AGENDA ITEM HISTORY SHEET

ITEM TITLE	**AGENDA NO.** 13
Rate Study Selection	**AGENDA DATE:**

FUNDING CERTIFICATION (Finance Director) (Signature, if applicable)

MANAGEMENT STAFF REVIEW (Signature)

MAYOR (Signature)

ITEM HISTORY (Previous Council reviews, action related to this item, and other pertinent history)

Both firms being considered for selection gave presentations to WSAC with their qualifications during the June meeting. Both firms would complete the project within the given timeline and within the budgeted amount for this project.

ITEM COMMENTARY (Background discussion, key points, recommendations, etc.) Please identify any or all impacts this proposed action would have on the City budget, personnel resources, and/or residents.

Per our rate ordinance and Act 605, a rate study must be completed by a third party organization. We put out an RFP, and we received two proposals back. We did not discuss pricing other than that the rate study and impact fee study stays within our budgeted amount. Due to the urgency, the rate study will be completed first followed by the impact fee study. We want the firm to be chosen by WSAC and Council to ensure the firm is being chosen based on qualifications and not by a price. The proposals can be watched during the June WSAC for those who could not make it. We risk losing our projected and desired timeline if we wait any longer to decide. Willdan and Raftelis presented their proposals to the Water Sewer Advisory Committee on June 11th. The Water Sewer Advisory Committee recommends that City Council select Willdan for this rate study.

(This section to be completed by the Mayor)

ACTION PROPOSED (Motion for Consideration)

We are asking for Council's recommendation and permission on a firm to move forward with this study.

CITY OF BRYANT, ARKANSAS

Proposal

Comprehensive Water, Wastewater, and Impact Fee Rate Study

12 Noon, May 24, 2024



WILLDAN

May 22, 2024

Mr. Tim Fournier
Public Works Director
210 SW Third Street
Bryant, Arkansas 72022

Re: Request for Comprehensive Water, Wastewater, and Impact Fee Rate Study

Dear Mr. Fournier:

Thank you for the opportunity for **Willdan Financial Services** and **RJN Group** to present this joint proposal for a Water and Wastewater Rate Study and Impact Fee Study for the City of Bryant ("The City"). Willdan Financial Services ("Willdan") is one of the largest public sector financial consulting firms in the United States. Our company has helped over 1,200 public agencies successfully address a broad range of financial challenges, such as financing the costs of growth and generating revenues to fund desired services. RJN Group is an employee-owned professional engineering and specialty field services corporation focused on providing cost-effective and innovative water infrastructure solutions. RJN has 180 engineering professionals and has successfully completed over 3,680 projects.

Our firms specialize in municipal and public-sector utilities and our principal clients are national, state and local governments. Each of our clients is served directly by our senior level professionals with decades of experience in utility consulting and economic/financial management. We are proud of our history of building long-term relationships with clients based on affordability, professionalism, and performance.

We have a proven track record of completing projects on time and staying within the quoted budget. Our client references will confirm that we do not miss deadlines or exceed our budget in our engagements. We encourage you to contact the references provided for feedback on our performance, commitment, and adherence to project milestones.

Further, **our two firms have had the privilege of serving as consultants to the city of Bryant** – Willdan as the City's rate consultants since 2020, and RJN as the City's engineering consultants since 2017. Willdan prepared the previous rate study for the City, the recommendations of which were adopted and implemented by the City Council. RJN has successfully completed nine separate projects for the City. We are proud of, and grateful for, the confidence the City has shown in us, and we pledge to continue to provide a top-level quality of service to the City. No firm can provide a more in-depth knowledge and understanding of the City's operations and finances than our team.

Willdan's interactive approach will result in a customized Excel financial model that is easy to use, and a focused and tailored analysis of the City's current rates, revenues, capital project and operational expenditures, debt commitments, reserve funding, and other financial data. The culmination of our analyses will be a comprehensive financial management plan that develops projected system operating results and allows for alternative rate plans for a ten-year time horizon.

We will combine engineering and financial expertise to complete a comprehensive review and recommendation for impact fees. RJN's unrivaled familiarity with the City's utility system ensures that the capital improvement plan on which the impact fees will be based will represent the needs of the City and will appropriately allocate costs between replacement and growth-related assets. Our familiarity will allow us to work quickly and efficiently, and to present a set of recommendations most appropriate to serve the City's current and future growth.

Our ability to focus on the financial aspects of operating publicly owned utility systems is coupled with recognized leadership in strategic planning and operations. This combination enables us to bring unmatched value to our clients. Our team brings a set of nationally recognized qualifications and experts that sets us apart. These qualifications include:

Experience in Arkansas — We have unparalleled experience performing similar studies in the state of Arkansas. In recent years we have performed water and wastewater rate studies and long-term financial plans for such Arkansas communities as **Conway, Community Water System, Benton Washington Regional Public Water Authority, Greenbrier, North Little Rock, Hot Springs, Russellville**, and **Hot Springs Village**. All studies had similar objectives to those sought by the City and all engagements were successfully completed. We have worked for North Little Rock and Hot Springs for over 20 years, and Russellville for over ten years; a sign of their continued satisfaction with our services.

We are fully approved by the Arkansas Natural Resources Commission to be a provider of rate studies under Act 605, and our studies have always been found to be compliant with the mandates of this legislation.

Extensive Expertise in Financial and Wholesale/Retail Rate Modeling – The Project Team's efforts will result in a focused and tailored analysis of the City's current utility rates and revenues, development of a comprehensive financial management plan, wholesale and retail cost of service analysis based on guiding industry practices, and innovative rate design solutions. Our impact fee model will carefully allocate costs between replacement and growth-related assets and will calculate a set of maximum allowable fees. Our team has decades of experience in utility wholesale/retail rate modeling, and the final dashboard-driven model tailored specifically for the City will be both technically proficient and remarkably easy to understand and update. Our study will be fully compliant with the requirements of State Law 605.

Our designated project team has performed over 400 of these studies for more than 200 clients across Arkansas, Texas, the USA and five sovereign nations in the past 30 plus years. Our record of accomplishment in the field of utility ratemaking is second to none. Finally, the Willdan rate and impact fee models are considered to be one of the premier tools in the industry and have been adapted for the use of setting rates and impact fees for hundreds of cities across the USA and throughout the Pacific.

Effectively Communicate Study Results — Sound technical analysis is only one element of this process. It will be equally important to effectively and transparently communicate results and implications of the proposed revenue requirement and rates to City staff, key stakeholders and, ultimately, to those that will be subject to new rates.

In other words, the objective of this study is not simply to write a report, deliver it to the client, and leave. **We consider rate studies to be part of an overall process, the ultimate goal of which is to adopt a formal, and final 10-year revenue requirement analysis and rate plan**. This involves far more than the completion of a report – the public involvement process is critical, and we will work tirelessly with staff to ensure that our recommended alternatives are successfully implemented. Most of our projects incorporate significant community and/or stakeholder involvement and education efforts, and our experienced consultants are able to communicate complicated technical analysis in a manner that is easy to follow and understand. I have given over 300 public presentations before cities on the necessity of setting new rate plans over my 30 plus year career as a utility consultant. We take pride in the frequent compliments we receive from clients about the ease and understandability of our presentations, and the fact that they present critical information required to make decisions in a straightforward and easy to follow manner.

