking Water Act (SDWA), which promulgated federal standards in one law that had either been enacted in a piecemeal fashion in other legislation or were completely lacking.

The professional and industry associations that are perceived as having authority over the financial operations of water utilities are Government Finance Officers Association (GFOA) and the American Water Works Association (AWWA), while the Water Environment Federation (WEF) has authority over wastewater utilities. To a certain extent, entities such as NARUC (National Association of Regulated Utility Commissioners) become involved in municipal ratemaking because some states require that local water utilities subscribe to standards such as NARUC's chart of accounts.

Members of our project team are active members of AWWA, WEF, and GFOA. The issuance of debt results in additional requirements for public utilities that have implications related to water and sewer rates and fees. In the case of the issuance of revenue bonds, the master bond indenture identifies the necessary debt service reserves and debt coverage requirements. Similarly, loans from entities such as the North Carolina Department of Environmental Quality (NC DEQ) sometimes identify specific financial requirements that must be met. Depending on the specific requirements, water rates must be adjusted to assure debt service coverage requirements are met and reserves are adequately funded.

INDUSTRY-WIDE CHALLENGES

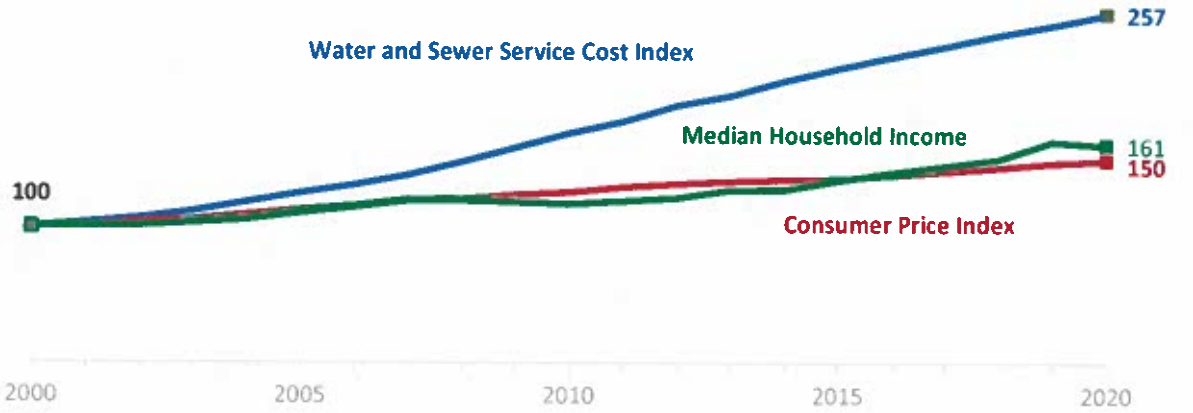
According to AWWA's 2022 State of the Water Industry Report, the five most important issues facing the water and wastewater industries are:

1. Renewal and replacement of aging water and wastewater infrastructure
2. Financing for capital improvements
3. Long-term drinking water supply availability
4. Aging workforce/anticipated retirements
5. Public understanding of the value of water and wastewater systems and services

Buried infrastructure continues to age, given that much of it was installed several decades ago, especially along the East Coast of the United States. Water and sewer main breaks have become a common daily occurrence. Energy and chemical prices continue to increase, and compliance with tighter federal (CWA, SDWA) and state (DEQ, DHHS) regulations continues to require more costly and complex distribution, collection, and treatment solutions. Ensuring the availability of water and sewer treatment capacity is vital for the growth of the community. As a result, finding ways to pay for deferred maintenance and supply and treatment solutions required to comply with increasing regulations is impacting the bottom line of water and sewer utilities and the affordability of bills for customers.

The following exhibit demonstrates that the cost of water and sewer service has continued to outpace the median household income and general costs (represented by the consumer price index) over the past two decades years:

Exhibit 1. Historical Cost Index Increases – 2000 through 2020



Compounding these costs is a loss of revenue due to declining water usage (and therefore sewage generation) per capita based on various reasons such as conservation policies, energy-efficient appliances, and smaller household sizes. In addition to causing workforce and supply chain issues, the current COVID pandemic has also adversely impacted collection rates for municipal utilities.

In light of increasing costs, water and sewer service is still a bargain compared with alternatives such as bottled water. However, for some customers, the affordability of these services can be burdensome. Public education is key to having the public understand what costs are required in delivering water and collecting wastewater, why these costs are increasing, and the true value of water and sewer service.

APPROACH

In its Request for Proposals, LCFWASA provided general requirements and an overview of three specific tasks to be undertaken by the consultant as part of the Water Rate Study scope of services. The following represents our proposed workplan to accomplish these three tasks (plus an initial task for data review and project kickoff and a fourth task for reporting).

TASK 0 – DATA REVIEW AND PROJECT KICKOFF

Immediately upon receipt of notice to proceed, NewGen will submit a detailed data request to LCFWASA, identifying the data needed to perform the scope of work for the Water Rate Study. As LCFWASA furnishes this data, it will be loaded into an online storage site, indexed, and stored to enable access by project personnel and others authorized by LCFWASA. This will ensure that all interested parties have access to all data and have the most current data available. We will review all the requested data to ensure a solid understanding of the LCFWASA's water system.

A project kickoff meeting will be held, with all key LCFWASA and consultant personnel invited to attend and participate. The purpose of this meeting is to review, update, and validate the proposed work plans, introduce key personnel to one another, identify any roadblocks to timely completion, agree to key dates, provide LCFWASA personnel with contact information for consultant personnel, and establish the formal and informal reporting relationships that are necessary for a smooth project. Administrative requirements (invoice formats and timing, documentation, insurance certificates, etc.) will be established.

As part of the kickoff meeting, we will want to discuss the current financial and rate policies currently in place, as they will serve as key guideposts for the study. We will also want to discuss any potential policy issues that

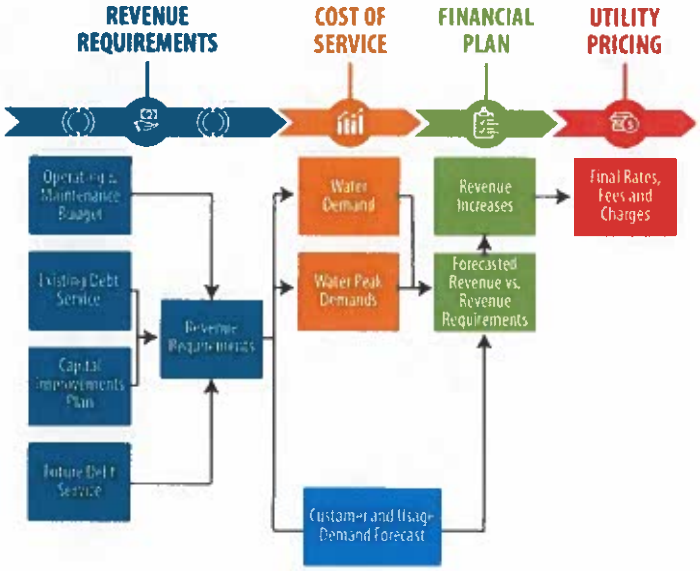
may need to be addressed during the studies. Based on our experience working with municipal governments, it is vitally important to identify and evaluate the key policy issues early in the study to ensure that consensus is developed regarding the principles governing the study. The primary goal of this task is to set a strong foundation for the study, ensuring all parties understand desired outcomes.

TASK 1 – WATER RATE STUDY

When undertaking a cost of service or rate study for a municipal utility, it is important that participants in the study have a shared vision of the priorities and objectives that must be reflected in the study. Our approach to reviewing and evaluating municipal utility rates is governed by the view that the ideal rate structure must satisfy seven criteria: equity, efficiency, revenue adequacy, sustainability, administrative practicality, and legal and regulatory compliance:

1. ***Equity*** requires that rates and charges result in no undue discrimination among customers or customer classes. Although equity is normally related to the cost of service, it should be realized that customer acceptance will center on preconceived notions of equity and fairness.
2. ***Efficiency*** refers to the ability of the rate schedule to encourage wise use of the resources devoted to the services that the utility provides. In some areas, this means the adoption of "conservation" rates. Whether or not this proves appropriate, efficiency considerations require that:
    - Rates should reflect the incremental cost of providing the next unit of service. If capacity is a limiting factor, for example, rates should reflect capacity costs.
    - Rates should be similar for customers or customer classes served under similar conditions.
    - Customers should be able to understand the rate schedules so that they can make rational decisions regarding their purchase of additional service.
3. ***Revenue Adequacy*** is the most fundamental of all considerations, recognizing that rates are cost-driven. In evaluating any rate structure, it is necessary that the rates produce revenues sufficient to operate the system, and those rates produce sufficient revenues if there are changes in demand for service.
4. ***Affordability*** means that the recommended rates must result in bills that are realistically within the ability of customers to pay – not based on some arbitrary bureaucratic measure but relative to other customer expenses.
5. ***Sustainability*** means that the objective of the rate methodology is to keep rates low over time, not to merely keep them low for the short-term by omitting or deferring needed expenses such as maintenance and funding of necessary cash reserves.
6. ***Administrative Simplicity*** recognizes that limits must be placed on the number of customer classes, complexity of the rate schedule, and billing frequency.
7. ***Legal and Regulatory Compliance*** is a prime consideration because rate structures must incorporate local, state, and federal statutes. Where questionable areas exist, they should either be buttressed by documentation or modified.

The application of the pricing criteria should recognize that a rate schedule is a form of public policy statement, setting forth those values that the utility considers important. Rate structures must be tailored to community perceptions, realities, and values. While each utility's budgeting, financial reporting, and flow of funds are unique, a generalized schematic illustrating our approach to a cost of service/rate study is shown in the graphic below.



Rate structures must be tailored to community perceptions, realities, and values if the project is to proceed smoothly and timely. Our standard approach to completing a cost of service/rate/fee study is predicated on a four-step process using industry-standard methodology that is explicit and replicable, including:

- **Revenue Requirements** - Develop and document the full cost of providing each separate service, including those costs that may not be explicitly identified in the utility's budget such as the need for repair and replacement (deferred maintenance).
- **Cost of Service** - Allocate revenue requirements to customer classes or types of customers and functions based on the cost of providing service to the extent necessary.
- **Financial Plan** - Develop a financial plan to fund system revenue requirements considering customer and usage demand forecasts.
- **Utility Pricing** - Review and evaluate rate/fee designs based on revenue needs and policy goals related to rate design (e.g., encouragement of consumption or conservation, support for economic development, affordability, etc.).

TASK 1.1 – REVENUE REQUIREMENTS

One of the primary tasks of the study is to identify the cost of providing water service. Our approach includes a detailed review of the costs incurred by LCFWASA (both identified and unidentified) to ensure a true cost of service is developed. The unidentified costs are often those associated with the repair and replacement of buried assets. The cost analysis can be broken down into four main categories of costs: operating and maintenance costs, capital improvements, existing debt service, and any contributions to reserves. The following section of our proposal describes our approach to reviewing and identifying each of these costs. The total amount of cash required annually for all purposes and from all sources constitutes the revenue requirement.

Completing this task will provide a 20-year forecast of system revenue requirements with the ability to change assumptions (inflation, growth, capital financing, etc.) and immediately see the impact on revenue requirements.

REVIEW O&M COSTS

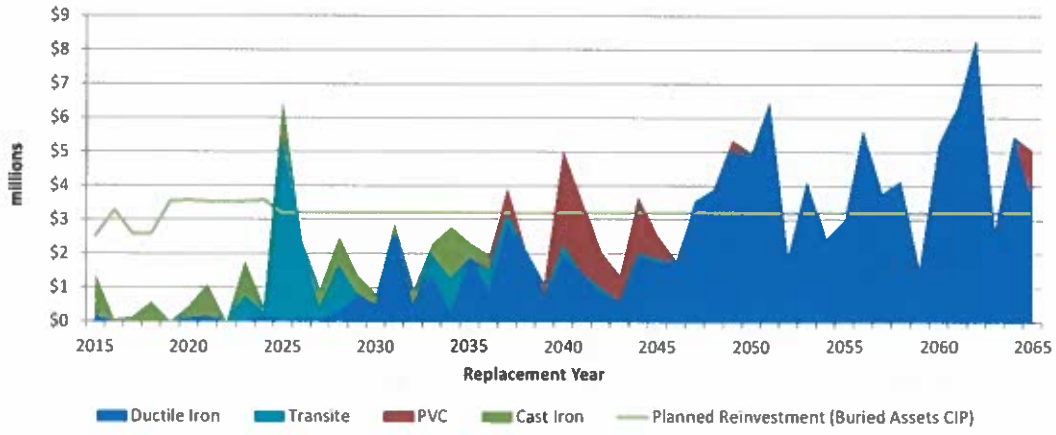
Using LCFWASA's current operating budget as a starting point, we will review the adequacy of budgeted operating and maintenance costs. O&M expenses will be forecast based on estimated annual inflation rates at the budgetary account line-item level. The forecast of operating expenditures will be based on the following:

- Review of historical operating expenditure increases by individual budget account line item
- Any additional information that would increase the accuracy of the estimates (i.e., staffing increases/decreases, new facilities coming online, old facilities being retired, etc.)
- Identifying contractual commitments for future wage and benefit increases
- Identifying and assessing the impact of the current capital improvement program on operating expenditures

REVIEW CAPITAL IMPROVEMENTS PROGRAM

We will work with LCFWASA to ensure that capital projects are appropriate and complete. If available, we will also review the age, useful life, and replacement cost associated with LCFWASA's buried infrastructure and equipment to identify if the planned investments result in realistic replacement schedules.

Exhibit 2. Capital Replacement Analysis



EVALUATE POTENTIAL FINANCING SOURCES

The types and levels of various funding sources to pay for the capital and operating costs of the utility systems will be examined, and the impacts of various approaches will be quantified. While it is presumed that all operating and maintenance costs will be funded via user rates, there are various approaches to funding capital expenses. They can be paid from operating revenues ("pay as you go" funding, the most conservative financial approach), grants or developer contributions, long-term debt (e.g., bonds, long-term leases, loans, etc.), or existing cash reserves. Typically, a utility might use a mix of these financing sources.

ANALYZE CURRENT AND PROJECTED DEBT SERVICE

The annual principal and interest payments for existing debt service related to the utility systems will be documented. Those projects or categories of projects contained in the CIP and anticipated to be debt-funded

will be identified, and projections of debt service will be developed. LCFWASA's practices on types of debt (revenue bonds, use of loans, frequency of borrowing, etc.) will be determined, as will typical debt structure (e.g., payment term, level principal payments vs. level debt service) and assumed interest rate.

EVALUATE THE ADEQUACY OF RESERVES

The wise use and management of financial reserves provides many advantages to a utility: rate stabilization and "smooth" rate increases, as well as enhanced credit ratings and resulting interest savings. We will review the adequacy of LCFWASA's current reserves in light of LCFWASA policy and our industry expertise.

If desired, we will also include the development of a repair, replacement, and rehabilitation (3R) reserve for fixed assets. Based on a review of the inventory of current water system assets, we will review the adequacy of current reserves for the water system to provide funds to pay for unexpected major repairs and planned replacement or rehabilitation of system assets. These reserves can be used to pay for capital costs in order to avoid or minimize the amount that would otherwise be recovered through user fees (and possibly result in a significant rate increase). Typically, the annual "3R" reserve balance is calculated based either on the estimated useful life of each asset or as a percentage of total assets. We will calculate such a reserve using both methodologies.

DEVELOP REVENUE REQUIREMENTS

The sum of the O&M costs, annualized capital costs (debt service plus cash purchases of capital assets), and any contributions to reserves constitutes the revenue requirement – the amount of money that must be raised from all sources over a given year. The gross revenue requirement less miscellaneous revenues results in the net revenue requirement to be collected from customers.

TASK 1.2 – DEMAND FORECAST

The demand forecast will be based on historical usage patterns, water facility plans, and discussions with LCFWASA regarding projected water demand. The projections will be developed by customer class for a 20-year period. One of the key variables that must be developed is the rate of growth in the utility, including the numbers and types of new customers to be added year by year, as well as increases (or decreases) in water usage over time by existing customers.

TASK 1.3 - COST OF SERVICE

Our general approach to the cost of service analysis is predicated on a three-component process:

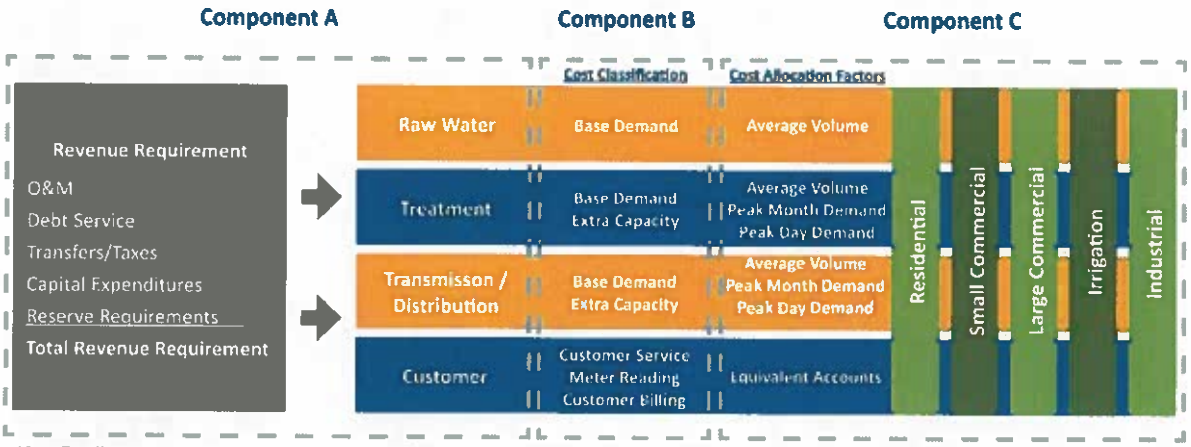
- **Component A: Functionalization of Revenue Requirement** – Development of the full cost of providing service to each class of customers and assigning those costs to system functions. This step defines what services the system provides.
- **Component B: Classification to Cost Causative Components** – Classification of each system function to the cost causative component. This step defines how the system provides its services.
- **Component C: Allocation to Customers** – Allocation of functionalized and classified revenue requirements to customer classes based on contributions to units of service. This step defines who the system provides these services to and at what level.

Further details and an example process flowchart on these three components are provided below.

The revenue requirements from rates will be allocated as necessary by class to serve as the basis for rate determination for each class. To complete the cost of service analysis, we propose to follow the methodology described in American Water Works Association (AWWA) Manual M1, *Principles of Water Rates, Fees and Charges,* for allocating water system revenue requirements. To the extent that significantly differing usage or

demand patterns among customers or customer classes exist, or to the extent required by external agreements, costs will be functionalized or segregated as necessary. Costs related to water consumption will be allocated to base (average day demand), maximum day, and maximum hour (if data is available) components. Costs unrelated to consumption will be allocated to customers based on factors such as bill counts, meter size, and hydrant and fire line size.

Exhibit 3. Water Cost of Service Flowchart



Note: For illustrative purposes only. Functions and allocators may change to align with utility operations/services.

TASK 1.4 – REVENUE ADEQUACY AND FINANCIAL PLAN DEVELOPMENT

This task evaluates the sufficiency of the current system of rates to meet the annual revenue requirements. This will be accomplished by developing the anticipated revenues generated by current rates over the projection period compared with the costs by water service type developed. Based on this analysis, we will develop a financial plan for revenue adjustments to ensure the financial health and sustainability of the LCFWASA water system.

TASK 1.5 – USER RATE ANALYSIS AND RATE ALTERNATIVES

We will review each of LCFWASA's water rates and charges to determine if the design structure is appropriate. Our focus will be on developing a rate schedule that reflects the differences in the cost of providing service to various classes of customers. It must be kept in mind that rate design is a "zero-sum" game; the amount of money raised from rates is the same, regardless of the rate design. All rate designs should produce the same total revenue but will impact different customers or customer classes differently.

The policy determinations and preferences of LCFWASA are also essential factors in determining the preferred rate design. Based on the results of the evaluation of alternative rate designs and relying on discussions with LCFWASA staff, a recommended rate schedule will be developed in detail. Ultimately, LCFWASA may not need to change the current rate structure but instead the amounts and allocation of costs among the components of the rate structure.

Any rate structure developed as a part of the study will identify the fixed and variable portion of the rate structure and the cost components that should be collected from fixed or variable charges. While it may be unrealistic to generate an identical proportion of fixed and variable costs in the revenue structure of LCFWASA, NewGen will strive to increase cash flow stability by using fixed charges where appropriate.

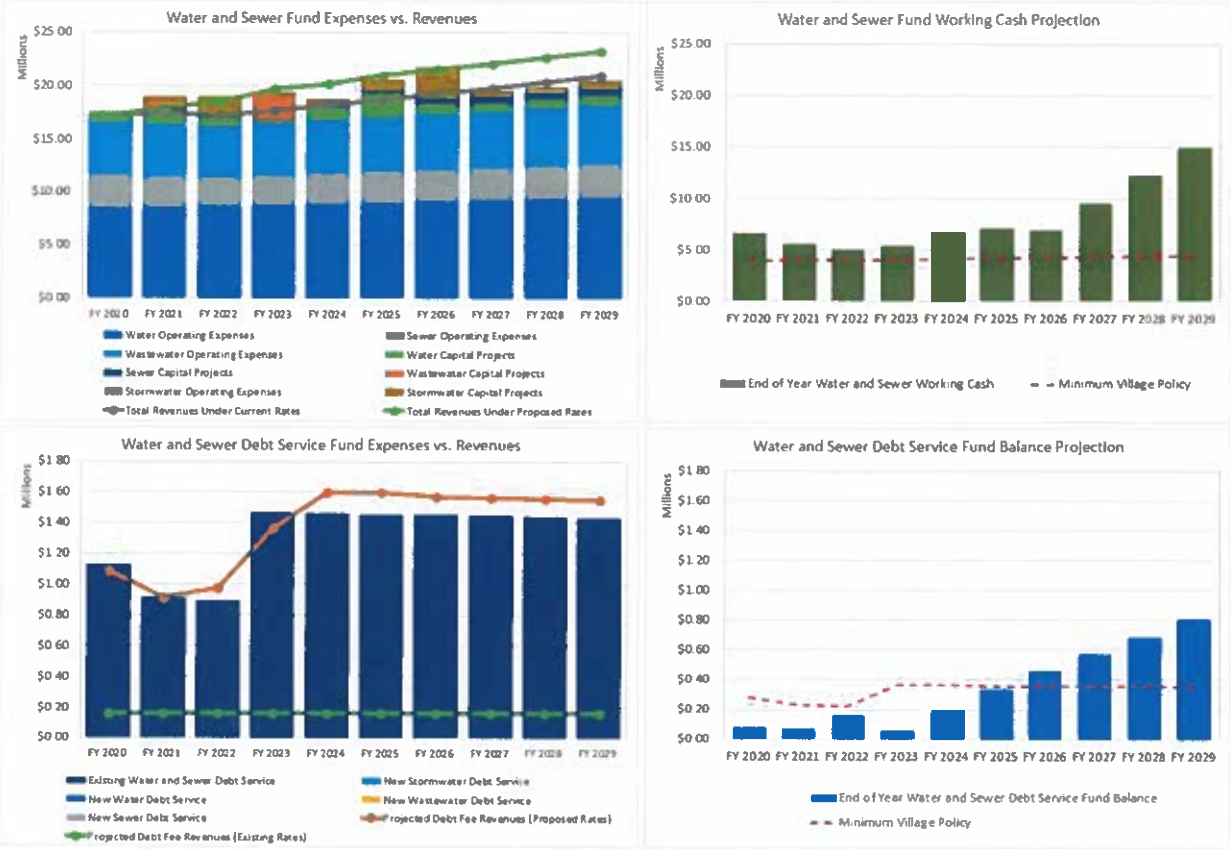
The financial model will be developed for a 20-year period, with a recommended rate schedule developed for the next five years. We will develop an analysis of the rate increase impact on all customers.

TASK 1.6 – RATE DESIGN BENCHMARKING

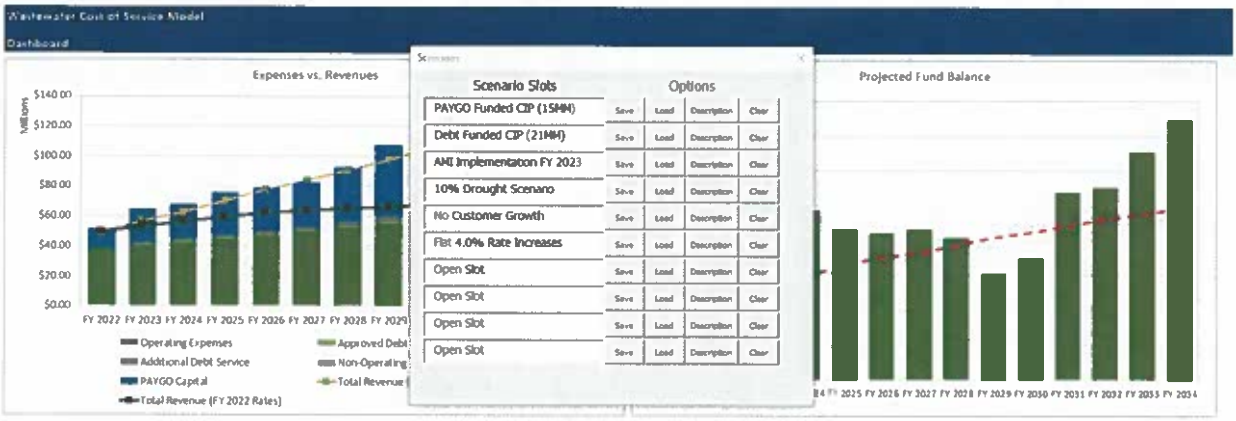
We will compare LCFWASA's current rate structure with that of other North Carolina utilities with similar customer bases. The Project Team will identify wholesale arrangements that are in place at other water utilities. The group of comparable utilities will be developed in coordination with LCFWASA staff and will include five to eight utilities. This benchmarking will provide an analysis of the options and best practices that exist for wholesale arrangements, the pros and cons of each, and any lessons learned that LCFWASA can consider for its agreements.

TASK 1.7 – FINANCIAL MODEL

NewGen's model utilizes Microsoft Excel® software. The model produces a series of interactive schedules, each of which addresses a principal topic (O&M costs, debt service, demand/usage, cost of service, etc.). Every model NewGen develops is fully customized to match the client's account structures and budget documents. The dynamic financial models enable the optimization of multiple independent variables that will define the financing plan for each utility. Built into the model is a Dashboard of summary-level graphics that show high-level projections of revenues, expenses, and cash flows under the model's current scenario, as well as key performance indicators. The Dashboard (water and sewer example shown below) provides instant feedback on rates, revenues, and performance indicators based on assumptions entered by the user.



NewGen's models include a feature that allows LCFWASA staff to instantly run parallel scenarios within the same model. That is, alternatives to key assumptions and data inputs are stored within the same file, so there is no need to save multiple versions of the rate model. NewGen's standard scenario manager includes a system dialog that shows ten "slots" to keep up to ten scenarios loaded in the model simultaneously. Switching between scenarios is as easy as clicking the "load" button. Saving scenarios is as easy as clicking the "save" button, at which time the model saves the current scenario into the scenario manager.



The model's schedules are linked to facilitate updating and minimize input errors. NewGen's financial models are highly user-friendly, and we make every effort to ensure that the model is a useful tool. The model will not be a black box, but rather a tool that can be easily used, understood, and updated. NewGen does not charge any form of licensing fee or royalty for ongoing use of the models developed for our clients, but we ask that clients not re-sell or give away the models developed for client use. NewGen will provide training on how to use and maintain the model. The model, combined with training, will enable LCFWASA to readily and easily adjust expenses, revenues, debt financing, capital projects, rates/fees, and other financial assumptions, if necessary, over a multi-year period as circumstances change.

TASK 2 – WHOLESALE RATES

LCFWASA's current wholesale water rates will be documented and validated for compliance with current pricing requirements. While the current rate design may meet the objectives and policies of LCFWASA, there may be alternative rate features that LCFWASA may wish to consider. As a result, the Project Team anticipates considering up to two alternative wholesale rate structures as a part of this task. We will develop recommended water rates using the current structure based on the cost of service allocations developed and then devise two alternative rate designs that produce the same amounts of revenue. Alternative rate designs might include fixed fee options (as opposed to just variable rate options), "take or pay" minimum purchases, incentives or penalties for using more or less water than agreed to, seasonal adjustments, etc. There are advantages and disadvantages to all of these features, and they should be discussed before rates are developed. We will also suggest wording and formula for inclusion in a long-term agreement to govern the revision of rates over an extended term in order to avoid re-negotiation.

There are two general approaches to developing the basis for the cost of service:

- Cash/modified cash basis – similar to the budgetary approach used by municipal governments
- Utility basis – similar to the basis required by many public service commissions for investor-owned utilities

The cash flow basis focuses on the cash needs of the utility and typically includes the principal and interest portions of debt service, while the utility basis is more detailed and includes cost elements such as depreciation (in lieu of the principal portion of debt service) and a return on investment (typically comprised of a return on debt and a return on equity). Both approaches produce virtually the same amounts of cash over time, with a difference in the timing of the cost recovery. Typically, utility-basis rates are higher than cash-basis rates. There are also numerous variations of these approaches. To the extent that certain functions (e.g., pumping) benefit only certain customer classes, it may be desirable to isolate and allocate such costs to specific customer classes.

TASK 3 – SYSTEM DEVELOPMENT CHARGES

Following the guidelines of North Carolina General Statute §162A Article 8 (Article 8 – System Development Fees) and based on the analysis of current and anticipated growth-related capital costs (whether in the form of cash purchases of assets or debt service), we will evaluate the calculation of and methodology for LCFWASA's system development charges.

The calculated amounts will be reduced by that portion of growth-related costs, which many utilities typically determine should be absorbed by all customers, as well as by the amounts of capital payments reflected in user fees (i.e., so that new customers do not pay twice for the same capacity). The resulting amounts will be the recommended system development charges.

Our project manager recently assisted the Town of Holly Springs with allocating growth and non-growth capital costs to be funded from user rates vs. system development charges. He also presented on system development charges (typically called "availability fees in Virginia) at the Virginia WaterJAM 2020 virtual conference and at the 2021 Chesapeake AWWA Tri-Association Conference in Ocean City, Maryland.

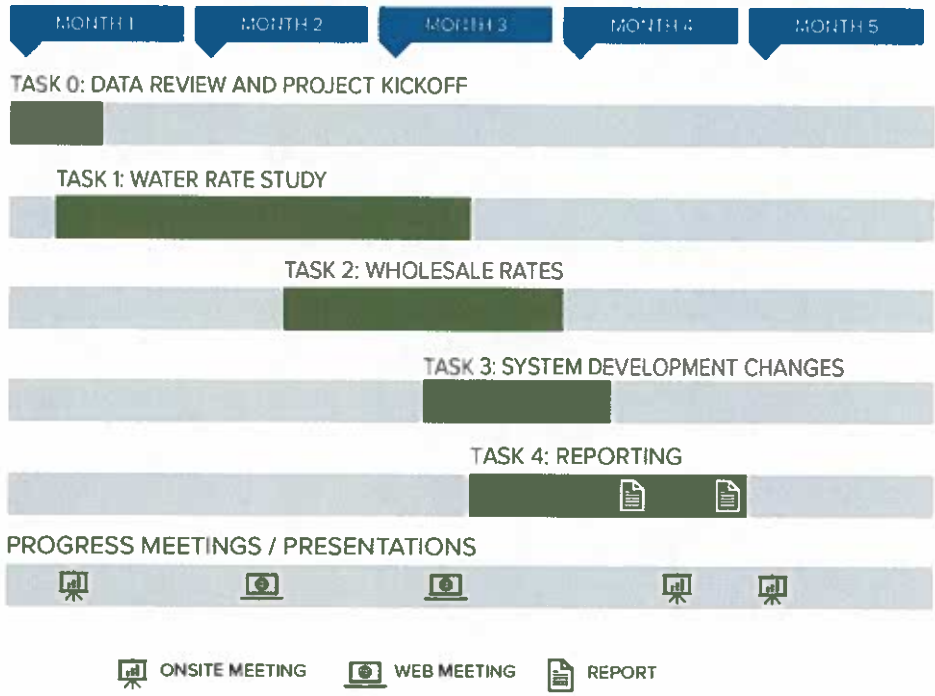
TASK 4 - REPORTING

We will document all work performed in the Water Rate Study in a concise narrative report. The report will include an executive summary written in easy-to-understand terms so that it is "public-friendly." All data sources relied upon in the study will be identified and documented, and all assumptions clearly set forth. The report will be delivered to LCFWASA in draft form, and a revised report will be delivered to LCFWASA shortly after receipt of comments on the draft report. The study's results will be presented as a summary slideshow in Microsoft PowerPoint that will present all study data, results, and recommendations for Board consideration and public understandability.

PROJECT SCHEDULE

We anticipate completing the technical approach outlined in this proposal to take 16 weeks from notice to proceed. The project schedule is provided below. Our schedule assumes the Project Team will make three on-site visits (kickoff and two presentations of results to the Board). Conference calls and online virtual meetings with LCFWASA stakeholders will occur as needed. Of course, NewGen is willing to adjust these expected delivery dates and the number of meetings if needed to accommodate LCFWASA's schedule.

Exhibit 4. Project Schedule



QA/QC PROCESSES

NewGen recognizes that the quality of our analysis and work product is of paramount importance. To serve as a trusted advisor to our clients, our work must be of the highest caliber. Mistakes challenge our credibility with colleagues and clients and can lead to serious negative consequences, including, but not limited to, potential litigation. Each engagement must be conducted under strict quality assurance/quality control (QA/QC) procedures. NewGen's internal QA/QC program involves three key levels of review for every project:

LEVEL 1 – PERSONAL

At the first level of our QA/QC program, every consultant is personally responsible for their work product. Any product developed internally should be considered "client-ready" prior to being submitted to higher levels of management for review.

CALCULATIONS
- Affirm internal checks are in place and not producing errors.

HOLISTIC
- Have you gotten out of the details and looked at the big picture?

ENGLISH
- Proper grammar and correct spelling.

COMPOSITION
- How does your product look?

KNOWLEDGE
- Does it reflect industry standards and represent a quality product?

UNDERLYING ASSUMPTIONS AND NOTES
- Clearly document and affirm assumptions.

PRINT READY
- Make sure document is print ready.

To assist consultants in ensuring that their work product meets these standards, NewGen has developed and utilizes a "CHECK-UP" process, as demonstrated by the graphic to the right. Using this as an acronym, NewGen encourages its consultants to apply these standards to every analysis conducted or work product prepared.

LEVEL 2 – PEER

The second level of our QA/QC process involves a peer review of all analyses and work products. As part of this process, NewGen has designated experts in each subject matter area to serve as "qualified reviewers." Each analysis or work product is reviewed and approved by a qualified reviewer prior to further transmission to a client.

LEVEL 3 – PRODUCT

The final level of review in our QA/QC process seeks to ensure that the product we develop and publish is reflective of the high standards of our Firm. Each deliverable is reviewed by our administrative staff to ensure it meets the quality standards of a NewGen product, regardless of the individual or office that produced the product. Additionally, integrated and embedded in the product is a QA/QC process of more automated checking of calculations and formulas that ensure the model is operating properly and concisely and notifies users if the model was updated or if any errors are present.

IMPLEMENTATION

NewGen conducts annual training for employees on the QA/QC process. This includes in-person, multi-day workshops on project management and the proper application of the QA/QC procedures. Furthermore, each employee's annual performance review has an entire section devoted to work quality and assesses the employee's application of the above-outlined process.

2. RELEVANT FIRM EXPERIENCE

PROJECT EXPERIENCE & REFERENCES

NewGen encourages LCFWASA to contact any of the representative professional references listed below. These clients can speak to our ability to provide quality work similar to the services requested.

LOWER CAPE FEAR WATER & SEWER AUTHORITY, NC - DEVELOPMENT OF WHOLESALE RATES AND PRICING MODEL

REFERENCE: *(at time of study)*

Donald Betz, Executive Director | (910) 383-1919 | don@lcfwasa.org

This regional agency provides raw water on a wholesale basis to several jurisdictions in several counties in the area in and around Wilmington, North Carolina. The Authority draws water from an impoundment operated by the U.S. Army Corps of Engineers on the Cape Fear River, based on a withdrawal permit for 100.0 MGD, and (after minimal treatment) delivers the water to four regional jurisdictions. We developed a spreadsheet financial model and methodology to identify the costs of water and to price that water in accordance with the terms and conditions of the multi-jurisdictional agreement that governs the cost of water for the Authority's members.

CAPE FEAR PUBLIC UTILITY AUTHORITY, NC – ESTABLISHMENT OF REGIONAL WATER AND SEWER AUTHORITY

REFERENCE: *(at time of study)*

James Quinn, Chairman, Board of Directors | (910) 251-2211 | jimquinncc@gmail.com
Sterling B. Cheatham, City Manager, Wilmington | (910) 341-7810 | sterling.cheatham@wilmingtonnc.gov

NewGen (then operating as MFSG, prior to MFSG's merger with NewGen in 2019) was engaged jointly by the City of Wilmington and New Hanover County to provide project management, technical assistance, and implementation services to create the Cape Fear Public Utility Authority on the Inner Banks of North Carolina and the transfer of all personnel, assets and liabilities, service areas, operating permits, equipment and related appurtenances to the new authority. The Authority assumed ownership of assets as well as operational responsibility on July 1, 2008. The work was accomplished via a series of task orders and included a broad scope of activities:

- Initial feasibility study to assess compatibility of the proposed entity with several benchmark "tests" specified by elected officials, such as comparative user rates, job security for all employees for specified durations, schedule for meeting consent decree programs, etc.
- Establishment of employee working groups to identify best practices and to develop design standards and operating procedures for the new entity

- Development of opening balance sheet and the valuation of all assets and liabilities that were transferred to the authority; compliance with GASB 34 reporting and classification formats
- Development of an integrated capital improvements program and updated water master plan for the new entity
- Development of an asset management program and implementing procedures to optimize expenditures for maintenance of capital assets in relation to their useful life, criticality, and replacement cost.
- Preparation of an information technology master plan, identifying all IT applications and processes – "as is," "to be," etc.; preliminary specifications for key operational applications (SCADA, customer service, billing system, etc.)
- Development of internal and external communications programs
- Development of standalone and consolidated cost of service/rate models and rate structures; preparation of feasibility studies for initial revenue bond issues; development of capital cost recovery fee structure (capacity fees) for growth-related capital costs; development of feasibility study to support the issuance of first $120 million revenue bond issue, including major roles in presentations to rating agencies
- Preparation of various reports and analyses to support the consolidation process, including organizational structure and staffing; benefits assessment; legal and governance issues, etc.
- Technical support, assistance, and guidance for the Executive Committee and the Advisory Committee established to oversee the consolidation process
- Recruitment of the first General Manager and the seven "direct reports" who report to the General Manager, as well as a compensation/benefits package for the entire workforce
- Development and "populating" of the initial organization chart for the Authority

The project manager for the initial City/County consolidation efforts and initial rate study and rating agency presentations will serve as a technical advisor for this study.

TOWN OF HOLLY SPRINGS, NC – WATER, SEWER & RECLAIMED WATER RATE STUDY

REFERENCE: Antwan Morrison | Finance Director | (919) 557-3912 | antwan.morrison@hollyspringsnc.gov
Kendra Parrish PE CFM | Executive Director of Utilities & Infrastructure | (919) 557-3935 | kendra.parrish@hollyspringsnc.gov

Located less than 20 miles southwest of Raleigh, the Town of Holly Springs provides water, sewer, and reclaimed water services to 13,250 residential and 610 commercial customers within a service area that includes the Town as well as parts of the extraterrestrial jurisdiction (ETJ).

The Town's primary source of supply is through the purchase of water from Hartnett County, pumped from the Cape Fear River and treated at Harnett County's regional water treatment plant. The Town's agreement with Harnett County expires in 2048. The Town also has backup water line connections to the Towns of Cary and Apex. The Town has an average demand of 2.5 million gallons per day (MGD). The Town's wastewater is treated at the Town's wastewater treatment plant, which has a treatment capacity of 6 MGD and is expected to be increased to 8 MGD during the next upgrade.

The scope of services included the following:

- Analyze the performance of the current rate structure and compare it to other NC utilities with a similar customer base. Assessed the current rate structure for sustainability and ability to generate the necessary revenue to fund cost of operations, maintenance/repair, debt service, as well as capital improvements

- Assess existing fee structure and identify other potential areas for service and system charges and recommend changes, if appropriate. Weigh the benefits of any proposed modifications against the financial impacts on rate payers.
- Assess the interaction between any water conservation elements of the recommended rate structure and their impact on the ability to fund water and sewer operations.
- Develop an understanding of the Capital Improvement Plan and the impacts of those plans on future rates.
- Develop a proposed rate schedule that reflects the Council's priorities and obligations and contains a forecast for proposed rates over a 5-year period that can be integrated into the Town's existing Capital Improvement Plan.
- Develop a rate projection that forecasts rates for 20 years based on expected cost increases over time, including increases in the cost of purchasing water from Harnett County.
- Provide justifications for any special classes of customers under the recommended rate structure.
- Demonstrate that any alternative rate structure is easy to understand and administer and can be accommodated within the existing billing system.
- Help develop a communication plan to educate the community, Council members, and staff on the rate study and alternate rate structures.
- Deliver a spreadsheet rate model that reflects any changes to the rate structure accepted by the Council and provide training to staff in running scenarios that will allow staff to fully understand how the model operates and how the results of various future recommendations that may be proposed can be illustrated.

FAYETTEVILLE, NC PUBLIC WORKS COMMISSION – WATER AND WASTEWATER COST OF SERVICE STUDY

REFERENCE: Jason Alban | Director of Financial Planning | (910) 223-4102 | jason.alban@faypwc.com
Carla Supples | Financial Rates Manager | carla.supples@faypwc.com

Fayetteville Public Works Commission (PWC) provides water and wastewater services to over 225,000 customers both inside and outside the City of Fayetteville. PWC draws water from two independent water sources, the Cape Fear River and Glenville Lake, with treatment capacity of 58 million gallons a day (MGD), with an average demand of 23.51 MGD in FY 2020. PWC's Cross Creek and Rockfish Creek Water Reclamation Facilities (WRF) have the capacity to treat 46 MGD. PWC maintains over 1,300 miles of sewer mains, 79 miles of forced sewer mains, and 85 lift stations.

PWC engaged NewGen to complete a water and wastewater Cost of Service (COS) Study to determine the appropriate revenue collection amongst PWC's customer classes. This was the first analysis to include PWC's AMI water metering data, which allowed NewGen to provide insight related to customer class peaking and the re-alignment of system costs. NewGen developed recommendations for water and wastewater revenue adjustments based on the COS analysis.

NewGen also advised PWC regarding key decision points within its water and sewer services, including its Inside City / Outside City rate differential, wholesale water rates, main extension and lateral fees, and other issues as they arose.

NewGen's project included several key evaluations:

- Water and Wastewater Cost of Service
- Financial planning / Pro Forma development
- Rate Design / Bill Impact
- Customer Class Designation

- Wholesale Rates
- Inside / Outside Rate Differential
- Miscellaneous Fees, including Main Extension and Lateral Fees
- Regional and National Benchmarking

RIVANNA WATER AND SEWER AUTHORITY, VA – TEN-YEAR WATER AND SEWER REVENUE ANALYSIS

REFERENCE: Lonnie Wood | Director of Finance | (434) 977-2970 x198 | lwood@rivanna.org

The Rivanna Water & Sewer Authority (RWSA) was founded in 1972 under the provisions of the Virginia Water and Waste Authorities Act of 1950, as amended. RWSA supplies drinking water to and treats the sewage of the City of Charlottesville and certain areas of Albemarle County, serving a population of about 110,000. The Authority employs 90 full-time equivalents and is governed by a seven-member Board of Directors, with three members serving ex-officio from each the City and County and the chair being appointed.

RWSA operates under the terms of a service agreement signed in 1973 by the officers of the Charlottesville City Council, the Albemarle County Board of Supervisors, the Albemarle County Service Authority, and RWSA. Based on this agreement, RWSA became the sole water production and wastewater treatment provider for ACSA and the City, while ACSA and the City manage the retail distribution of water and collection of sewage in Albemarle County and the City of Charlottesville, respectively.

RWSA is charged with acquiring, financing, constructing, operating, and maintaining facilities for the production, storage, treatment, and transmission of potable water and the interception, treatment, and discharge of wastewater. RWSA operates and maintains five water treatment plants and three wastewater treatment plants and the associated storage facilities, pump stations, transmission mains, and interceptors.

RWSA rates and charges are defined by the service agreement (also called the "Four-Party Agreement") to allocate costs by the six rate centers. There are several addendums and one amendment to the service agreement. There are also several cost allocation agreements in effect that cover capital improvement debt service costs of the urban rate centers.

NewGen was hired by the Authority to perform a 10-year revenue analysis. As part of the study, NewGen developed a ten-year rate model that calculates the following for each of the Authority's six rate centers (Urban Water, Urban Wastewater, Crozet Water, Scottsville Water, Glenmore Wastewater, and Scottsville Wastewater):

- Operations - inputs of various variables for operating, such as known direct costs, changes in inflation, changes in flow estimates, operating reserves, etc.
- Capital and Debt Service - capital and related debt service costs that will conform to the various cost allocation agreements, account for current debt service charges, accommodate new project costs, and factor in debt service coverage targets/reserves assumptions to show resulting annual and monthly debt service charges for the two retail customers by rate center.
- A combination of the operating rates and debt service charges for a total annual revenue requirement needed for the two retail customers.

ALBEMARLE COUNTY SERVICE AUTHORITY, VA – FINANCIAL PLANNING AND RATE STUDIES

REFERENCE: Quin Lunsford | Director of Finance | (434) 977-4511 | glunsford@serviceauthority.org

This retailer of water and sewer service in a rapidly growing and affluent community centered around Charlottesville has engaged NewGen (initially as MFSG) for a series of projects since 2003. Project tasks have included:

- Development of formal cost of service/rate models for the Authority's central service area and its outlying service area
- Development of separate and common rate and fee schedules for the central and outlying service areas
- Development of formal policies by the Board dealing with the establishment of reserves and the target balances for such reserves
- Assistance in negotiating allocation of costs to ACSA by its wholesale provider, the Rivanna Water & Sewer Authority
- Negotiation of participation by the City of Charlottesville in financing the expansion of ACSA's water supply reservoir, owned by ACSA but operated on ACSA's behalf by the Rivanna Water & Sewer Authority

Ongoing technical assistance and rate updates are provided to ACSA via a task order arrangement.

CITY OF CHARLOTTESVILLE, VA – WATER AND WASTEWATER COST OF SERVICE STUDY

REFERENCE: Chris Cullinan, Director of Finance, (434) 970-3200, cullinan@charlottesville.org
Lauren Hildebrand, Director of Utilities, (434) 970-3819, hildebrand@charlottesville.org

Incorporated in 1888, the City of Charlottesville is an independent city located in the center of Virginia, approximately 100 miles southwest of Washington, D.C. and 70 miles northwest of Richmond. The City has a population of over 46,000 residents (with an additional 23,000 students at the University of Virginia) within a total area of just over 10 square miles. The City provides retail water and wastewater service to customers through the operation of its Department of Utilities, which owns the municipal water distribution and sanitary wastewater collection systems (as well as a natural gas distribution system). Water and wastewater treatment services are provided wholesale by the Rivanna Water and Sewer Authority (RWSA), a wholesale agency that serves the City of Charlottesville and the Albemarle County Service Authority (ACSA). NewGen was hired by the City to perform a water and wastewater cost of service and rate study. The project included assessing the financial health of the water and wastewater systems, capital plan and revenue requirement needs, developing rate designs based on AWWA standards, examining the financial impact of rate alternatives on all customer classes, comparing typical City bills with those of surrounding utilities, evaluating utility billing operations for efficiency and customer service based on best practices and industry standards and reviewing the City's agreement with its largest customer.

ANNE ARUNDEL COUNTY, MD – WHOLESALE WATER PURCHASE AGREEMENT NEGOTIATIONS

REFERENCE: Chris Phipps, PE | Director of Public Works | (410) 222-7092 | pwphip33@aacounty.org

This extraordinarily high-growth AAA-rated local government engaged NewGen (then MFSG) in the late 1990s to develop sophisticated fiscal impact models to allow the County to assess the impact of various growth scenarios on its three utilities (water, wastewater, and solid waste) that are operated as enterprise funds. Since that time, NewGen has provided an ongoing series of specialized studies and financial models to assist the County's staff. Most recently, NewGen has assisted the County with its wholesale water purchase agreement with the City of Baltimore. NewGen's tasks include:

- Analyze the specific rate calculation methodology used by the City of Baltimore when pricing wholesale water services
- Recommend changes to the wholesale rate calculation based on industry standards
- Determine the appropriate City system assets that should be included in the wholesale rate calculation
- Determine the appropriate return on equity that should be included in the wholesale rate calculation
- Advise the County as to the impact of varying levels of system "buy in", that is, the amount of flow the County commits to purchasing from the City on a daily basis
- Calculate the financial impact on the County's customers of various wholesale rate scenarios

NewGen has provided a series of special reports and briefings for the County's senior staff, the County Council, and the County Executive.

CLERMONT COUNTY, OH – WATER AND WASTEWATER RATE AND FEE STUDY

REFERENCE: Lyle G. Bloom, P.E. | Director of Utilities, Clermont County Water Resources | (513) 732-7970 | lbloom@clermontcountyohio.gov

Clermont County is located in southwestern Ohio, just east of Cincinnati, with a population of about 206,000. Clermont County Water Resources owns and operates the following water and wastewater system that serves more than 45,000 customer accounts:

- Three water treatment plants (including 19 MGD of surface water treatment capacity and 17.2 MGD of groundwater treatment capacity) with 9.6 MGD of billed water in 2018, including wholesale service to two villages, partial service to one additional village and one city, and emergency connections to serve five adjacent water systems.
- Eight wastewater treatment plants (26.39 MGD of total capacity) supported by 105 lift stations billed about 8.2 MGD of use in 2018.

The County hired NewGen (as MFSG) to perform a comprehensive water and wastewater rate and fee study. As part of the study, NewGen provided the following:

- A functionalized cost of service analysis that identifies/allocates costs by customer class.
- Identification of required funding for infrastructure replacement costs.
- A review of the rationale for and methodology used to develop all capital and operating costs and fees and charges, with a clear distinction between fees and rates (i.e., growth-related costs vs. non-growth related costs).
- Three alternative rate designs with the impact of each on customers and the utilities.

- Sample bills for various customer classes as well as water and wastewater rate surveys to compare the County with surrounding municipalities

CITY OF FORT WORTH, TX – UNIFORM WHOLESALE WASTEWATER CONTRACT NEGOTIATIONS

REFERENCE: Mr. Lawrence "Andy" McCartney | Administrative Services Manager (at time of study, currently Consultant at NewGen) | (817) 475-5813 | mccartneycpa@yahoo.com

In June 2015, the City of Fort Worth, Texas (Fort Worth) retained the services of NewGen to assist in the negotiation of wholesale wastewater contracts for twenty-three wholesale customers. During this project, NewGen met with the customers prior to the negotiation process to understand key financial, operational, and contractual issues. NewGen led quarterly wholesale wastewater customer meetings to explain the process of negotiating the contract and to compile customer comments. The NewGen team conducted a financial sensitivity analysis associated with each potential modification to the existing wholesale wastewater contract. Workshops were conducted with Fort Worth staff, as well as with the Wholesale Wastewater Advisory Committee to discuss the impact of each scenario upon existing rates as well as to review the draft uniform wholesale wastewater contract.

CITY OF GARLAND, TX – RETAIL WATER AND WHOLESALE AND RETAIL WASTEWATER RATE STUDY

REFERENCE: Ms. Sharon Bailey | Water Utilities Finance Manager | (972) 205-3282 | SBailey@garlandtx.gov

NewGen (as J. Stowe & Co.) was engaged by the City of Garland to assist the City in conducting a water rate study for the City's retail customers and a wholesale and retail rate study for the City's wastewater customers. For the previous several years, the City had relied on outside consultants for the majority of the City's required rate analysis. With this study, the City desired to bring rate analysis back in-house and, to that end, requested that the NewGen project team develop Microsoft Excel-based rate models for use by City staff. The rate models allow City staff to easily update the required financial and customer usage information within the models and to run what-if scenarios regarding the long-term funding and execution of capital projects.

As part of the wastewater rate model, the team built functionality to allocate costs between retail and wholesale customers. After initially developing the revenue requirement, the wastewater model functionalized the costs between treatment, collection, industrial waste, and customer costs. The treatment costs were then further classified by volumes, BOD, and TSS strength loadings. Finally, the revenue requirements were allocated to the customer classes. Rates were then developed for each customer class based on their cost of service.

Coupled with the rate study and rate model development, the City also requested NewGen's assistance in developing a new uniform wholesale wastewater contract. The City provided wholesale wastewater service to a number of entities under a variety of contract terms and conditions. These varying contracts made it difficult for City staff to manage service to wholesale wastewater customers and created a significant administrative burden in calculating wholesale wastewater rates. It was anticipated that after approval by the City's legal department, the City would phase in the new uniform contract where possible, simplifying contract administration and allowing the City greater control and flexibility in establishing wholesale wastewater rates.

Annually beginning in 2015, the City has contracted with NewGen for Open Services, in which services were provided on an as-needed basis. The NewGen project team assisted in the update of the retail water and

wholesale and retail wastewater models as necessary. In 2018, the project team refreshed the models originally built in 2013 by adding new functionality and enhancing existing features based on the use of the models by the City.

In 2019, NewGen was retained by the City to conduct a one-year retail water and wastewater cost of service study. Additionally, the City Council requested a thorough understanding of the entire process of cost of service and rate design which required multiple presentations at each step along the way. The NewGen project team appeared before City Council to explain the cost of service process in its entirety, present the revenue requirement, present the cost of service results, and finally, deliver rate recommendations based on City Council goals and objectives. The cost of service rates recommended were designed to equitably allocate the revenue needed by the utility to the various customer classes of service based on the use of the utility system. Ultimately the City Council determined the proposed rates adhered to the City's policies and guidelines and met the objectives of the utility and affordability needs within the community.

In 2020, the City requested NewGen's services to update the retail and wholesale water and wastewater rate models for Fiscal Year 2021. As a result of the impacts of COVID-19, the City did not want to raise rates. NewGen provided findings and determined it was feasible to maintain existing rates for the next year in order to mitigate the customer impact during the pandemic.

In 2021, NewGen was once again retained by the City to prepare a retail and wholesale water and sewer rate study. On the heels of the COVID-19 pandemic, the City was concerned about any impact a rate increase would have on customers. NewGen was able to provide a result that minimized the impact on the customers while still meeting the needs of the utilities.

COMPANY INFO

NEWGEN STRATEGIES AND SOLUTIONS, LLC

NewGen Strategies and Solutions, LLC (NewGen) is a management and economic consulting firm specializing in serving the utility industry and market. Established as a Limited Liability Corporation (LLC) in August 2012, NewGen primarily serves public sector utilities and provides nationally recognized expertise in load forecasting, utility cost of service (COS) and rate design studies, financial feasibility studies, municipalization and privatization efforts, depreciation and appraisal studies, litigation support for state and federal regulatory proceedings, utility financial planning, and stakeholder engagement for water, wastewater, solid waste, electric, and natural gas utilities.

LEGAL NAME
NewGen Strategies and Solutions, LLC

OWNERSHIP STRUCTURE
Limited Liability Company (Partnership)

YEAR ESTABLISHED
2012

HEADQUARTERS
225 Union St, Ste 305, Lakewood, CO 80228
(P) 720.633.9514 / (F) 720.633.9535
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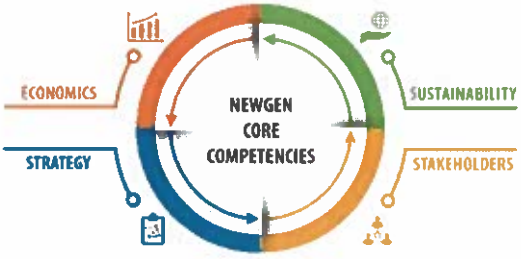
FIRM WEBSITE
https://newgenstrategies.net

We recognize the need for strategic intent behind our clients' actions by applying the latest market insights, technologies, and tactics to support our recommendations. Our results empower decision-makers to implement sound public policy, incorporating community input, market direction, and regulatory mandates.

Understanding your community, your organization, and your data are the three essential elements to developing actionable strategies to maximize the future. NewGen believes that strategy dictates everything. Our approach utilizes your data, markets, and communities to provide an integrated view designed to make long-term decisions with confidence. We leverage our modeling technology and market expertise in utilities to solve your most complicated issues. Through proactive collaboration, we upgrade or design strategies for you to ensure they are responsive, transparent, and reliable while paving the way for successful buy-in from all your stakeholders.

We are well-versed and experienced in providing management and financial advice related to every aspect of municipal utility services. Our specialized services include wholesale and retail cost of service/rate studies, system development charge/availability fee studies, operational reviews/management audits, comparative analyses and benchmarking, financial feasibility studies, and contract negotiations.

NewGen employs over 50 professional and administrative staff, with 12 ownership members and a Board. Our current staff is experienced and capable and has the capacity to work on simultaneous assignments. We can add staff and expand support from a network of teaming partners if needed. NewGen has 13 offices located nationwide.



NewGen's core business is providing financial and management advice related to water, wastewater, stormwater, and solid waste infrastructure and operations. The specialized services we offer to our clients include:

- Cost of Service/Rate Studies
- System Development Charges/Capacity Fee Studies
- Operational Reviews/Management Audits
- Comparative Analyses/Benchmarking
- Financial Feasibility Studies
- Infrastructure Management/GASB 34
- Conservation Studies
- Appraisal/Valuation/Depreciation Studies
- Organizational Effectiveness

RELEVANT FIRM EXPERIENCE

Our clients feel comfortable working with NewGen because they know that NewGen's staff understands the day-to-day operations and environment of municipal utilities. NewGen's sole focus is on providing objective professional advice and assistance for our clients' specialized activities – ***This is what we do.***

3. PROJECT TEAM EXPERIENCE

KEY PROJECT PERSONNEL

NewGen evaluates the needs of each project and responds by assembling a project team of knowledgeable professionals who are uniquely qualified to provide the services needed.

The project team assembled for this project, with biographical summaries for each individual shown below, are widely recognized cost of service, rate-making, and financial forecasting experts who possess unique knowledge of water resources and industry trends as well as water and wastewater best practices. We guarantee the specific performance of the key personnel identified below.

Detailed resumes are included as Appendix B to this proposal.

MICHAEL MAKER | PROJECT MANAGER

EDUCATION: MBA, Finance, Loyola University (Beta Gamma Sigma Honor Society)
BA, Economics, University of Rochester, Minor: Electrical Engineering

AFFILIATIONS: AWWA, WEF, GFOA | Serves on AWWA Workforce Strategies Committee and AWWA Finance, Accounting & Management Controls Committee | Serves on Chesapeake AWWA Utility Conference Planning Committee

Bringing 19 years of experience, Mr. Mike Maker is Deputy Director of NewGen's Water and Wastewater Practice and a Partner applying management, financial, and technical experience. He has served as either Project Manager or Lead Analyst for over 100 management and financial studies. Day-to-day responsibilities include managing client projects, developing analytical financial models, and compiling comprehensive reports and presentations.

Recent client work experience includes water and/or sewer rate consulting and financial planning for the Albertson Water District, Carle Place Water District, Fishers Island Water Utility Company, Hicksville Water District, Plainview Water District, and Port Washington Water District in New York; the Albemarle County Service Authority, the Town of Warrenton, and the Cities of Fredericksburg, Charlottesville, Hampton, and Portsmouth in Virginia; Calvert County, Cecil County, Frederick County, the Cities of Fredrick and Hagerstown, and the Town of Emmitsburg in Maryland; the City of Camden in New Jersey; the Town of Holly Springs in North Carolina; and Clermont County and the Cities of Niles and Perrysburg in Ohio.

He also is an intervenor and expert witness in a wholesale water rate proceeding before the Rhode Island Public Utilities Commission dealing with the Providence Water Supply Board, led a project to establish a performance measurement program for the Fairfax County wastewater system, and serves as project manager for a water and sewer business operations and processes project jointly funded by Baltimore City and Baltimore County.

He is a current member of AWWA's Finance, Accounting & Management Controls Committee and Workforce Strategies Committee. He is helping to rewrite the latest editions of AWWA's *Manual M29 - Capital Financing* and *Manual M5 - Water Utility Management*. He presented on setting water and sewer rates and the state of

the industry at the New York GFOA Conference in 2020 and 2017 and the Long Island Water Conference in 2019.

CHRIS EKRUT | PROJECT PRINCIPAL

EDUCATION: Master of Public Administration, University of North Texas;
Bachelor of Arts in Public Administration, West Texas A&M University

Mr. Chris Ekrut, Chief Financial Officer, has been providing rate-making consulting services since 2004, with the majority of his consulting experience centered within the water and wastewater industry. Mr. Ekrut has filed expert witness testimony regarding COS determination and rate design and provided litigation support and expert witness testimony development before other rate regulatory agencies. He has also conducted several wholesale and retail water and wastewater rate studies, developed water, wastewater, and stormwater rate/fee models, and assisted in negotiation and litigation involving several wholesale water contracts. Mr. Ekrut also specializes in developing Utility Business Plans and has been called on by the Texas Section of the American Water Works Association to speak on the importance of business planning for municipal utilities.

EDWARD DONAHUE | TECHNICAL ADVISOR

EDUCATION: MBA, Finance, Government-Business Relations, George Washington University
BS, Accounting, Johns Hopkins University

REGISTRATIONS & CERTIFICATIONS: Certified Management Consultant (U.S., Canada)

AFFILIATIONS: AWWA, WEF, GFOA
Active member of the AWWA Finance, Accounting & Management Controls Committee

Mr. Edward Donahue has over 40 years of experience, having performed cost of service, rate, and feasibility work for more than 125 clients, including work for cities, counties, and special purpose authorities and commissions in Alaska, California, Connecticut, Delaware, the District of Columbia, Illinois, Kentucky, Maine, Maryland, Massachusetts, New York, North Carolina, Ohio, Pennsylvania, Virginia, and others. He has served as chairman of AWWA's Finance, Accounting and Management Controls Committee and currently chairs that organization's GASB 34 Task Force; he is a contributing author and editor for AWWA's Manual M-29, Capital Financing and served the same role for the recent AWWA/GFOA textbook Financial Management for Water Utilities. He has been accredited and served as an expert witness in accounting, contract, and construction and rate matters before courts and regulatory agencies.

ERIC CALLOCCHIA | COST OF SERVICE

EDUCATION: BA, Economics/Mathematics, Johns Hopkins University

AFFILIATIONS: AWWA, WEF, CWEA, GFOA
AWWA Rates and Charges Committee - Cost of Service Subcommittee

Mr. Eric Callocchia has over eleven years of utility cost of service and financial consulting experience. His expertise involves a broad range of industry issues, including revenue stability, customer affordability, operational sustainability, and public education. He has experience with establishing new stormwater utilities through the analysis of impervious area modeling and the implementation of best management practices. He is a contributing author to the most recent edition of the Water Environment Federation's Manual of Practice 27 – *Financing and Charges for Wastewater Systems*. He is an active member of the American Water Works Association (AWWA) Rates and Charges Committee, and a contributing author to the upcoming eighth edition of AWWA's Manual M1 – *Principles of Water Rates, Fees and Charges*. He has been accredited as an expert witness concerning utility rate-setting matters by the

Maryland Tax Court and has provided expert advice in California related to one of the State's major ongoing rate litigation disputes.

Mr. Callocchia has worked with over 100 water, wastewater, and stormwater utilities throughout the United States. Through his efforts, clients have realized new stormwater utilities, justified revenue increases, adopted rate structure changes, enhanced reserve policies, funded capital financing plans, and applied other industry best practices. Mr. Callocchia regularly presents at industry conferences to keep peers informed of the cutting-edge methodologies developed as a part of his projects.

NICK SHORT | DATA ENTRY/MODELING

EDUCATION: BS, Economics, Towson University

AFFILIATIONS: AWWA, WEF

Mr. Nick Short applies financial modeling skills to a broad range of rate design projects for clients. He has served as lead data analyst for numerous water, sewer, stormwater, and/or solid waste rate studies throughout the United States. In addition to rate design projects, Mr. Short has also assisted in operation and management, benchmarking, and performance management studies.

4. PROJECT MANAGEMENT APPROACH

NewGen provides the latest and most up-to-date computer, e-mail, and internet resources available for its professional and administrative staff. We also employ encrypted and password-protected off-site, cloud-based data storage capabilities to ensure security and backup of our client data and files. NewGen utilizes Microsoft Office 365, including Excel, Access, Power Query, Power BI, and SharePoint as the primary software programs used to conduct daily activities for our clients.

Our consultants are well-seasoned in the use of Excel and Access, having developed and critiqued countless models developed in these software programs. In addition to the Microsoft Office Suite, NewGen employees utilize Microsoft SharePoint, an online, collaborative software package. This software allows us to develop project-specific, web-based workspaces, accessible securely by members of the Project Team and Client. Each workspace represents a collaborative, online environment between our consultants and clients in which project-specific files and information can be maintained and shared, and ongoing discussions can be held and recorded. The software also allows for the maintenance of a project calendar as well as milestone and task reporting. Powerful analysis, data aggregation, and dynamic visualizations are handled in Power BI and shared with clients via their SharePoint client portal. NewGen also uses Microsoft Teams for internal project scheduling, team communication, and data management.

For an increasing number of client projects, we utilize dedicated/shared websites on which indexed and cataloged data related to the project is stored and accessible to authorized users from both the client and consulting organizations. The software used for such shared sites is subject to client approval to ensure it is compatible with its IT policies.

Big data analytics has become the staple of innovation as the availability of data has grown exponentially over time. Utilities, in particular, are stewards of a sizable amount of information due to recent technological advances in the industry. Smart metering and other sensors have made operational data easily accessible to utility executives. Many executives see the value in mining this data for insights but are unsure where to start. Potential value from this data includes cost reduction, reliability, and customer engagement for the utility and its stakeholders.

In recognition of the value that data and the analysis of said data can bring to utility management, NewGen's data analytics experts deploy the latest advanced analytics strategy and tools to help utilities better understand their data. While every client is different, NewGen follows the following three key steps in applying our data analytics expertise:

- Our team first identifies key objectives or subject areas and develops a tailored analytics approach to build momentum.
- Second, initial data engineering, including cleaning and merging data, brings out areas that need additional attention and provides a basis for more in-depth analysis.
- Third, the employment of data visualization and modeling provides the utility with a better understanding of the financial and operational impact of their service offerings.

PROJECT MANAGEMENT APPROACH

NewGen analytics experts utilize tools such as PowerPivot, Power Query, R, and others as a part of the initial data engineering process. Once the initial data engineering process is complete, dynamic, user-friendly dashboards, presentations, and reports are created utilizing Microsoft Excel, Power BI, and Sway to provide a tailored solution in a comprehensive, visual manner.

5. RECORD OF SUCCESS

We have built our reputation by providing clients with solutions based on sound principles, economic feasibility, and innovative thinking without losing sight of budget and schedule considerations and constraints. We are proud of the long-standing relationships that we have developed with our clients. NewGen encourages LCFWASA to contact any of the representative professional references listed in our proposal. These clients can speak to our ability to provide quality work similar to the services requested.

NewGen seeks to be a trusted advisor to all our clients. We recognize that facilitating this relationship requires our Project Teams to be available when the need arises to be responsive to our clients' unique challenges and opportunities. To facilitate this role, NewGen's offices conduct routine meetings wherein we plan and forecast workload to ensure timely and responsive service to each client. At the same time, we recognize that last-minute requests may occur, which necessitate the provision of immediate service not included in the workload plan. NewGen utilizes the latest technological tools to interconnect its Project Teams, which allow such requests to be quickly assigned and completed while minimizing the impact on the ongoing workload plan. Our Project Manager and Deputy Project Manager will be available to LCFWASA and will be responsible for ensuring the project's needs are addressed and done so with the utmost quality of service.

Additionally, our proposed Project Manager and Deputy Project Manager will act as advocates for LCFWASA in this project to ensure that the client's full needs are being met by the NewGen project staff. Furthermore, NewGen will advise LCFWASA if any foreseen issues can interrupt the project schedule.

For simple projects, tabular and graphic presentations of actual time and effort vs. planned time and effort are maintained and updated semi-monthly based on time and expense reports submitted by project staff. For more complex projects, critical path method (CPM) software such as Microsoft Project is often used. When we assisted with the establishment of LCFWASA several years ago, we used Microsoft Project and developed more than 600 tasks to track relationships, dependencies, level of effort, and schedule.

In order to stay on time and within budget, a detailed project schedule is developed to clearly identify project tasks, staff roles and responsibilities, deliverables and QA/QC, client meetings, and informational/outreach meetings for each project. Each task has clearly identified budgets and schedules. In order to have the project completed in a cost-efficient manner, we address with the client at the project kickoff meeting (or earlier, if possible) work elements that could be accomplished by client staff.

6. FEE PROPOSAL

BASIS OF COST PROPOSAL

We develop our cost proposals by estimating the number of hours of effort required by key individual/classification of employee and multiplying this number by the standard hourly rate that has been established for each administrative classification of employee. To this estimate of professional fees, we add estimated out-of-pocket expenses (e.g., airfare, transportation, lodging, etc.) at actual cost, with no profit or overhead added to out-of-pocket expenses.

We estimate our costs for the studies specified by LCFWASA to be $42,010. A detailed breakdown by the tasks within our workplan is shown in the exhibit below.

Task	Maker $235	Ekrut $310	Donahue $360	Callocchia $225	Short $145	Hours	Fees	Expenses	Total
Task 0 Data Review and Project Kickoff	4	2	-	2	8	16	$ 3,170	$ 1,200	$ 4,370
Task 1 Water Rate Study	16	4	2	4	36	62	$ 11,840		$ 11,840
Task 2 Wholesale Rates	12	8	2	4	30	56	$ 11,270		$ 11,270
Task 3 System Development Charges	8	-	2	2	14	26	$ 5,080		$ 5,080
Task 4 Reporting	10	2	4	4	12	32	$ 7,050	$ 2,400	$ 9,450
Labor Hours	**50**	**16**	**10**	**16**	**100**	**192**			
					Subtotal		$ 38,410	$ 3,600	
					Total Proposed Budget				**$ 42,010**

INSURANCE

NewGen carries insurance that meets and/or exceeds those typically required by water and sewer utilities. A copy of our Certificate of Insurance with LCFWASA named as additional insured can be provided upon request.