Offer a Highly Innovative Approach — Our approach to the development of utility rates has been carefully honed over the years. **We will work collaboratively with City staff to carefully assess and understand the City's unique system concerns and issues and develop a tailored approach that will best serve your needs.** We do not use a "cookie-cutter" approach, but rather bring a combination of planning and financial expertise providing a thorough understanding of all aspects of utility operations and management. This allows us to work collaboratively to provide comprehensive business solutions. Our objective is to educate and inform throughout the process, not just at the completion of the project.

We are excited about this opportunity to serve the City of Bryant. To discuss any aspect of this submittal or notification of selection, please contact me directly; my contact information is included in the table below.

Contact Information

Project Manager

Dan V. Jackson, Vice President

5500 Democracy Dr., Suite 130, Plano, TX 75024

Tel#: (972) 378-6588 | Email: djackson@willdan.com

Respectfully Submitted,

WILLDAN FINANCIAL SERVICES



Dan V. Jackson
Vice President

Table of Contents

Table of Contents iii

1. Qualifications 4
   - Firm Profile -- Willdan 4
   - Utility Rate and Impact Fee Experience 5
   - Willdan's Unique Project Approach 6

2. Consultant Personnel 9
   - Project Team 9
   - Resumes 10
   - Dan V. Jackson. M.B.A. 11
   - Daniel D. Lanning 16
   - Dennis Goral 17
   - Additional Team Members 18

3. Client References 22
   - Similar Clients 29

4. Project Objectives/Understanding and Approach 30
   - Description of Study Understanding 30
   - Work Plan 31
   - Water and Wastewater Rate Study Scope of Work 31
   - Water and Wastewater Impact Fee Study Scope of Work 34
   - Project Disclaimer 36
   - Willdan Models Guide You to Your Optimal Solutions 39

1. Qualifications

Firm Profile -- Willdan

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 (WLDN). WGI, through its divisions, 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 approximately 1,400 employees working in more than a dozen 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—***three of whom are committed to contribute their expertise throughout the duration of Bryant 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 one of the largest public sector economic and financial analysis consulting firms in the United States. We have helped over 800 public agencies successfully address a broad range of infrastructure challenges. Willdan assists local public agencies by providing the following services:

Willdan Financial Services
General Services

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

Our staff of over 80 full-time employees supports 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.

On April 6, 2015, the Plano, Texas office of Economists.com joined Willdan. Economists.com provided economic analysis and innovative financial solutions since 1997 to a wide range of municipal and public sector utilities and other critical infrastructure organizations.

Utility Rate and Impact Fee Experience

Willdan's professional staff has provided professional consulting services, including financial planning; rate and cost-of-service studies; impact fee analysis; alternative and feasibility analyses; and operational and management studies for water, reclaimed water, wastewater, solid waste, and stormwater utility clients across the United States for three decades. Additionally, Willdan staff are involved with the development of the rate-setting methodologies set forth in the American Water Works Association (AWWA) M-1 manual "Principles of Water Rates, Fees and Charges," and the AWWA M-29 manual, "Water Utility Capital Financing." 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 in 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 have held positions as finance directors, deputy city managers, and auditors, and therefore understand the financial, operational, and political realities faced by governmental staff and management; we craft solutions, which are sensitive to this.

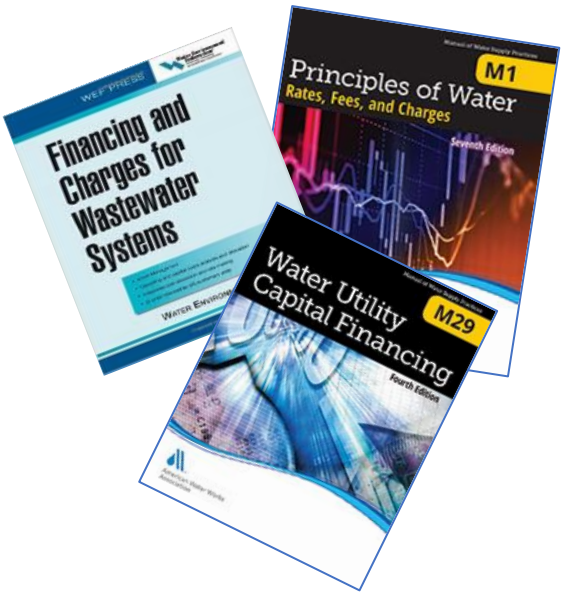
Our expertise spans across the following utility financial planning services:

Willdan Financial Services

Utility Rate Experience

- Retail and wholesale rate studies;
- Revenue sufficiency analyses;
- Utility management and policy assistance;
- Connection fee / system development charge studies;
- Miscellaneous fee and charge studies;
- Renewal and replacement sufficiency analyses;
- Comprehensive alternatives analyses;
- Capital project funding studies;
- Interactive rate model development with dashboards showing key performance indicators;
- CIP financial scenario planning;
- Rate ordinance drafting;
- Billing system validation/rate testing;
- Bond feasibility reports;
- Valuation/divestiture studies; and
- Life cycle costs analyses

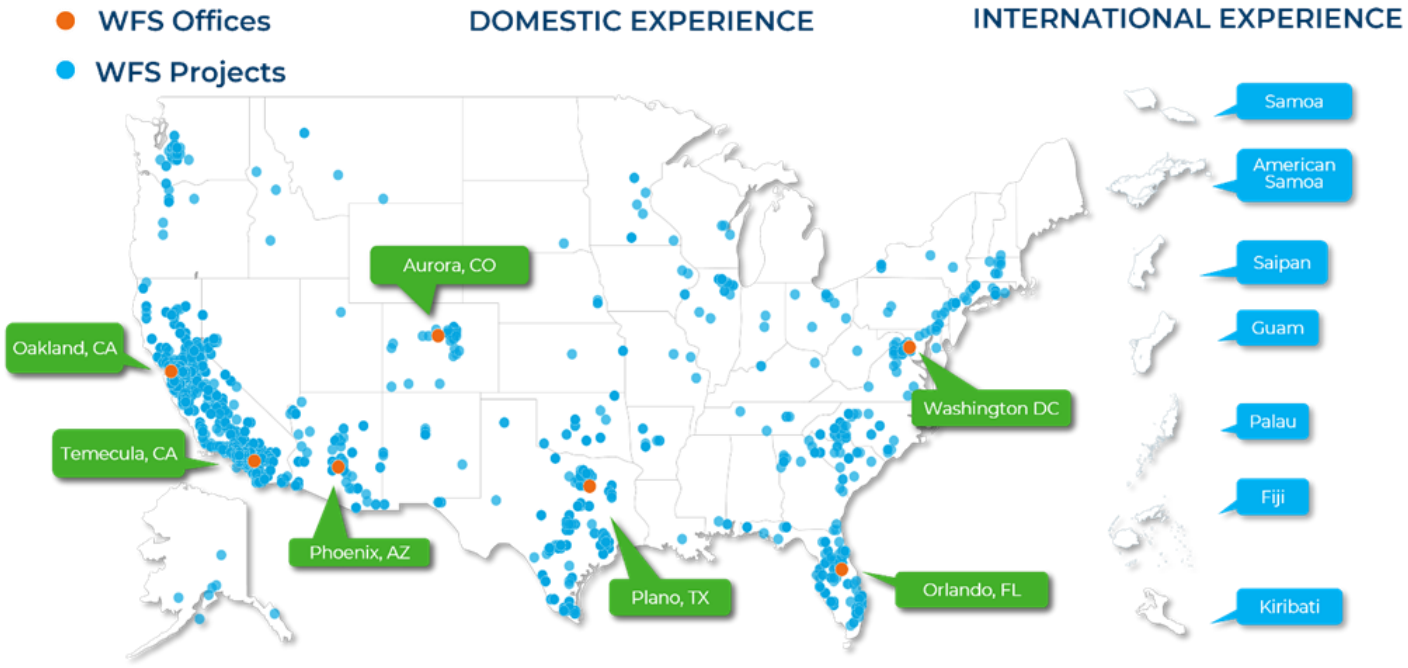
Willdan will work with the City to identify, and prioritize operational and fiscal objectives, and match these to specific rate attributes; and use this information throughout the engagement to develop a comprehensive financial plan and design utility rates that effectively meet these goals. The culmination 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 forecasted 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 the City with genuine business solutions and recommendations as to the strategic direction of its 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.

National and International Presence

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 **accompanying graphic.** Our client base extends from the south shores of Florida to the inside passage of Alaska, and for five sovereign nations.



Willdan's Unique Project Approach

Willdan proposes to develop a spreadsheet-based utility financial planning model that will allow the City to test a variety of "what-if" futures, whereby the City can change assumptions related to growth, the capital improvement program, operational programs, and a variety of other planning, engineering, and financial variables and predict the financial outcome of that scenario and its effect on utility rates. This is especially useful in testing the affordability of the capital improvement program, allowing the user to turn new projects "on or off" in the model, change the costing with updated information, delay their funding, or look at cash vs. debt vs. fee-funding alternatives and their impact on affordability.

Working with the professionals on our team and City staff, we will use advanced modeling techniques to test the capital improvement program for prioritization, timing and affordability of projects. In doing so, staff will be able to identify the resources available for implementing programs identified in the capital planning process. In the end, the process will allow the City to determine the optimum rate path for balancing the financial health of the system against political and other considerations.

We cannot emphasize strongly enough the need for, and benefit of, a properly constructed public involvement process to introduce the recommended rate plan to the public. The general public and elected officials are naturally going to be inclined to oppose rate plans that involve higher rates and fees; after all, no one wants to pay more for anything at any time for any reason. Therefore, the burden is on the City and its consulting team to present any proposed rate plan to the public in a manner that is both easily understandable and emphasizes the benefits of implementation (i.e., a better quality of service). **Consulting teams and rate plans that do not recognize both the need to present information in an understandable manner and take into account the sensitivity of ratepayers and elected bodies to cost increases are doomed to fail**.

With this in mind, we would note the following about our services and the deliverables we will prepare for the City:

- We are proud of the quality of our written reports. The intent is to make our reports readable and easily understandable to those who are not ratemaking or financial professionals. We are frequently complimented by clients who tell us that they understood both the major points of our analysis and the benefits of our proposed rate plans. We pledge to produce both a final report and presentations to the City that will result in a similar reaction.
- Many regard the process of rate studies as simply writing a report, dropping it off to the client, and leaving. Rate studies should be considered overall processes, the goal of which is to ultimately adopt a formal rate and financial plan. This involves far more than the completion of a report – the public involvement process is critical, and we will work tirelessly with staff to ensure that our recommended alternatives are successfully implemented.
- We also believe that our public presentations are of a superior quality, both in terms of overall presentation and understandability. Mr. Jackson has provided over 300 public presentations in his career, to such diverse clients as border communities, large cities and suburbs, and Pacific island nations. He understands how to make presentations to non-financial audiences.

Project Dedication

Willdan has assembled a project team of three subject matter experts within the Financial Consulting Services group, to conduct the City of Bryant's water/wastewater rate study and Development Impact Fee Study engagement. This team has coordinated or participated in numerous public stakeholder and staff workshops regarding fees and cost of service-based charges.

Project Availability

Willdan's Financial Consulting Services group is composed of a team of over 20 senior-level professional consultants. While each member of the project team currently has work in progress with other clients, the workload is at a manageable level with sufficient capacity to meet the needs of the City specific to the schedule and budget for this engagement.

FIRM BACKGROUND

Established in 1975, RJN is an employee-owned professional engineering and specialty field services corporation focused on providing cost-effective and innovative water infrastructure solutions, always driven by client goals. With 180 nationwide engineering professionals and over 3,680 projects successfully completed, our engineers have the experience to meet the unique challenges of any assessment or design project.

49	291M	9.6M	$400M
years delivering infrastructure solutions	linear feet of pipeline assessed	linear feet of pipeline designed	worth of constructed pipelines and assets

THE RJN DIFFERENCE

Engineering Quality Data

RJN engineers understand the caliber and type of data required to meet project goals, whether the aim is achieving peak hydraulic performance, extending remaining useful life, or restoring design capacity.

Public Utility Expertise

More than 90 percent of our clients are municipalities and public utilities. We understand the nuances of navigating the complex regulatory environment and funding constraints when working with critical community systems.

Technology and Innovation

RJN embraces emerging technologies and new approaches. We continuously strive to identify ways to create efficiencies and enhance our ability to capture quality data and deliver actionable solutions.

SERVICES

Our engineers provide full life cycle project delivery, from planning through construction phase.

Analyze

- Condition field investigations and assessments
- Inflow and infiltration (I/I) analysis and reduction
- GIS/asset survey, mapping, and integration
- Flow and rainfall monitoring

Plan

- Capacity analysis and hydraulic modeling
- Asset management
- Regulatory and funding assistance
- Master and capital planning

Design and Construct

- Pipeline design
- Lift and pump station assessments and design
- Construction inspection and management
- Design-build project delivery programs

AWARDS

APWA National and Regional Project of the Year
2016: West Park Wet-Weather Storage, Design-Build, Wilmette, Illinois

APWA Regional Project of the Year
2021: Emergency Levee Repairs, Fort Worth, Texas
2020: Large Diameter Pipe Rehabilitation, Wheeling, Illinois
2017: Southwest Wet-Weather Pump Station and Storage, Elmhurst, Illinois

Water Environment Federation Innovative Technology Award
2020: Clarity®

Trenchless Technology
19th in Top 50 Trenchless Engineering Firms

Engineering News-Record
Top 200 Environmental Firm
Top 500 Design Firm

Engineering Infrastructure for Tomorrow

Firm Background | 1

2. Consultant Personnel

Project Team

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

Mr. Dan V. Jackson, MBA, will serve as **project manager** for this engagement. He will have ultimate responsibility for the successful execution of this engagement. Mr. Jackson was the co-founder, Managing Director, and Chief Executive of Economists.com. Since the acquisition of Economists.com, Mr. Jackson now serves as a Willdan Financial Services Vice President. He possesses 40 years of experience in financial consulting for water, sewer, stormwater, solid waste, and electric utilities throughout Arkansas, Texas, the southwest, the United States and Pacific Region. He has prepared over 400 such studies and has provided over 300 public presentations outlining the results of the analysis conducted. Mr. Jackson is a frequent speaker at utilities conferences and trade associations. He received a Bachelor of Arts in Social Science and a Masters in Business Administration in Finance and Accounting from the University of Chicago in 1984. Mr. Jackson is also an accomplished author; his newest novel **Rainbow Bridge** has won the prestigious 2021 Feathered Quill Award for animal-based literature. Mr. Jackson served as Project Manager for both of Willdan's engagements for the City of Bryant.

With more than 30 years of professional consulting experience, **Mr. Daniel Lanning, Sr.** will serve as the **senior project analyst** working closely with Mr. Mr. Jackson to develop the analyses under the City's scope of services. Furthermore, Mr. Lanning will share knowledge gained through his involvement with American Water Works Association (AWWA) developing industry professional standards.

Mr. Lanning is a contributing author to the AWWA Manual of Practice M29 – Capital Financing for Water Utilities and is involved in the ongoing update of the AWWA Manual M1 – Principles of Water Rates, Fees, and Charges.