FORMS

The following required proposal forms are included as Appendix A:

- Proposal Sheet (P-1)

ADDITIONAL SERVICES

If LCFWASA requests additional services not covered by the scope of this RFP, we will be pleased to provide such services at the rates shown in the exhibit. Among the additional services that NewGen can provide include:

- Appraisals (by certified NewGen personnel on-staff appraisers) for both fair market value and replacement cost
- Litigation support and expert witness testimony
- Financial feasibility studies to support the issuance of revenue bonds
- Staffing and organizational studies

- Development of key performance indicators and processes to monitor KPIs

NewGen will be pleased to discuss these and any other related services we can provide to support LCFWASA in accomplishing its mission. It should be noted that NewGen does not charge any premium to its standard billing rates for any special services, including expert witness testimony.

ADDENDUM ACKNOWLEDGEMENT

We are not aware of any addenda.

NewGen Strategies & Solutions

APPENDIX A: REQUIRED FORMS

RFP

WATER RATE STUDY AND METHODOLOGY

P-1

PROPOSAL SHEET

Please provide the following information on your company:

BY: Michael Maker

TITLE: Partner

COMPANY: NewGen Strategies and Solutions, LLC

ADDRESS: 911-A Commerce Road, Annapolis, MD 21401

TELEPHONE: 443-951-0355

EMAIL: mmaker@newgenstrategies.net

Bidder's company is: Corporation X Partnership/Proprietorship

If corporate name is different from above, please show in full.

What state is corporation incorporated in? Colorado

NewGen Strategies & Solutions

APPENDIX B: RESUMES

RFP

WATER RATE STUDY AND METHODOLOGY

Michael MAKER

PARTNER

Bringing 19 years of experience, Mr. Maker is Deputy Director of NewGen's Water Practice and a Partner applying management, financial and technical experience. Day-to-day responsibilities include managing client projects, developing analytical financial models, and compiling comprehensive reports and presentations.

KEY EXPERTISE

- Rate and Fee Design
- Financial Modeling
- Cost of Service Analyses
- Operational Audits
- Management Studies
- Efficiency and Effectiveness Studies
- Demand/Usage Projections
- Benchmarking/Comparative Analyses
- Research and Data Analyses
- Process/Workflow Mapping

RELEVANT EXPERIENCE

Cost of Service and Rate Design

Mr. Maker prepares cost of service and rate studies for water, wastewater, stormwater, and solid waste utilities. His responsibilities included the development of cost of service cash flow model, rate design, fee design, and customer impact analysis. Models developed by Mr. Maker have provided clients with the necessary information to make critical capital financing decisions and rate adjustments to fully finance replacement needs while maintaining a healthy cash balance. He has also provided policy direction based on industry standards regarding reserve levels and line replacement funding. The models developed can assess the impacts of sensitivity analysis of inflation and growth assumptions and various what-if scenarios. Mr. Maker has recommended alternative rate structures and assisted in implementing phased-in rate plans that address each client's specific issues and maintain the financial health of utility funds. Mr. Maker completed cost of service and rate studies for the following clients (sorted alphabetically by state abbreviation and utility):

- Branford, CT
- Cheshire, CT
- Manchester, CT
- Montville, CT
- Stratford, CT
- Watertown, CT
- Milton, DE
- Glenview, IL
- Morton Grove, IL
- Orland Park, IL
- Auburn, MA
- Barnstable, MA
- Anne Arundel County, MD
- Baltimore, MD
- Baltimore County, MD
- Calvert County, MD
- Cecil County, MD
- Elkton, MD
- Emmitsburg, MD
- Frederick, MD
- Frederick County, MD
- Frostburg, MD
- Garrett County, MD
- Hagerstown, MD
- Harford County, MD
- Kent County, MD
- Rockville, MD
- Washington Sub. San. Comm., MD
- Westminster, MD
- Cape Fear Public Utilities Auth., NC
- Holly Springs, NC
- Claremont, NH
- Exeter, NH
- Camden, NJ
- Evesham Municipal Utilities Auth., NJ
- Albertson Water District, NY
- Beacon, NY

CONTACT

911-A Commerce Road
Annapolis, MD 21401

Email: mmaker@newgenstrategies.net
Website: www.newgenstrategies.net

EDUCATION

Master of Business Administration in Finance, Loyola University

Bachelor of Arts in Economics, University of Rochester, Minor: Electrical Engineering

PROFESSIONAL MEMBERSHIPS

American Water Works Association (AWWA) - Active member of the following:

- Workforce Strategies Committee
- Finance, Accounting & Management Controls Committee
- Chesapeake AWWA Utilities Committee
- Virginia AWWA Utility Management Committee

Water Environment Federation (WEF)

Government Finance Officers Association (GFOA)

NewGen Strategies & Solutions

Michael MAKER

PARTNER

- Bethpage Water District, NY
- Carle Place Water District, NY
- Fishers Island, NY
- Fishkill (Town), NY
- Fishkill (Village), NY
- Hicksville Water District, NY
- Jericho Water District, NY
- Mohawk Valley Water Authority, NY
- Plainview Water District, NY
- Port Washington Water District, NY
- Rochester, NY
- Suffolk County Water Authority, NY
- Tivoli, NY
- Water Auth. of Great Neck North, NY
- West Hempstead Water District, NY
- Canton, OH
- Clermont County, OH
- Cleveland, OH
- Dublin, OH
- Niles, OH
- Perrysburg, OH
- Summit County, OH
- Tallmadge, OH
- North Middleton Township, PA
- Pittsburgh Water/Sewer Auth., PA
- Bristol County Water Authority, RI
- North Kingstown, RI
- Highland Park, TX
- Sharyland Water Supply Corporation, TX
- Tyler, TX
- Westlake, TX
- Albemarle County, VA
- Charlottesville, VA
- Chincoteague, VA
- Fauquier County, VA
- Franklin, VA
- Hampton, VA
- Henrico County, VA
- Herndon, VA
- James City Service Authority, VA
- Leesburg, VA
- Lexington, VA
- Lovettsville, VA
- Newport News, VA
- Norfolk, VA
- Portsmouth, VA
- Purcellville, VA
- Richmond, VA
- Rivanna Water & Sewer Authority, VA
- Southampton County, VA
- Stafford County, VA
- Warrenton, VA

Presentations and Publications

Mr. Maker has given numerous presentations and participated in training and workshops.

- "Harnessing the Power of Data - Using Key Performance Indicators and Benchmarks to Optimize Operations"; 2022 CSAWWA Tri-Association Conference
- "Utility Best Management Practices: Strong Adopted Financial Management Policies"; Reviewer, Journal AWWA, April 2022
- "System Development Charges: Funding Growth in Maryland"; 2021 Chesapeake AWWA Tri-Association Conference
- "Setting Water and Sewer Rates in New York State"; New York GFOA Northeast Holiday Seminar (2020)
- "Vision Beyond 2020: Preparing and Paying for Growth in the Commonwealth"; 2020 Virginia AWWA WaterJAM
- "Setting Water Rates: State of the Industry"; Long Island Water Conference (2019)
- "EPA's Definition of Affordability"; 2017 Tri-Association Conference (CSAWWA, CWEA, WWOA)
- "Setting Water and Sewer Rates"; 2017 New York State GFOA 38th Annual Conference
- "Defining Affordability"; 2016 AWWA Annual Conference & Exposition (ACE)
- "A World without Crystal Balls: Attempting to Forecast Operating Expenses"; 2015 Water Asset Management Conference
- "Stormwater Utility Financial Analysis: A Case Study of the City of Hampton"; Virginia Lakes and Watersheds Association 2013 Virginia Water Conference
- "LEED Certified Water Efficient Buildings and Water and Sewer Capacity Fees"; 2012 CSAWWA Tri-Association Conference
- "Stormwater Utilities in Virginia"; 2013 Brown Edwards Conference
- "Creating Sustainable Infrastructure"; Maryland GFOA 2009 Spring Conference

Chris EKRUT

CHIEF FINANCIAL OFFICER

Mr. Chris Ekrut is a founding Partner and Chief Financial Officer for NewGen. Mr. Ekrut has been providing consulting services since 2004, with the majority of his client-related projects focused on pricing services and developing rates and fees for utility systems.

Mr. Ekrut is a recognized expert witness, having filed testimony regarding cost of service and rate design and providing litigation support and regulatory filing assistance before rate regulatory agencies. He has conducted numerous wholesale and retail water and wastewater rate studies, developed utility rate and fee models, and assisted in negotiations and/or litigation involving several wholesale service contracts. He also serves as an instructor for the national "Fundamentals of Water Cost of Service and Rate Design" class sponsored by EUCI and serves on the Faculty of the National Association of Regulatory Commissioner's (NARUC) Rate School.

CONTACT

275 W. Campbell Road, Suite 440
Richardson, TX 75080
cekrut@newgenstrategies.net
www.newgenstrategies.net

EDUCATION

Master of Public Administration, University of North Texas

Bachelor of Arts in Public Administration, West Texas A&M University

KEY EXPERTISE

Cost of Service

Feasibility/Rate Impact Studies

Indirect Cost Allocation Studies

Litigation and Regulatory Support

Operations and Management Review

Rate Design

System Valuations

Utility Business Plans

NewGen Strategies & Solutions

RELEVANT EXPERIENCE

Utility Business Plans

- City of Blue Mound, TX
- City of Gainesville, TX
- Town of Prosper, TX

Water and Wastewater Systems

- Lower Colorado River Authority's Water and Wastewater Service Unit
- Brownsville Public Utilities Board

System Valuation

- City of Blue Mound, TX
- City of Oak Point, TX
- City of Southmayd, TX
- City of Tyler, TX
- Mustang Special Utility District
- Town of Lakeside, TX

Indirect Cost Allocation Studies

- City of Brenham, TX
- City of Terrell, TX
- North Texas Municipal Water District

Wholesale and/or Retail Water, Reclaimed Water, Wastewater, and Drainage Cost of Service and Rate Design Studies

- Canyon Regional Water Authority *
- City of Aledo, TX *
- City of Amarillo, TX
- City of Bastrop, TX *
- City of Bellaire, TX
- City of Blue Mound, TX *
- City of Bonham, TX *
- City of Brenham, TX *
- City of Burkburnett, TX *
- City of Burnet, TX *
- City of Cedar Park, TX
- City of Celina, TX
- City of Cisco, TX
- City of Coleman, TX

Chris EKRUT

CHIEF FINANCIAL OFFICER

Wholesale and/or Retail Water, Reclaimed Water, Wastewater, and Drainage Cost of Service and Rate Design Studies (cont.)

- City of Colleyville, TX
- City of Eunice, NM
- City of Gainesville, TX *
- City of Gatesville, TX *
- City of Garland, Texas *
- City of Glenn Heights, TX *
- City of Graham, TX
- City of Grapevine, TX *
- City of Irving, TX
- City of Jacksonville, TX
- City of Justin, TX
- City of Killeen, TX *
- City of Lancaster, TX *
- City of Farmersville, TX *
- City of Forest Hill, TX *
- City of Forney, TX
- City of League City, TX
- City of Lewisville, TX *
- City of Liberty Hill, TX
- City of Lubbock, TX
- City of McGregor, TX *
- City of Mabank, TX
- City of Mansfield, TX *
- City of Mexia, TX
- City of Mineral Wells, TX *
- City of Murphy, TX
- City of Odessa, TX *
- City of Paris, TX *
- City of Portland, TX
- City of Roanoke, TX *
- City of Sanger, TX
- City of Seagoville, TX *
- City of Stamford, TX
- City of Terrell, TX *
- City of Thornton, CO
- City of Tyler, TX *
- City of Waco, TX *
- City of Weatherford, TX *
- City of Willow Park, TX *
- City of Wolfforth, TX *
- Double Diamond Utilities Co. *
- Johnson County Special Utility District *
- Marilee Special Utility District *
- Mustang Special Utility District
- MSEC Enterprises
- Navajo Tribal Utility Authority
- North Texas Municipal Water District
- Nueces County Water Control and Improvement District No. 3
- Parker Special Utility District
- Pillan Income Asset Management
- Pittsburgh Water and Sewer Authority
- Possum Kingdom Water Supply Corporation
- Quadvest
- Riverbend Water Resources District
- Sabine River Authority
- South Texas Water Authority *
- Town of Addison, TX
- Town of Argyle, TX
- Town of Lakeside, TX *
- Town of Pantego, TX
- Town of Prosper, TX *
- Trophy Club Municipal Utility District No. 1 *
- West Wise Special Utility District

Service Area Valuations/Appraisals

- Aquilla Water Supply Corporation
- City of Tyler, TX
- City of Waco, TX
- Double Diamond Utilities * Green Valley Special Utility District
- Guadalupe-Blanco River Authority
- Johnson County Special Utility District
- Kempner Water Supply Corporation
- MSEC Enterprises
- Mustang Special Utility District *
- Private appraisals for individuals

Chris EKRUT

CHIEF FINANCIAL OFFICER

Feasibility Studies/Rate Impact of Engineering Recommendations/Peer Review

- City of Forney, TX
- City of Garland, TX *
- City of Odessa, TX
- City of Waco, TX *
- County Special Utility District
- McLennan County, TX
- North Texas Municipal Water District
- Town of Palm Beach, Florida (Electric Study)
- Upper Trinity Regional Water District

Litigation Support

Mr. Ekrut provided litigation support, directly or as a subcontractor, to the following entities.

- BASF Corporation
- Double Diamond Utilities *
- MSEC Enterprises
- North Texas Municipal Water District
- Office of Public Utility Counsel *
- Rock Creek Water Supply Corporation
- Texas RioGrande Legal Aid
- Town of Star Harbor, Texas
- West Wise Special Utility District

Rulemaking Regulatory Support

Mr. Ekrut provided Expert Assistance to the Office of Public Utility Counsel (OPUC) for the following PUC rulemaking projects.

- PUC Project No. 43871
- PUC Project No. 43876
- PUC Project No. 43967
- PUC Project No. 44462
- PUC Project No. 44706
- PUC Project No. 45111
- PUC Project No. 45113
- PUC Project No. 45118
- PUC Project No. 45758

Gas Utility Experience

Mr. Ekurt provided litigation support in Texas Railroad Commission Docket No. 9670 – Petition for De Novo Review of the Reduction of the Gas Utility Rates of ATMOS Energy Corp., Mid-Tex Division. He also assisted the City of Brenham, Texas, in analyzing and amending their Gas Cost Adjustment Factor.

General Fund Studies

- City of Arlington, TX (Oil/Gas Well Emergency Fee)
- City of Bonham, TX (Ambulance Service Fee, Street Maintenance Fee)
- City of Burkburnett, TX (Planning and Development Fees)
- City of New Braunfels, TX (Planning and Development / Community Service Fees)
- City of Killeen, TX (Street Maintenance Fee)

Solid Waste Experience

Mr. Ekrut has assisted with the following solid waste studies and efforts:

- City of Denton, TX (Municipal Solid Waste Operations Study)
- City of Peoria, AZ (Alternative Feasibility Study)
- North Central Texas Council of Governments (Mixed Recycling Facility (MRF) Study)
- Siemens Energy and Environmental Services (Waste Shed Analysis of the DFW Metroplex)

Chris EKRUT

CHIEF FINANCIAL OFFICER

Electric Utility Experience

- City of Austin, TX
- City of Bastrop, TX
- City of Brenham, TX
- City of Burnet, TX
- City of Liberty, TX
- City of Sanger, TX
- Garland Power & Light

Impact Fee/Capital Recovery Experience

Mr. Ekrut has assisted in developing Water, Wastewater, and/or Roadway Impact Fees for the following clients.

- City of Bastrop, TX *
- City of Burnet, TX *
- City of College Station, TX
- City of Denton, TX *
- City of Flower Mound, TX *
- City of Frisco, TX *
- City of Ft. Worth, TX *
- City of Galveston, TX
- City of Garland, TX
- City of Glenn Heights, TX
- City of League City, TX
- City of McKinney, TX *
- City of Mesquite, TX
- City of Willow Park, TX
- Nueces County Water Control and Improvement District No. 4
- Parker County Special Utility District

Franchise Fee Experience

Mr. Ekrut has assisted in conducting reviews of franchise fee payments for the following clients.

- Payments made by Charter Communications to the Cities of Rockwall and Denton, Texas.
- Payments made by Oncor to a coalition of Cities within the State of Texas.
- Gas and electric providers in Fayette County, Kentucky.

PRESENTATIONS

American Water Works Association, Texas Section, 2019/2018/2016/2008

- *When, Water, Where, and Why – The Importance of Rate Studies in Utility Management* (April 2019)
- *That'll Be the Day that Water Rates Change in Lubbock* (April 2018)
- *Decimated by Data – Common Utility Billing Mistakes and the Impact on Water and Sewer Utilities* (April 2018)
- *Getting a Good Opinion: The Importance of Financial Policies and the Impact on a Utility's Credit Rating* (April 2016)
- *Business Planning and its Benefits to Municipal Utilities* (2008)

American Water Works Association, Utility Management Conference, 2015

- *Aledo, Texas – How a Small City Overcame a Capital Improvement Giant* (January 2015)

Forester University, 2020

- *Machine Learning Facilitated Stormwater Financing* (September 2020)

Government Finance Officers Association of Texas, 2016/2014

- *Legislative and Regulatory Update for Water and Wastewater Utilities* (July 2016)
- *When in Drought! Utility Ratemaking 101* (April 2014)

Chris EKRUT

CHIEF FINANCIAL OFFICER

PRESENTATIONS (CONT.)

North Central Texas Council of Governments, 2014/2015/2016/2017/2018

- *Utility Management and Revenue Considerations; New and Emerging City Manager Roundtable and New and Emerging Finance Director Roundtable* (2014, 2015, 2016, 2017, and 2018)
- *To the PUC . . . and Beyond!* (November 2015)

Texas Water Conservation Association, 2013

- *Texas Water Development Board Water Conversation Best Management Practices Model: Estimating Water Conservation Savings for New Annual Reporting Requirements* (March 2014)
- *Strategies for Pricing Direct Water Reuse* (March 2013)

Texas Water Law Conference, 2007

- *Allocating the Costs of Population Growth in Wholesale Water Contracts* (January 2007)

PUBLICATIONS

Texas Town & City, 2009

- *Plan Your Work and Work Your Plan: The Benefits of Municipal Utility Business Planning* (October 2009)

Ed DONAHUE

SENIOR ADVISOR

Mr. Ed Donahue has almost 50 years of experience, having performed cost of service, rate, and feasibility work for more than 150 utilities across the country, from Maine to San Diego, from Nome to the Florida Keys. He served as chairman of the American Water Works Association's (AWWA) Finance, Accounting, and Management Controls Committee and currently chairs that organization's GASB 34 Task Force. Mr. Donahue is a contributing author and editor for AWWA's Manual M-29, Capital Financing, and served the same role for the recent AWWA/GFOA textbook Financial Management for Water Utilities. He has been accredited and served as an expert witness in accounting, contract, construction, and rate matters before courts and regulatory agencies at state and federal levels.

Before coming to NewGen, Mr. Donahue established the Municipal & Financial Services Group (MFSG), a specialized consulting practice focused on financial, management, and economic issues facing the public sector and infrastructure clients, especially those involved in large capital-intense activities. His career includes work as a National Consulting Practice Director for a Big Four accounting firm, a Financial Manager for the Chief Scientist at Westinghouse Electric Corporation, and a Senior Systems Accountant at the U.S. Environmental Protection Agency.

CONTACT

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Annapolis, MD 21401
edonahue@newgenstrategies.net
www.newgenstrategies.net

EDUCATION

Master of Business Administration in Finance (Government Business Relations), George Washington University

Bachelor of Science in Accounting, Johns Hopkins University

PROFESSIONAL REGISTRATIONS/ CERTIFICATIONS

American Water Works Association

Certified Management Consultant (U.S., Canada)

Community Associations Institute

Government Finance Officers Association

Institute of Management Consultants (Past President, D.C. Chapter)

Water Environment Federation

KEY EXPERTISE

Asset Management

Financial Planning & Analysis

Hazardous Waste

Litigation Support & Expert Witness Testimony

Management Audits & Operational Reviews

Management Reporting

Regulatory Analysis

Strategic Planning

Tax Exempt Financing

NewGen Strategies & Solutions

RELEVANT EXPERIENCE

Financial Planning and Analysis

Mr. Donahue facilitated the development of financial alternatives, capital improvement plans, and financial feasibility studies for operating and capital costs, such as:

- Bond-related studies (coverage tests, arithmetic verifications, arbitrage compliance, parity tests, etc.)
- Cost of service/rate studies for over 150 utilities (water, sewer, electric, solid waste, stormwater)
- Development of long-term business plans
- Evaluation of contracts and proposals; acquisition and disposal of assets; change orders
- Financial feasibility studies/debt affordability studies
- Impact fees/capacity fees/system development charges
- Negotiation of inter-jurisdictional agreements
- Tax differential / tax setoff studies
- Tax revenue and expenditure analyses (tax and annexation disputes)

Strategic Planning

Mr. Donahue facilitated the development of strategic and long-range plans for nonprofit and for-profit organizations.

Ed DONAHUE

SENIOR ADVISOR

Management Audits and Operational Reviews

Mr. Donahue evaluates the performance, efficiency, and effectiveness of organizations and provides recommendations for establishing new organizations or consolidating existing organizations or departments. These efforts include the development of organizational structures and staffing needs, recruitment of key personnel, job descriptions, compensation programs, capital and operating budgets, revenue analysis, etc. Mr. Donahue has also conducted governance studies for boards of directors, commissions, and authorities.

Asset Management

Mr. Donahue develops asset management processes and systems for infrastructure, including optimization of operating and capital budgets; definition of service levels; condition assessments; identification and specification of software packages; life cycle costing analyses; development of planned and preventive maintenance programs.

Management Reporting

Mr. Donahue designs management reporting systems, including the development of information needs, frequency, timing of reports, and format. He develops specifications for financial reporting systems for large municipal and federal agencies and develops testing protocols to validate management reporting performance with pre-established criteria.

Tax Exempt Financing

Mr. Donahue uses creative approaches to finance economic development and industrial facilities with tax-exempt debt. Strategies include using special taxing districts such as tax increment financing districts (TIF) and special community benefit districts (SCBDs) to facilitate desirable development. His experience includes:

- Automotive coatings facilities
- Electric, steam and chilled water systems
- Paper manufacturing facilities
- Senior living communities

Hazardous Waste

Mr. Donahue identifies and evaluates financial risks and develops recommended assurance, insurance levels, and mechanisms for large, fully permitted landfills accepting industrial and medical wastes. These efforts also include determining the risk management mix for hazardous waste operations.

Regulatory Analysis

Mr. Donahue evaluates the financial and economic impact of various environmental laws and regulations at industry, company, and plant levels.

LITIGATION SUPPORT & EXPERT WITNESS TESTIMONY

Mr. Donahue provides financial analysis and expert witness services to various litigation and regulatory hearings. Typical areas of review include:

- Civil bankruptcies (Chapters VII, IX and XI)
- Construction claims/commercial disputes
- Cost allocations/rate schedules
- Criminal bankruptcy
- Development of/response to interrogatories
- Documentation/recreation of historical costs
- Financial models
- Forecasts/projections of costs/revenues
- Forensic accounting
- Patent/trademark infringement (lost profits, reasonable royalties)
- Sensitivity analysis

Eric CALLOCCHIA

PRINCIPAL

Mr. Eric Callocchia has over eleven years of utility cost of service and financial consulting experience. His expertise involves a broad range of industry issues, including revenue stability, customer affordability, cost of service rate making, and public engagement and education. His expertise in utility cost of service is rooted in his exceptional analytic skills and broad experience, which ensure that the recommendations he develops are understandable and withstand legal scrutiny.

Mr. Callocchia is a contributing author to the most recent edition of the Water Environment Federation's Manual of Practice 27 – Financing and Charges for Wastewater Systems. He is an active member of the American Water Works Association (AWWA) Rates and Charges Committee and a contributing author to the upcoming eighth edition of AWWA's Manual M1 – Principles of Water Rates, Fees, and Charges.

CONTACT

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EDUCATION

Bachelor of Arts in Economics and Mathematics, Johns Hopkins University

PROFESSIONAL REGISTRATIONS/ CERTIFICATIONS/ AWARDS

American Water Works Association – Active member of the AWWA Rates and Charges Committee and Cost of Service Subcommittee

Government Finance Officers Association

Water Environment Federation

KEY EXPERTISE

Cash Flow Sensitivity Analysis
Econometrics
Economic Impact Analysis
Financial Modeling
Public Finance
Utility Management
Utility Rate and Fee Design
Water and Wastewater Cost of Service Analyses

NewGen Strategies & Solutions

RELEVANT EXPERIENCE

Water/Sewer/Stormwater Rate Studies

Mr. Callocchia provides water, wastewater, and stormwater industry expertise and policy guidance to NewGen's clients. His rate study approach involves the development of customized financial models that focus on the policy issues, cash needs, revenue requirements, and key performance indicators of each client. His models equip clients with the necessary information to make critical capital financing decisions and rate adjustments to fully finance their system's operation, asset maintenance, and replacement needs while maintaining fund balance policies based on industry best practices. The models also have the capability of scenario analysis and can be incorporated with operating and capital expense and revenue projects. Mr. Callocchia develops and recommends alternative rate structures and assists with implementing phased-in rate plans that address client issues and maintain the financial health of utility funds. Mr. Callocchia also provides expert guidance on managing water, sewer, and stormwater utilities, including developing policies and procedures related to customer service, organizational communication, and public outreach.

Clients that Mr. Callocchia has provided these services to include:

- Albemarle County, VA
- Anne Arundel County, MD
- Bloomington and Normal Water Reclamation District, IL
- City of Annapolis, MD
- City of Brea, CA
- City of Charlottesville, VA
- City of Concord, CA
- City of Dover, DE
- City of Falls Church, VA
- City of Frederick, MD
- City of Fredericksburg, VA
- City of Hagerstown, MD
- City of Hampton, VA
- City of Naperville, IL
- City of North Kingstown, RI
- City of Park Ridge, IL
- City of Portsmouth, VA
- City of Prospect Heights, IL
- City of Richmond, VA
- City of Rockville, MD

Eric CALLOCCHIA

PRINCIPAL

- City of Salisbury, MD
- City of Westminster, MD
- Coachella Valley Water District, CA
- Delaware County Regional Water Quality Control Authority (DELCROA), PA
- Frederick County, MD
- Jericho Water District, NY
- Jurupa Community Services District, CA
- King George County Service Authority, VA
- Loudoun Water, VA
- Rivanna Water and Sewer Authority, VA
- Somerset County Sanitary District, MD
- Town of Barnstable, MA
- Town of Colonial Beach, VA
- Township of East Brunswick, NJ
- Town of Elkton, MD
- Town of Fairfield WPCA, CT
- Town of Herndon, VA
- Town of Lovettsville, VA
- Town of Middleburg, VA
- Town of Pound, VA
- Town of Purcellville, VA
- Town of Wallingford, CT
- Town of Vienna, VA
- Village of Addison, IL
- Village of Fox Lake, IL
- Village of Libertyville, IL
- Village of Lindenhurst, IL
- Village of Lombard, IL
- Village of Orland Park, IL
- Village of Westchester, IL
- Washington Suburban Sanitary Commission, MD
- Wise County Public Service Authority, VA

Stormwater Feasibility and Fee Studies

Libertyville, IL

In 2019, the Village engaged NewGen to complete a feasibility study to project the costs of implementing a Master Stormwater Management Plan (MSM) and to determine the appropriate methodology to charge Village citizens the fees for the MSM planned projects. The Village also tasked NewGen with developing credit policies and manuals, appeal procedures, and an appropriate Stormwater Ordinance. Mr. Callocchia developed a financial model that projected the twenty-year cost of the Village's MSM and the various impervious area-based cost allocation methods the Village could adopt as a funding mechanism. Mr. Callocchia's feasibility study allowed Village staff and elected officials to evaluate the various stormwater funding alternatives and implement industry best practices for the administration of its stormwater management program. Mr. Callocchia finalized the impervious area and utility billing databases and coordinated with Village staff to develop an interactive online fee lookup tool that allowed Village citizens to see their potential stormwater fee before it became effective. Mr. Callocchia also worked with Village staff to conduct two Town Hall style public information sessions before the fee became effective.

Westminster, MD

The City of Westminster serves as the County Seat. It is in the center of Carroll County, conveniently located near Maryland's largest cities, two state capitals, Annapolis and Harrisburg, and the nation's Capital. The City had historically faced challenges when funding stormwater operating and capital costs. In the past, the City had not accounted in a detailed fashion for the actual stormwater management costs, with most of the costs absorbed by the City's streets and road maintenance accounted for in the General Fund. The City engaged NewGen in 2019 to complete a feasibility study with several tasks:

- Identify and isolate the actual cost of stormwater maintenance.
- Develop and recommend a ten-year stormwater CIP given the City's asset listing and future stormwater needs.
- Recommend policies regarding stormwater fees and credits.
- Engage in a public information campaign to educate the City's citizens on the need for additional resources for stormwater management.
- Assist in implementing a Stormwater Utility that properly accounts for the City's stormwater costs.

Mr. Callocchia developed a financial model detailing the City's stormwater costs and helped the City implement a stormwater fee tied to the account information of City sewer users.

Eric CALLOCCHIA

PRINCIPAL

Frederick County, MD

Frederick County, Maryland, was anticipating the issuance of a Municipal Separate Storm Sewer System (MS4) Permit from the Maryland Department of the Environment (MDE) that would place a particular cost burden on the County's 48,000 stormwater fee payers. Mr. Callocchia developed a financial model that determined the Maximum Extent Practicable (MEP) level the County could reasonably fund given current funding levels, median household income, and the County's procurement limitations. Mr. Callocchia's financial model allowed for a sensitivity analysis to determine the increase in funding that would be possible given several factors. The County used Mr. Callocchia's analysis to appeal the permit requirements and reduce the financial impact on the County's customers by reducing the mandated spending related to the permit and lengthening the required implementation timeframe.

Geneva, IL

The City of Geneva was actively involved in developing the Kane county Stormwater Management Ordinance dating back to 1998. Geneva became a "certified community" in 2001 with the adoption of the final version of the City's stormwater ordinance. The Lake County Stormwater Management Commission provided a template that was the basis of the City's Stormwater Management Program Plan (SMPP). The plan's purpose was to meet the minimum standards required by the U.S. Environmental Protection Agency (EPA) under the National Pollutant Discharge Elimination System (NPDES) Phase II program.

Mr. Callocchia led a team that conducted a financial analysis as a part of a Citywide Watershed Study. The City supported the drainage and stormwater-related costs through its General Fund. His role in the Watershed Study was to support and participate in the initial City staff meeting to establish a City Vision document. Mr. Callcocchia also identified current grants and funding sources and developed funding strategies to facilitate the City's Public Works Department's capital and operational needs related to their drainage infrastructure responsibilities. He recommended funding gap strategies associated with an annual program and budget and participated in and supported a City Council strategic planning workshop topic related to the Citywide Stormwater Report and financial perspectives.

Water and Sewer Revenue Bond Feasibility Study

Mr. Callocchia developed a water and sewer rate model for the City of Annapolis, Maryland, that projected various debt scenarios, including bond coverage calculations and cash-on-hand target projections. The City was able to generate ratings of AA-, Aa3, and AA- from the three major rating agencies and issue the revenue bonds in the amount of $30,755,000 on schedule, thanks to the feasibility report generated by Mr. Callocchia's team.

Litigation Support

Utility Billing Dispute

Silgan Plastics is the leading manufacturer of metal containers in North America and Europe and the largest manufacturer of metal food containers in North America, with a volume of approximately half the market share in the United States of America. They are also a leading worldwide manufacturer of metal, composite and plastic closures for food and beverage products. Mr. Callocchia led a team to evaluate the utility rates charges to a selection of Silgan's manufacturing plants and assist Silgan in settling rate disputes with local utility providers. Mr. Callocchia's detailed evaluations and expert analysis resulted in a settlement agreement for more than $500,000 above the amount previously offered to Silgan before Mr. Callocchia's involvement.

Eric CALLOCCHIA

PRINCIPAL

Water Rate Litigation

The San Diego County Water Authority (SDCWA) and The Metropolitan Water District of California (MWD) were engaged in litigation regarding the water rates charged to SDCWA by MWD. Mr. Callocchia developed a report on MWD's rate setting methodology and how it relates to the principles and industry standard practices detailed in the American Water Works Association (AWWA) Manual M1 - Principles of Water Rates, Fees, and Charges. Mr. Callocchia's evaluation assisted SDCWA in its efforts to show the illegality of MWD's rates based on their non-conformity to both AWWA standards and California Law (Proposition 26). Mr. Callocchia's work involved cost-of-service analysis and knowledgeable explanation of industry standards to the Superior Courts of California. After Mr. Callocchia's report, a judge ruled in favor of the Water Authority, saying MWD's rates for 2011-2014 were illegal, and awarded SDCWA $235 million. Upon appeal, the appellate court ruled in favor of MWD on one of twelve issues. The California Supreme Court denied a petition by SDCWA to review the appellate court ruling. The results of the dispute in which Mr. Callocchia was involved as an expert were:

- MWD must pay the Water Authority approximately $51 million for the so-called "Water Stewardship" charges that MWD added to the transportation rates it charged the Water Authority from 2011-2014. The decision prevents MWD from imposing more than $20 million in illegal charges annually in the future. By 2047, those unlawful charges would have amounted to approximately $1.1 billion.
- MWD unlawfully under-calculated the Water Authority's statutory water right to MWD's water supply.
- A contract clause MWD used to disqualify local water supply projects in San Diego County from receiving funding from MWD was unconstitutional.
- Engage in a public information campaign to educate the City's citizens on the need for additional resources for stormwater management.
- Assist in implementing a Stormwater Utility that properly accounts for the City's stormwater costs.

Benefit Assessment Dispute

The City of Westminster, Maryland, was sued by a new customer who alleged that the methodology used by the City to calculate its water and sewer benefit assessments, commonly known in the utility industry as System Development Charges, was unlawful. Mr. Callocchia served as an expert witness detailing the industry standard methodologies used to calculate these fees and provided the Court with the rationale and basis for the City's fees. The Court ultimately found that the City's fees were not illegally calculated based on the City's testimony, which included Mr. Callocchia's expert witness statements.

PRESENTATIONS AND PUBLICATIONS

WEF Manual 27, Financing and Charges for Wastewater Systems, Contributing Author

Setting Water and Sewer Rates in New York State While Addressing the Challenges of 2020
New York State GFOA 2020 Northeast Holiday Seminar, 2020

Setting Water and Sewer Rates
New York State GFOA 38th Annual Conference, 2017

A World without Crystal Balls: Attempting to Forecast Operating Expenses
Tri-Association Conference, 2016

Enhanced General Fund Reimbursement by Enterprise Funds
Brown Edwards Conference, 2014

Nick SHORT

CONSULTANT

Mr. Short is a Consultant at NewGen, applying financial modeling skills to a broad range of rate design projects for clients. Mr. Short has extensive experience analyzing utility billing data to project cash flow and financing scenarios as a part of utility rate studies.