Mr. Dennis Goral is a Senior Analyst with 8 years of municipal utility analysis experience and 2 years in financial and economic analysis experience. His consulting experience includes a variety of projects associated with public water, wastewater, reclaimed water, sanitation, natural gas, and electric utility systems throughout the United States and Pacific Islands. Mr. Goral has been involved with many different facets of project analysis for water and wastewater utility systems including data gathering, dashboard development, dynamic model development, sensitivity analysis, cost-benefit analysis, alternative analysis, demographic analysis, consumption analysis and rate design. Additionally, he has been involved in model development and analysis for cost allocation and user fee studies. He has special expertise in dashboard development and dynamic model development. In addition, Mr. Goral has an extensive working knowledge of Microsoft Excel and the ability to perform detailed and complex analyses. He has experience in presenting complex information in a simple and easy to understand way.

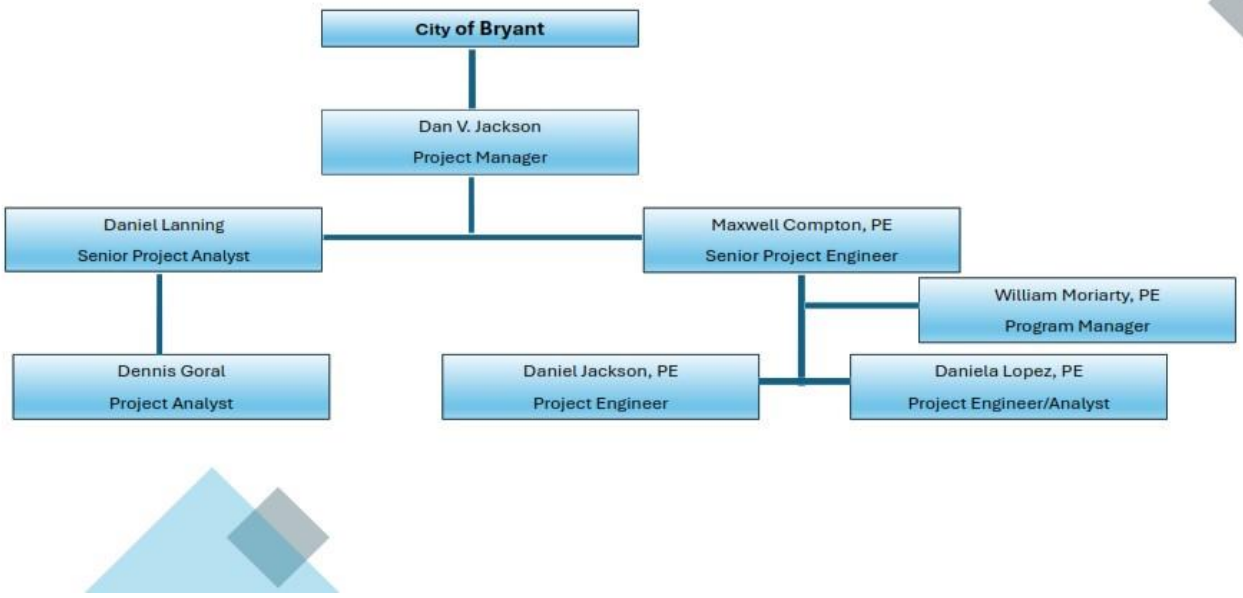
Mr. Mac Compton of RJN will serve as Senior Project Engineer for this engagement. Mr. Compton brings a diverse background in Civil Engineering services to his utility relationships. His expertise spans a wide range of environmental and utility engineering programs, focusing on inspecting and analyzing underground infrastructure conditions and performance, design improvements and managing construction-phase engineering services. He received a BS in Engineering from the University of Arkansas in 2007.

Mr. Daniel Jackson, PE of RJN (no relation to the project manager) will serve as project engineer for this engagement. Mr. Jackson has expertise in collection system planning, regulatory compliance, and municipal maintenance, which equips municipalities to effectively manage infrastructure growth and meet future population demands. His experience also includes sanitary sewer evaluation studies, water and sewer rehabilitation design, collection systems design, hydraulic capacity analysis, master planning and construction inspection/management. He received a BS in Civil Engineering from Texas Tech University in 2002.

Ms. Daniela Lopez, PE of RJN will serve as project engineer/analyst. Ms. Lopez has a comprehensive skillset which ensures that municipalities can develop and maintain robust, efficient and sustainable systems that meet current needs and prepare for future growth. She has expertise in hydraulic and hydrologic modeling services of municipal water and wastewater utilities. Her experience also includes master planning, capacity design, CSO/SSO mitigation, inflow and infiltration studies, SSES programming, and pump capacity studies. She received her BS in Civil Engineering from the University of Dayton in 2017.

Mr. William Moriarty, PE, BCEE, of RJN will serve as project advisor/program manager for this engagement. Mr. Moriarty has extensive experience in the planning, design and construction management of water, wastewater and stormwater systems for major municipalities across the USA. He is listed in "Who's Who in Environmental Engineering", serves as a diplomat for the American Academy of Environmental Engineers, and holds specialty certification in environmental sustainability. He has also been appointed by the Austin City Council as Chairman of the Water and Wastewater Commission and the Austin Integrated Water Resources Task Force. He received his BA in Civil Engineering from Marquette University in 1974, and his MBA from the University of Houston in 1985. He has over 49 years experience.

The project team's proposed organization chart is presented below.



Resumes

Resumes for the City's project team are presented on the following pages.

Dan V. Jackson. M.B.A.

Vice President and Principal in Charge

Education

Master of Business Administration, University of Chicago, 1984; Specialization in Finance/Accounting

Bachelor of Arts, University of Chicago, 1982; Major in Social Sciences Dean's Honor List

Areas of Expertise

Rate Design

Cost of Service

Financial Forecasting

Valuation Analysis

Acquisition Analysis

Privatization Analysis

Economic Impact Analysis

Expert Witness Testimony

Affiliations

Member, American Water Works Association

National Association for Business Economics

Other

The Forgotten Men (fiction) – Mediaguruz

Rainbow Bridge – Fiction – Mirador Publishing

39 Years' Experience

Mr. Jackson has 39 years of experience as an international financial expert, having completed utility rate/cost of service studies and long-term financial plans for clients throughout the USA and five sovereign Pacific nations. He also has served as an expert witness in state court, federal court and before several public utility commissions. Mr. Jackson's prior experience includes positions with Deloitte and Touche and Reed-Stowe and Company. In 1997, Mr. Jackson co-founded Economists.com LLC, an international consulting firm with offices in Dallas and Portland, Oregon. Willdan acquired Economists.com in 2015, and Mr. Jackson now serves as Vice President.

Mr. Jackson has prepared over 400 utility rate studies for over 100 clients in Texas, 200 clients across the USA, and 5 sovereign nations during his long career. He has given dozens of lectures and presentations before professional associations on utility rate issues.

Mr. Jackson is also an accomplished author; his newest novel **Rainbow Bridge** is now available on Amazon.com and in selected bookstores and has won the prestigious Feathered Quill Award for animal-based literature.

Water/Wastewater – Rate Studies and Long-Term Financial Plans

Mr. Jackson has served as project manager for over 400 water and wastewater rate studies and long-term financial plans. His clients have primarily been cities and public utilities located in Texas, Oklahoma, Arkansas, Arizona and across the USA. He has given over 300 public presentations on rate and long-term financial plans for city councils and ratepayers throughout the USA. His clients have ranged from Arizona and Texas border communities to Northwestern metropolises, rural water districts, urban suburbs and inner-city communities.

Electric – Rate Studies and Financial Plans

Mr. Jackson has managed over 25 electric rate studies across the USA. He has helped set electric rate policy in 5 nations, and has met with senior government officials and regulatory agencies to develop appropriate guidelines. He is frequently engaged by the Asian Development Bank to prepare electric tariff analyses and assess the impact of solar PV on the cost of service for Pacific utilities. He has provided expert witness testimony supporting electric rate designs.

Solid Waste and Stormwater – Rate Studies and Financial Plans

Mr. Jackson has managed over 15 solid waste and 10 stormwater rate studies and financial plans, across the southwest United States and the Pacific Region. He has provided expert witness testimony supporting electric rate designs on numerous occasions.

Water/Wastewater – CCN/System Valuations and Acquisitions

Mr. Jackson has prepared approximately 50 water and wastewater CCN and system valuations, for the purpose of enabling utilities to acquire additional service territory. A critical component of these analyses was the impact of the acquisitions on the user rates for both existing ratepayers and the acquired territories.

Water/Wastewater – Impact Fee Studies

Mr. Jackson has prepared approximately 25 water and wastewater impact fee studies for utilities throughout the United States.

International Experience

Mr. Jackson is recognized as an international expert on utility financial planning and tariff (rate) design by the World Bank and the Asian Development Bank. Under their direction, he has assisted in projects that have brought potable water to villages in developing nations. He has worked on these engagements in the independent nations of Fiji, Samoa, Palau, Kiribati, and the U.S. territories of American Samoa and the Commonwealth of Northern Mariana Islands. He has worked independently for water, wastewater and electric utilities in Guam, Tuvalu and the Kingdom of Tonga.

Other

Mr. Jackson has prepared numerous additional utility financial analyses, including but not limited to: conservation ratemaking, utility wholesale contract reviews, cost allocation studies, non-rate fee studies, lease vs. purchase, economic impact of desalination, telecommunications franchise fees, and the financial feasibility of reuse.

D. Jackson
Resume Continued

Water/Wastewater – Rate Studies and Long-Term Financial Plans

Texas – Dallas/Fort Worth

- Allen
- Balch Springs
- Burleson
- Cedar Hill
- Celina
- Cleburne
- Denison
- Denton County FWSD 1A
- Coppell
- DeSoto
- Duncanville
- Denton County FWSD 8C
- Ferris
- Grand Prairie
- Fairview
- Garland
- Hutchins
- Frisco
- Heath
- Little Elm
- Hackberry
- Kaufman
- Kennedale
- Josephine
- Mesquite
- Midlothian
- McKinney
- Princeton
- Parker
- Oak Point
- Rowlett
- Prosper
- Plano
- Rockwall
- Royce City
- Richardson
- Venus
- Sachse
- Sherman

Texas — Statewide

- Alvarado
- Amarillo
- Aqua Water Supply Corporation
- Beeville
- Brownsville PUB
- Brady
- Castroville
- Cibolo Creek Municipal Authority
- Combes
- Crystal Clear SUD
- Del Rio
- Donna
- El Paso County WCID #4
- El Paso County Tornillo WCID
- Edinburg
- Galveston
- Galveston County WCID
- Fairfield
- Harlingen WaterWorks
- Hempstead
- Groesbeck
- Harker Heights
- Jonah Special Utility District
- Hewitt
- Hondo
- Laguna Madre Water District
- Kempner WSC
- Laredo
- League City
- La Villa
- Leander
- Marble Falls
- Liberty Hill
- Los Fresnos
- Mercedes
- Marfa
- McLendon-Chisholm
- Rockport
- New Braunfels
- North Fort Bend Water Authority
- Paris
- Port Arthur
- Port of Houston Authority
- Primera
- Raymondville
- Robinson
- Robstown
- San Juan
- Schertz
- Seguin
- Selma
- Schertz-Seguin Local Govt Corp.
- Sonora
- Southmost Reg. Water Authority
- Tomball
- Troup
- Venus
- Waller
- West Harris Co. Reg. Water Auth
- West University Place
- Webb County
- Whitehouse
- Winona
- Yancey Water Supply Corporation

D. Jackson
Resume Continued

Arizona

- Bisbee
- Buckeye
- Camp Verde Sanitary District
- Carefree
- Casa Grande
- Chino Valley
- Chloride Domestic Water Imp District
- Clarkdale
- Clifton
- Cottonwood
- Douglas
- Eagar
- Eloy
- Florence
- Flowing Wells Improvement Dist.
- Goodyear
- Holbrook
- Jerome
- Marana
- Miami
- Nogales
- Oro Valley
- Patagonia
- Payson
- Prescott
- Prescott Valley
- Quartzsite
- Queen Creek
- Safford
- San Luis
- Show Low
- Somerton
- Tombstone
- Tonto Village DWID
- Wellton
- Willcox
- Winslow
- Yuma

Arkansas

- Bryant
- Conway
- Hot Springs
- North Little Rock Wastewater Utility
- Greenbrier
- Hot Springs Village
- Russellville
- Community Water System
- Benton Washington RPWA

Oklahoma

- Ada
- Altus
- Chickasha
- Edmond
- Miami
- Pryor
- Lindsay

International Regulated Utilities – Pacific and Caribbean

- Water Authority of Fiji
- Commonwealth Utility Corp Saipan
- Kiribati Public Utilities Board
- EPC, Independent State of Samoa
- Virgin Islands Telephone Company
- American Samoa Power Authority
- Guam Power Authority
- Tuvalu Electric Corp.
- TTV – Cook Islands
- Palau Public Utilities Corporation

Stormwater – Rate Studies and Long-Term Financial Plans

- Hot Springs, AR
- Hewitt, TX
- Bryant, AR
- Balch Springs, TX
- Coppell, TX
- San Marcos, TX
- Prescott Valley, AZ

Solid Waste – Rate Studies and Long-Term Financial Plans

- Duncanville, TX
- Mercedes, TX
- Goodyear, AZ
- Frisco, TX
- San Luis, AZ
- Altus, OK
- Hewitt, TX
- Somerton, AZ
- Miami, OK

Impact Fee Studies

- E. Medina Co. Special Utility Dist, TX
- Cibolo Creek Municipal Auth., TX
- Hot Springs, AR
- Crystal Clear SUD, TX
- Harlingen, TX
- Laguna Madre Water District, TX
- Liberty Hill, TX
- Los Fresnos, TX
- Marble Falls, TX
- Mesquite, TX
- Seguin, TX
- San Luis, AZ
- Marana, AZ
- Wellton, AZ
- Prescott, AZ
- Prescott Valley, AZ
- Yuma, AZ

D. Jackson
Resume Continued

CCN Valuations

- PUC Texas – 30 CCN Valuations
- Avondale, AZ
- Bolivar WSC
- Bullhead City, AZ
- Buckeye, AZ
- Casa Grande, AZ (private)
- Chino Valley, AZ
- Cottonwood, AZ
- Clarkdale, AZ
- Denton, TX
- Florence, AZ
- Marilee SUD – 2 parcels
- Marana, AZ
- Pine Strawberry Water Imp District, AZ
- Prescott, AZ
- Prescott Valley, AZ
- Queen Creek, AZ
- Show Low, AZ
- Aubrey, TX
- Huffines Development
- Arlington, TX
- Celina, TX
- Forney Lake WSC, TX
- Gunter, TX
- Kempner WSC, TX
- Lancaster, TX
- Taylor, TX
- Whitehouse, TX
- Van Alstyne, TX
- Rockwall, TX
- Trinity Water Reserve, TX
- North Chicago, IL
- North Little Rock WWU, AR

Expert Witness Testimony

Mr. Jackson has served as an expert witness in over 20 cases before state court, federal court and Public Utility Commissions.