CONTACT

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EDUCATION

Bachelor of Arts in Economics, Towson University

KEY EXPERTISE

Cost of Service Analyses

Economics

Financial Modeling

Operational Benchmarking

Performance Metrics

Rates and Fee Design

RELEVANT EXPERIENCE

Water and Sewer Rate Studies

Mr. Short works with NewGen project managers to build financial models for utility clients. These models utilize industry standard cost allocation methodologies and allow clients to project the operating, capital, debt service and reserve requirements of their systems on both a short and long-term basis. Mr. Short provides expert utility billing analysis in order to properly project utility revenues. Clients that Mr. Short has provided these services to include:

- Albemarle County, VA
- Albertson Water District, NY
- Anne Arundel County, MD
- Bristol County Water Authority, RI
- Calvert County, MD
- Carle Place Hamlet, NY
- City of Baltimore, MD
- City of Camden, NJ
- City of Canton, OH
- City of Charlottesville, VA
- City of Dover, DE
- City of Dublin, OH
- City of Frederick, MD
- City of Fredericksburg, VA
- City of Hagerstown, MD
- Town of Highland Park, TX
- Town of Holly Springs, NC
- Town of Middleburg, VA
- Town of Wallingford, CT
- Town of Warrenton, VA
- City of Hampton, VA
- City of Hazelton, PA
- City of Niles, OH
- City of Perrysburg, OH
- City of Portsmouth, VA
- City of Richmond, VA
- City of Tallmadge, OH Town of Tyler, TX
- City of Vienna, VA
- City of Waco, TX
- City of Watertown, MA
- Clermont County, OH
- Coachella Valley Water District, CA
- County of Baltimore, MD
- Town of Westlake, TX
- Township of East Brunswick, NJ
- Village of Addison, IL
- Village of Libertyville, IL
- Delaware County Regional Water Quality Control Authority, PA
- Fairfax County, VA
- Fisher's island, NY
- Frederick County, MD
- Hicksville Water Authority, NY
- Jericho Water District, NY
- North Middleton Township, PA
- Ocean City, MD
- Plainview Hamlet, NY
- Port Washington Water District, NY
- Rivanna Water and Sewer Authority, VA
- Town of Barnstable, MA
- Town of Herndon, VA
- Water Authority of Great Neck North, NY
- WCPSA & Town of Pound, VA
- West Hempstead Hamlet, NY

NewGen Strategies & Solutions

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THANK YOU!

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Lower Cape Fear Water and Sewer Authority

Water Rate Study and Methodology

PROPOSAL / NOVEMBER 21, 2022

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RAFTELIS

November 21, 2022

Ms. Danielle Hertzog
Finance Administrative Assistant
Lower Cape Fear Water and Sewer Authority
1107 New Pointe Boulevard, Suite 17
Leland, NC 28451

Subject: Proposal for Water Rate Study and Methodology

Dear Ms. Hertzog:

Raftelis is pleased to submit this proposal to assist the Lower Cape Fear Water and Sewer Authority (LCFWASA) with a water rate study. We appreciate the opportunity to submit this proposal, which details our project approach to meet the LCFWASA's objectives as well as our qualifications and experience within the water and wastewater utility industry.

Raftelis was established in Charlotte, NC in 1993 to provide financial, rate, and management consulting services of the highest quality to water and wastewater utilities. Since that time, Raftelis has grown to have the largest water and wastewater utility financial and management consulting practice in the country, with more than 130 consultants. Our staff have provided rate and/or financial planning assistance to over 1,000 utilities across the nation, including assisting more than 50 utilities in North Carolina. Raftelis is still headquartered in Charlotte, and we have additional North Carolina offices in Cary and Greensboro.

We have built a project team with skills and experience to develop a financial roadmap for LCFWASA that will become a decision support tool for LCFWASA staff for many years to come. This study will develop a financial plan that projects the future costs of providing water and sewer services for current customers and considers costs related to system expansion and regionalization opportunities. Raftelis is uniquely qualified to serve as your expert consultant based on our extensive experience successfully completing many similar studies for utilities in the Carolinas and across the country.

Clean and reliable access to water is a foundation of every community. Our project team also includes experts who can quantify the economic benefit that LCFWASA brings to its region by providing a clean and reliable source of water to the households and businesses it serves. Measuring the significant benefits and economic impact to the region will produce important information that can be conveyed to key stakeholders and other target audiences.

This project will be successful by bringing LCFWASA the best combination of industry-leading rate and economic experts that have direct relevant experience completing rate studies and benefit-cost and regional economic impact analysis similar to the tasks requested by LCFWASA. We strongly believe our team would successfully complete the studies and provide significant value to the Cape Fear Public Utility Authority for several reasons, including:

- **Breadth of experience** – We have conducted thousands of financial projects for more than 1,000 utilities across the country, many of them similar to this study.
- **Proximity** –Our team members are located nearby in Charlotte and are intimately aware of the concerns facing North Carolina utilities.

RAFTELIS

- **Depth of resources** – No firm that specializes in financial consulting for the water and wastewater industry has the staff resources we have.
- **Drive to succeed** – Our project team will be focused on not only meeting, but exceeding, LCFWASA's expectations.

Thank you for the opportunity to provide this proposal to LCFWASA. If you have any questions or need any additional information, please do not hesitate to contact me.

Sincerely,

Melissa Levin
Vice President
P: 704.936.4441 / E: mlevin@raftelis.com

Diversity and inclusion are an integral part of Raftelis' core values.

We are committed to doing our part to fight prejudice, racism, and discrimination by becoming more informed, disengaging with business partners that do not share this commitment, and encouraging our employees to use their skills to work toward a more just society that has no barriers to opportunity.

REGISTERED MUNICIPAL ADVISOR

Raftelis is registered with the U.S. Securities and Exchange Commission (SEC) and the Municipal Securities Rulemaking Board (MSRB) as a Municipal Advisor.

Registration as a Municipal Advisor is a requirement under the Dodd-Frank Wall Street Reform and Consumer Protection Act. All firms that provide financial forecasts that include assumptions about the size, timing, and terms for possible future debt issues, as well as debt issuance support services for specific proposed bond issues, including bond feasibility studies and coverage forecasts, must be registered with the SEC and MSRB to legally provide financial opinions and advice. Raftelis' registration as a Municipal Advisor means our clients can be confident that Raftelis is fully qualified and capable of providing financial advice related to all aspects of financial planning in compliance with the applicable regulations of the SEC and the MSRB.

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Project Understanding and Approach

LCFWASA has requested proposals from qualified consultants with extensive experience conducting rate studies for water and sewer utilities. Raftelis is the most qualified consulting firm to perform a Water and Sewer Rate Study and an Economic Impact Study for LCFWASA.

Described below is our approach for the study consistent with the tasks described in the RFP. For each major study task, Raftelis will prepare a project approach and work plan detailing the estimated level of effort and cost. A timeline/schedule for completion of the task will also be provided. The estimated timeline will be consistent with the objectives of LCFWASA and Raftelis will work to meet any specific timeline requirements. Examples of our project approach for each of the tasks listed in the RFP are provided below.

Quality Control Program

Raftelis is committed to providing our clients with the highest quality consulting services. To ensure the quality of our services and work products, we use a deliberate quality assurance and quality control (QA/QC) process on each of our engagements. Raftelis will assign a senior staff member who will be responsible for the QA/QC review of all major work products and deliverables for each project or scope of work. This process will ensure that all of the work products produced for LCFWASA are technically sound and consistent with industry standards and are responsive to the objectives identified by LCFWASA.

WATER AND SEWER RATE STUDY

Task 1: Study of Rates and Charges

As enterprise funds, water and sewer utilities should operate like self-supporting businesses. The scale of operations, infrastructure and investment requires thoughtful planning for future needs. System reliability, sustainability and financial integrity must be balanced with customer costs and impacts. Having a financial roadmap for financial decision making in the future is key to the financial success of the utility(s).

A financial planning and rate study will provide the financial roadmap for LCFWASA while also providing equitable and cost justified rates for LCFWASA customers. Our project approach for this study is provided below and is consistent with commonly accepted industry guidelines published by the American Water Works Association (AWWA), Water Environment Federation (WEF), and Raftelis' experience performing thousands of studies across the county.

Task 1.1: Initiation and Management

The project management task ensures the study progresses in an efficient and deliberate manner. This task will include administrative components related to project management and quality assurance and control processes.

Task 1.2: Kick-off Workshop and Data Request

Raftelis believes the execution of a successful kick-off workshop is instrumental in conducting an efficient and useful study. The goals of this meeting include providing a forum to finalize the work plan and schedule of the study, ensuring Raftelis has a clear understanding of the LCFWASA's objectives, and providing an opportunity for LCFWASA staff to meet and become comfortable with the Raftelis team. This meeting also provides an opportunity to review and prioritize

the LCFWASA's most important pricing objectives (e.g., revenue stability, affordability, etc.) for providing water and sewer services. The pricing objectives ultimately influence the "conceptual designs" for rate structure options. Raftelis will prepare a kick-off workshop package that contains the meeting agenda, our initial assessment of the system's current financial state, a list of questions related to the LCFWASA's water and sewer system, and presentation materials to guide the discussion and describe the project approach and deliverables.

Raftelis will prepare a detailed data request list so that readily available data can be forwarded to LCFWASA prior to the workshop. The data required will include, but will not be limited to, operating and capital budgets, billing data, financial reports, Master Bond Resolution (or related document), fixed assets and capital improvement plans for calculating system development fees, population forecasts, ordinances, and/or contractual agreements. Using the information provided, Raftelis will conduct a preliminary review to assess the financial health of the water and sewer funds.

PLANNED MEETINGS:

- Kick-off meeting (web-based or in-person)

DELIVERABLES:

- Data request list
- Agenda for kick-off meeting
- Documentation summarizing the kick-off meeting

Task 1.3: Development of Financial Plans

With a firm understanding of the utility's overall financial condition, pricing objectives, and policy goals, Raftelis will develop a financial plan that will become the roadmap for financial decision making in the future. Developing the financial plan will include three key tasks:

1. Establishing and projecting system revenue requirements
2. Developing a forecast of billable units and revenues at existing rates
3. Evaluating the sufficiency of existing revenues to meet the projection of revenue requirements

Project System Revenue Requirements

The revenue requirements will include all operating and maintenance (O&M) costs, capital costs, reserve requirements, and bond covenants. In addition, the projection of revenue requirements will also recognize the LCFWASA's current and future capital program and provide an estimate for future debt service requirements and revenue financed capital.

The LCFWASA's FY 2023 budget will serve as the baseline for the forecast of future operating costs. Raftelis will review the LCFWASA's actual O&M costs for the past three to five years to identify trends that should be recognized in the forecast of future costs. We will review the current budget and discuss with staff any known and measurable changes to current cost levels, such as wages and benefits, utility costs, and other significant cost categories. Also, we will discuss with LCFWASA staff any contractual commitments for future wage and benefit increases and any expected changes in operations and staff that will impact future O&M costs, including the effects of the capital program. In order to project costs over the planning period, we will develop escalators based on historical trends and anticipated impacts of inflation on the various categories of costs. These escalation factors will be reviewed with LCFWASA staff to obtain their perspectives and input.

A critical component when projecting revenue requirements will be working with the LCFWASA's capital improvement plan (CIP). We will work with LCFWASA staff to ensure the projection of revenue requirements incorporates the cost of regulatory requirements, repair and replacement needs of the system, and costs related to system expansion. Depending on the LCFWASA's level of future capital needs and policies on capital financing, it may be appropriate to consider the

issuance of future debt in combination with revenue generated from rates to deliver the capital program while managing the impacts on customers.

As a Registered Municipal Advisor, Raftelis will be available to work with the LCFWASA to develop a capital financing plan for the study period. This is now a requirement under the Dodd-Frank Wall Street Reform and Consumer Protection Act. As noted previously, the financing sources for the CIP may include a combination of debt and current revenues and will be influenced by the financial policies developed during this task. We will review the proposed CIP financing plan with staff and make appropriate recommendations reflecting their perspectives and comments. As part of this task, Raftelis will incorporate debt service on existing debt and calculate projected debt service payments related to future borrowings to finance the capital program. If necessary, Raftelis will also review bond resolutions and ordinances (or related documents) securing outstanding bonds and loans to ensure we have a comprehensive understanding of the flow of funds and all debt covenants that should be monitored.

Finally, the forecast of revenue requirements will consider all of the LCFWASA's financial and debt policies (reserve fund balances, and debt service coverage targets). Policies and metrics, both existing and proposed, will be identified, tracked, and incorporated into the forecast of revenue requirements. Raftelis will hold a web meeting with LCFWASA staff to review all components of the forecast of revenue requirements. We will solicit LCFWASA staff input to ensure the forecast is consistent with the expressed financial objectives.

Establish and Forecast Billable Units of Service and Revenues Under Existing Rates

Raftelis will examine historical utility billing records to determine customer demands for water and sewer service. This analysis includes examining usage patterns as they relate to customer demands, population growth, and usage peaks during different periods of the year. Based on this historical analysis and planning data, Raftelis will develop projections of customer accounts and consumption.

The next step in the financial planning process is to forecast revenue over the planning period at the existing rates. Raftelis will incorporate the results of the customer demand analysis to develop a forecast that projects billable units of service while accounting for any anticipated decline in per capita consumption and any estimates for the impact of price elasticity on customer demand. The forecast of billable units is paired with the existing rates to calculate user charge revenues. In addition to revenue generated from user charges, we will also forecast revenues from various ancillary fees, miscellaneous revenue, and interest income for the planning period.

Evaluate Revenue Sufficiency and Establish Financial Plan

Combining the results from the previous work elements will result in a financial plan over both five- and 10-year forecast periods. Projections beyond 10 years will also be included for planning purposes. The financial plan will summarize the projected revenues and revenue requirements and incorporate annual debt service coverage requirements and reserve fund balance targets. The financial plan will project any future revenue shortfalls under the LCFWASA's existing rates and provide an indication of the additional revenues necessary to support the projected revenue requirements and financial health of the water and sewer utilities.

PLANNED MEETINGS:

- Web-based meeting to review multi-year financial plans

DELIVERABLES:

- Multi-year financial plans for water and sewer utilities
- Recommendations for reserve fund, debt coverage, and other key financial policies

Task 1.4: Cost Allocation, Rate Design, and Fee Calculation

We will work with LCFWASA staff to develop conceptual designs, or approaches, for alternative rate and fee structures based on the LCFWASA's pricing objectives and financial goals. The process will consider the current user charge structure and the financial impact on the various ratepayers based on alternative structures. Although we take care to tailor a utility's cost-of-service analysis to meet the needs of the individual utility, we always make sure to follow the basic premise of cost-of-service allocations set forth by state and local laws, the American Water Works Association's *Manual M1, Principles of Water Rates, Fees and Charges (Manual M1),* the Water Environment Federation's *Manual of Practice No.27, Financing and Charges for Wastewater Systems (MOP 27)*, and other authoritative bodies. Depending on the results of the conceptual designs, we will determine the most appropriate methodology for allocating costs, which may include detailed cost allocations to functional components of the utility systems, categories of service, and customer classes based on usage characteristics. However, it may be determined that costs need to be allocated more simply between fixed and variable components, for the purpose of calculating fixed and variable charges that are not assessed by customer class. In either case, we will develop an approach to allocating costs that is consistent with AWWA and WEF standards.

Following the cost allocation, Raftelis will calculate preliminary rates and charges based on the conceptual designs for alternative rate and fee structures. Rates under the proposed alternatives will be calculated for each year in the forecast period and adjusted, where possible, to provide for a smooth forecast of rate adjustments. Customer impact analyses will be performed to understand the impact of proposed changes to different types of customers. Raftelis will also compare the proposed rates to those of comparable communities and peers throughout North Carolina. This survey will be incorporated into the report and presentation identified in Task 6.

At the end of this task, we will conduct a web meeting with LCFWASA staff. At this meeting, Raftelis will review the entire rate and fee development process and present preliminary rates and fees. Prior to the meeting, LCFWASA staff will be provided with the draft rate model so that they may review our methodology and suggest changes. We will discuss all suggested changes and then work with LCFWASA to develop our final recommendations.

PLANNED MEETINGS:

- Web-based meeting with LCFWASA staff to review rate alternatives

DELIVERABLES:

- Preliminary and final rate and fee recommendations

Task 1.5: Rate Model Development

At the heart of any successful rate study is the rate model used to develop revenue requirements, perform operational and capital financial planning, review customer information, and calculate revenue and rates. The rate model will incorporate the results of each of the other tasks in the engagement and be sophisticated enough to perform the complex calculations involved in a comprehensive rate analysis with the ability to analyze various rate structures.

The rate model created for this engagement will be developed using Excel and will be based on a model framework that incorporates industry-standard, rate-setting methodologies in a user-friendly manner. LCFWASA staff will be provided with working copies of the rate model that they will be able to provide input into its development, if desired. The rate model will be built around our innovative modeling approach and will include a customized and interactive dashboard that will provide the LCFWASA with an intuitive system to measure, track, and manage the performance of the water and sewer utilities. The rate model will be non-proprietary and will become the property of the LCFWASA at the conclusion of the study. Raftelis will also provide virtual training for LCFWASA staff on the construction and use of the rate model.

Raftelis will develop a customized financial model that incorporates a dashboard to allow you to easily run scenarios and see the impacts in real time. Shown here is a sample dashboard that we developed for another project.

Task 1.6: Report, Recommendations, and Presentations

The final task includes the development of draft and final deliverables and presentations to conclude the study.

Communication Strategy

To set the groundwork for effective reporting, the Raftelis team will work with the LCFWASA to determine an appropriate communication strategy for LCFWASA leadership and for customers who may have questions or concerns about proposed rate changes.

Draft Report

Raftelis will provide a draft report that describes the study process along with financial planning, rate, and fee recommendations. The draft report will be submitted to LCFWASA administration for review and comment. Comments and revisions will be incorporated before finalizing the report.

Final Report

Raftelis will incorporate LCFWASA staff's comments on the draft report into a final report. Upon finalization of the report, Raftelis will deliver an electronic copy and any requested hard copies of the final report. The final rate model will also be provided to the LCFWASA, and Raftelis staff are available to train LCFWASA staff on the model's continued use.

Presentations

Raftelis will be able to assist the LCFWASA as necessary in presenting the results of the study and supporting study recommendations.

PLANNED MEETINGS:

- Web-based meeting with staff to review draft report and presentation
- In-person public meeting with leadership to present final study report
- Web-based meeting with staff to provide training on the final rate model

DELIVERABLES:

- Draft report
- Final report incorporating staff and stakeholder comments
- PowerPoint presentation
- Final rate model

Task 2: Wholesale Rates

There are two methodologies endorsed by the American Water Works Association (AWWA) in its *Manual M1, Principles of Water Rates, Fees, and Charges* (Manual M1) that are typically used to calculate wholesale rates. These two approaches are the cash-basis and the utility-basis approaches. Under both approaches, revenue requirements consist of operating costs and capital costs. The difference between the approaches is the make-up of the capital costs. Under the cash basis, capital costs consist of debt service (principal and interest) and rate-financed capital (also commonly known as pay-as-you-go (PAYGO) capital). A debt service coverage component is often included in a cash-basis arrangement to ensure sufficient revenues to meet bond covenants. The premise of the cash approach is that a utility must satisfy its cash needs, and it is most commonly used to set retail rates.

Alternatively, the utility basis includes depreciation and a return on rate base as the capital components. Depreciation recovers the cost of the LCFWASA's investments in capital assets over their useful lives. The return on rate base is designed to recover the wholesale provider's cost of capital and a "return" as compensation for ownership and related risk. This methodology is particularly common in wholesale, bulk, and outside-city arrangements to compensate service providers for bearing the risks of ownership. Both methodologies have merit and are defensible. Raftelis will work with the LCFWASA to determine the most appropriate methodology for this particular situation.

To review the LCFWASA's existing water and sewer wholesale rates and to make recommendations that will improve the cost justification for these rates, Raftelis will perform the following tasks:

Task 2.1: Initiation and Management

The project management task is designed to ensure the study progresses in an efficient and deliberate manner. This task will include administrative components related to project management and quality assurance and control processes.

Task 2.2: Data Collection and Review

Raftelis will prepare a detailed data request list so that readily available data can be forwarded to Raftelis. The project team will have detailed discussions with LCFWASA staff to understand the wholesale relationship between the Buyer and Seller of wholesale services. For example, is it a transmission line that is owned equally between both parties? Which party is responsible for the upkeep of the transmission line? As well as additional questions. Raftelis will work with LCFWASA Staff to evaluate the strengths and weaknesses of both methodologies and to determine the most appropriate methodology for the LCFWASA's wholesale agreements.

An example of the data requirements is provided below (some of this information is also used for the study task 1):

- Approved operating budgets for the last three fiscal years (including the current fiscal year)
- Financial statements for the last three fiscal years
- A copy of existing wholesale customer agreements or contracts
- Detailed water and wastewater fixed asset data as of June 30, 2022 – please provide a description of each asset, its original cost, accumulated depreciation, date placed in service and net book value.
- Total capacity in the water and sewer systems
- Total water treated/produced and total sewer treated

- Estimated water and sewer wholesale usage
- Total water and sewer billable flows
- Quantity of lines / mains by size (total length in feet for each diameter size)
- Number of water and sewer personnel by department

Task 2.3: Data Analysis and Model Development

Raftelis will develop cost allocations to wholesale customers consistent with the specific characteristics of the service agreements. Typically, this involves an allocation of both operating and capital costs to retail only, wholesale only, and common-to-all customer classifications. Raftelis will work closely with LCFWASA staff to identify cost allocation factors. Through this process it is common to utilize fixed asset data and related operational costs to help inform these allocations, such that the recommended approach is reasonable and sufficiently recovers costs associated with assets that are used and useful to wholesale customers. Cost allocation recommendations will be shared with LCFWASA staff to ensure that they are consistent with wholesale pricing objectives and with the terms and conditions of the wholesale agreements.

Once this task is completed, Raftelis will conduct a Webinar to discuss the results. This will give staff the opportunity to react to and provide insight on the preliminary results prior to the completion of the study. Raftelis will then make any modifications and finalize the review and calculation of the water and sewer wholesale rates.

PLANNED MEETINGS:

- Web-based meeting with LCFWASA staff to review wholesale rates

Task 2.4: Preparation of Draft and Final Report

Raftelis will document the study's process, findings, and recommendations in a draft report. The draft report will provide the methodology selected for the wholesale rates, and the reasons for the selected methodology and supporting documentation. Staff will have the opportunity to review the report and provide comments. It should be noted this proposal does not contemplate re-drafting wholesale agreements.

PLANNED MEETINGS:

- Web-based meeting with LCFWASA staff to review wholesale rates

DELIVERABLES:

- Draft report
- Final report incorporating staff comments
- Final wholesale rate model

Task 3: System Development Fees

System development fees are one-time charges assessed to new water and/or wastewater customers for their use of system capacity. They serve as an equitable method of recovering system capacity costs from those using the capacity. North Carolina General Statute 162A Article 8 ("Article 8") provides for the uniform authority to implement system development fees for public water and wastewater systems in North Carolina. Article 8 requires local governments to re-calculate system development fees at least every five years. Since the adoption of Article 8, there have been three amendments. This study will provide an opportunity to use the most current data for the LCFWASA to calculate the LCFWASA's system development fees.

The tasks below describe our approach to updating the system development fee study and communicating results to LCFWASA staff and the appropriate parties.

Task 3.1: Initiation and Management

The project initiation and management task is designed to ensure the study progresses in an efficient and deliberate manner. This task will include administrative components related to project management and quality assurance and control processes.

Task 3.2: Data Collection and Review

Raftelis will prepare a data request list that will identify the information needed to complete the study. The list will include, but not be limited to, detailed water and sewer fixed asset data as of June 30, 2022, outstanding utility debt and debt service per system, contributed capital, water and sewer system capacity, Residential Equivalent Unit (REU) flow assumptions used for planning, daily water production and sewer treatment data, system water loss factor, inflow and infiltration flow factor, and a detailed capital improvement plan (CIP) with funding sources. Once Raftelis has received and reviewed initial information, Raftelis will hold a conference call with LCFWASA staff to review the data provided.

Task 3.3: Develop SDF Model

Raftelis will use Excel to develop a model to calculate the system development fees based on the data requested. Once initial data has been entered into the model, Raftelis will hold a webinar with LCFWASA staff to review the data and ask questions. Raftelis will discuss the methodologies, concepts, and key assumptions for calculating system development fees using industry guidelines, as described briefly below:

- **Buy-In Approach:** The Buy-In Methodology is most appropriate in cases where the existing system assets provide adequate capacity to provide service to new customers. This approach calculates a fee based upon the proportional cost of each user's share of existing plant capacity. The cost of the facilities is based on fixed assets records and usually includes escalation of the depreciated value of those assets to current dollars.
- **Incremental Cost Approach:** The Incremental Cost (or Marginal Cost) Methodology focuses on the cost of adding additional facilities to serve new customers. It is most appropriate when existing facilities do not have adequate capacity to provide service to new customers, and the cost for new capacity can be tied to an approved capital improvement plan (CIP) that covers a 5- to 20-year planning period.
- **Combined Approach:** A combined (or hybrid) approach, which is a combination of the Buy-In and Incremental Cost approaches, can be used when the existing assets provide some capacity to accommodate new customers, but where the capital improvement plan also identifies significant capital investment to add additional infrastructure to address future growth and capacity needs.

Raftelis will seek input from the LCFWASA's legal counsel regarding the appropriate methodology, with respect to industry guidelines and Article 8 requirements. During this meeting, Raftelis and the LCFWASA will agree upon the methodology and key assumptions. Raftelis will then apply the methodology and key assumptions and calculate preliminary system development fees. The preliminary results will be discussed with LCFWASA staff and legal counsel via a Webinar to provide the LCFWASA with the opportunity to review the key assumptions and provide any changes. Raftelis will then model any suggested changes and provide the final results to staff and legal counsel.

Task 3.4: Prepare Draft and Final Reports

Article 8 requires that a report be available to the public on the LCFWASA's website for at least 45 days prior to a public hearing for fee approval. Raftelis will create a draft report, solicit staff feedback, and provide a revised final report, which the LCFWASA may post on its website. Raftelis will assist the LCFWASA in responding to any written public comments regarding the calculation of the system development fees.

Task 3.5: Presentation of Final Results to LCFWASA Staff and Appropriate Parties

Raftelis will present results to LCFWASA Staff and to the appropriate parties. If requested by the LCFWASA, Raftelis can also present during a public hearing.

PLANNED MEETINGS:

- Web-based meeting with LCFWASA staff to review system development fees

DELIVERABLES:

- Draft report
- Final report incorporating staff comments

WHO IS

Raftelis

HELPING LOCAL GOVERNMENTS AND UTILITIES THRIVE

Local government and utility leaders partner with Raftelis to transform their organizations by enhancing performance, planning for the future, identifying top talent, improving their financial condition, and telling their story. We've helped more than 600 organizations in the last year alone. We provide trusted advice, and our experts include former municipal and utility leaders with decades of hands-on experience running successful organizations. People who lead local governments and utilities are innovators—constantly seeking ways to provide better service to the communities that rely on them. Raftelis provides management consulting expertise and insights that help bring about the change that our clients seek.

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We believe that Raftelis is the *right fit* for this project. We provide several key factors that will benefit LCFWASA and help to make this project a success.

RESOURCES & EXPERTISE: This project will require the resources necessary to effectively staff the project and the skillsets to complete all of the required components. With more than 130 consultants, Raftelis has the largest water-industry financial and management consulting practice in the nation. Our depth of resources will allow us to provide LCFWASA with the technical expertise necessary to meet your objectives. In addition to having many of the industry's leading rate consultants, we also have experts in key related areas, like stakeholder engagement and data analytics, to provide additional insights as needed.

DEFENSIBLE RECOMMENDATIONS: When your elected officials and customers are considering the validity and merit of recommended changes, they want to be confident that they were developed by experts using the latest industry standard methodology. Our senior staff is involved in shaping industry standards by chairing various committees within the American Water Works Association (AWWA) and the Water Environment Federation (WEF). Raftelis' staff members have also co-authored many industry-standard books regarding utility finance and rate setting. Being so actively involved in the industry will allow us to keep LCFWASA informed of emerging trends and issues and to be confident that our recommendations are insightful and founded on sound industry principles. In addition, with Raftelis' registration as a Municipal Advisor, you can be confident that we are fully qualified and capable of providing financial advice related to all aspects of utility financial planning in compliance with federal regulations.

HISTORY OF SIMILAR SUCCESSES: An extensive track record of past similar work will help to avoid potential pitfalls on this project and provide the know-how to bring it across the finish line. Raftelis staff has assisted 1,000+ utilities throughout the U.S. with financial and rate consulting services with wide-ranging needs and objectives. Our extensive experience will allow us to provide innovative and insightful recommendations to LCFWASA and will provide validation for our proposed methodology ensuring that industry best practices are incorporated.

USER-FRIENDLY MODELING: A modeling tool that your staff can use for scenario analysis and financial planning now and into the future will be key for LCFWASA going forward. Raftelis has developed some of the most sophisticated yet user-friendly financial/rate models available in the industry. Our models are tools that allow us to examine different policy options and cost allocations and their financial/customer impacts in real time. Our models are non-proprietary and are developed with the expectation that they will be used by the client as a financial planning tool long after the project is complete.

RATES THAT ARE ADOPTED: For the study to be a success, rates must be successfully approved and implemented. Even the most comprehensive rate study is of little use if the recommendations are not approved and implemented. Raftelis has assisted numerous agencies with getting proposed rates successfully adopted. We develop a message regarding the changes that is politically acceptable and convey that message in an easy-to-understand manner. We focus on effectively communicating with elected officials about the financial consequences and rationale behind recommendations to ensure stakeholder buy-in and successful rate adoption.

How we stack up

29 years serving the public sector

OUR TEAM INCLUDES

140+ consultants focused on finance/management/communication/ technology for the public sector

2 chairs & **16** members of AWWA and WEF utility finance and management committees and subcommittees

& A Past President of AWWA

RAFTELIS HAS PROVIDED ASSISTANCE FOR

1,200+ public agencies and utilities

that serve more than

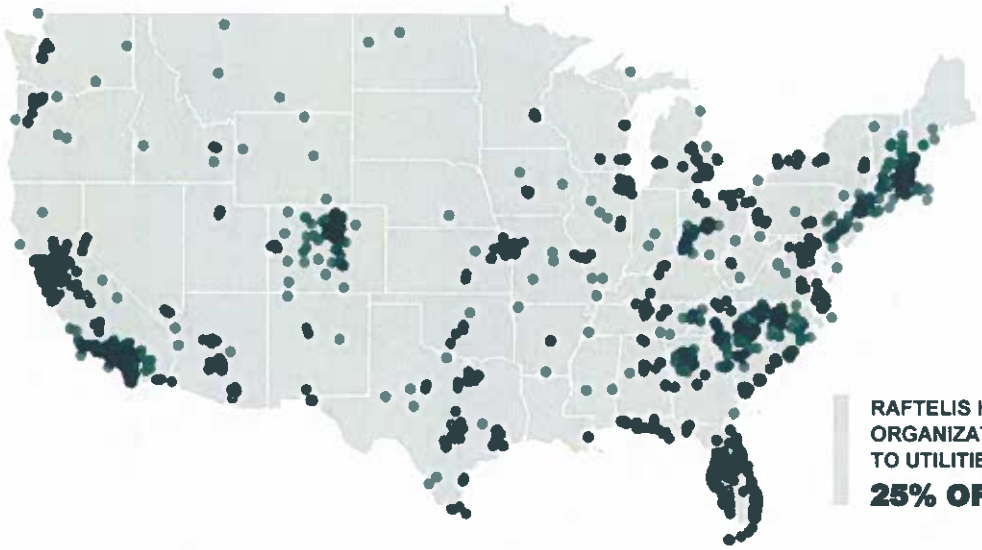
25% of the U.S. population

including the agencies serving

38 of the nation's 50 largest cities

in the past year alone, we worked on

1,000+ projects for **600+** agencies in **46** states



RAFTELIS HAS PROVIDED FINANCIAL/ ORGANIZATIONAL/TECHNOLOGY ASSISTANCE TO UTILITIES SERVING MORE THAN **25% OF THE U.S. POPULATION.**

Experience

RAFTELIS HAS THE MOST EXPERIENCED UTILITY FINANCIAL AND MANAGEMENT CONSULTING PRACTICE IN THE NATION.

Our staff has assisted more than 1,200 local government agencies and utilities across the U.S., including some of the largest and most complex agencies in the nation. In the past year alone, Raftelis worked on more than 1,200 financial, organizational, and/or technology consulting projects for over 600 agencies in 46 states, the District of Columbia, and Canada. Below, we have provided descriptions of projects that we have worked on that are similar in scope to LCFWASA's project. We have included references for each of these clients and urge you to contact them to better understand our capabilities and the quality of service that we provide.

City of Raleigh NC

References: Stephen Balmer, Fiscal Manager
219 Fayetteville Street Mall, Suite 620, Raleigh, NC 27602 / P: 919.996.3523 / E: stephen.balmer@raleighnc.gov

Raftelis has been providing financial consulting assistance to the City of Raleigh (City) Public Utilities Department (CORPUD) since 2008. CORPUD originally engaged Raftelis to develop conservation-based rates that would enable the City to meet its capital planning needs while minimizing the impact to its customers. A rate model was developed that was able to test the effects of implementing a conservation-based water rate structure and analyze the impacts of a new rate structure on customers of the system. Shortly thereafter, Raftelis worked with CORPUD as it implemented its new customer information and billing system, to ensure that the new system captured the appropriate information for future

enhancements to the rate structure, as well as better financial planning capabilities. This process also included the implementation of monthly billing.

Since that time, Raftelis has performed numerous studies for the City of Raleigh including a cost-of-service and rate studies, capital recovery fee studies, and financial feasibility evaluations four revenue bond issues with total proceeds of approximately $420 million. CORPUD was able to obtain a AAA credit rating and maintains that rating presently.

Raftelis continues to assist CORPUD in annual rate updates, budgeting, capital and debt planning, and interjurisdictional contract administration. As part of contract administration, Raftelis provides annual support to CORPUD related to its merger Town agreements and the annual management and update to support verification that the agreement terms are being satisfied.

Raftelis has also worked with City staff to develop a dedicated funding source for its varied infrastructure asset renewal program. The infrastructure replacement charges provide dedicated funding for a 50-year replacement cycle of the City's water and sewer lines.

Lastly, Raftelis has worked with the City to develop water and sewer capital facilities fees. In 2012, Raftelis developed the City's capital facilities fees. The fees have been modified in 2017, 2018 and again in 2022 to be in compliance with the new North Carolina general statute 162A.

Currently, Raftelis is working with the City to analyze affordability across the Raleigh service area including affordability for the Towns that have merged with the Raleigh system. Raftelis is analyzing affordability according to current industry guidelines. Information from this study will be used to analyze the assistance that is currently being provided by the City of Raleigh.

Greenville Utilities Commission NC

References: Jeff McCauley, Chief Financial Officer
401 S. Greene Street, Greenville, NC 27834 / P: 252.551.1532 / E: mccauljw@guc.com

Randy Emory, Director of Water Resources
P.O. Box 1847, Greenville, NC 27835 / P: 252.551.1554 / E: emoryr@guc.com

In August 2006, the Greenville Utilities Commission (GUC) retained Raftelis to develop a water and wastewater rate and financial planning model, to develop system capacity fees, and to determine high-strength surcharges for their commercial/industrial customers. As a result of the study, a new rate structure was implemented that ensured adequate cost recovery for GUC while maintaining target reserve fund balances. One of GUC's concerns was capital infrastructure that needed to be put in place over a projected time frame. The model, built using a 10-year planning horizon, provided GUC with an opportunity to plan for that infrastructure and to take measures to plan for the financing of the infrastructure. Personnel of GUC continue to utilize this Model that was provided as a formal deliverable of the project. In addition to the changes in the retail rate structures, Raftelis also calculated water and wastewater capacity fees and high-strength surcharges for GUC. Both the water and wastewater capacity fees were calculated using the System Buy-In Approach, which is designed to provide reasonable cost-justification and to address the general legal guidelines of the Rational Nexus test. The capacity fees calculated for GUC became part of a larger formal extension policy that Raftelis assisted with in 2009.