City of Arlington, TX – Seven separate cost of service analyses and testimony in wholesale contract rate proceedings before TNRCC. Largest ongoing wastewater rate dispute in Texas history, 1990-1994.

Cameron County Fresh Water Supply District No. 1 vs. Town of South Padre Island (TNRCC Docket 30346-W) – Expert testimony on reasonableness of rate structure, 1992.

Cameron County Fresh Water Supply District No. 1 vs. Sheraton Hotel/Outdoor Resorts (TNRCC Docket 95-0432-UCR) – Expert testimony on reasonableness of rate structure, 1993.

Laguna Madre Water District (PUC Docket 49154) – Expert testimony on the reasonableness of the District's raw water rate -- 2019.

City of Celina, TX (SOAH Docket 2003-0762-DIS) – Expert testimony on the proposed creation of a Municipal Utility District, 2004.

City of Celina, TX (PUC Docket No. 49225) – Expert testimony on the reasonableness of outside city limit rates – 2020.

City of Leander, TX (PUC Docket No. 53063) – Expert testimony on the reasonableness of outside city limit rates – 2023.

East Medina County Special Utility District (SOAH Docket 582-02-1255) – Expert testimony on CCN application, 2003.

East Medina County Special Utility District (SOAH Docket 582-04-1012) – Expert testimony on CCN application, 2004.

City of Karnes City, TX – Expert testimony on valuation of CCN before the Texas Commission on Environmental Quality, 2009.

City of Princeton, TX (SOAH Docket 582-06-1641 and TCEQ Docket 2006-0044-UCR) – Expert testimony on ability to serve proposed service territory, 2007.

Town of Little Elm, TX (SOAH Docket 582-01-1618) – Expert testimony on reasonableness of rate structure, 2001.

Schertz Seguin Local Government Corporation – Expert testimony addressing application of San Antonio Water System for groundwater permits for Gonzalez County UWCD, 2009.

City of Ruidoso, NM – Expert testimony on reasonableness of Wastewater Rates, 2010.

City of Hot Springs, AR – Expert witness testimony on Reasonableness of Stormwater Rates, 2010.

Dallas County Water Control and Improvement District No. 6 (TNRCC Docket 95-0295-MWD) – Hearing on the merits for proposed wastewater treatment plant permit, 1995.

Commonwealth Utilities Corporation Saipan -- Expert testimony before Commonwealth Public Utilities Commission on reasonableness of rate structure, 2010-2015.

D. Jackson
Resume Continued

City of Mesquite, Texas vs. Southwestern Bell Telephone Company (No. 3-89-0115-T, U.S. Federal Court Northern Texas) -- 18 year estimate of revenues excluded from municipal franchise fees by SWB. Expert testimony on SWB accounting and franchise policies and Discovery disputes, 1991-1995.

City of Port Arthur, et. al., vs. Southwestern Bell Telephone Company (No. D-142,176, 136th Judicial District Court of Beaumont, Texas) -- 20 year estimate of revenues excluded from municipal franchise fees by SWB. Expert testimony on SWB accounting and franchise policies. 1993-1995.

Southwestern Bell Telephone Company vs. City of Arlington, Texas (No. 3:98-CV-0844-X, U.S. Federal Court Northern Texas) -- 15 year estimate of access revenues excluded from municipal franchise fees by SWB. Expert testimony on SWB accounting and franchise policies, 1996.

Metro-Link Telecom vs. Southwestern Bell Telephone Company (No. 89-CV-0240, 56th Judicial District Court Galveston County Texas) -- 20 year pro forma model calculating lost revenue from the cancellation of a trunk line leasing contract.

Complaint of the City of Denton against GTE Southwest, Inc. (PUC Docket 14152), 1994.

GTE vs. City of Denton (No. 95-50259-367, 367th Judicial District Court of Denton County, Texas) -- 10 year estimate of revenues excluded from municipal franchise fees by GTE, 1994-1996.

MAS vs. City of Denton, Texas (No. 99-50263-367, Judicial District Court of Denton County, Texas) – Testimony on reasonableness of franchise fee payment calculations.

Publications/Presentations/Seminars

- ***Rainbow Bridge (fiction) –*** Mirador Publishing, 2020. Winner, 2021 Feathered Quill Silver Award for Animal-based literature; 2021 National Indie Excellence Award Finalist; 2023 Book Excellence Award Finalist
- ***The Forgotten Men (fiction)*** – Mediaguruz Publishing, 2012.
- *Raising Water and Wastewater Rates – How to Maximize Revenues and Minimize Headaches – Arizona Small Utilities Association, August 2002; Texas Section AWWA, April 2003*
- *Wholesale Providers and the Duty to Serve: A Case Study* – Water Environment Federation, September 1996.
- *Lease vs. Purchase – A Guideline for the Public Sector* – Texas Town and City, March 1998•.
- *An Introduction to Lease vs. Purchase* – Texas City Managers Association – May 1998.
- *Technische Universiteit Delft* – Delft Netherlands -- Annual Infrastructure Conference – May 2000, 2001.
- *The US Water Industry – A Study in the Limits of Privatization* -- Technische Universiteit Delft – Delft Netherlands – March 2007.
- *The New Information Economy: Opportunity or Threat to the Rio Grande Valley?* – Rio Grande Valley Economic Summit -- Oct 2000.
- *The Financial Benefits of Regionalization – A Case Study* – Texas Water Development Symposium – September 2010.
- *Developing Conservation Water Rates Without Sacrificing Revenue* – TWCA Conference, San Antonio Texas, October 2012.
- *Water Rates – Challenges for Pacific Utilities* – Pacific Water and Wastes Conference, American Samoa, September 2014.
- *Water Rates – Challenges for Arizona Utilities* – GFOAZ Conference, August 2023.

Daniel D. Lanning

Senior Consultant and Financial Analyst

Education
Bachelor of Science, Accounting, Bentley University, Waltham Massachusetts

Areas of Expertise
Management Consulting
Impact Fee Studies
Financial Analysis
Utility Rate and Cost Studies
Feasibility and Financial Analysis and Reporting
Asset Valuation
Expert Witness
Utility Regulation

Affiliations
American Water Works Association (AWWA)

Texas Section American Water Works Association

Societies
Member: AWWA Rates and Charges Committee, Accounting and Finance Subcommittee;

Member Task Force Revising AWWA Manual M-1 – Water Rates and Charges;

Member Task Force to prepare AWWA Manual M-52 – Developing Rates for Small Systems;

Member Task Force to edit/revise AWWA Manual M-27 – Fundamentals of Water Utility Capital Financing

Water Environment Federation - Member Financing and Charges for Wastewater Systems Task Force that prepared WEF Manual of Practice No. 27, Financing and Charges for Wastewater Systems.

Over 35 Years of Utility Financial Experience

Mr. Lanning is a management consultant with over 35 years of domestic and international experience in utility financial/cost of service studies and energy efficiency and procurement matters. As a consultant, he has served as project manager, task leader, and key staff person on cost of service, impact fee, asset valuation, financial feasibility, and management studies for public and private utilities. He has presented testimony before local and federal courts and state regulatory agencies supporting positions utility cost of service issues. He has served for the past decade on the AWWA Rates and Charges Committee. Prior to his consulting career, Mr. Lanning served as a member of the New Hampshire Public Utilities Commission staff where he held several positions including Assistant Finance Director, Chief Auditor, and a PUC Examiner.

Water/Wastewater – Cost of Service and Rate Studies

Mr. Lanning has developed and updated over 150 water, wastewater cost of service, rate and long-term financial planning studies for domestic and international government and private (IOU) entities. These studies regularly involve evaluating utility capital improvement plans, capital financing alternatives, operating statistics, and budget reporting. Mr. Lanning also has significant experience designing computer financial models for utilities and other government entities. Example projects include: Laredo, TX (W/WW Rates); League City, TX (W/WW Rates); Combes, TX (W/WW Rates); Laguna Madre Water District, TX (W/WW Rates); Brownsville PUB, TX (W/WW Rates); Edinburg, TX (Raw/Reuse Water Rates); and USAID (Bosnia and Herzegovina sector wide financial strengthening of water/ wastewater utilities).

Stormwater and Solid Waste – Rate Studies and Long-term Financial Plans

Mr. Lanning has led and participated in numerous important stormwater and solid waste financial, rate and cost of service studies and projects. These studies included developing fees for retail solid waste, tipping fees for landfills, and developing stormwater and wastewater fees utilizing impervious area data.

Water/Wastewater - Impact Fees

Mr. Lanning has prepared impact/capacity fee analyses in Texas, Arizona, and Massachusetts. Recent example impact/capacity fee studies include: Yuma, AZ; Marana, AZ; Seguin, TX; and Cibolo Creek Municipal Authority, TX. These studies required strict adherence with state statutes that include preparation of specific reports and participation in public meetings.

Energy – Procurement and Energy Management Project Feasibility

Mr. Lanning has been a key participant in several energy deregulation and comprehensive energy management projects. These projects include evaluating energy cost savings from proposed projects and developing electric procurement strategies/policies. Example studies include: Dallas, TX and Houston, TX.

Dennis Goral

Senior Analyst

Education
Double Bachelor of Science, Finance and Economics, University of Texas

Areas of Expertise
Rate Studies

Rate Design

Dynamic Computer Modeling

Dashboard Design

Cost of Service Studies

Alternatives Analysis

Advanced Excel

Cost Allocation Studies

User Fee Studies

Clubs and Organizations
GFOAT, Government Finance Officers Association of Texas

SEED, Student Entrepreneurs and Economic Development

SIFE, Student in Free Enterprise

Alpha Beta Gamma, Business Honors Society

Honors and Awards
Lowe's Community Improvement Grant for Collin Community College, 2011

8 Years' Experience

Mr. Goral is a Senior Analyst with 8 years of municipal utility analysis experience and 2 years in financial and economic analysis experience. His consulting experience includes a variety of projects associated with public water, wastewater, reclaimed water, sanitation, natural gas, and electric utility systems throughout the United States and Pacific Islands.

Mr. Goral has been involved with many different facets of project analysis for water and wastewater utility systems including data gathering, dashboard development, dynamic model development, sensitivity analysis, cost-benefit analysis, alternative analysis, demographic analysis, consumption analysis and rate design. Additionally, he has been involved in model development and analysis for cost allocation and user fee studies.

He has special expertise in dashboard development and dynamic model development. In addition, Mr. Goral has an extensive working knowledge of Microsoft Excel and the ability to perform detailed and complex analyses. He has experience in presenting complex information in a simple and easy to understand way.

Representative Client Listing

The following is a listing of Mr. Goral's water and wastewater related project experience accumulated in the past four years:

- City of DeSoto, TX
- City of Balch Springs, TX
- City of Donna, TX
- City of McKinney, TX
- City of Altus, OK
- City of Winslow, AZ
- City of Cedar Hill, TX
- City of Frisco, TX
- City of Coppell, TX
- City of Allen, TX
- City of Amarillo, TX
- City of Edmond, OK
- City of Florence, AZ
- City of Somerton, AZ
- Town of Carefree, AZ
- City of Duncanville, TX
- City of Rockwall, TX
- City of Castroville, TX
- City of Crandall, TX
- City of Hutchins, TX
- City of Midlothian, TX
- City of Buckeye, AZ
- Schertz-Seguin Local Government Corporation, TX
- Water Authority of Fiji, Fiji
- City of Plano, TX
- Commonwealth Utilities Corporation, Saipan
- City of San Luis, AZ
- City of Rowlett, TX
- City of Russellville, AR
- City of College Station, TX
- City of New Summerfield, TX
- City of Princeton, TX
- City of Mesquite, TX
- City of Alamo Heights, TX

The following is a listing of Mr. Goral's cost allocation and user fee related project experience accumulated in the past four years:

- City of Missouri City, TX
- City of DeSoto, TX
- City of San Luis, AZ
- City of Mesquite, TX
- Town of Sunnyvale, TX
- City of Coppell, TX

Additional Team Members

Maxwell Compton, PE

Senior Project Manager



Mr. Compton brings a diverse background in civil engineering services to his utility relationships. His expertise spans a wide range of environmental and utility engineering programs focused on inspecting and analyzing underground infrastructure conditions and performance, designing improvements, managing construction-phase engineering services, and planning for future growth by ensuring infrastructure can accommodate increasing demands.

RELATED PROJECT EXPERIENCE

Multi-Year Sewer Study, Bryant, Arkansas—Project Manager. Multi-year sewer evaluation study to assess I/I in the system and develop mitigation measures. Services included flow monitoring (7 meters/4 rain gauges), InfoWorks ICM hydraulic model construction and calibration (480,000 LF of sewer, force main, and pump stations), manhole inspections (1,254), smoke testing (395,232 LF), dye testing (45 setups), and CCTV review (37,322 LF) to identify and evaluate I/I sources. A systemwide Sewer Evaluation and Capacity Assurance Plan (SECAP) was developed to provide a prioritized plan to improve existing facilities and address future needs.

SECAP & Collection System Analytical Services, Little Rock Water Reclamation Authority, Arkansas —Project Manager. Consent-driven, multi-year initiative to eliminate SSOs by 2023 through a systemwide evaluation and management program. Services included the updating of the existing SECAP in compliance with a consent administrative order (CAO), flow monitoring (86 meters/9 rain gauges); InfoWorks hydraulic modeling (1.8M LF using an all-pipe approach); developing future flow requirements using current and projected usage and population data; analyzing lift station performance, capacities, and peak hydraulic capacity for three WWTPs; and developing improvement plans weighing efficacy, risk, and costs for phased implementation. Annual reports were prepared, and prioritized CIP items were updated. Released from Consent Administration Order in March 2024.

Sanitary Sewer Model and Master Plan Update, Fayetteville, Arkansas—Project Manager. Master plan update to evaluate current capacities and determine future needs. Services included model updates to incorporate system changes (2.3M LF), flow monitoring (21 meters/10 rain gauges), data verification and model calibration, and hydraulic capacity analysis to assess dry-weather conditions, peak flow conditions, and design storm conditions. Future capacity needs were based on land use and population projections for the 2030 planning horizon. The master plan update included recommendations for capacity improvements with cost estimates and continued SSES inspection, maintenance, and rehabilitation recommendations.

Systemwide Stormwater Mapping Program, Hot Springs, Arkansas—Project Manager. The City of Hot Springs initiated a project to locate, survey, and map its stormwater infrastructure. The objective was to build a complete GIS-based asset inventory that could be used to plan for future maintenance and capital improvements.