Since the original study was completed, Raftelis has continued to provide consulting assistance to GUC on various financial issues including wholesale rates and various interlocal agreements. Raftelis has completed two additional rate

and financial planning studies for GUC with the most recent rate study completed in June 2018. With this most recent rate study, Raftelis built a water and wastewater financial planning model to interface with GUC's new oracle-based customer care and billing system (CCB). The interface between the two systems provides GUC with a dynamic forecasting tool that is continually updated as new information becomes available and is input into CCB. Raftelis is currently in the process of updating this tool for GUC, and in addition, is performing a full cost-of-service study that will include an evaluation of retail rates, wholesale rates and miscellaneous fees.

Raftelis has also assisted GUC with financial feasibility analyses for revenue bonds (2009, 2016, and 2019) and with updating is water and wastewater capacity fees to reflect the changes to the state legislation (N.C. House Bill 436 or General Statue 162A Article 8).

Of particular interest to this RFP, Raftelis worked with GUC to perform the financial feasibility analysis that analysed GUC's acquisition of the Town of Bethel's water and wastewater utilities. Raftelis worked with GUC and its third-party engineering firm to examine additional operating and capital costs that would be incurred due to the acquisition, and the offsetting revenues that would be generated from the additional customers and their demand. A surcharge was ultimately calculated that would be assessed to the Town of Bethel customers to be used as an offset to pay for their additional debt service/capital costs that were being incurred and should not be passed through to existing GUC customers.

Metropolitan Government of Nashville and Davidson County TN

Reference: Amanda Deaton-Moyer, Assistant Director, Business and Finance
1600 2nd Avenue North, Nashville, TN 37208 / P: 615.862.4782 / E: amanda.deaton-moyer@nashville.gov

The Metropolitan Government of Nashville and Davidson County – Metro Water Services (MWS) provides water, wastewater, and stormwater services to more than 650,000 people in the Nashville area. MWS has contracted with Raftelis for five five-year financial and rate consulting contracts in 2001, 2006, 2011, 2017 and 2022 with additional contract amendments throughout the last 20 years. During these engagements, Raftelis has provided financial consulting services and expertise and has conducted many studies for MWS.

Most recently, in 2019, Raftelis provided consulting services to complete a full water and sewer cost of service study for MWS. One of the objectives of the study was to determine the cost to serve MWS water and sewer retail customers, segregated between specific customer classes. The analyses evaluated whether the current rate structure, which included separate water and sewer rates and charges for residential and small, medium, and large customer classes, provided for equitable cost recovery from each customer class. The results of the study indicated that a new rate structure would provide for more equitable recovery. Rates were restructured to address new customer classes, conservation efforts and affordability.

In addition, the level rate of recovery was adjusted to address increasing capital needs and costs. Over the last 20 years, the MWS service area has experienced sustained population and service area growth which has required the installation of miles of water and sewer mains and also the repair and replacement of aging infrastructure. Also, MWS leads an initiative (Clean Water Nashville) in coordination with partner agencies including the U.S. Environmental Protection Agency (EPA) and the Tennessee Department of Environment and Conservation for the purpose of improving the sewer system to continue meeting the requirements of the Clean Water Act. MWS is responsible for a one-billion-dollar consent decree program. As part of the study, a five-year financial forecast of rates and rate adjustments was developed to pay for the increasing capital needs.

Additionally, as part of the cost-of-service study, Raftelis also reviewed the methodology used to develop miscellaneous fees such as tap fees, meter inspection fees, and flow test and provided recommendations for revising fee calculations.

Capital recovery fees were also calculated, to provide for more equitable cost recovery from new customers connecting to the system.

Over the last 20 years, Raftelis has provided assistance with the following types of analyses:

- **High-strength Surcharges:** MWS surcharges industries discharging wastewater with higher concentrations of biochemical oxygen demand, total suspended solids and nitrogen (as measured by ammonia) than normal domestic wastewater.
- **Annual Budget Reviews:** Raftelis performs an annual budget review which involves reviewing the adequacy of budgeted revenues to cover projected operating expenses and debt service requirements, particularly with regard to compliance with the rate covenant test defined by their Water and Sewer Revenue Bond Resolution.
- **Financial Feasibility Studies:** Included as part of MWS' 2002, 2010, and 2017 Revenue Bond offerings. The studies were included as part of the official statements to demonstrate the financial sufficiency of the utility system and its ability to support the associated debt service.
- **Additional Cost-of-service, Financial Planning, and Wholesale Studies.**

Raftelis is currently working with MWS to restructure financial policies and targets including debt service coverage targets, reserve fund balances, and percentages of debt versus cash capital projects financing. Additionally, MWS is in the process of obtaining a WIFIA loan. Raftelis is assisting in providing financial information for securing the loan.

Renewable Water Resources SC

Reference: Cathy Caldwell, CPA, Director of Administrative Finance
561 Mauldin Road, Greenville, SC 29607 / P: 864.299.4011 / E: cathyc@re-wa.org

Raftelis and Renewable Water Resources (ReWa) have a close relationship, having worked on a number of projects together since 2016. Established in 1925, ReWa provides wastewater trunk (or conveyance) and treatment services to customers across Upstate South Carolina. ReWa serves most of Greenville County and portions of Anderson, Laurens, Pickens, and Spartanburg Counties. Within ReWa's service area, there are 17 sewer subdistricts that provide collection service, ultimately connecting to ReWa's trunk and treatment system. ReWa maintains and operates approximately 350 miles of wastewater trunk lines and nine water resource recovery facilities (WRRFs), which treat more than 43 million gallons per day (MGD) of wastewater.

In April 2016, Raftelis was engaged by ReWa to perform a wastewater utility rate and new account fee (NAF) study (2016 Study). The objectives of the rate study were to: evaluate revenue sufficiency and recommend rates that recover the necessary revenues to meet system revenue requirements; evaluate the cost recovery equity of ReWa's existing rates (specifically fixed vs. volume) and make recommendations for improvements; and provide a user-friendly financial planning and rate model, designed for continuous use by ReWa Staff. As a part of the rate study, Raftelis also reviewed ReWa's existing NAF's to evaluate their cost justification and recommend modifications. The Study results were well-received by ReWa's Board of Commissioners and the rate program was approved and implemented in March 2017.

Following the 2016 Study, Raftelis provided various on-call rate, financial planning, and management consulting services. For rate and finance support, these services included periodic rate model updates and performing sensitivity analyses on the financial plan. Raftelis' management consulting team performed a capital prioritization study in September 2017. Using a series of interviews and facilitated workshops, the Raftelis team helped ReWa develop a revised capital prioritization system to manage the competing needs of regulatory, growth, renewal, and efficiency improvement.

Most recently, in 2019 Raftelis was re-engaged by ReWa to perform a comprehensive Wastewater Rate and Affordability Study (2019 Study). The key objectives of the 2019 Study were to: recommend rates that meet operating and capital needs

and internal financial policies over a five-year planning period; evaluate ReWa's existing user rates and charges and make recommendations for improvements; recalculate collection rates with updated information; and analyze the affordability of water and sewer utility service in ReWa's service area. Due to the nature of sewer collection service in ReWa's service area, a "deep dive" into customer-level affordability was performed. With information provided by Greenville Water, MetroConnects (the largest local collection service provider), and ReWa's GIS department, Raftelis was able to calculate the cost of providing water and sewer service to each household in ReWa's service area. Raftelis relied on industry guidance to assess service affordability. The results of the affordability analysis informed and supported the projected rate and financial plan. The results of the Study were presented to ReWa's Board of Commissioners in March 2020.

Currently, Raftelis is in the process of updating ReWa's rates and five-year financial plan. Additionally, pre-treatment fees, engineering fees and high-strength surcharges are being calculated for FY 2023 implementation.

MetroConnects SC

Reference: Carol Elliott, General Manager
120 Augusta Arbor Way, Greenville, SC 29605 / P: 864.277.4442 / E: celliott@metroconnects.org

Raftelis has worked with Metropolitan Sewer Subdistrict (MetroConnects) since 2018. MetroConnects was created in 1969 as a special purpose district to provide wastewater collection services within Greenville County, SC. The MetroConnects district boundary was originally established to match the boundary of Renewable Water Resources (ReWa) except where another subdistrict or municipality already exists. In 2018, MetroConnects engaged Raftelis to conduct a wastewater financial planning and rate study (Study) to develop a sustainable and equitable wastewater rate structure, and a solvent financial plan for the special purpose district. At the time Raftelis was engaged, MetroConnects recovered the cost of wastewater collection service through an ad valorem tax. Raftelis was engaged to develop a retail wastewater volumetric rate structure consistent with industry standards and which provides for a more fair and equitable recovery of revenue from MetroConnects' customers. The Study was approved by the Board of Commissioners and the proposed rate structure went into effect on July 1, 2019.

The provision of wastewater services in Greenville County is complex in nature and has recently become a hot-button political issue. In 2020 Raftelis was re-engaged by MetroConnects to analyze a theoretical "county-wide" wastewater collection rate study. The work performed in this engagement required cooperation and collaboration between ReWa and MetroConnects. Raftelis was able to leverage billing data and affordability analyses work performed for ReWa to complete the analysis for MetroConnects. Raftelis presented the results of the Study at a meeting at ReWa to various stakeholders, including leaders from MetroConnects, ReWa, and Greenville County and Greenville County Commissioners. In March 2021, the Greenville County Commissioners passed an ordinance requiring the consolidation of six of the Greenville County sewer subdistricts with MetroConnects. MetroConnects is to be the owner/operater of the consolidated system. Raftelis continues to provide support to MetroConnects through this consolidation. Raftelis has provided the financial forecasts to be used for the issuance of debt needed for the systems consolidation and the consolidation of all system(s) outstanding debt. The consolidation of four of the systems went into effect July 1, 2021. The remaining two systems consolidated July 1, 2022.

South Carolina Rural Infrastructure Authority SC

Reference: Kendra Wilkinson, Infrastructure Sustainability Manager
1201 Main Street, Suite 1600, Columbia, SC 29201 / P: 803.737.0390 / E: kwilkerson@ria.sc.gov

In 2021 and 2022, Raftelis served on the Consultant Team with the South Carolina Rural Infrastructure Authority (SCRIA) to perform a water and wastewater system assessment and assist in the development of the State's utility viability strategy. The goal of the project was to give the State a roadmap for targeting the most vulnerable areas of the State's water and wastewater infrastructure. The strategy consists of four key components: 1) utility viability identification, 2) coordination of assistance, 3) leveraging partnerships, and 4) targeted financial assistance.

Raftelis' role in the engagement was focused on performing rate, financial, and affordability assessments and contributing to the development of the viable utility strategy. For the assessment, Raftelis collected audited financial statements, utility rate information, and demographic data for 300 systems and developed a set of affordability and financial health metrics to serve as guidelines to help the RIA identify distressed utilities. The analyses included assessments broken down by utility size and region.

After performing the assessment, Raftelis assisted in the strategy development. This included recommending financial viability indicators and assisting the development of the development of the *Utility Viability Tool.* This online self-assessment tool allows utilities and stakeholders benchmark utility performance against the viability indicators. The goal is to identify viability concerns as soon as possible and encourage resource engagement before problems become more significant.

In addition to running analyses and supporting in strategy development, Raftelis assisted in delivering the results and findings by participating in various stakeholder touchpoints, including meetings with the Viability Strategy Advisory Committee and the South Carolina Utility Forum on September 30th, 2021. The study was finalized in February 2022 and the report and viability tool are publicly available documents that can be found here: https://ria.sc.gov/utility-viability.

Mount Pleasant Waterworks SC

Reference: Mark Coffin, CGMA, Chief Financial Officer
1619 Rifle Range Road, Mount Pleasant, SC 29464 / P: 843.971.7507 / E: mcoffin@mpwonline.com

Since 2005, Raftelis has assisted Mount Pleasant Waterworks (MPW) with a variety of financial and rate issues. Initially, Raftelis assisted MPW in developing a new Microsoft Excel-based utility financial planning and rate model that could be used by the MPW staff in its annual financial planning and utility rate setting process. Additionally, Raftelis designed the new rate model to maximize its interface and exchange of information with the other information and financial systems used by the MPW. The rate model was developed to provide cost-of-service-based cost allocations and rate calculations and provide a direct link to the MPW's new PIPES capital improvement planning software and Microsoft Forecaster budgeting software.

Raftelis also developed a utility impact fee model designed to incorporate forecasted capital improvements needs and other growth-related financial and demographic data through a variety of build-out scenarios. The impact fee model was developed to share capital and other information with the rate model to ensure consistent financial planning through utility rates and the growth-related capital charges. Raftelis has been engaged to review and update MPW's impact fees in 2012 and 2019 to reflect current and ongoing system investment made by the utility.

Raftelis has provided ongoing assistance to MPW since 2015. Elements of this work include updating the financial models and working with the Board of Commissioners to build acceptance of proactive financial management through a

series of work sessions. As part of this ongoing assistance, Raftelis has also performed an in-depth evaluation of, and recommended revisions to, MPW's Cost Recovery Policy document. This rate-setting and policy document was designed to direct the utility's user rate and financial procedures to maintain financial stability while ensuring the full and equitable recovery of all operating and capital costs from different customer classes.

Raftelis has supported MPW through several legal challenges to their rates and impact fees. MPW has been found to have rates that are fair and reasonable and set in accordance with industry standard in all cases. Raftelis developed a strategic communications plan for MPW that staff has been using since 2019 to guide its customer engagement activities. In 2020, Raftelis performed an in-depth review of MPW's billing and tiered rate structure. MPW sets the water usage cutoffs for its inclining block rates based on the number of equivalent residential units purchased by each customer. Raftelis analyzed every customer account for the past three years to confirm that the tiers were properly being applied by the billing system and functioning as designed.

City of Asheville Water Resources Department NC

Reference: David Melton, Director Water Resources
70 Court Plaza, Asheville, NC 28801 / P: 828.259.5957 / E: dmelton@ashevillenc.gov

In November 2010, the City of Asheville Water Resources Department (Department) engaged Raftelis to evaluate the City's water rate structure to determine if modifications should be made to the rate structure to more equitably recover costs from its various customer classes. In addition to evaluating the rate structure, Raftelis also examined the level of water rates to determine if any adjustments should be made to the current rates. Raftelis prepared a 10-year financial forecast for the water utility that projected water rates, expenses and revenues, and debt service coverage ratios in order to be in compliance with outstanding revenue bonds. As a deliverable of the study, Raftelis developed a financial planning model for the Department to use for future planning purposes.

Since that time, the Department has continued to engage Raftelis to maintain and rebuild their financial model for periodic rate and rate structure updates. The most recent update to the model and rate structure occurred in 2021. Additionally, during this update, Raftelis worked with the Department and DEC Associates to provide a financial forecast for the issuance of revenue bonds. Currently, Raftelis is working with the Department to outline the needs for a water cost of service study to be done. The Department's objective with this study is to verify the equity of their current rate structure.

In addition to providing financial planning and rate assistance, Raftelis has also assisted the Department with the calculation of system development fees. In 2018, Raftelis was engaged to calculate the Department's system development fees to reflect modifications to state legislation, North Carolina general statute 162A Article 8. Raftelis recently completed an update to these fees in 2021.

Experience in North Carolina

Raftelis has unparalleled experience providing financial and rate assistance to water and wastewater utilities in North Carolina. This map and the list below show some of Raftelis' North Carolina water and wastewater utility clients who we've assisted with financial and rate issues.

- City of Asheville
- City of Belmont
- Town of Boone
- Brunswick County
- City of Burlington
- Water & Sewer Authority of Cabarrus County
- Town of Cary
- Charlotte Water
- City of Concord
- Dare County
- Davie County
- City of Durham
- Durham County
- City of Elizabeth City
- Fayetteville Public Works Commission
- Town of Fuquay-Varina
- City of Goldsboro
- City of Greenville
- Greenville Utilities Commission
- City of Havelock
- City of Hendersonville
- Town of Hillsborough
- Hoke County
- City of Jacksonville
- City of Kinston
- City of Lexington
- Lincoln County
- City of Lincolnton
- City of Locust
- Town of Midland
- Town of Mooresville
- City of Mount Holly
- Neuse Regional Water & Sewer Authority
- New Hanover County
- South Granville Water and Sewer Authority
- Town of Oakboro
- Town of Oak Island
- Onslow Water & Sewer Authority
- Orange Water and Sewer Authority
- Town of Oxford
- Piedmont Triad Regional Water Authority
- Village of Pinehurst
- City of Raleigh
- City of Reidsville
- Roanoke Rapids Sanitary District
- City of Salisbury
- City of Sanford
- City of Siler City
- Stanly County Utilities
- Union County
- Town of Wake Forest
- Wayne County
- City of Wilson
- Winston-Salem/Forsyth County Utilities Commission

National Experience

This matrix shows a brief sample of some of the utilities throughout the U.S. and Canada that Raftelis staff has assisted and the services performed for these utilities.

		Finance								Organization						Technology			
Client		Affordability Analysis & Program Development	Capital Improvements Planning/Prioritization	Debt Issuance Support	Economic & Financial Evaluations	Financial Planning & Modeling	Rate, Charge, & Fee Studies	Stormwater Utility Development & Support	Organizational, Governance, & Operations Optimization	Performance Measurement & Benchmarking	Program Planning & Support	Stakeholder Engagement & Communication	Strategic Planning	Billing, Permitting, & Customer Information Audits	Business Process Development	Data Management, Analytics, & Visualization	Software Solutions
AL	Birmingham Water Works Board	●	●	●		●	●			●		●	●			●	
AR	Central Arkansas Water		●			●	●		●				●				
AR	Little Rock Water Reclamation Authority		●			●	●			●		●					
AZ	Phoenix, City of	●	●	●		●				●							
AZ	Pima County		●			●	●										
AZ	Tucson Water		●			●	●					●					
CA	Alameda County Water District		●	●		●	●										
CA	Anaheim, City of		●			●	●										
CA	Central Contra Costa Sanitation District		●			●	●		●	●							
CA	East Bay Municipal Utility District	●	●			●	●										
CA	Long Beach, City of	●		●		●	●										
CA	Los Angeles, City of					●	●										
CA	Metropolitan Water District of Southern California					●	●			●							
CA	Palo Alto, City of		●			●	●										
CA	San Diego, City of		●			●	●										
CA	San Juan Capistrano, City of		●			●	●										
CA	Santa Cruz, City of		●			●	●										
CA	Thousand Oaks, City of	●	●			●	●										
CA	Ventura, City of					●	●					●					
CO	Boulder, City of		●			●	●	●									
CO	Denver Wastewater Management Division			●			●		●	●		●					
CO	Denver Water						●									●	
CO	Greeley, City of		●	●	●	●	●	●									
CO	Metro Wastewater Reclamation District												●				
CT	Groton, City of		●		●	●	●		●		●	●			●	●	
DC	DC Water		●			●	●		●	●			●			●	
DE	Wilmington, City of								●				●				
FL	Emerald Coast Utilities Authority		●	●		●											
FL	Florida Keys Aqueduct Authority		●	●		●	●										
FL	Pompano Beach, City of		●			●	●		●								
FL	St. Johns County		●	●		●	●										
GA	Augusta, City of		●			●	●										
GA	Columbus Water Works		●	●		●	●										
GA	Paulding County		●	●	●	●											
HI	Honolulu ENV, City and County of		●			●	●										
IL	Bloomington, City of		●			●	●										
IL	City of Naperville		●			●	●										
KS	Topeka, City of		●			●	●										
KS	Wichita, City of		●			●	●										
KY	Hardin County Water District #1		●			●	●										
LA	New Orleans, Sewerage & Water Board of		●	●		●	●	●		●		●				●	
MA	Boston Water & Sewer Commission		●			●	●	●	●		●	●				●	●
MA	Northampton, City of	●				●	●					●					
MD	Baltimore, City of	●	●			●	●	●	●			●	●			●	●
ME	Portland Water District					●	●										
MI	Detroit Water and Sewerage Department					●	●										
MI	Flint, City of					●	●									●	

	Client	Finance								Organization					Technology			
		Affordability Analysis & Program Development	Capital Improvements Planning/Prioritization	Debt Issuance Support	Economic & Financial Evaluations	Financial Planning & Modeling	Rate, Charge, & Fee Studies	Stormwater Utility Development & Support	Organizational, Governance, & Operations Optimization	Performance Measurement & Benchmarking	Program Planning & Support	Stakeholder Engagement & Communication	Strategic Planning	Billing, Permitting, & Customer Information Audits	Business Process Development	Data Management, Analytics, & Visualization	Software Solutions
MI	Saginaw, City of		●			●	●										
MO	Metropolitan St. Louis Sewer District		●	●		●	●	●	●								
MS	Jackson, City of	●	●			●	●		●							●	
NC	Asheville, City of		●	●		●	●		●			●					
NC	Charlotte Water	●	●			●	●										
NC	Durham, City of		●	●		●	●										
NC	Fayetteville, City of		●	●		●	●	●									
NC	Raleigh, City of		●	●		●	●	●	●		●						
NH	Concord, City of		●			●	●										
NJ	Brick Township Municipal Utilities Authority					●	●										
NJ	Jersey City Municipal Utilities Authority		●			●	●										
NV	Henderson, City of		●			●	●										
NY	Erie County Water Authority					●	●										
NY	New York City Water Board		●			●	●									●	
OH	Akron, City of		●			●	●					●					
OH	Franklin County		●			●	●		●								
OH	Montgomery County Environmental Services		●			●	●		●	●			●		●	●	●
OH	Northeast Ohio Regional Sewer District	●	●			●	●	●		●						●	●
OK	Chickasha, City of						●	●	●	●		●			●	●	
OK	Stillwater Utilities Authority					●	●									●	
OR	Portland Bureau of Water, City of		●	●		●	●									●	
PA	Capital Region Water	●	●	●		●	●	●				●	●				
PA	Philadelphia Water Department	●	●	●		●	●		●	●	●	●			●	●	●
PA	Pittsburgh Water and Sewer Authority	●	●	●	●	●	●		●	●		●	●		●	●	●
RI	Newport, City of		●	●		●	●										
RI	Providence Water Supply Board		●			●	●		●	●							
SC	Greenville Water					●	●		●								
SC	Mount Pleasant Waterworks		●			●	●						●				
TN	Johnson City, City of	●	●	●		●	●										
TN	Metro Water Services of Nashville and Davidson County		●	●		●	●	●		●		●	●				
TX	Austin, City of		●	●		●	●			●							
TX	Dallas, City of		●			●	●	●				●			●	●	
TX	El Paso Water Utilities		●	●		●	●					●				●	●
TX	North Texas Municipal Water District		●		●				●	●		●	●		●		●
TX	Round Rock, City of						●										
TX	San Antonio Water System	●	●			●	●					●					
UT	Salt Lake City					●	●					●					
VA	Newport News Department of Public Utilities, City of		●	●		●	●						●			●	
VA	Richmond Department of Public Utilities	●	●			●	●	●				●				●	
VA	Suffolk, City of		●	●		●	●										
VT	Burlington, City of		●	●		●											
WA	Tacoma, City of				●		●						●			●	
WI	Milwaukee Metropolitan Sewerage District		●			●	●										
WI	Milwaukee Water Works		●			●	●										
WV	Charleston Sanitary Board						●										
Can	Calgary, City of		●			●			●							●	
PR	Puerto Rico Aqueduct and Sewer Authority		●	●		●			●	●		●					

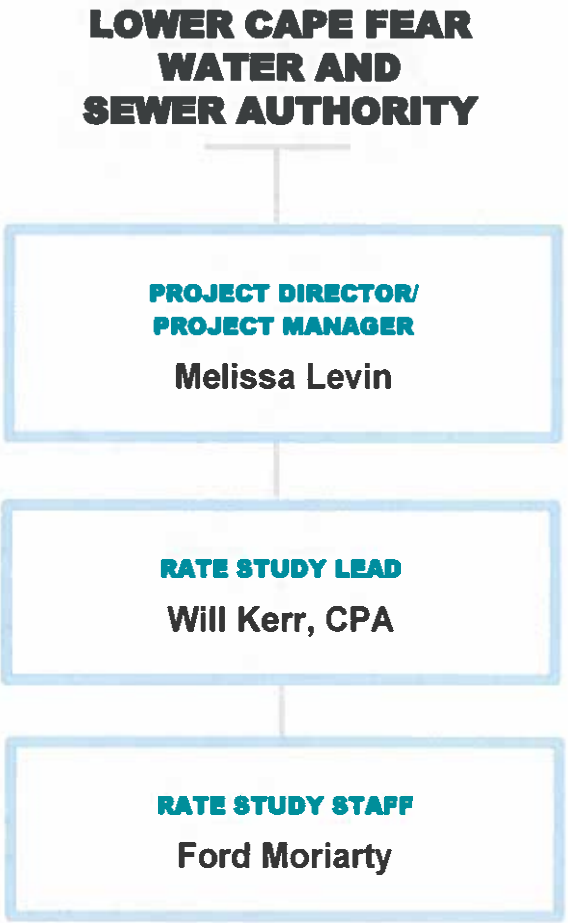
Overall Staff Experience

WE HAVE DEVELOPED A TEAM OF CONSULTANTS WHO SPECIALIZE IN THE SPECIFIC ELEMENTS THAT WILL BE CRITICAL TO THE SUCCESS OF LCFWASA'S PROJECT.

Our team includes senior-level professionals to provide experienced project leadership with support from talented consultant staff. This close-knit group has frequently collaborated on similar successful projects, providing LCFWASA with confidence in our capabilities.

Here, we have included an organizational chart showing the structure of our project team. On the following pages, we have included resumes for each of our team members as well as a description of their role on the project.

For a list of project references from the project team, please refer to the previous section.



Melissa Levin

PROJECT DIRECTOR/PROJECT MANAGER

Vice President

Specialties

- Utility cost-of-service & rate structure studies
- Development fee studies
- Privatization procurement
- Wholesale rate analysis
- High-strength surcharge studies
- Bond feasibility studies
- Financial valuation & economic impact studies
- Public works organization
- Survey research of water & wastewater utility characteristics & rates

Professional History

- Raftelis: Vice President (2020-present); Senior Manager (2017-2019); Manager (2005-2016); Senior Consultant (1999-2004)
- BASF Corporation: Chemist (1994-1999); Research Lab Leader (1991-1994)

Education

- Masters in Business Administration - Wake Forest University (1998)
- Bachelor of Science in Chemistry - Georgia Institute of Technology (1991)

Professional Memberships

- AWWA: North Carolina Section
- Georgia Association of Water Professionals

ROLE

Melissa will be responsible for overall project management and accountability and will be available to provide quality assurance and control, industry perspective, and insights into the project. Melissa will manage the day-to-day aspects of the project, ensuring it is within budget, on schedule, and effectively meets LCFWASA's objectives. She will also lead the consulting staff in conducting analyses and preparing deliverables for the project. Melissa will serve as LCFWASA's main point of contact for the project.

PROFILE

Melissa has been with Raftelis since 1999 and has worked on a variety of projects to assist water and wastewater utilities in addressing economic and financial issues. These projects include: cost-of-service and rate structure studies; financial valuation and economic impact studies; litigation support; bond forecast and feasibility studies; privatization assessment and implementation; and financial forecasting and modeling. Melissa leads Raftelis' Southeast practice and has authored the chapter entitled, "Valuation of Water and Wastewater Utility Assets," for the Fourth Edition of the industry guidebook, *Water and Wastewater Finance and Pricing: The Changing Landscape*.

KEY PROJECT EXPERIENCE

Renewable Water Resources (SC)

Beginning in April 2016, Melissa served as project manager for a wastewater utility rate and new account fee (NAF) study for Renewable Water Resources (ReWa). The objectives of the rate study were to: evaluate revenue sufficiency and recommend rates that recover the necessary revenues to meet system revenue requirements; evaluate the cost recovery equity of ReWa's existing rates (specifically fixed vs. volume) and make recommendations for improvements; and provide a user-friendly financial planning model, designed for continuous use by ReWa Staff. As a part of the rate study, Raftelis also reviewed ReWa's existing NAF's to evaluate their cost justification and recommend modifications. Raftelis continues to serve ReWa and has performed many additional studies since the original study including high-strength surcharge analyses, additional rate structure modification studies, miscellaneous fees studies and others.

City of Raleigh (NC)

Melissa has served as the project manager for Raftelis' engagement(s) with the City of Raleigh (City) since 2008. The City engaged Raftelis to develop conservation-based rates that would enable the City to meet its capital planning needs while minimizing the impact to customers. A rate model was developed under the direction of Melissa that was able to test the effects of implementing a conservation-based water rate structure and analyze the impacts of a new rate structure on customers of the system. Since that time, Raftelis has performed several studies for the City of Raleigh including a cost-of-service study, capital recovery fee studies, and financial feasibility evaluations for the City's proposed issuance of $110 million of revenue bonds in 2011, $75 million in 2013 and $99 million in 2016. The City was seeking capital market funds for various capital improvements to its water and wastewater system. Raftelis' analysis included a forecast of revenues,

expenses, and debt service over a five-year period, to ensure compliance with all bond covenants and debt service coverage requirements, and a comprehensive report.

Most recently, Raftelis has worked with City staff to develop and implement new charges specifically designed to recover the long-term cost of capital replacement in the system. Raftelis continues to assist the City in annual rate updates, budgeting, capital and debt planning, and interjurisdictional contract administration. Currently, Raftelis is working with the City to provide an Agreed Upon Procedures letter for a $200 million revenue bond issue.

MetroConnects (SC)

In 2018. MetroConnects engaged Raftelis to perform a sewer collection system rate study to convert the system's sewer customers from a property tax source of revenue to a user-fee based rate structure. Raftelis worked with the sewer subdistrict to obtain billing data from its local water provider, Greenville Water. A ten-year financial forecast and user rates (fixed and volumetric) were established and put into place beginning July 2019. Shortly thereafter, in 2020, in effort to reduce significant inflow/infiltration in the Greenville County sewer service area, MetroConnects embarked on an effort to work with Greenville County to consolidate several sewer subdistricts with MetroConnects, also converting these sewer subdistricts to a user-fee based rate structure. Beginning July 2021, MetroConnects will consolidate with sewer systems from the cities of Berea, Gantt, Wade Hampton and Marietta under the direction of MetroConnects's staff. Over the course of the last year, Raftelis worked with MetroConnects to establish revenue requirements and required revenues to meet the needs of a consolidated system. Raftelis continues to work with MetroConnects to establish financial forecast and rate projections for the system and the potential merger of additional sewer collection systems in the future.

City of Asheville Water Resources Department (NC)

In 2010, the City of Asheville Water Resources Department (Department) engaged Raftelis to evaluate the City's water rate structure to determine if modifications should be made to the rate structure to more equitably recover costs from its various customer classes. In addition to the evaluation of the rate structure, Raftelis examined the level of water rates to determine if any adjustments should be made to the current rates. Raftelis prepared a 10-year financial forecast for the water utility that projects water rates, expenses and revenues, and debt service coverage ratios in order to be in compliance with outstanding revenue bonds. As a deliverable of the study, Raftelis developed a financial planning model for the Department to use for future planning purposes. Since that original study, Raftelis has continued to work with the City to provide updates to the original financial planning model and 10-year forecast. In April 2021, Raftelis recently completed an analysis for the City that restructured the City's fixed charges and increased volumetric charges. The results of the analysis are to be implemented July 1, 2021. Raftelis is currently working with the City to perform a full cost-of-service study that will examine retail rates and miscellaneous fees. Information resulting from the study will be incorporated into the fiscal year 2024 rate recommendations.

Metro Water Services of Nashville and Davidson County (TN)

Raftelis engaged in a five-year contract with the Metro Water Services of Nashville and Davidson County (MWS) in March of 2001. In 2006, 2011, 2017 and again in 2021, Raftelis was retained for additional five-year contracts with MWS. Melissa has served as the project manager on various analyses and studies performed for Metro Water Services over the past twenty years including cost-of-service and rate studies where Raftelis determined the cost to serve MWS water retail customers, segregated between specific customer classes, as well as determined the cost to serve wholesale customers. As part of the cost-of-service studies, Raftelis reviewed the methodology used to develop miscellaneous fees such as tap fees, meter inspection fees, and flow test, and provided recommendations for revising fee calculations. As a last part of the cost-of-service study, capital recovery fees were calculated, so that MWS could recover cost related to growing its system.

In addition, Raftelis has performed financial feasibility studies as part of the MWS' Revenue Bond offerings. The studies were completed as part of the official statements to prove the financial sufficiency of the utility system and its ability to

support the associated debt service. Raftelis also performs several annual updates and reviews to ensure that MWS is in compliance with their rate covenant test defined by the Water and Sewer Revenue Bond Resolution, as well as in compliance with the user fee requirements of the United States Environmental Protection Agency. These are just a few of the numerous financial services that Raftelis has performed and continues to perform for MWS under the direction of Melissa.

Greenville Utilities Commission (NC)

In August 2006, the Greenville Utilities Commission (GUC) retained Raftelis to develop a water and wastewater rate and financial planning model, develop system capacity fees, and determine high-strength surcharges for their commercial/industrial customers. As a result of the study, a new rate structure was implemented that ensured adequate cost recovery for GUC, and, in addition, established target reserve fund balances. One of GUC's concerns was capital infrastructure that needed to be put in place over a projected time frame. The study provided GUC with an opportunity to plan for that infrastructure and to take measures to plan for the financing of the infrastructure. In addition to the changes in the retail rate structures, Raftelis also calculated water and wastewater capacity fees and high-strength surcharges for GUC, in addition to assistance with wholesale rates and contracts. Raftelis continues to provide financial assistance and rate updates to GUC. The water and wastewater rate and financial planning model, currently in use by GUC staff was rebuilt in 2012, 2017 and is currently being rebuilt in 2022.

Most recently, Raftelis worked with GUC to assess the feasibility and financial impact of acquiring a neighboring water and sewer utility. Raftelis analyzed the system to determine how much the rate differential between the two systems would need to be to pay for capital improvements required to bring the neighboring system to GUC operating standards. Melissa continues to work with GUC and the state of North Carolina to help make this transition happen. Melissa serves as the project manager for all GUC assignments.

Gwinnett County Department of Water Resources (GA)

In 2020, the Gwinnett County Department of Water Resources (GCDWR) engaged Raftelis to provide an affordability assessment and to provide recommendations for customer assistance plans to help reduce the substantial number of customers that were routinely getting locked-out of their water service. GCDWR was interested in examining and determining possible reasons that customers were not making adequate and timely payments leading to lock-off status. Based on the new EPA affordability guidelines, Raftelis examined affordability for the County by examining the average bill by census tract related to the lowest quintile income of that census tract, and the impact that future rate increases would have. Additionally, Raftelis examined customer information for those customers that were regularly locked-off to determine how much these lock-offs were costing GCDWR and to determine the similarities and correlations between these customers. Several key focus areas were identified with specific tasks for each focus area. These focus areas with tasks (customer assistance plans) were developed for the GCDWR to implement in effort to reduce the number of customers experiencing lock-offs.

Rockdale County Water Resources (GA)

In 2011, Rockdale Water Resources (RWR) engaged Raftelis to evaluate their water and wastewater rate structures to determine if modifications should be made to the rate structures to more equitably recover costs from its various customer classes. In addition to the evaluation of the rate structures, Raftelis examined the level of water and wastewater rates to determine if any adjustments should be made to the current rates. Raftelis prepared a financial forecast for the water and wastewater utility that projects water and wastewater rates, expenses and revenues, and debt service coverage ratios in order to be in compliance with outstanding revenue bonds. As a deliverable of the study, Raftelis developed a financial planning model for RWR to use for future planning purposes. Raftelis updated the results of this study in 2016 and again in 2018. Raftelis is currently (2022) in the process of rebuilding the financial planning model and performing a cost-of-service study to verify the equity of RWR's existing rate structure and rates.

Will Kerr CPA

RATE STUDY LEAD

Manager

Specialties

- Rate modeling & financial forecasting
- Governmental accounting
- Bond feasibility studies
- Cost-of-service studies
- System development fee studies
- Rate surveys
- Affordability studies

Professional History

- Raftelis: Manager (2020-present); Senior Consultant (2018-2019); Consultant (2015-2017); Associate (2013-2014); Intern (2012)

Education

- Bachelor of Science in Financial Management - Clemson University (2013)

Certifications

- Certified Public Accountant, North Carolina (2018)
- Series 50 Municipal Advisor Representative

Professional Memberships

- AWWA & South Carolina AWWA
- WEF: Utility Management Committee Member
- North Carolina Government Finance Officers Association: Associate Member
- North Carolina Association of CPAs

ROLE

Will will serve as the Lead Consultant for the rate study tasks and will work at the direction of Melissa in conducting analyses and preparing deliverables for the project.

PROFILE

Will joined Raftelis in 2012 and currently serves as a project manager in the Charlotte, NC office. His expertise lies in financial forecasting and forecasting, water and wastewater cost-of-service and rate design, and governmental accounting. Will has conducted and managed various projects, including: water, wastewater, and stormwater rate studies, impact fee studies, bond feasibility studies, affordability studies, rate filings, and water and wastewater rate surveys. From 2016-2018, Will lived and worked in Greater Boston, MA supporting Raftelis' New England practice. Will brings a unique perspective having served on dozens of engagements along the East Coast for both large and small water and wastewater providers. In addition to project-related work, Will also serves as the Vice Chair of the Board of Trustees of the Raftelis Charitable Gift Fund and is active in various state and regional industry associations.

KEY PROJECT EXPERIENCE

City of Winston-Salem (NC)

Will has worked with Winston-Salem/Forsyth County Utilities (WSFCU) in a variety of roles since 2014. In 2014, Will served as Associate Consultant on an engagement with WSFCU and developed a comprehensive cost-of-service model to assess the cost-recovery equity of WSFCU's rate structure. In 2017, Raftelis was reengaged to examine the rates and recommend cost-of-service justified modifications in an effort to simplify the existing rate structure. Will served as a staff consultant on this engagement and performed the majority of the data analysis and modeling efforts. In addition, Raftelis also performed a bond feasibility study to project revenues and expenditures over a five-year forecast period to assess the City's ability to meet required debt service coverage levels associated with the 2017 water and wastewater revenue bonds. In 2018 and 2019, Raftelis continued assisting the City with updates of the rate and financial planning model and various consulting services. Will served in a lead consultant role in these engagements, overseeing modelling initiatives and the development of deliverables for the City.

In 2020 and 2021, Raftelis was re-engaged to perform an affordability study (2020) and a comprehensive cost-of-service study (2021). The results from the affordability study helped inform the rate-design decision making for the cost-of-service study. The study is projected to be completed in Spring 2022. Alongside the cost-of-service study, Raftelis provided financial forecasting support for the City's water and sewer revenue bond issue in January 2022.

Pittsburgh Water and Sewer Authority (PA)

Will currently serves and has served as the lead consultant on several engagements with the Pittsburgh Water and Sewer Authority (PWSA) to provide water and wastewater rate and financial consulting services. The first engagement in 2016

included a water and wastewater rate study. As part of the study, Will developed a comprehensive cost-of-service, rate, and financial planning model. At the time PWSA was considering implementing stormwater user charges and, as such, a stormwater rate study was performed alongside the study. The model was built to determine the cost of providing water, wastewater, and stormwater services and to calculate cost justified rates by customer class with the functionality to include a new stormwater charge. Raftelis was re-engaged for an update in 2017 to help address growing operating and capital needs. The goal of the study was to establish a three-year forecast of water and wastewater rates that enable each service to be self-sustaining, fund significant operating and capital reinvestment, and to ensure ongoing sustainable financial operation of the utility. The three-year rate plan was approved in December 2017.

In 2018, PWSA was ordered to come under jurisdiction of the Pennsylvania Public Utilities Commission (PAPUC) which requires an initial base tariff filing as well as the filing of a compliance plan identifying how PWSA will reach compliance with all PA and PAPUC regulations. Will's focus on the engagement was on the rates, finance, and tariff filing side. Will was tasked with updating PWSA's rate model to meet PAPUC specifications, developing schedules for the initial tariff filing package, assisting in the drafting of direct testimony, and supporting the finance and accounting department in reaching compliance with PAPUC code.

In conjunction with traditional tariff filing obligations, Will's role in the PWSA engagement was expanded to include support services for Interim Finance Director, Rocky Craley, due to accounting and finance staffing limitations. Will worked closely with Rocky and PWSA Staff coordinating various efforts across different PWSA departments, including: finance, accounting, HR, customer service, and operations. In addition to general day-to-day support services, key tasks included establishing 2018 and 2019 operating budgets; examining billing system and customer collection issues as well as improving data-querying protocols; collecting and compiling volumes of historical financial and operational data required by the PAPUC; and assisting the utility in establishing formal Rules and Regulations.

PWSA re-engaged Raftelis in 2019 to provide ongoing rate, financial planning, and stormwater consulting services. These services include a 2020 Base Rate Increase Tariff Filing for PWSA. Relying on the previously developed model, Raftelis is supporting the filing with a Cost of Service study and financial planning support. Will is overseeing the update of the model, assisting in the development of a forecast of revenues and revenue requirements, and providing input on the direct testimony to support the Tariff Filing.

City of Kingston (TN)

Will serves as the project manager on an engagement with the City of Kingston, TN (City). In late-2019, Raftelis was engaged by the City to perform a rate and financial planning study. Small losses in the City's audited financial statements (presented on an accrual-basis) have prompted the State of Tennessee Water and Wastewater Financing Board (WWFB) to order the City to perform a financial planning and rate study. Raftelis evaluated revenue sufficiency and recommended a rate increase program to recover the necessary revenues to meet state regulatory requirements and existing and projected operating and capital needs. In addition to evaluating revenue sufficiency, Raftelis evaluated the cost recovery equity of the City's existing rates. Raftelis performed a detailed review and calculation to assess the cost-justification for the City's outside-City rate differential and payment-in-lieu-of taxes. Working closely with the Client, Will developed a rate model to run the necessary rate and financial planning analyses and presented the results to the City Water Board. The Study was successfully submitted to the WWFB by the required deadline of May 1, 2020. Raftelis continues to assist the City in compliance with the WWFB order.

North Charleston Sewer District (SC)

Will serves as the lead consultant on an engagement with the North Charleston Sewer District (NCSD). Raftelis was engaged by North Charleston Sewer District (NCSD) to perform a rate and cost of service study (Study) for a five-year forecast period beginning in fiscal year (FY) 2021. First Raftelis developed a financial plan that summarized revenue requirements and projected revenues for a five-year planning period while monitoring annual debt service coverage

requirements and reserve fund balances. The next step in the study process was conducting a cost of service study in accordance with generally accepted industry practices for cost allocation and ratemaking. This approach is based on the methodologies described in the Water Environment Federation's (WEF) Manual of Practice No. 27, *Financing and Charges for Wastewater Systems*. Raftelis used historical operating and financial data, as well as input from NCSD staff, to develop cost allocations and cost drivers. After the financial plan and cost of service model was developed, NCSD and Raftelis began the process of evaluating rate structure adjustments and changes (as needed) to generate sufficient revenues. Raftelis developed a comprehensive rate and financial planning model which included an alternative rates dashboard to efficiently measure customer impacts related to rate structure modifications.

In addition to retail rates and charges, Raftelis also calculated cost-justified system development fees and miscellaneous charges for ancillary services. The results were combined to develop a comprehensive rate and financial plan which was documented in a final report and submitted to NCSD on May 7, 2020.

City of Gainesville (GA)

Will serves as the lead consultant on a project with the City of Gainesville (City). Raftelis was engaged to perform a cost-of-service study and an Outside-City Rate Differential study (the Studies) for the City to examine the equity among the City's water and wastewater rates as well as the cost-justification for the City's outside-city rate differentials. For the cost-of-service study, Will lead the development of a detailed cost-of-service model which first allocates the Water Resource Department's revenue requirements to water and wastewater and then performs a detailed cost-of-service analysis to determine the cost of serving each customer class. For water, Raftelis performed a base extra-capacity cost-of-service analysis in alignment with the AWWA M1 manual and for wastewater, Raftelis performed a cost-of-service analysis relying on guidance from WEF Manual of Practice No. 27. For the Outside-City Rate Differential study, Raftelis used the utility basis to determine a unit cost for Outside-City customers which is compared to the unit cost of serving Inside-City customers. This meant performing a detailed allocation of operating expenses, fixed assets, and depreciation to Inside- and Outside-City. Will lead the development of both models and reports, relying on previous studies and working closely with City Staff.

Following the completion of the Studies, the City re-engaged Raftelis to provide ongoing support services. These services include the following tasks: public outreach and support services in communicating the results of the Studies; miscellaneous affordability analyses to guide the discussion on the affordability of water and sewer service; and additional rate and financial planning analyses.

Roanoke Rapids Sanitary District (NC)

In 2013 and 2015, Will served as a staff consultant on a project with the Roanoke Rapids Sanitary District (District) to provide water and wastewater rate financial planning. As part of the study, Will updated and enhanced the District's rate and financial planning model to provide pro forma scenario analyses evaluating the possible consolidation of a neighboring utility. The model was developed with the ability to monitor the acquisitions impacts on financial performance and customer bill impacts.

In 2018, Raftelis was re-engaged to perform a Rate and System Development Fee study. Will serves as the lead consultant on the engagement overseeing the development of a new comprehensive rate model and a separate system development fee model. The rate model will be relied upon to calculate cost-justified water and wastewater rates and evaluate multiple proposed rate scenarios on an ongoing basis. The System Development Fee Model was used to calculate fees as set forth in North Carolina General Statute 162A Article 8 "System Development Fees".

Ford Moriarty

RATE STUDY STAFF

Consultant

Specialties

- Financial forecasting & rate modeling
- Affordability studies
- Impact fee studies
- Rate surveys
- Data Visualization & Integration

Professional History

- Raftelis: Consultant (2020-present); Associate Consultant (2017-2019)
- TTG, Inc.: Database Intern (2016)
- StreamSweepers: Intern (2015)

Education

- Bachelor of Arts in Economics, Minors in Business & History - Sewanee: The University of the South (2017)

Professional Memberships

- AWWA: Virginia Section

ROLE

Ford will work at the direction of Melissa and Will in conducting analyses and preparing deliverables for the project.

PROFILE

Ford began his career with Raftelis in 2017 and currently serves as a consultant in the Charlotte, NC office. His expertise lay in financial planning and rate setting for water and wastewater providers, and affordability studies. Since joining Raftelis, Ford has performed numerous rate, financial planning, bond feasibility, affordability, solid waste, and impact fee studies. He has also assisted with updating by the American Water Works Association and Association of Metropolitan Water Agencies' rate surveys over the last several years.

KEY PROJECT EXPERIENCE

MetroConnects (SC)

Ford served as associate consultant on a project with MetroConnects (Metro), a collection system Greenville, SC. Metro engaged Raftelis to develop a financial planning model for its wastewater system, as well as conducting a rate study to develop alternative rate structures. Ford has been responsible for creating an appropriate financial plan, as well as exploring rate structures, primarily using meter sizes and consumption, potentially replacing Metro's current rates, based on tax and property value fees.

Metro Water Services of Nashville and Davidson County (TN)

Ford has served as staff consultant on various analyses and studies performed for Metro Water Services of Nashville and Davidson County (MWS) since 2019. Ford has worked on several financial planning and rate model updates, completing a full rebuild of the rate model in 2020, as well as assisting with building the stormwater financial planning and rate model. Ford has also assisted with a consumption analysis performed to closer predict revenues. In 2021, Ford served as consultant updating the rate model as MWS looked to apply for a WIFIA loan, and assisted with the application.

Renewable Water Resources (SC)

Ford serves as Consultant on an engagement with Renewable Water Resources (ReWa) located in Greenville, SC. Raftelis was engaged to perform a wastewater utility rate, and initial affordability study. The objectives of the rate study were to: evaluate the existing rate structure and revenue sufficiency and recommend rates that recover the necessary revenues to meet system revenue requirements for both trunk and treatment as well as collection and distribution. For the affordability portion of the engagement, Ford worked in Tableau to create heat maps of the utility's sub-districts, analyzing individual customer bills and assumed levels of income by census tract. The utility is able to use this information to have a better understanding of its service area and the patrons it serves.

North Charleston Sewer District (SC)

Ford served as consultant on an engagement with the North Charleston Sewer District (NCSD). Raftelis was engaged by North Charleston Sewer District (NCSD) to perform a rate and cost of service study (Study) for a five-year forecast period beginning in fiscal year (FY) 2021. First Raftelis developed a financial plan that summarized revenue requirements and

projected revenues for a five-year planning period while monitoring annual debt service coverage requirements and reserve fund balances. The next step in the study process was conducting a cost of service study in accordance with generally accepted industry practices for cost allocation and ratemaking. This approach is based on the methodologies described in the Water Environment Federation's (WEF) Manual of Practice No. 27, *Financing and Charges for Wastewater Systems.* Raftelis used historical operating and financial data, as well as input from NCSD staff, to develop cost allocations and cost drivers. After the financial plan and cost of service model was developed, NCSD and Raftelis began the process of evaluating rate structure adjustments and changes (as needed) to generate sufficient revenues. Raftelis developed a comprehensive rate and financial planning model which included an alternative rates dashboard to efficiently measure customer impacts related to rate structure modifications.

In addition to retail rates and charges, Raftelis also calculated cost-justified system development fees and miscellaneous charges for ancillary services. The results were combined to develop a comprehensive rate and financial plan which was documented in a final report and submitted to NCSD on May 7, 2020.

Brunswick County (NC)
Ford served as associate consultant on an engagement with Brunswick County (County) in North Carolina. The County engaged Raftelis to perform a bond feasibility study of issuing two general obligation bonds in 2020, and an additional two bonds in 2021. As part of the study, Ford worked with County staff to update the user-friendly model to account for the new debt, as well as draft the report for the bond issue.

City of Albemarle (NC)
Ford served as Associate Consultant on a project with the City of Albemarle (City) to provide water and wastewater rate financial planning. As part of the study, Ford was tasked with developing a comprehensive financial planning and rate model for the City. The model was built to develop a five-year financial plan for the water and wastewater utilities, determine the cost of providing water and wastewater services to utility customers, and calculate cost justified rates. Once the alternative rate modifications and scenarios were developed, Raftelis was able to analyze the impacts of the proposed changes against the City's current financial plan.

Roanoke Rapids Sanitary District (NC)
In 2018, Raftelis was engaged to perform a Rate study and a system development fee study by the City of Roanoke Rapids (City). Ford served as associate consultant on both engagements, creating a new comprehensive rate model and financial plan, as well as develop a separate system development fee model. The rate model will be relied upon to calculate cost-justified water and wastewater rates and evaluate multiple proposed rate scenarios. the system development fee model will be used to calculate fees as set forth in North Carolina General Statute 162A Article 8 "System Development Fees."

City of Hopewell (VA)
Ford served as associate consultant on a project with the City of Hopewell (City). The city engaged Raftelis to develop a rate financial planning model for the City's wastewater system. Ford was responsible for collecting and analyzing data from the City, as well as constructing an appropriate rate model to forecast the financial needs of the system. As part of the project, Ford was responsible for creating a new base and volumetric rate structure for the City that can replace the current rates.

City of Wilson (NC)
Ford served as associate consultant on an engagement with the City of Wilson (City). The City requested an updated financial plan and rate model for both the water and wastewater systems. As part of the project, Ford was responsible for the enhancement of the City's 10-year capital plan and existing rate structure, as well as the comprehensive update to its financial plan.

Approach to Project Management

PROJECT COORDINATION AND PROJECT TEAM SUPPORT

Raftelis' entire business practice consists of providing financial, rate, and management consulting services for water, wastewater, stormwater, solid waste utilities and local governments. Raftelis' staff includes 130 consultants who specialize in providing these services. The depth of our "bench" eliminates the potential for any disruptions in the services we provide. Throughout the project, Raftelis will conduct ongoing project management and administration. The Project Director/Manager will plan, coordinate, monitor, and control all project tasks in concert with all other appropriate project team members. By keeping all activities coordinated, the team can adhere to the agreed upon project schedule.

Raftelis includes regular and consistent project team and communications with clients, consisting of a combination of email and phone correspondence as well as virtual meetings. The most important aspect of communications is the approvals process and having a clear understanding of the client's approval protocols. This ensures the client is involved with the project progress needs and prevents surprises in deliverables and invoicing. As each project or assignment is identified, Raftelis will prepare a detailed work plan identifying the specific tasks to be performed and the level of effort and associated costs.

LOCAL KNOWLEDGE / EXPERIENCE WITH LOCAL AGENCIES

Raftelis was established (1993) and remains headquartered in Charlotte, NC. Many of our team members are located there and are intimately aware of the concerns facing North Carolina utilities. We have unparalleled experience providing financial and rate assistance to water, wastewater, stormwater, and solid waste utilities in the Carolinas. In addition to providing assistance to the many utilities across the Carolinas, Raftelis has also worked with many of the state agencies that provide assistance to many of these utilities.

Raftelis recently worked with the South Carolina Rural Infrastructure Authority to perform a water and wastewater system assessment to assist in the development of the State's utility viability strategy. The goal of the project was to give the State a roadmap for targeting the most vulnerable areas of the State's water and wastewater infrastructure. The strategy consisted of four key components: 1) utility viability identification, 2) coordination of assistance, 3) leveraging partnerships, and 4) targeted financial assistance.

Raftelis' role in the engagement was focused on performing rate, financial, and affordability assessments and contributing to the development of the viable utility strategy. For the assessment, Raftelis collected audited financial statements, utility rate information, and demographic data for 300 systems and developed a set of affordability and financial health metrics to serve as guidelines to help the RIA identify distressed utilities. The analyses included assessments broken down by utility size and region.

Currently, Raftelis is working the North Carolina Division of Water Infrastructure. Under North Carolina Session Law 2020-79 (SL 2020-79) entitled "An Act to Improve Viability of the Water and Wastewater Systems of Certain Units of Local Government..." was enacted July 1, 2020. SL 2020-79 directs the State Water Infrastructure Authority (Authority) and the Local Government Commission (LGC) to establish an assessment and review process to identify distressed water and wastewater systems across the state. Raftelis is currently working with the NC DWI to create a standardized financial planning model to be used by NC DWI staff to determine which of the states many water and wastewater utilities may be exhibiting signs of being financial distressed.

VERIFICATION OF EXISTING DATA / POTENTIAL RISK

The most significant risk in providing financial and rate consulting services is that financial plans and recommendations for adjusting rates may prove to be ineffective if based upon poor data or inappropriate assumptions. Our experience working with hundreds of utilities across the country gives us access to a robust set of benchmarking information. We help most of our clients with the development of reliable customer usage data and cost information. This experience gives our firm a unique insight and understanding to help minimize the risk of relying on inaccurate data or unreasonable assumptions. As a result, we believe our firm is uniquely positioned to minimize any potential risks associated with the execution of this contract.

Registered Municipal Advisor (Dodd-Frank Act)

Raftelis is registered with the U.S. Securities Exchange Commission (SEC) and the Municipal Securities Rulemaking Board (MSRB) as a Municipal Advisor. This is a requirement under the Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank Act). All firms that provide financial forecasts for municipal entities that include assumptions about the size, timing and terms for possible future debt issues, as well as debt issuance support services, must be registered with the SEC and MSRB to legally provide financial opinions and advice. As a registered Municipal Advisor under the Dodd-Frank Act, Raftelis is required to inform our clients of any existing or potential conflicts of interest that may be relevant to any proposed scope of services that may include providing "advice" as that term is defined in the Dodd-Frank Act. In addition, Raftelis is legally required to have a fiduciary duty, and a duty of loyalty to our clients, and to put our clients' interests ahead of our own. Although Raftelis has always operated with these principles in mind, these legal requirements and responsibilities provide an additional level of assurance and serve to mitigate any potential risks.

Under the Dodd-Frank Act the definition of "advice" includes providing any opinion, information or assumptions related to the size, timing and terms of possible future debt issues or borrowing. Many of the potential scopes of work identified in this RFP may fall within this definition. For example, this type of information may be integrated into the capital and financial planning components of a rate and financial planning study. This definition is applicable regardless of whether this information is developed and used solely for planning and decision-making purposes. Raftelis's registration as a Municipal Advisor means our clients can be confident that Raftelis is fully qualified and capable of providing financial advice related to all aspects of utility financial planning in compliance with the applicable regulations of the SEC and MSRB.

Record of Success by the Consultant

Raftelis takes great pride in not only meeting but exceeding our clients' expectations. This mindset has been the foundation of our approach to project execution since we were founded in 1993. This approach is how we are able to complete over 1,000 projects every year that provide solutions to hundreds of clients across the country. Past and current clients are the best and most important record of success that we have. We urge you to reach out to the client references we have listed below to learn first-hand about our project team, our ability to responsive and agile in finding solutions to client's problems, and our commitment to completing projects on schedule and within budget that deliver high-quality results and deliverables.

City of Asheville Water Resources Department NC

David Melton, Director Water Resources
P: 828.259.5957 / E: dmelton@ashevillenc.gov

Greenville Utilities Commission NC

Jeff McCauley, Chief Financial Officer
P.O. Box 1847, Greenville, NC 27835 / P: 252.551.1532 / E: mccauljw@guc.com

City of Raleigh NC

Stephen Balmer, Fiscal Manager
P: 919.996.3523 / E: Stephen.Balmer@raleighnc.gov

Renewable Water Resources SC

Cathy Caldwell, CPA, Director of Administrative Finance
P: 864.299.4011 / E: cathyc@re-wa.org

MetroConnects SC

Carol Elliott, General Manager
P: 864.277.4442 / E: celliott@metroconnects.org

South Carolina Rural Infrastructure Authority SC

Kendra Wilkinson, Infrastructure Sustainability Manager
P: 803.737.0390 / E: kwilkerson@ria.sc.gov

Metropolitan Government of Nashville and Davidson County TN

Amanda Deaton-Moyer, Assistant Director, Business and Finance
P: 615.862.6539 / E: amanda.deaton-moyer@nashville.gov

MANAGING PROJECT SCHEDULE

Raftelis employs several management strategies to heighten the effectiveness and efficiency of the services we provide to our clients. We place a high priority on being responsive to our clients and, as we determine scope and staffing for each project, we carefully consider our workload and the availability of resources to meet client needs and project schedules.

Each week, the Raftelis management team participates in a conference call to review the number of consulting hours required to meet the needs of our clients during the upcoming week. This weekly meeting allows our project managers to deploy our consulting staff in a flexible manner that ensures a suitable level of hours will be devoted to LCFWASA even during periods of accelerated deadlines and heavy work requirements.

Our project management conference calls provide Raftelis project managers with opportunities to effectively distribute work within a project. However, it is equally important that consulting hours spent on the project are tracked and compared to project budgets on a real-time basis. Raftelis uses project management software to monitor project progress, consulting hours, and budgets.

If selected for this project, we will conduct a comprehensive scoping meeting with LCFWASA staff and our project team to discuss the work plan to ensure we are in agreement on how best to achieve LCFWASA's goals and objectives. This meeting will include a discussion of our proposed schedule and LCFWASA's timing requirements for meetings, milestones, and deliverables, so that our teams have a full understanding of what to expect on the project. Throughout the project, we will provide LCFWASA with frequent updates so that you are constantly aware of the status of the project and our progress towards meeting milestones and deadlines.

MANAGING PROJECT COSTS

Client satisfaction is of the utmost importance to Raftelis, and we strive to provide services that meet our clients' objectives in the most cost-effective manner possible. Because our project team members are based in North Carolina, our travel expenses for meetings will be minimized for LCFWASA's project. When appropriate, we use web meetings in lieu of face-to-face meetings to reduce travel time and expenses. Raftelis uses our project management system to ensure the efficient allocation of resources and adherence to project budgets, and our project managers also meet regularly with our executive team to discuss project status and budget.

Fee Proposal

The following table provides a breakdown of our proposed fee for this project. This table includes the estimated level of effort required for completing each task and the hourly billing rates for our project team members. Expenses include costs associated with travel and a $10 per hour technology charge covering computers, networks, telephones, postage, etc.

WATER RATE STUDY

Tasks	Web Meetings	In-person Meetings	Hours					Total Fees & Expenses
			ML	WK	FM	Corp	Total	
1. Initiation and Management			8	4	2	4	18	$4,210
2. Kick-off Workshop and Data Request		1	8	8	24	0	40	$10,043
3. Development of Financial Plans	1		4	8	28	0	40	$8,720
4. Cost Allocation, Rate Design, and Fee Calculation		1	8	8	24	0	40	$10,043
5. Rate Model Development			4	8	30	0	42	$9,110
6. Report, Recommendations and Presentations	1	1	8	12	32	0	52	$12,623
Total Meetings / Hours	2	3	40	48	140	4	232	
Hourly Billing Rate			$295	$245	$185	$80		
Total Professional Fees			$11,800	$11,760	$25,900	$320	$49,780	

Total Fees	$49,780
Total Expenses	$4,970
Total Fees & Expenses	$54,750

ML - Melissa Levin
WK - Will Kerr
FM - Ford Moriarty
Corp - Corporate Functions

WHOLESALE RATE STUDY

Tasks	Web Meetings	In-person Meetings	Hours					Total Fees & Expenses
			ML	WK	FM	Corp	Total	
1. Initiation and Management			8	2	2	4	16	$3,700
2. Data Collection and Review			8	0	16	0	24	$5,560
3. Data Analyis and Model Development	1		12	0	24	0	36	$8,340
4. Preparation of Draft and Final Report	1		12	2	16	0	30	$7,290
Total Meetings / Hours	2	0	40	4	58	4	106	
Hourly Billing Rate			$295	$245	$185	$80		
Total Professional Fees			$11,800	$980	$10,730	$320	$23,830	

Total Fees	$23,830
Total Expenses	$1,060
Total Fees & Expenses	$24,890

ML - Melissa Levin
WK - Will Kerr
FM - Ford Moriarty
Corp - Corporate Functions

SYSTEM DEVELOPMENT FEE STUDY

Tasks	Web Meetings	In-person Meetings	Hours					Total Fees & Expenses
			ML	WK	FM	Corp	Total	
1. Initiation and Management			8	0	2	4	14	$3,190
2. Data Collection and Review			12	0	24	0	36	$8,340
3. Data Analyis and Model Development	1		12	0	30	0	42	$9,510
4. Preparation of Draft and Final Report	1		8	0	16	0	24	$5,560
Total Meetings / Hours	2	0	40	0	72	4	116	
Hourly Billing Rate			$295	$245	$185	$80		
Total Professional Fees			$11,800	$0	$13,320	$320	$25,440	
							Total Fees	$25,440
							Total Expenses	$1,160
							Total Fees & Expenses	$26,600

ML - Melissa Levin
WK - Will Kerr
FM - Ford Moriarty
Corp - Corporate Functions

Exceptions

We request that LCFWASA consider making the following modifications, shown in red below, to the Professional Services Agreement. Please contact us if you have any questions or concerns about these modifications.

D. Workmanship and Quality of Services

All work performed under this Contract shall be performed in a workmanlike and professional manner, to the reasonable satisfaction of the AUTHORITY, and shall conform to all prevailing industry and professional standards prevailing in the Consultant's industry at the time and place the work is performed.

I. Indemnity

To the fullest extent permitted by law, CONSULTANT shall save, defend, hold harmless, and indemnify the AUTHORITY, its officers, directors, members, partners, and employees from liability ~~of any kind~~, including all claims, costs (including ~~but not limited to,~~ defense, all fees and charges of any consultant, architect, attorney, or other professional, and all court or arbitration or other dispute resolution costs), damages, and losses accruing or resulting to any person, firm, or corporation that may be injured or damage~~d~~ caused by the negligence, gross negligence or willful misconduct by CONSULTANT ~~directly or indirectly~~, in the performance of this Contract. This representation and warranty shall survive the termination or expiration of this Contract.

J. Warranty

The CONSULTANT by acceptance of this Contract warrants full compliance with ~~all~~ applicable local, state, and federal laws and regulations ~~and agrees to indemnify and defend the AUTHORITY against any loss, cost, liability or damage by reason of CONSULTANT's violation of this paragraph.~~ The CONSULTANT expressly…

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PROPOSAL SHEET

Please provide the following information on your company:

BY: Melissa Levin

TITLE: Vice President

COMPANY: Raftelis Financial Consultants, Inc.

ADDRESS: 227 W. Trade Street, Suite 1400

Charlotte, NC 28202

TELEPHONE: 704-936-4441

EMAIL: mlevin@raftelis.com

Bidder's company is: Corporation ✓ Partnership/Proprietorship

If corporate name is different from above, please show in full.

What state is corporation incorporated in? North Carolina

WILLDAN
FINANCIAL SERVICES

November 21, 2022

Ms. Danielle Hertzog
Finance Administrative Assistant
Lower Cape Fear Water and Sewer Authority
1107 New Pointe Boulevard, Suite 17
Leland, North Carolina 28451

Submitted via Email

Re: Proposal to Prepare a Water Rate Study for the Lower Cape Fear Water and Sewer Authority

Dear Ms. Hertzog,

Willdan Financial Services ("Willdan") is pleased to present this proposal to the Lower Cape Fear Water and Sewer Authority ("LCFWASA" or "Authority") in response to the Request for Proposals ("RFP") denoted above. Given Willdan's utility rate experience and prior project experience, we are particularly well positioned to serve the LCFWASA and help achieve the objectives associated with the proposed engagement. Outlined below are the advantages and benefits that Willdan will provide to the LCFWASA.

Direct Experience with Lower Cape Fear Water and Sewer Authority — From 2007 to 2014, Willdan team members provided professional consulting services to the LCFWASA specific to the financial feasibility of the construction of the Westside Water System and more recently the allocation of new debt service to wholesale customers based on existing and future planned capacity needs. The Westside Water System project objectives included development of rates that provided for recovery of operating costs, outstanding debt service as well as debt service associated with the project, allowing the Authority to meet required debt service coverage requirements over time, and preservation of adequate ending annual balances in the various funds being maintained at the time. The feasibility analysis included projected operating results over a 10-year period for future planning purposes. The end result was the development of preliminary unit costs ($/1,000 gallons) required in the provision of finished water to the customers served by the Westside Water Project. Additionally, Willdan team members developed monthly Availability Charges for customers where lines were present but do not take water service. *This experience and familiarity with LCFWASA and your operations will ensure a successful project.*

Unique Combination of Services and Expertise/Public Engagement — Willdan is one of the largest public sector financial consulting firms in the United States. We have helped more than 800 municipal, county and special district agencies successfully address a broad range of financial challenges, such as financing the costs of growth and generating revenues to fund capital projects. Our team is comprised of professionals with decades of experience in utility operations and economic/financial management and is highly qualified for this engagement.

Unique Approach — Willdan combines unsurpassed utility rate modeling and financial planning (Willdan's specialty) with proven operational and economic analyses. We will work collaboratively with LCFWASA staff to carefully assess and understand the unique utility system dynamics and develop a customized (not "cookie-cutter") approach to meet the defined objectives.

Willdan's interactive approach will generate a custom-built Microsoft Excel financial model that is easy to use, which will be provided to the LCFWASA upon project completion. The model and accompanying documentation will provide a detailed analysis of the LCFWASA's customers, revenues, capital projects, operating expenditures, debt service, reserve funding, and other financial metrics. The results will be proposed utility rates to fund a comprehensive financial management plan for the next ten to twenty fiscal years.

When called upon, our proposed project team of qualified and experienced consultants can provide the consulting expertise you require. Listed below is a brief highlight of our experience.

- National company and one of the fastest growing consulting firms in the country;
- Development of a Microsoft Excel-based dashboard model designed specifically for your needs;
- A partnership approach with LCFWASA staff members;
- Fixed-fee pricing with no change orders unless requested by the LCFWASA;
- Industry leader (AWWA Manuals/Professional Speaking);
- Subject matter experts, including Municipal Financial Advisors and Certified Utility Valuation Analyst;
- Ability to balance both financial and political realities;
- Focus on open communication with frequent project updates; and
- Stringent internal Quality Assurance/Quality Control program.

Willdan appreciates this opportunity to present this submittal to Lower Cape Fear Water and Sewer Authority. If you have any questions or need additional information, please do not hesitate to contact me at (407) 459-7117 or at jmcgarvey@willdan.com.

As always, Willdan greatly appreciates your consideration.

Respectfully submitted,

WILLDAN FINANCIAL SERVICES

Jeffrey McGarvey
Vice President, Managing Principal

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Project Understanding and Approach

Project Understanding

As part of the utility rate study process, Willdan Financial Services ("Willdan") will verify the rate setting and pricing priorities and objectives of the Lower Cape Fear Water and Sewer Authority ("LCFWASA" or "Authority") to potentially incorporate into the rate making process. It is understood that the LCFWASA desires to align capital projects more closely with a sustaining rate schedule.

Willdan team members Mr. Rick McClung and Mr. Daryll Parker assisted LCFWASA with the determination of cost based rates for its wholesale customers in 2007. Willdan's advanced modeling techniques will allow LCFWASA to assess potential rate structure alternatives and their respective impacts to system customers and revenue recovery. Additionally, our modeling techniques will be utilized to effectively communicate potential outcomes to various stakeholder groups.

It is further understood that the Board has expressed an interest in exploring both Rate Stabilization and Just-in-Time rate making philosophies. Willdan's modeling techniques will allow LCFWASA, at the click of a button, to compare Just-in-Time rate adjustments (i.e., adjusting rates only when and as much as needed for a given fiscal year) or utilize a phased-in rate approach that essentially smooths out annual rate adjustments over a specified time period. This approach leads to a multi-year rate path that has been optimized to meet LCFWASA's broader goals and objectives.

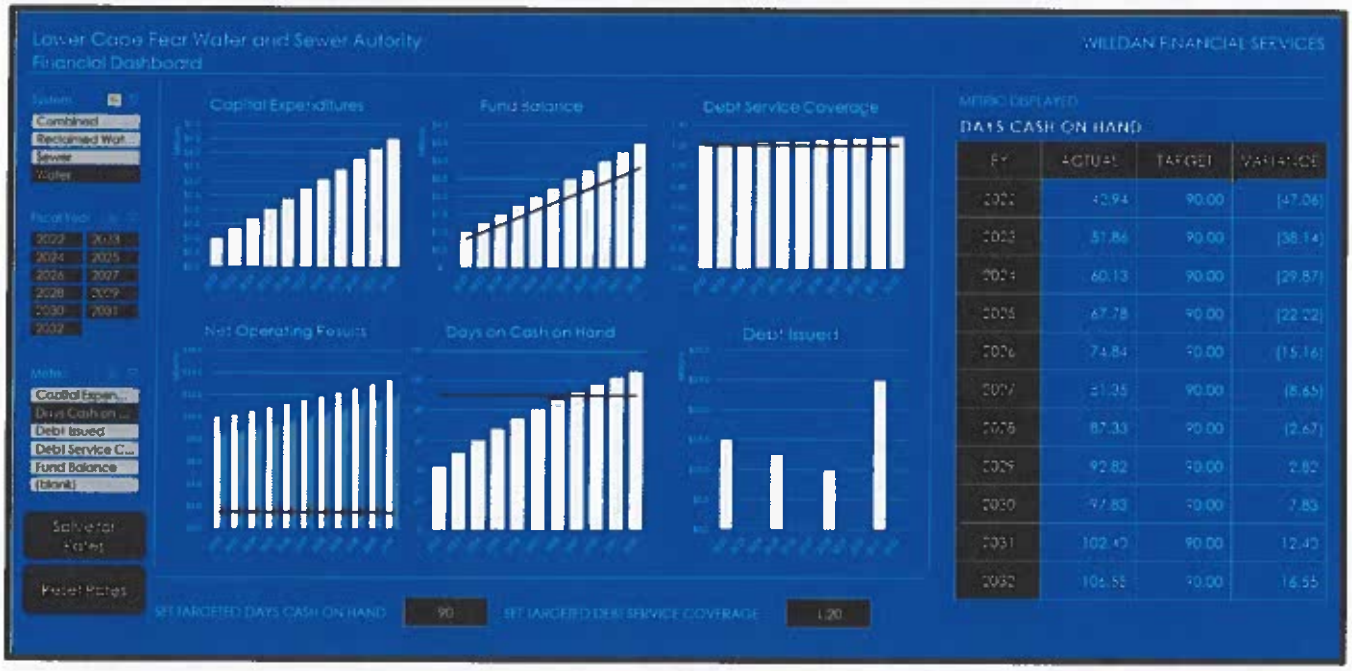
Willdan Innovation

Our Microsoft Excel-based rate model has all of the elements necessary to conduct a full financial planning analysis and rate study. The comprehensive analysis model allows us to develop various scenarios regarding such things as: i) capital financing alternatives; ii) debt service coverage tests; and iii) liquidity tests (cash reserves) and modeling of rate structure alternatives to test "what-if" scenarios, to address such questions that may arise during project team meetings with staff or elected officials. This process helps gain consensus regarding the rate and financial plan which best addresses your needs.

Features of the analysis model include the ability to incorporate line-item data and assumptions that are then summarized in a graphic dashboard to show key financial indicators for the utility system(s). The sample dashboard included herein illustrates how we can summarize data, assumptions, and calculations into an easy-to-understand graphical interface that updates with each alternative scenario evaluated.

To summarize, rate model development is an integral part of the Willdan consulting process, and one in which staff and other stakeholders play a collaborative role. At the completion of the analysis, the model will be customized to generate the financial metrics and targets desired by LCFWASA, and ***an Excel version of the model will be provided for use by LCFWASA staff.***

A sample dashboard image has been provided on the following page.



Subsequent to careful development and validation of the baseline forecast, a series of alternative forecasts will be prepared illustrating various results in the following general categories.

- **What if things turn out differently?** These alternatives will demonstrate the sensitivity of the forecast to the significant assumptions used. This results in a sound understanding of areas where a conservative forecast approach is warranted.
- **What happens when we try this?** This series of alternatives focuses on different financial management approaches. For example, the use of different financing techniques such as capitalized interest, interim short-term financing, and capital appreciation bonds may be explored.
- **What can we do to make it better?** This approach to forecasting identifies the factors that may be causing significant rate increases in a given year and explores alternatives. For example, if a large capital project in a single year is the culprit, we would work with staff and the consulting engineers to determine whether this project could be phased or delayed.
- **How will any adjustments affect our customers?** In examining rate structure alternatives, we will demonstrate and discuss how users in various categories or classifications will be impacted. Our team will use our rate design model to explore the impact of various rate structures on bills for each customer class over the relevant consumption range.

Scope of Services

Our proposed work plans, described in detail, are provided below. We explain how each step will be accomplished and identify associated meetings and deliverables. We want to ensure our scope provides quality and clarity and is responsive to the LCFWASA's needs and specific local circumstances. We will work in concert with the LCFWASA to adjust the work plans as needed during the course of this engagement.

Task 1: Water Rate Study

Provided herein is a detailed description of the tasks/steps anticipated to complete a water utility rate study for the LCFWASA in accordance with the requested scope of services. The proposed approach is intended to develop utility rates and fees and includes a review process that will allow the LCFWASA to accomplish the changes in rates and policies necessary to recover costs fairly and remain financially strong going forward. In addition, Willdan has developed the following approach to match the logical progression of tasks required to complete the proposed Water Rate Study.

Data Collection and Review

Data Collection and Review. The LCFWASA will be provided with an initial list of basic data needed to conduct the study. The data request will include, but is not limited to, items such as: financial and operating data, customer account and billing data, reports prepared by others, budgets, audits, capital improvement programs, fixed asset records, official bond statements, debt service schedules, master plans, ordinances, previous rate studies, LCFWASA codes and policies. The data will be reviewed for completeness and to ensure a sufficient understanding of historical utility operations.

Revenue Requirements and Rate Determinants

Historical Billing Data Analysis. The data request document will provide instructions for the development of historical customer billing information. It is anticipated that the billing information will be provided in a format necessary to summarize the water system billings for a recent historical period for which audited revenues exist. The customer accounts and flows provide the basis on which operating revenues are derived and are therefore the primary factors utilized in reviewing the user rates and charges. As such, the historical billing data provides an important basis for analyses that will be used to develop assumptions for projecting revenues under existing and/or proposed rates.

Customer and Flow Projections. The water system billings and respective billable flows will be forecasted for a 10- to 20-year planning period. Such projections will be developed through the consideration of historical growth trends, peak demands, climatological patterns, local economic conditions, changes in usage patterns over time, discussions with LCFWASA regarding future customer's demand requirements, and experienced judgment.

Projected Revenues Under Existing Rates. Projections of utility system revenues under existing rates for the 10- to 20-year planning period will be developed, recognizing projected flow volumes for each wholesale and retail (if applicable) customer (as determined in the billing analysis). Such revenue projections will assume that the existing user rates and rate structures remain constant at the existing levels.

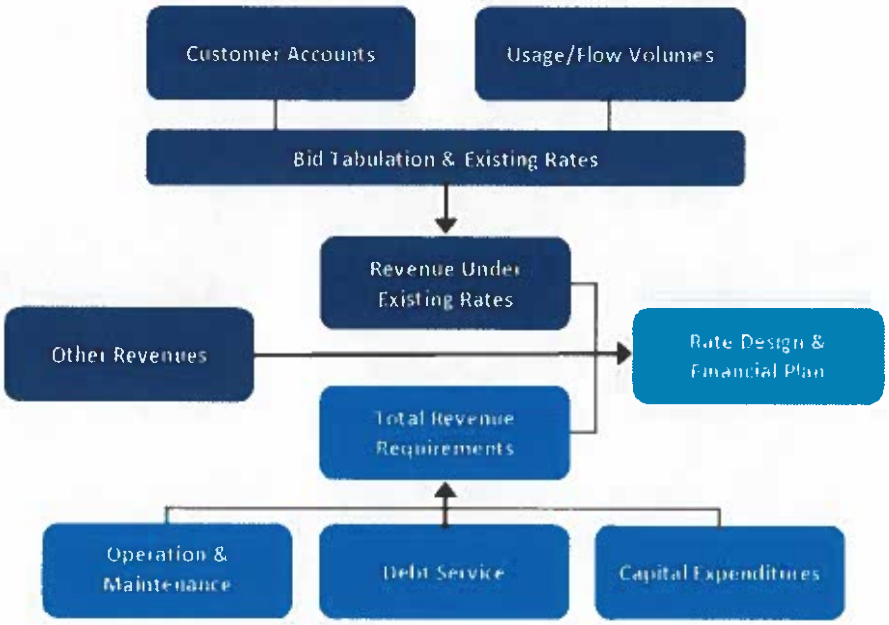
Miscellaneous Revenue Projections. The revenues to be generated from other existing sources, including such items as interest earnings, insurance proceeds, FEMA and rental income, will be projected for the planning period. It should be noted that prior to projection, each ancillary revenue source will be reviewed for a general level of reasonableness and will be discussed with Authority staff prior to projecting these other revenue sources.

Projected Revenue Requirements. Revenue requirements (i.e., system expenditures) will be developed for the water system based on an analysis of historical, currently budgeted, and anticipated operating and capital expenditures. The revenue requirements will be projected on a fiscal year cash flow basis, considering expected operational changes, changes in operating expenditures for new facilities, system growth occurring from the Authority's wholesale customers, anticipated extraordinary expenses, and allowances for inflation.

The projections will include, but not be limited to, the following:

- Operation and maintenance expenses;
- Outlay for annual capital additions and replacements;
- Debt service and reserve requirements on existing and anticipated debt instruments;
- Transfers to fund major capital improvements; and
- Other expenditures and transfers to the Authority's various restricted and unrestricted funds.

The objective of the identification of revenue requirements and rate determinants is delineated in the graphic below.



Projected Operating Results Based on Existing Rates. The projected revenues and revenue requirements will be summarized into a 10- to 20-year cash flow statement providing the projected operating results of the water system under the existing rates. The cash flow statement will be used to estimate annual adjustments in utility revenues necessary to fund operating and capital expenditure requirements, meet existing bond covenant requirements, maintain sufficient balances in restricted and unrestricted funds, and maintain prudent utility management practices. The estimated timing and magnitude of future debt issues required, if any, to finance proposed capital improvements will also be shown.

Concurrent with the development of the projected operating results, the study will review the general financial health of the utility operations and, as necessary, make recommendations for changes in fund balances, reserves, and existing debt service coverage ratios to maintain financial integrity and a stable bond rating.

Cost Share Methodologies

Based upon the Board's interest in cost sharing, Willdan will develop the rate model to account for different water demand needs for wholesale customers and identify which customers are requiring development of new capacity/capacity sources from the Authority and allocating each customer's proportionate share according to their needs. Members of the project team developed this same type of analysis for the Authority in 2014 when a new debt issuance was under consideration. The allocation of the new debt was determined based on a combination of the current contract capacity, the actual capacity being used, and the requested new capacity for each wholesale customer for a more fair and equitable allocation of the resulting debt service payments to the subset of customers benefiting from capital improvements and/or capacity expansions .

Rate Analysis and Design

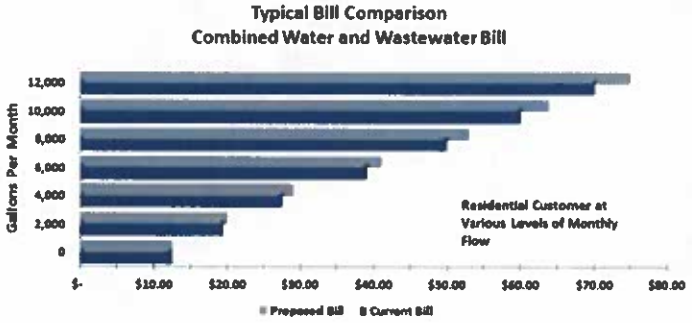
Evaluation of Existing Rate Structure. The existing rate structure will be reviewed and evaluated for its effectiveness in equitably recovering costs of utility service from the Authority's wholesale customers. As part of the rate design process, Willdan will discuss with department staff the current trends and philosophies in utility ratemaking as set forth in the AWWA M1 Manual, other relevant industry standard publications regarding sound rate making principles and North Carolina law. Based on these discussions, the analysis will include recommended rate structure alternatives

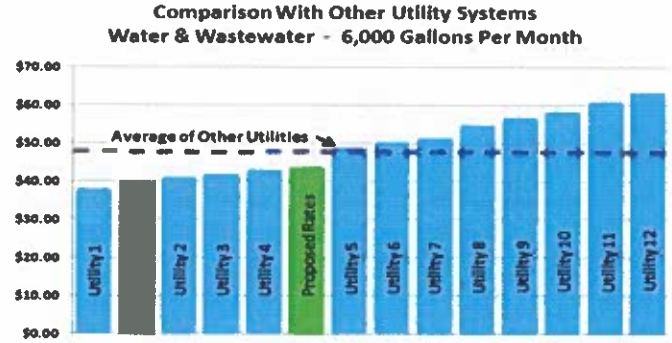
(i.e., blocked rates), if requested, that may better meet the objectives of the LCFWASA. The analysis model will be developed in a dynamic manner allowing the LCFWASA to compare alternative Just-in-Time ("JIT") rate increases versus annual incremental/phasing adjustments to achieve the same funding goals and that maintain internal targets established by the Board. This will also allow for the analysis of external liquidity targets set forth in the Authority's bond ordinance and coverage requirements.

Rate Structure Alternatives. The rate model spreadsheet will be developed in a dynamic manner such that Willdan and LCFWASA staff will be able to analyze "what-if" scenarios detailing the financial impacts under each scenario utilizing an iterative dashboard view. Baseline rate structures will be recommended as required to fund the water system, and consider annual inflationary, indexed adjustments to rates as needed to maintain the utility. The recommended rate structure alternatives, if requested, will potentially include base and uniform volumetric charges or blocked volumetric charges and will be developed to recover the projected revenues needed to fund utility operations, infrastructure/capital improvements. Furthermore the alternatives will establish reasonable recovery of costs from the Authority's existing customers, as well as comply with applicable regulations and policies. Any alternative rate structures will be based on common industry standards and will be consistent with LCFWASA's goals and objectives. Additionally, the benefits of any proposed rate modifications will be weighed against the financial impact to the Authority's wholesale customers.

Projected Operating Results Based on Proposed Rates. The proposed user rates and/or rate structures will be applied to the projected customer flows to estimate the revenues to be generated from the proposed rates for the Test Year and the subsequent years of the projection period. In addition, similar to the process described under the Revenue Requirements and Rate Determinants subheading, **the multi-year forecast** will identify annual adjustments in utility system revenues necessary to meet existing bond covenant requirements, prudent management practices, and sound capital financing considerations.

Typical Bill Comparison. Comparisons of typical utility bills under the existing and proposed rates will be developed to better demonstrate rate impacts on each wholesale customer. The graphs included herein are examples of the possible output to be provided to the Authority and in the report documents with water-only comparisons.

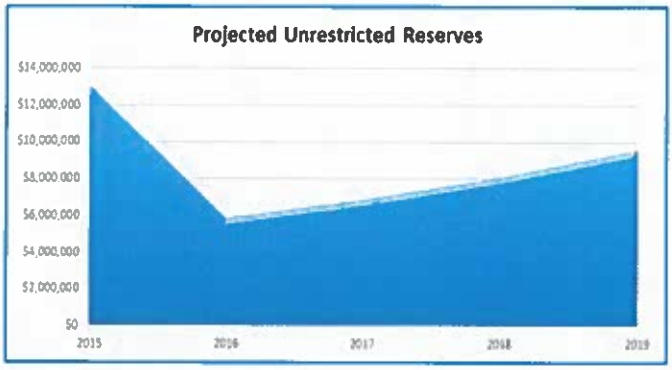




Neighboring Utility Comparison. A comparison will be prepared to assess the difference between the existing and proposed rates of the LCFWASA with those of other comparable municipal utility systems with a similar customer base and will be reflective of water systems only.

Capital Financing Analysis

Review Capital Improvement Program (CIP). The LCFWASA's existing utility system multi-year CIP will be reviewed in conjunction with conversations with LCFWASA staff. The objective of such a review is to gain an understanding of the types of projects scheduled; the timing associated with such projects, associated expenditure requirements and the sources of funding each project. The results of the financial plan will also help the LCFWASA to prioritize projects identified within the CIP.



Develop Capital Financing Plan. Based on the findings made during the CIP review and the previously described Projected Operating Results, a general financing plan will be developed to provide for the anticipated capital expenditure activities, including existing debt issuances, relative to the CIP. Such a financing plan will include consideration for the use of restricted and unrestricted funds, surplus operating reserves, system development fees, and future rate adjustments. The analysis will also develop a projection of reserve fund balances and levels of liquidity within those funds.

Rate and Capital Funding Model. The CIP will drive the future funding options and will directly impact rates. Therefore, the rate analysis will incorporate the CIP for high-level financial planning. The rate model will have the ability to run various CIP funding scenarios and quickly show the estimated impact on utility rates.

Task 2: Wholesale Water Rate Study

Willdan will conduct a detailed review of the existing wholesale rate and rate structure and if necessary, gather additional information from staff. The utility rate model developed during Task 1 will be utilized to calculate the wholesale water rate. The rate and/or rate structure will be based upon the cost-of-service principles and methodologies previously developed and agreed upon and will comply with the AWWA-approved Utility Basis of ratemaking. Rates will be forecasted over a 10- to 20-year period.

Reports and Deliverables

Preliminary Draft Report. Copies of the draft report will be presented to LCFWASA staff for review and comment. Contents of the report will include assumptions relied upon for the projection of customers and usage, revenue requirements, revenues, operating results, cost share methodologies, results of the allocated cost-of-service analyses and any proposed adjustments to the utility rates/rate structures. Limiting conditions affecting the analysis will also be identified to demonstrate that they do not materially affect or undermine the reliability of the conclusions reached. An electronic PDF copy and Microsoft Word version of the draft report will be provided to staff for review.

Final Report. Based on comments received from staff and other participants during the presentation of the Preliminary Draft Report, the Final Report will be revised to incorporate the agreed upon changes. Upon completion, an electronic PDF copy of the Final Rate Study Report will be provided to the LCFWASA. The final document and accompanying workpapers/exhibits will be prepared such that they are suitable for inclusion directly or by reference in budget reports, financial plans, bond documents or other Authority publications.

Rate Model Dashboard. The study will include the development of a spreadsheet model in Microsoft Excel and will be developed in such a way as to project cash flows over the multi-year projection period by allowing "what-if" scenarios by varying rates, target reserve fund balances, debt service coverage targets, operating expense and capital cost assumptions. The model will be provided to the LCFWASA and will have a user-friendly dashboard with interactive graphics depicting key performance indicators (i.e., debt coverages, days cash on hand, etc.) that automatically update as inputs or assumptions are changed. Furthermore, the Willdan Team will provide up to four (4) hours of virtual instruction to LCFWASA staff specific to the use of the utility rate model prepared in conjunction with this analysis.

Meetings & Presentations

Our proposal includes several meetings/web conferences as part of the rate study process. Such meetings will be scheduled based on the needs of staff and the LCFWASA Board of Directors. Specific meeting requirements will be developed following consultation with, and in concert with, LCFWASA staff.

Project Kick-Off Meeting. An initial kick-off meeting will be scheduled with LCFWASA staff at the start of the project to discuss project requirements, finalize project scheduling/milestones and reporting requirements, and receive overall project direction. This meeting will provide the opportunity to review current water rates and discuss rate structure issues with staff. The meeting will help ensure project objectives are clearly defined and understood by all parties and that the project stays on course and meets the Authority's established project deadlines and completion dates.

Project Progress Web Conferences. During the course of the project, and prior to meetings with the LCFWASA Board of Directors, team web conferences will be scheduled as necessary to present the progression of the analysis to staff in order to obtain input and feedback associated with model development, revenue and expenses projections, customer growth assumptions and any rate adjustments that may be presented. These web meetings will assist in the completion of rate design and guide the development of the draft report.

Draft Report Meeting. The first draft report results of the rate study will be presented to staff in order to offer the supporting rationale for the proposed rates and to address any revisions, questions and/or concerns raised by staff members prior to making a formal presentation of the proposed rates to the LCFWASA Board.

Public Hearing. The results of the study will be presented to the LCFWASA Board during a regular Board meeting, or Public Hearing, where the water rates are to be considered for adoption. Willdan team members will address any questions or concerns raised during the hearing prior to action being taken by the LCFWASA Board.

Task 3: System Development Fee Study

In developing system development fees, Willdan will employ generally accepted accounting, engineering, and planning methodologies. Such methodologies include buy-in, incremental cost or marginal cost, and combined cost. A brief description of each of these methods as identified in American Water Works Association Manual ("AWWA") M1 is described below.

- *Buy-in Method.* Based on the value of the existing system's capacity. Under this method, new development "buys" a proportionate share of capacity at the cost (value) of the existing facilities.
- *Incremental/Marginal Cost Method.* Based on the value or cost to expand the existing system's capacity. This method assigns to new development the incremental cost of future system expansion needed to serve new development.
- *Combined Cost Method.* Based on blended value of both the existing and expanded system capacity. This method uses a combination of the buy-in and incremental/marginal cost methods.

Each of these methods will be developed for consideration in calculating the fees. The steps anticipated to complete the LCFWASA's System Development Fee Study is outlined below. The proposed work plan is intended to equitably recover the historical and projected capital investments made by the LCFWASA in the major treatment, supply, transmission, distribution/collection and disposal infrastructure in compliance with House Bill 436, Section 1, Chapter 162A, Article 8.

Data Collection and Review

Willdan will assist in collecting the information required to perform the System Development Fee Study. Once received, Willdan will review the data for completeness to ensure it is sufficient for use in calculating the fee structures. The types of data requested may include, but not be limited to, the following:

- Detailed asset listing (type of asset, date in service, accumulated depreciation, etc.);
- Capital Improvement Plan ("CIP");
- Engineering documents describing existing and planned facilities (e.g., Master Plans); and
- Detailed amortization schedules for outstanding debt issued to fund existing facilities.

Identification of System Capacities

The available master planning and capital improvement information will be utilized to identify the existing and future supply and transmission capacities for the water system. Such information will be used to determine the existing and future levels of supply, treatment and transmission capacities for use in calculating the respective fees.

Buy-In-Analysis

Allocation of Existing Assets. Utilize detailed data of the existing utility system assets as provided by the LCFWASA in order to allocate the assets between major facility components of supply, treatment (if applicable), transmission and distribution. Identify which asset or portions of the asset that may have been funded through grants or contributed by developers (if applicable) as these amounts would be excluded as recoverable assets in the development of the fees.

Determination of Replacement Cost of Assets. The replacement cost of each asset line item will be determined using construction cost indices set forth in such publications as the Handy-Whitman Index or the Engineering News Record.

Determination of Replacement Cost Less Depreciation (RCLD). The depreciation amount for each asset line item will be deducted from the replacement cost for that line item. The total of the Replacement Cost Less Depreciation ("RCLD") value of all assets will be used as the basis to determine the Buy-In method's fees.

Determination of Applicable Credits and/or Financing Costs. Depending upon the funding and/or financing mechanisms used to pay for existing capital facilities, it may be appropriate to apply debt service credits. In addition to debt service, the analysis will consider credits for grants and other generally accepted valuation adjustments.

Incremental/Marginal Cost Analysis

Functional Allocation of CIP. The most current CIP will be reviewed and summarized, and the level of future growth/capacity related capital expenditures will be identified in order to determine the projected amount of growth-related capital expenditures to be incurred during the planning horizon. This task will involve the identification of planned capital project costs incurred as a result of customer growth and will include utilization of information provided in Master Plans or other engineering reports prepared for the utility (if available). The analysis will include costs of construction or expansion that are necessitated by and attributable to new development. The planned capital costs will be allocated between major facility components of supply, treatment, transmission and distribution.

Determination of Applicable Credits. The analysis will include a credit against the projected aggregate cost of utility capital improvements. The credit will be determined based upon generally accepted calculations and will reflect a deduction of outstanding debt principal.

Calculation of Capacity Fees

Buy-In Method. The asset values, as adjusted for applicable credits, and capacity information will be utilized to develop fees that equitably recover the capacity-related cost of existing utility facilities.

Incremental/Marginal Cost Method. The applicable growth-related project costs allocated between treatment, supply and distribution related, and the capacity added by those projects will be utilized to develop fees that equitably recover the cost of future growth-related projects.

Combined Cost Method. The buy-in and incremental/marginal cost methods will be combined to calculate the applicable fees for each system. The calculation methodology will separate fees by major utility component (supply and transmission). The proposed fees will include an equivalency or conversion table for use in determining the fees applicable for various categories of demand.

Neighboring Utility Comparisons

A customer impact comparison will be prepared in order to assess the comparability of the proposed fees to those of other municipal utility systems in the same geographical region. The fees used for other systems will be the most current fees available.

Report Preparation/Supporting Analysis

Following completion of the analysis, Willdan will prepare a draft report that documents the methodologies, analyses, and assumptions applied in developing the proposed fees. The draft report will be provided to staff for review and comment. Any comments or revisions provided by staff, public officials or other decision makers will be incorporated into a near final report document, which will need to be posted on the Authority's website for public review and comment. Following the 45-day posting period, any comments will be considered, addressed and potentially be incorporated into a final report document. Upon completion, an electronic (PDF) copy of the final report will be provided to staff for their records.

Project Disclaimer

The Lower Cape Fear Water and Sewer Authority further represents, acknowledges, and agrees that:

(i.) The LCFWASA uses the services of one or more municipal advisors registered with the U.S. Securities and Exchange Commission ("SEC") to advise it in connection with municipal financial products and the issuance of municipal securities;

(ii.) The LCFWASA is not looking to Willdan to provide, and the LCFWASA shall not otherwise request or require Willdan to provide, any advice or recommendations with respect to municipal financial products or the issuance of municipal securities (including any advice or recommendations with respect to the structure, timing, terms, and other similar matters concerning such financial products or issues);

(iii.) The provisions of this proposal and the services to be provided hereunder as outlined in the scope of services are not intended (and shall not be construed) to constitute or include any municipal advisory services within the meaning of Section 15B of the U.S. Securities Exchange Act of 1934, as amended (the "Exchange Act"), and the rules and regulations adopted thereunder;

(iv.) For the avoidance of doubt and without limiting the foregoing, in connection with any revenue projections, cash-flow analyses, feasibility studies and/or other analyses Willdan may provide the LCFWASA with respect to financial, economic or other matters relating to a prospective, new or existing issuance of municipal securities of the LCFWASA, (A) any such projections, studies and analyses shall be based upon assumptions, opinions or views (including, without limitation, any assumptions related to revenue growth) established by the LCFWASA, in conjunction with such of its municipal, financial, legal and other advisers as it deems appropriate; and (B) under no circumstances shall Willdan be asked to provide, nor shall it provide, any advice or recommendations or subjective assumptions, opinions or views with respect to the actual or proposed structure, terms, timing, pricing or other similar matters with respect to any municipal financial products or municipal securities issuances, including any revisions or amendments thereto; and

(v.) Notwithstanding all of the foregoing, the LCFWASA recognizes that interpretive guidance regarding municipal advisory activities is currently quite limited and is likely to evolve and develop during the term of the potential engagement and, to that end, the LCFWASA will work with Willdan throughout the term of the potential Agreement to ensure that the Agreement and the services to be provided by Willdan hereunder, is interpreted by the parties, and if necessary amended, in a manner intended to ensure that the LCFWASA is not asking Willdan to provide, and Willdan is not in fact providing or required to provide, any municipal advisory services.

Quality Assurance/Quality Control

Our quality control program is incorporated as a required element of Willdan's day-to-day activities. There are three levels of reviews incorporated for our deliverables:

- Peer review;
- Project manager review; and
- Final quality assurance manager review.

Peer reviews involve one analyst reviewing the work of another, while project manager reviews are conducted prior to delivery to the quality assurance manager. The quality assurance manager then performs a final review. This assures that our final product has been thoroughly evaluated for potential errors; thus, providing quality client deliverables, and high levels of integrity and outcomes.

The primary mission of our quality control plan is to provide staff with the technical and managerial expertise to plan, organize, implement, and control the overall quality effort, thereby ensuring the completion of a quality project within the time and budget established.

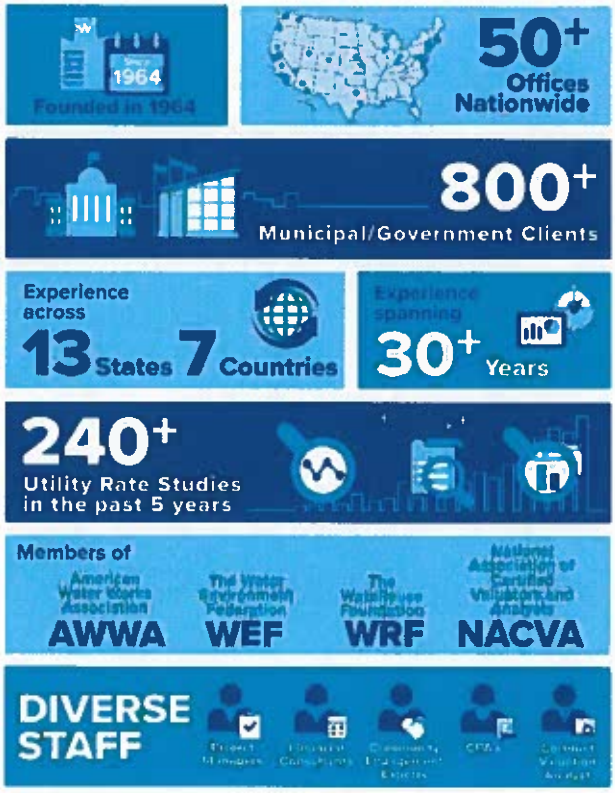
Relevant Firm Experience

Firm Description

Willdan Financial Services is an operating division within Willdan Group, Inc. (WGI), which was founded in 1964 as an engineering firm working with local governments. Today, WGI is a publicly traded company (NASDAQ: WLDN). WGI, through its subsidiaries, provides professional technical and consulting services that ensure the quality, value and security of our nation's infrastructure, systems, facilities, and environment. The firm has pursued two primary service objectives since its inception—ensuring the success of its clients and enhancing its surrounding communities.

A financially stable company, Willdan has over 1,400 employees working in over 25 states across the U.S. Our employees include a number of nationally recognized subject matter experts for all areas related to the broadest definition of connected communities — ***which includes a team who will be committed to contribute their expertise throughout the duration of the LCFWASA's Water Rate Study engagement.***

Willdan has solved economic, engineering and energy challenges for local communities and delivered industry-leading solutions that have transformed government and commerce. Today, we are leading our clients into a future accelerated by change in resources, infrastructure, technology, regulations, and industry trends.



Willdan Financial Services

Established on June 24, 1988, Willdan Financial Services, is a national firm and one of the largest public sector economic and financial analysis consulting firms in the United States. Since that time, we have helped over 800 public agencies successfully address a broad range of infrastructure challenges.

Our staff of over 70 full-time employees support our clients by conducting year-round workshops and on-site training to assist them in keeping current with the latest developments in our areas of expertise. Willdan assists local public agencies by providing the services listed below.

Willdan Financial Services
Professional Services

- Development impact fee establishment and analysis
- Utility rate and cost of service studies
- Fiscal and economic impact analysis
- Real estate economic analysis
- Feasibility studies
- Municipal advisory services
- Arbitrage rebate and continuing disclosure services
- Economic development strategic plans
- Housing development and implementation strategies
- Grant administration
- User fee studies
- Cost allocation plans
- District administration services
- Property tax audits
- Tax increment finance district formation and amendment
- Debt issuance support
- Long-term financial plans and cash flow modeling

Diversity, Equity, and Inclusion

Willdan is committed to cultivating internal and external workplaces that reflect a range of unique perspectives and offer opportunities for all. Our community and teams are made up of bright, talented, and driven people from all different backgrounds.

At Willdan, team members, applicants, and subconsultants are considered for all positions and projects without regard to age, ancestry, color, creed, disability, marital status, medical condition, national origin, citizenship, race, religion, sex, sexual orientation, gender, gender identity, gender expression, or any other legally protected status. WGI has a Diversity Equity & Inclusion Working Group with the following initiatives.

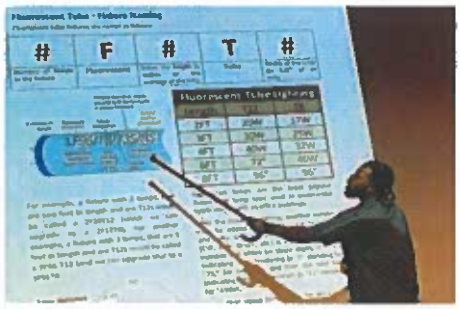
Willdan strives to utilize local, small, and DBE/MBE/WBE firms to provide services. Willdan is committed to meeting firm/client goals for participation by Disabled Veteran Business Enterprise (DVBE), Disadvantaged Business Enterprise (DBE), Minority Business Enterprise (MBE), and Women Business Enterprise (WBE) firms. Willdan's internal policy includes the establishment of ongoing relationships with these firms, utilizing qualified subconsultants for meaningful participation, and actively seeking to broaden our resources. We have utilized the services of hundreds of firms over more than 58 years in business.

Urban Land Institute (ULI) Diversity Training

Willdan believes that diversity, equity, and inclusion (DEI) are the pillars of sustainable, thriving communities. To help train the next generation of public finance advisors, Willdan supports staff engagement with the Urban Land Institute's Diversity, Equity & Inclusion Initiative. Willdan Managing Principal Molly McKay serves as a Vice-Chair of ULI's DEI Initiative and has participated in quarterly ULI DEI training forums. Ms. McKay is also currently serving on a six-person working group tasked with drafting Best Practices in DEI Member Recruitment for ULI Global. Willdan brings this equitable community outreach perspective to the municipalities we serve, and it is imbedded in our approach to public engagement.

Supplier Diversity

Con Edison recognized Willdan with its Supplier Diversity Award for its support of small disadvantaged subconsultants.



Training to Support the Community

As a corporate sponsor of Engineers Without Borders City College of New York, Willdan staff instruct and mentor students to provide no-cost energy audits for a Harlem health non-profit. Instructor shown is Willdan's Clayton Gregory.

Utility Rate Experience

Willdan's professional staff has provided professional consulting services, including financial planning; rate and cost-of-service studies; alternative and feasibility analyses; and operational and management studies for water, reclaimed water, sewer, solid waste, and stormwater utility clients across the United States for over two decades. Additionally, Willdan staff are involved with the development of the rate-setting methodologies set forth in the American Water Works Association (AWWA) M1 manual "Principles of Water Rates, Fees and Charges," and the AWWA M29 manual, "Water Utility Capital Financing," as well as serve on the AWWA Rates Committee. Willdan is nationally recognized for its expertise with staff frequently being called upon to speak or instruct on utility financial matters, as subject matter experts, including the AWWA Utility Management conference.

Willdan staff is experienced in a broad range of utility planning services; and therefore, understand the importance of an approach that integrates elements of utility planning, engineering, and finance. Willdan team members possess considerable experience specific to utility rate and cost-of-service studies and have performed these services for hundreds of utilities throughout the country. Our team includes staff with public sector experience spanning 30 years, and staff on the forefront of utility ratemaking and rate-modeling. In addition, team members understand the financial, operational, and political realities faced by governmental staff and management; we craft solutions, which are sensitive to this.

Our expertise spans across the following utility financial planning services.

Willdan Financial Services Experience and Expertise	
▪ Retail and wholesale rate studies	▪ Interactive rate model development with dashboards showing Key Performance Indicators ("KPIs")
▪ Revenue sufficiency analyses	▪ Connection fee / system development charge studies
▪ Utility management and policy assistance	▪ CIP financial scenario planning
▪ Rate ordinance drafting	▪ Billing system validation / rate testing
▪ Miscellaneous fee and charge studies	▪ Bond feasibility reports
▪ Renewal and replacement sufficiency analyses	▪ Valuation / divestiture studies
▪ Comprehensive alternatives analyses	▪ Life cycle costs analyses
▪ Capital project funding studies	

Willdan will work with LCFWASA to identify, and prioritize operational and fiscal objectives, and match these to specific rate attributes; and use this information throughout the engagement to develop a comprehensive financial plan and design utility rates that effectively meet these goals. The culmination of our analyses will be rate policies that guide the rate setting process, and a financial management plan that develops projected system operating results for the utility for the forecast period. Willdan will employ its proven interactive approach, coupled with advanced financial modeling techniques to design rates and a financial plan that meet established goals and performance criteria. These modeling techniques serve as a powerful decision-making tool and provide LCFWASA with genuine business solutions and recommendations as to the strategic direction of its water utility.

During rate and financial planning projects we employ tools and techniques, which focus on consensus building among stakeholders to ensure the team understands the future financial implications of current management decisions. Our extensive project expertise is bolstered by our unique interactive financial planning process and model.

Client References

Included herein are representative project summaries demonstrating Willdan's experience and qualifications specific to utility rate studies. These projects highlight the breadth and depth of our team experience and knowledge.

Johnston County, NC – Water and Sewer Rate Study and Updates; System Development Fee Study and Updates

Willdan project team members, Mr. Rick McClung along with Mr. Michael Cronan have been providing utility rate, financial and capital planning services to Johnston County since 2016. Services provided have included a comprehensive Water and Wastewater Rate Study followed by subsequent annual updates through 2021.

Principal Consultant Rick McClung also developed a Bond Feasibility Report in support of the County's first ever revenue bond issuance, which closed in August 2021. He also developed a System Development Fee Study in 2017, with subsequent updates in 2018 and 2019 needed to address the recovery of ever-increasing capital project costs over the County's 20-year planning horizon due to the rapid growth. Mr. McClung is currently updating the rate study, System Development Fee ("SDF") study and bond feasibility report for the County's upcoming bond issuance.

Client Contact: Chandra Farmer, PE, Utilities Director
309 East Market Street, Smithfield, NC 27577
Tel #: (919) 989-5075 | Email: Chandra.farmer@johnstonnc.com

Team Members: R. McClung, Project Manager; D. Parker, Project Support; J. McGarvey, Technical Advisor & Quality Control Manager; M. Cronan, Analytical Support

Town of Carolina Beach, NC – Utility Capital Planning Model

The Town owns and operates public water supply, treatment, transmission and distribution facilities, and wastewater collection, transmission, treatment and disposal facilities providing utility services to both residential and nonresidential customers within the Town limits, as well as certain surrounding areas, both incorporated and unincorporated. Willdan was originally requested to perform a water and wastewater rate study for the Town that included restructuring the rates to eliminate a usage allowance that was included in the base charge. Willdan subsequently completed a System Development Fee study to comply with North Carolina House Bill 436 and most recently developed a ten-year capital planning model for the water, wastewater and stormwater utilities.

Client Contact: Debbie Hall, Finance Director
1121 North Lake Park Boulevard, Carolina Beach, NC 28148
Tel #: (910) 458-5495 | Email: Debbie.hall@carolinabech.org

Team Members: D. Parker, Project Manager; J. McGarvey, Technical Advisor & Quality Control Manager; M. Cronan, Analytical Support

City of High Point, NC – Bond and Utility System Financial Services

Members of the project team originally began working with High Point in 2000. During the 20-plus year relationship, team members have assisted the City with many different financial matters related to the water, wastewater and electric utility systems. Most recently, Willdan has prepared bond feasibility reports, updated the Electric Fund financial model and conducted an electric rate consolidation analysis. Revenue bond feasibility reports were prepared for the Combined Enterprise Systems Revenue Bonds, Series 2018 and Series 2022, documenting historical and project operating results. Willdan was also retained to prepare an analysis and restructuring of electric rates, as well as updated the financing plan. The electric rate tariff consolidation analysis resulted in the City reducing the number of tariffs from 38 to 6.

Client Contact: Eric Olmedo, Assistant City Manager
211 South Hamilton Street, High Point, NC 27261
Tel #: (336) 883-3018 | Email: eric.olmedo@highpointnc.gov

Team Members: J. McGarvey, Principal-in-Charge/Project Manager; R. McClung, Project Support; M. Cronan, Analytical Support

Lancaster County Water & Sewer District, SC – Water and Wastewater Rate Study and Capacity Fee Study

Lancaster County Water & Sewer District ("the District") is located in Lancaster, South Carolina which is just south of the City of Charlotte, North Carolina. The District is located in one of the fastest growing communities in the Charlotte region and has faced many challenges with the pace of the growth.

The District currently provides water and wastewater retail service to its customers, as well as wholesale water service to the City of Lancaster, Town of Heath Springs, Town of Kershaw and Carolina Water Service.

It had been many years since the District completed a comprehensive Water and Wastewater Rate Study, which led to the decision to commission Willdan in late 2015. A comprehensive, dynamic model was developed and utilized to assist the District with its long-term capital, rate and financial planning. The model takes into consideration the cost-of-service, the District's capital needs, the impact on rates and a proper rate design based on American Water Works Association ("AWWA") standards.

Under the guidance of Principal Consultant Daryll Parker the rate study was presented to the District Board during the Commission's annual retreat. Mr. Parker continues to provide utility rate, financial and capital planning services on an as-needed basis. Willdan was again commissioned in January 2022 to perform a Water and Wastewater Rate Study, and a review and update of the District's Capacity Fees.

Client Contact: Brad Bucy, PE, Assistant Manager
1400 Pageland Highway, Lancaster, SC 29721
Tel #: (803) 416-5523 | Email: bbucy@lcwasd.org

Team Members: D. Parker, Project Manager; J. McGarvey, Technical Advisor & Quality Control Manager; M. Cronan, Analytical Support

City of Brentwood, TN – Water & Wastewater Rate Study

Willdan was retained by the City of Brentwood (TN) to provide professional services associated with a water and wastewater utility cost-of-service analysis and rate study. Brentwood is located in close proximity to Nashville. From a utility standpoint, the City is in an enviable position in that it is in a high-growth area and a large portion of the customer base has well above average income levels. As such, the water and wastewater bills for these customers represent such a low percentage of their disposable income that there is very little pushback when rate adjustments are needed. As part of the 2015 study, Willdan assisted Brentwood in developing an inclining block rate structure for its water system. The new rate structure was implemented with no negative feedback. Faced with continued growth and increasing costs, in 2020, Brentwood requested for Willdan to perform an updated rate study for the utility system. The new study was completed in 2021.

Client Contact: Chris Milton, Water & Sewer Director
1750 General George Patton Drive, Brentwood, TN 37027
Tel #: (615) 371-0080 | Email: chris.milton@brentwoodtn.gov

Team Members: D. Parker, Project Manager; J. McGarvey, Technical Advisor & Quality Control Manager

City of Jefferson City, GA – Water and Wastewater Rate Study

The City of Jefferson City is located on the I-85 corridor between Atlanta and Greenville, South Carolina, and is also close to Athens. As a result of its location, the City has experienced significant growth in recent years, and is expecting more in the future. Such growth has put a strain on the utility system causing the need to expand capacity. The City needed a utility rate study to develop a rate and funding plan for its Capital Improvement Plan and increasing operating costs. Willdan worked with the City Manager, Finance Director and other staff members to develop the capital funding plan and accompanying rate path to meet the targeted financial metrics while mitigating the impact on customers.

Client Contact: Amie Pirkle, Finance Director
147 Athens Street, Jefferson, GA 30549
Tel #: (706) 367-5121 | Email: apirkle@cityofjeffersonga.com

Team Members: D. Parker, Project Manager; J. McGarvey, Technical Advisor & Quality Control Manager

City of Oviedo, FL – Comprehensive Utility Rate Analysis

The City of Oviedo, Florida is adjacent to the City of Orlando, in Seminole County. It has maintained a steady growth over the years and has grown from a sleepy little citrus town to a thriving and vibrant community. The City of Oviedo's Utilities Division is regional and provides service to approximately 30,000 residents in Oviedo and Seminole County. The City provides water, wastewater, reclaimed water and stormwater service to residential, multi-family and commercial establishments. The Utilities Division also provides reuse (irrigation quality) water to the local golf course and residential and commercial reclaimed zones throughout the City. Willdan was selected in 2013 to provide a variety of utility rate and financial consulting services.

Willdan Vice President, Mr. Jeff McGarvey, is the Project Lead for the City's studies. The City sought a consulting firm to provide the following services on an as-needed basis which included rates and charges; financial policies and practices; capital program activity and funding sources; and debt issuance support.

Mr. McGarvey and Ms. Hollis continue to work with the City on a variety of issues related to water, wastewater, reclaimed water and stormwater systems. In addition, they have had the privilege of working with the City for the last several years on a broad range of other projects that have included, among other things:

- Development of assessment methodologies for street lighting and fire services;
- Solid waste contractual issues;
- Utility billing system audit;
- Establishment of a cost allocation plan; and
- Fiscal impact analysis for proposed new development.

Client Contact: Jerry Boop, Finance Director
400 Alexandria Boulevard, Oviedo, FL 32765
Tel # (407) 971-5544 | Email: jboop@cityofoviedo.net

Team Members: J. McGarvey, Principal-in-Charge/Project Manager; T. Hollis, Project Support; M. Cronan, Analytical Support

Staff Experience

Our management and supervision philosophy for the project team is very simple: staff every position in sufficient numbers with experienced personnel to deliver a superior product and convey results to decision makers in meetings, on time and on budget. With that philosophy in mind, we have selected experienced professionals for the CFPUA's engagement. We are confident that our team possesses the depth of experience that will successfully fulfill the desired work performance.

The project team's key resources are comprised of the individuals identified below.

- Jeffrey McGarvey, Managing Principal; Principal-in-Charge & Technical and Policy Advisor
- Rick McClung, Principal Consultant; Senior Project Manager
- Daryll Parker, Principal Consultant; Senior Technical Advisor
- Tara Hollis, CPA, CVA, MBA, Principal Consultant; Project Support
- Michael Cronan, Senior Analyst; Analytical Support

Resumes

Provided on the pages that follow are resumes for each member of the Willdan team, outlining their professional credentials and experience, which will be drawn upon to complete the LCFWASA's proposed engagement.

Jeffrey McGarvey

Principal-in-Charge & Technical and Policy Advisor

Mr. Jeffrey McGarvey is a Managing Principal in Willdan's Financial Consulting Services group, and for more than 31 years has provided professional consulting services to municipal water, wastewater, solid waste, electric, and natural gas utilities throughout the country. He possesses a broad range of municipal utility system experience, including special expertise in complex alternatives analyses; utility rate analyses; utility valuations and acquisitions; regionalization and consolidation studies; debt issuance support; capital financing analyses; strategic planning; rate and regulatory assistance; and instituting financial mechanisms to provide the sufficient recovery of operating and capital costs.

Rate and Cost of Service Studies – Mr. McGarvey has extensive experience specific to utility rates and cost of service studies for water, wastewater, solid waste, stormwater, electric and natural gas systems. This experience generally relates to performing budget analyses, customer and usage analyses, development of revenue requirements, cost of service allocations and sensitivity analyses related to the implementation of rate structures designed to promote desired usage characteristics.

Revenue Bonds, Feasibility Analyses and Capital Funding – Mr. McGarvey has been involved in the preparation of capital financing plans and feasibility studies associated *with the issuance of over $1 billion in municipal revenue bonds and bond anticipation notes (BANs).* The funding proceeds have been utilized for such purposes as utility acquisitions, expansion of facilities and various other capital improvement needs. In addition, Mr. McGarvey has developed capital funding strategies utilizing various combinations of bonds, bank loans, government assistance loans (i.e., State Revolving Funds) and grants. As a financial feasibility consultant, Mr. McGarvey has made numerous presentations on behalf of clients to various bond insurers and rating agencies (Moody's, Standard & Poor's, and Fitch).

Business and Strategic Planning – Mr. McGarvey has experience developing complex financial and economic evaluation models for water, wastewater, solid waste, electric and natural gas systems throughout the country. Such experience generally relates to the development of business and strategic plans as well as performing structured alternatives analyses and sensitivity analyses related to the evaluation and implementation of system modifications such as service and operational changes, as well as planning for customer growth and capital expenditures.

Acquisitions and Valuation Analyses – Mr. McGarvey has been involved in numerous acquisitions and valuation analyses for utility systems. Acquisition projects generally involve financial due diligence, valuations, negotiations and financing activities associated with such transactions. He has performed valuation analyses utilizing various generally accepted methodologies including cost approach (value of the cash flows generated by the system), original cost less depreciation (book value), comparable sales (actual transactions for other systems), replacement cost new less depreciation and reproduction cost new less depreciation (value of system assets).

Education

Bachelor of Science, Finance, University of Central Florida

Areas of Expertise

Alternatives Analysis

Strategic Planning

Rate Studies

Cost of Service Studies

Revenue Bonds

Feasibility Analyses

Capital Funding

Acquisitions

Valuation Analyses

Affiliations

American Water Works Association

The Water Environment Federation

The Utility Management Conference

The WateReuse Foundation

31 Years' Experience

Rick McClung, MBA

Senior Project Manager

Mr. Rick McClung is a Principal Consultant and has more than 35 years of water and wastewater utility rate, financial, economic and capital planning experience. He has provided consulting services since 1987 and has been with Willdan for more than 8 years. His expertise includes rate and cost-of-service studies, wholesale rates, system development fee studies, capital planning, debt issuance support, and regionalization studies. *Mr. McClung will serve in the role of Senior Project Manager and share his knowledge specific to the LCFWASA with other members of the Willdan team.*

Education

Master of Business Administration, University of Central Florida

Bachelor of Science, Business Administration, University of Central Florida

Areas of Expertise

Rate & Cost-of-Service Studies

Rate Design Alternatives

Dynamic "Dashboard-Driven" Computer Modeling

System Development Fee Studies

Revenue Bond Feasibility Reports

Capital & Financial Planning

Wholesale Rates

Acquisitions & Mergers

Utility Valuations

Long Term Strategic Planning

35 Years' Experience

Rate & Cost-of-Service Studies – Mr. McClung has extensive experience with water and wastewater rate and cost-of-service studies, having prosecuted *more than 195 studies.* Such studies generally require the development of revenue requirements, performing budget analyses, customer and usage analyses, cost-of-service allocations, financing plan for the capital improvement program, development of user rates to meet client goals and objectives, and the development of a dynamic "dashboard driven" model. In addition, he has an extensive working knowledge of governmental budgeting processes, funding alternatives, accounting procedures, financial reporting requirements, enterprise operations and administrative relations. It should also be noted that Mr. McClung has *prosecuted over 60 system development fee studies* throughout the course of his career.

Dynamic "Dashboard Driven" Modeling – Mr. McClung has extensive experience developing "custom" Microsoft Excel rate models that are user friendly, apply easy navigational aids and include a dynamic dashboard tool that supports unlimited "what-if" analyses. The dashboard tool is especially useful in explaining rate options to elected officials, utility advisory boards and members of the public.

In addition, the dashboard has interactive graphics, the ability to produce a series of reports as inputs are changed, and the ability to produce financial measures and ratios. It also includes the ability to show alternative pricing structures (uniform versus tiered rates), scenarios/sensitivity analysis post-study, and fiscal budget submissions including rate proposals. He has developed procedures and supervised preparation of dynamic and interactive computer models for utility rate studies, financial benchmarking, data retrieval and analysis, feasibility analyses, system expansion programs, capital acquisition alternatives, and wholesale capacity transactions.

Revenue Bonds, Feasibility Analyses and Capital Funding – Mr. McClung has been involved in the preparation of Financial Feasibility Reports (for inclusion in the Official Statement offering document) *in support of more than $1.5 billion of long-term indebtedness.* He has also made presentations to local government commissions, rating agencies and bond insurers (i.e., Moody's, Standard & Poor's, Fitch, Ambac, FSA, etc.).

Project Experience – Listed below is a sampling of Mr. McClung's relevant project experience within North and South Carolina.

- Town of Mooresville, NC
- City of Gastonia, NC
- Cape Fear PUA, NC
- LCFWASA, NC
- Union County, NC
- City of Abbeville, SC
- City of Clinton, SC
- City of Greensboro, NC
- Johnston County, NC
- City of Newberry, SC
- Woodruff-Roebuck Water District, SC
- City of Salisbury, NC
- City of Clemson, SC
- Richland County, SC
- City of Kannapolis, NC
- City of Monroe, NC
- City of Lexington, NC
- City of High Point, NC

Daryll Parker, MBA

Senior Technical Advisor

Mr. Daryll Parker is a Principal Consultant with Willdan Financial Services and has more than 28 years of water and wastewater utility rate, financial, economic, and capital planning experience. He resides in the firm's Orlando, Florida office and his expertise includes rate and cost-of-service studies, wholesale rates, system development fee studies, capital planning, debt issuance support, and regionalization studies.

Rate & Cost-of-Service Studies – Mr. Parker has extensive experience with water and wastewater rate and cost-of-service studies, having prosecuted *more than 175 studies.* Such studies generally require the development of revenue requirements, performing budget analyses, customer and usage analyses, cost-of-service allocations, financing plan for the capital improvement program, development of user rates to meet client goals and objectives, and the development of a dynamic "dashboard driven" model. It should be noted that Mr. Parker has *prosecuted over 80 system development fee studies* throughout the course of his career.

Management Consulting – Mr. Parker has been involved with many different facets of management consulting for water and wastewater utility systems including strategic planning, assisting with rate and regulatory matters, analyzing capital funding alternatives and instituting financial mechanisms to provide for sufficient and equitable recovery of operating and capital costs.

Dynamic "Dashboard Driven" Modeling – Mr. Parker has extensive experience developing "custom" Microsoft Excel rate models that are user-friendly, apply easy navigational aids and include a dynamic dashboard tool that supports unlimited "what-if" analyses. Separate dashboard functionality is typically developed for each water and wastewater system, as well as for a combined enterprise system (if applicable). The dashboard tool is especially useful in explaining rate options to elected officials, utility advisory boards and members of the public. In addition, the dashboard has interactive graphics, the ability to produce a series of reports as inputs are changed, and the ability to produce financial measures and ratios. It also includes the ability to show alternative pricing structures (uniform versus tiered rates), scenarios/sensitivity analysis post-study, and fiscal budget submissions including rate proposals.

Revenue Bonds, Feasibility Analyses and Capital Funding – Mr. Parker has been involved in the preparation of Financial Feasibility Reports (for inclusion in the Official Statement offering document) *in support of more than $1 billion of long-term indebtedness.* He has also made presentations to local government commissions, rating agencies and bond insurers (i.e., Moody's, Standard & Poor's, Fitch, Ambac, FSA, etc.).

Project Experience – Listed below is a sampling of Mr. Parker's relevant project experience within North and South Carolina.

- Town of Elon, NC
- Town of Harrisburg, NC
- Summerville CPW, SC
- City of Thomasville, NC
- City of Lowell, NC
- City of Columbia, SC
- LCFWASA, NC
- GMD-Greenwood, SC
- Fuquay-Varina, NC
- Carolina Beach, NC
- Lancaster Co. WSD, SC
- SJWD Water District, SC
- City of Aiken, SC
- City of Florence, SC
- Berkeley County, SC
- James Island PSD, SC
- Town of Fort Mill, SC
- City of Goose Creek, SC
- Hilton Head PSD, NC

Education

Master of Business Administration, University of Florida

Bachelor of Science, Business Administration, University of Florida

Areas of Expertise

Acquisitions & Mergers

Capital & Financial Planning

Rate & Cost of Service Studies

Rate Design

Revenue Bond Feasibility Reports

Presentations / Training

"Long Term Capital & Financial Planning for Public Utility Systems," EUCI Training Course

"Utility Rate Studies & Rate Surveys," presented at the South Carolina Utility Billing Association Annual Meeting

"Getting Ready for Wall Street," presented at the South Carolina Environmental Conference

"The Reclaimed Water Pricing Paradox," presented at the North Carolina AWWA/WEA Water Reuse Seminar

28 Years' Experience

Tara L. Hollis, CPA, CVA, MBA

Project Support

Ms. Tara Hollis is a Principal Consultant with Willdan Financial Services and has more than 23 years of experience. She has provided consulting services throughout the southeast and across the country. Ms. Hollis has provided utility rate, financial, economic and capital planning services for water, wastewater, stormwater, reclaimed water, solid waste and electric utility systems. She specializes in rate and cost-of-service studies, capital planning, feasibility and financial reports, debt structuring analyses for the issuance of utility indebtedness, and valuation studies for mergers or acquisitions.

Rate & Cost-of-Service Studies – Ms. Hollis has extensive experience in utility rates and cost-of-service studies, having *prosecuted more than 140 studies.* Such experience generally relates to performing budget analyses, customer and usage analyses, development of revenue requirements, cost-of-service allocations and sensitivity analyses related to the implementation of rate structures designed to promote desired usage characteristics. It should also be noted that Ms. Hollis has *prosecuted over 40 system development fee studies* throughout the course of her career.

Revenue Bonds, Feasibility Analyses and Capital Funding – Ms. Hollis has been involved in the preparation of bond resolutions, Official Statement Financial Feasibility Reports, certificates of compliance, additional bonds test certificates, and other related documents *in support of $1.5 billion of long-term indebtedness.* The funding proceeds have been utilized for such purposes as utility acquisitions, expansion of facilities and various other capital improvement needs. In addition, she has developed capital funding strategies utilizing various combinations of bonds, bank loans, government assistance loans (i.e., State Revolving Funds) and grants. She also has extensive experience related to reviewing and analyzing compliance with bond covenant requirements and contractual obligations.

Utility System Valuations – Ms. Hollis has conducted *over 150 valuation studies* using various techniques including the cost approach, income approach, and comparable sales approach for water, wastewater, and electric utility systems. She has developed detailed financial forecasts and cash flow models to be used in utility acquisition assistance including contract negotiations, transitional, transactional, and financial feasibility analysis. Additionally, Ms. Hollis is a Certified Valuation Analyst, designated from the National Association of Certified Valuators and Analysts.

Project Experience

City of Greensboro, NC – Water and Wastewater System Development Fee Study: Ms. Hollis served as lead consultant working with the City to update its water and wastewater system development fees. As part of this study, she performed a replacement cost analysis to determine the costs of the existing capital facilities. She also worked with the City to identify future capital projects that should be included in the development fee analysis. These updated costs were allocated to the system development fees per ERC based on the level of service provisions identified in the City's utility code. The final recommendations were presented at a City Council meeting.

Bay Laurel Center Community Development District (Ocala, FL) – Water, Wastewater, Reclaimed Water Miscellaneous Charges and AFPI Capacity Charges Rate Study: The main objectives of this study were to 1) develop rates and fees that would further promote water resource conservation and continue to provide revenue sufficiency; 2) modify reclaimed water rates; and 3) review, update, and recommend a comprehensive list of miscellaneous charges.

Education

Master of Business Administration, University of Central Florida

Bachelor of Science, Business Administration, University of Central Florida

Certifications

C.P.A. Florida, No. AC-0031100

Certified Valuation Analyst

Areas of Expertise

Rate Studies

Revenue Bonds

Capital & Financial Planning

System Development Fee Studies

Acquisitions & Mergers

Utility Valuations

Expert Witness Testimony

Utility Optimization Services

Presentations

"Long Term Capital & Financial Planning for Public Utility Systems," EUCI Training Course

"Financial Forces Impacting Utility Systems," Growth and Infrastructure Consortium Conference in Florida

"Financial Sustainability as a Basis for Utility Management," South Carolina Rural Water Association Conference

"Financial Forces Impacting Small Utility Systems," AWWA Section Conference in Indiana

23 Years' Experience

Michael Cronan

Analytical Support

Mr. Michael Cronan is a senior analyst within Willdan's Financial Consulting Services group. His primary function is to support principal consultants with utility rate studies and other financial analyses. He specializes in Microsoft Excel capabilities and has performed dynamic analyses for a variety of entities, including cities, counties, public service districts and public utilities.

Education
Bachelor of Science, Business Administration, University of Central Florida

Areas of Expertise
Utility Rate Studies

Impact/Capacity Fee Studies

User Fee Studies

Financial Forecast Modeling

Dashboard Development

5 Years' Experience

Project Experience

City of Gastonia, NC – Utility Rate and System Development Fee Study: Mr. Cronan is serving as the financial analyst for the City's water and wastewater rate study, revenue bond financial feasibility, and system development fee study.

Gainesville Regional Utilities; Gainesville, FL – Combined Utility Rate Project: Mr. Cronan assisted senior project staff on Willdan's combined utility rate project conducted for Gainesville Regional Utilities (GRU), which included a comprehensive revenue requirement, cost of service analysis, and rate design for their electric, water, wastewater, and natural gas utility systems.

City of Oviedo, FL – Utility System and General Financial Services: Mr. Cronan provides analytical support to project team members serving the City's on-call engagements specific to Utility System and Financial Services.

City and County of Denver, CO – Sanitary Sewer and Storm Drainage Benchmarking and Storm Drainage Impact Fee Study: Served as the lead analyst on a benchmarking study to review and compare the City's current rate structures to those of other front range and national utilities. The objective of the study was to identify potential areas for refinement to the City's current rate structures. Mr. Cronan also served as lead analyst for developing and recommending first time storm drainage impact fees for the City.

McKinleyville Community Services District, CA – Water and Sewer Utility Rate Study: Willdan was retained by the McKinleyville CSD to update the financial models, develop water and sewer rates and assist with the State-mandated noticing and balloting process. Mr. Cronan provided analytical support to the project manager and principal consultant.

City of Richmond, CA – Wastewater Rate Study: Mr. Cronan served as the project analyst and provided support for the City's rate study. He gathered and verified data for the project manager and lead project consultant and played a significant role in the development of the customer database and financial model.

City of Lakeport, CA – Water and Sewer Rate Study: Provided analytical support to the senior project team members as the project analyst for the City's ongoing utility rate study.

City of Twentynine Palms, CA – Sewer Treatment Facility Fair Share and Sewer Rate Analysis: Mr. Cronan provided analytical support in the development of the model to support to the project's senior team on the City of Twentynine Palms' sewer treatment facility fair share analysis. This study also included a sewer rate study, specific to the new treatment plant and its customers.

Approach to Project Management

Knowledge of Local Conditions

Willdan has provided financial consulting services to LCFWASA from 2007 to 2014 and for other municipalities in surrounding areas and throughout North Carolina since the early 1990s. Willdan is thoroughly familiar with the Authority's financial reporting requirements for the water utility fund. Additionally, Willdan believes this level of familiarity will allow us to provide the work requested more economically and in a timely manner. Willdan is well positioned to successfully meet the LCFWASA's requested deadlines.

Other reasons why we believe that we are the right choice for the LCFWASA:

- Project team members that have worked together in the Carolina's since the early 1990s;
- Project team members that have provided over 200+ water and sewer rate and cost of service projects in North Carolina;
- Partnership approach with the LCFWASA;
- Fixed-fee pricing which includes all labor billings and expenses (unless additional services are requested by the LCFWASA);
- Project team that stays at the forefront of any legislative changes as it pertains to System Development Fees in North Carolina;
- Communication process where project webinars and conference calls will be scheduled at each project milestone; and
- Quality assurance/quality control program based on Willdan's philosophy of communication, relationships, and professional service.

Project Management

At Willdan, we utilize a project management process/approach that ensures projects are completed on time, within budget and most importantly yield results that match our clients' expectations. We will document discussions leading to important policy decisions and/or the choice of critical assumptions used in constructing the analysis. Following key stakeholder discussions, a call will be scheduled to summarize findings and direction with LCFWASA staff, to make certain both parties agree with stated objectives, and that feedback is incorporated as appropriate.

Through the process of providing regular updates and conducting project status conference calls, potential issues will be highlighted, discussed, and resolved. Any deviances from the project timeline will be identified and plans will be developed for course corrections. If necessary, changes in approach or strategy will be discussed with staff to meet the needs of LCFWASA. In doing this, we will ensure the project stays on track and is delivered on time.

Project Management				
Define the Project	Plan the Project	Manage the Project	Review the Project	Communicate the Project
▪ Identify project scope, set objectives, list potential constraints, document assumptions. ▪ Define a course of action and develop an effective communication plan. ▪ Provide a forum for applying the team's collective expertise to solving difficult analytical issues that arise in complex projects.	▪ Collaborate with the project team and client staff and agree upon a schedule to meet the estimated project timeline. ▪ Assign workload functions to appropriately qualified staff to ensure milestones are met, on time. ▪ Pre-schedule quality control meetings with project team to maintain the progressive motion of the project.	▪ Manage the execution of the project. ▪ Direct existing and upcoming project tasks. ▪ Control and monitor work in progress. ▪ Provide feedback to client and project team. ▪ Identify and resolve deviances from the project timeline.	▪ Review all work products and deliverables. ▪ Utilize structured quality assurance process involving up to three levels of review at the peer level, project manager level and the quality assurance manager. ▪ Procure executive officer level review.	▪ Communicate with the client regarding work status and progress. ▪ Ensure client is in receipt of regular status updates. ▪ Schedule regular conference calls to touch base. ▪ Inform client of roadblocks, work outside of projected scope.

Willdan Ability to be Efficient

Verification of Existing Data

Each professional consulting engagement regardless of the study type begins with the transition of client data, which the consultant is then responsible for verifying. The Willdan team is well versed and experienced on the data gathering process and will ensure the appropriate data is collected, interpreted, researched, and correctly inputted/updated into the financial model.

Coordination with Local Agencies

Willdan was founded in 1964 as an engineering firm working with local governments; and over the past 5 decades we have assisted more than 800 public agencies. Furthermore, the project team members proposed for this engagement have assisted numerous public agencies throughout North and South Carolina with the fulfillment of their utility-related consulting needs.

Support of LCFWASA by Project Team

Willdan takes to heart the fact that we represent the LCFWASA when working and/or speaking with residents, business owners, developers, customers and with other industry professionals such as underwriters, bond counsel and appraisers. Our goal is to take care of and effectively manage the utility rate study process, so that LCFWASA staff can focus on other responsibilities. We actively manage key projects with a focus on the overall timeline, so that staff is provided timely and accurate work products without having to expend valuable time managing the process more than necessary.

Record of Success

Adhere to Project Budget and Timeline

Willdan has a proven track record of completing projects on time and within the quoted budget. Our client references, listed below, will confirm that we do not miss deadlines or exceed the quoted budget while performing a project unless asked by the client to perform additional tasks outside of the original scope of services proposed on. We encourage you to contact the references provided herein for feedback specific to our performance, commitment to their agency/constituents, and adherence to project milestones.

- Johnston County, NC
- Town of Carolina Beach, NC
- City of High Point, NC
- Lancaster County Water & Sewer District, SC
- City of Brentwood, TN
- City of Jefferson City, GA
- City of Oviedo, FL

Record of Project Success

For over 30 years Willdan's professional staff has provided utility rate, financial, economic, management and capital planning consulting services to utilities and governmental entities across the country. A representation of Willdan's geographical client presence is depicted in the graphic below. Our client base extends from the south shores of Florida to the inside passage of Alaska, and for four sovereign nations and three US commonwealths/territories.

Our record of success within the industry provides assurance of the professionalism and capability we will bring to this engagement.

Fee Proposal

The fees charged by Willdan are reflective of our belief and commitment to providing high quality, cost-effective consulting services to our clients. As such, we have adopted a billing philosophy whereby out of pocket costs such as reproduction, printing, postage, shipping, telephone, and travel are considered as part of the project and will be included in the proposed fees. This is accomplished by utilizing a fixed fee not-to-exceed approach based on a defined scope of services, and not requesting change orders or budget amendments unless additional services are requested by the client.

Pursuant to the LCFWASA's RFP, it is Willdan's understanding that the project comprises three (3) primary tasks as follows: 1) Water Rate Study, 2) Wholesale Rate Development; and 3) System Development Fee ("SDF") Study. The rate study analytical model and wholesale rate development tasks will culminate into one report document as discussed in the scope of services section of this proposal. The SDF study will include a separate and distinct report document due to the 45-day posting requirement also discussed in the scope of services section. In addition, Willdan will provide one day of training on the Microsoft Excel models developed in conjunction with this engagement, as well as present final findings and recommendations to the LCFWASA Board.

Willdan has priced the following as though the tasks are being prosecuted concurrently, thus providing economies of scale and cost savings to the LCFWASA.

Lower Cape Fear Water and Sewer Authority Fee Proposal	
Task	**Fee**
Task 1 & Task 2 – Water Rate Study and Wholesale Rate Development	$30,000
Task 3 – System Development Fee Study	$15,000
Total Combined Prosecution of All Projects*	**$45,000**

This combined project budget includes three (3) on-site meetings: one (1) for the project kick-off meeting with LCFWASA staff, one (1) with LCFWASA staff for training on the Microsoft Excel models developed for the water rate and SDF studies, and one (1) for the presentation to the LCFWASA Board upon project completion. Based on Willdan's experience working with utilities such as LCFWASA over the recent years and available web conferencing technology, it has proved cost-effective and equally productive to have virtual web conference calls for the purposes of project status updates for these types of engagements, which we are anticipating being the case for the projects in this proposal.

Hourly Rates

Additional on-site meetings may be requested by the LCFWASA staff and/or the Board, which would be above and beyond those described in the Scope of Services and Fee Proposal sections of this proposal. Please be assured that Willdan will be available, as needed, to attend any additional meetings required by the Authority. Such meetings will be attended by Mr. McClung (Senior Project Manager) and/or Mr. Parker (Senior Technical Advisor) and billed at Willdan's hourly billing rates. The current hourly rate schedule for Willdan professionals is set forth below.

Willdan Financial Services Hourly Rate Schedule	
Position	**Hourly Rate**
Group Manager (QA/QC & Policy Advisor)	$220.00
Principal Consultant (Senior Technical Advisor)	$210.00
Principal Consultant (Senior Project Manager)	$187.50
Senior Project Analyst (Task Manager)	$125.00
Analyst	$100.00

Required Forms

Proposal Sheet

P-1

PROPOSAL SHEET

Please provide the following information on your company:

BY: Jeffrey McGarvey

TITLE: Vice President, Managing Principal

COMPANY: Willdan Financial Services

ADDRESS: 200 South Orange Avenue, Suite 1550

Orlando, FL 32801

TELEPHONE: (407) 872-2467

EMAIL: jmcgarvey@willdan.com

Bidder's company is: Corporation X Partnership/Proprietorship

If corporate name is different from above, please show in full. _

Not Applicable

What state is corporation incorporated in? California

MBE/WBE (DBE) Compliance Form

EXHIBIT A
(To be sumitted with qualifications statement)

MBE/WBE (DBE) Compliance Form

Contracting with Small and Minority Businesses, Women's Business Enterprises and Labor Surplus Area Firms

Engineer shall take the following affirmative steps to assure that minority businesses, women's business enterprises, and labor surplus area firms are used when possible as per 2 C.F.R. § 200.321.

(1) Placing qualified small and minority businesses and women's business enterprises on solicitation lists
(2) Assuring that small and minority businesses, and women's business enterprises are solicited whenever they are potential sources
(3) Dividing total requirements, when economically feasible into smaller tasks or quantities to permit maximum participation by small and minority businesses, and women's business enterprises
(4) Establishing delivery schedules, where the requirement permits, which encourage participation by small and minority businesses, and women's business enterprises
(5) Using the services and assistance, as appropriate, of such organizations as the Small Business Administration, the Minority Business Development Agency of the Department of Commerce, and other agencies such as NC HUB Office.

Engineer has read the information in this MBE/WBE (DBE) Compliance Supplement and where reasonable follow the affirmative steps above to assure that minority businesses, women's business enterprises, and labor surplus area firms are used when possible as per 2 C.F.R. § 200.321.

Willdan Financial Services
Engineering Firm Name (Print)

August 8, 2022
Engineering Firm Representative (Sign & Date)
Jeffrey McGarvey, Vice President

Certification for Contracts, Grants, Loans & Cooperative Agreements

EXHIBIT B
(To be submitted with qualifications statement)

Certification for Contracts, Grants, Loans, and Cooperative Agreements

(To be submitted with qualifications statement)

The undersigned [Engineer] certifies, to the best of his or her knowledge, that:

1. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

2. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL , "Disclosure Form to Report Lobbying," in accordance with its instructions.

3. The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

The Engineer, Willdan Financial Services , certifies or affirms the truthfulness and accuracy of each statement of its certification and disclosure, if any. In addition, the Engineer understands and agrees that the provisions of 31 U.S.C Chap. 38, Administrative Remedies for False Claims and Statements, apply to this certification and disclosure, if any.

Signature of Engineer's Authorized Official

Jeffrey McGarvey, Vice President, Managing Principal

Name and Title of Engineer's Authorized Official

August 8, 2022

Date