EDUCATION
BS—Engineering (University of Arkansas, 2007)

EXPERIENCE
16 years

REGISTRATIONS
PE—Arkansas #15396

CERTIFICATIONS
NASSCO PACP/LACP/MACP #U-217-07006949

OSHA 10-Hour Safety Certification #28-006011329

4-Hour Work Zone Traffic Control

Confined Space Entry

Confined Space Rescue

TECHNICAL PRESENTATIONS
"Rainfall Analysis & Wastewater Compliance Tools," 2022 - AWW & WEA Arkansas Water Conference

MEMBERSHIPS
Little Rock Engineers Club

rjn group

RJN GROUP RESUMES | 1

Daniel Jackson, PE

Principal/Senior Vice President



Mr. Jackson's expertise in collection system planning, regulatory compliance, and municipal maintenance equips municipalities to effectively manage infrastructure growth and meet future population demands. His experience also includes sanitary sewer evaluation studies, water and sewer rehabilitation design, collection systems design, hydraulic capacity analysis, master planning, and construction inspection/management. He works with clients to develop programs to meet regulatory mandates, assisted in consent decree negotiations with the DOJ, and brings a strong knowledge base with municipal maintenance/management.

RELATED PROJECT EXPERIENCE

Multi-Year Sewer Study, Bryant, Arkansas—Project Director. Multi-year sewer evaluation study to assess I/I in the system and develop mitigation measures. Services included flow monitoring (7 meters/4 rain gauges), InfoWorks ICM hydraulic model construction and calibration (480,000 LF of sewer, force main, and pump stations), manhole inspections (1,254), smoke testing (395,232 LF), dye testing (45 setups), and CCTV review (37,322 LF) to identify and evaluate I/I sources. A systemwide Sewer Evaluation and Capacity Assurance Plan (SECAP) was developed to provide a prioritized plan to improve existing facilities and address future needs.

SECAP & Collection System Analytical Services, Little Rock Water Reclamation Authority, Arkansas —Project Director. Multi-year initiative to eliminate SSOs by 2023 through a systemwide evaluation and management program. Updated the SECAP per a consent administrative order (CAO), conducted flow monitoring (86 meters/9 rain gauges), InfoWorks hydraulic modeling (1.8M LF), analyzed future flow requirements, lift station performance, and peak hydraulic capacity for three WWTPs. Developed improvement plans considering efficacy, risk, and costs for phased implementation. Prepared annual reports and updated prioritized CIP items. Released from CAO in March 2024.

Sanitary Sewer Model and Master Plan Update, Fayetteville, Arkansas—Project Director. Evaluated current capacities and determined future needs with model updates for system changes (2.3M LF), flow monitoring (21 meters/10 rain gauges), data verification, model calibration, and hydraulic capacity analysis for dry-weather, peak flow, and design storm conditions. Future needs were based on land use and population projections for 2030. Included recommendations for capacity improvements with cost estimates, and ongoing SSES inspection, maintenance, and rehabilitation recommendations.

Wastewater Master Plan Update, Waco, Texas—Project Manager. Master plan update involving evaluation of the 2015 wastewater master plan, updating the hydraulic model to an all-pipe system model (4,456,234 LF), flow monitoring (3 meters/1 rain gauge), modeling simulations to assess current and 2050 planning horizon capacity needs under various storm scenarios using land-use and population projections, and recommendations for prioritized improvements for 2030 capital improvement planning.

EDUCATION
BS—Civil Engineering (Texas Tech University, 2002)

EXPERIENCE
22 years

REGISTRATIONS
PE—Texas #102137

CERTIFICATIONS
OSHA 10-Hour Safety Certification #30-003173557

NASSCO PACP/MACP #U-1113-06019290

4-Hour Work Zone Traffic Control

Confined Space Entry

Confined Space Rescue

TECHNICAL PRESENTATIONS
"Bridging the Gap: Bringing Data Transparency in a Citywide Condition Assessment," 2022 - WEF Collection Systems Conference

"Successful Removal from a CAO - The Hot Springs Story," 2018 - AWW & WEA

"Asset Management for Collection Systems," 2017 - AWW & WEA

"How Are We Doing? Mid-Term Evaluation of the Hot Springs SECAP," 2016 - WEFTEC

"Hot Springs, Resort Town - The 'Other' Water: Part 2," 2014 - EPA Region 6 CMOM Workshop

"Under Control: The City of Hot Springs, Ark. Uses Combination of Trenchless Solutions to Tackle I/I Problems," 2014 - Trenchless Technology Magazine

rjn group

Daniela López, PE

Project Engineer



Ms. López has a comprehensive skillset which ensures that municipalities can develop and maintain robust, efficient, and sustainable systems that meet current needs and prepare for future growth. She has expertise in hydraulic and hydrologic modeling services of municipal water and wastewater utilities. In addition, her experience includes master planning, capacity design, CSO/SSO mitigation, inflow and infiltration studies, SSES programming, planning and managing flow monitoring programs, and pump capacity studies. Drinking water experience includes model calibration, testing for available fire flow, pressure system analysis, determining unaccounted water, and hydrant testing.

RELATED PROJECT EXPERIENCE

SECAP & Collection System Analytical Services, Little Rock Water Reclamation Authority, Arkansas —Modeling Engineer. Multi-year initiative to eliminate SSOs by 2023 through systemwide evaluation and management. Updated the SECAP to comply with a consent administrative order (CAO). Conducted flow monitoring (86 meters/9 rain gauges) and InfoWorks hydraulic modeling (1.8M LF all-pipe). Developed future flow requirements using current and projected data, analyzed lift station performance and peak capacities for three WWTPs, and created phased improvement plans based on efficacy, risk, and costs. Prepared annual reports and updated prioritized CIP items.

Flow Monitoring, Hydraulic Modeling, and I/I Study, Copperas Cove, Texas—Modeling Engineer. Flow monitoring (16 meters/4 rain gauges), hydraulic modeling, and condition field inspections to evaluate capacity and I/I levels. Services included flow meter site investigations, equipment installation and maintenance, data QC and flow analysis, hydraulic model (820,000 LF) construction and calibration, manhole inspections (235), smoke testing (120,000 LF), dye testing (12 setups), CCTV inspection and review (12,000 LF), and engineering analysis to develop recommendations for I/I mitigation and capacity improvements.

Waco Wastewater Modeling On-Call Services—Modeling Engineer. Master plan update involving evaluation of the 2015 wastewater master plan, updating the hydraulic model to an all-pipe system model (4,456,234 LF), flow monitoring (3 meters/1 rain gauge), modeling simulations to assess current and 2050 planning horizon capacity needs under various storm scenarios using land-use and population projections, and recommendations for prioritized improvements for 2030 capital improvement planning.

PRIOR PROJECT EXPERIENCE

Hydraulic Model Updates & Growth Assessment , Craig County Rural Water District #1, Oklahoma—Hydraulic Modeling. Updated the District's hydraulic model and analyzed average and max day demands. Evaluated if existing water mains, pump station, and water tank can support expected growth from medical marijuana facilities. Designed capital improvement projects to accommodate this growth.

EDUCATION
BS—Civil Engineering (University of Dayton, 2017)

EXPERIENCE
7 years

REGISTRATIONS
PE—Arkansas #21809

CERTIFICATIONS
Confined Space Entry

First Aid, CPR & AED

OSHA 10-Hour Safety Certification #27-006055845

SOFTWARE
InfoWorks ICM, InfoSWM, PANET, PCSWMM, XPSWMM, EPASWMM, SSOAP Toolbox, WaterGEMS, InfoWate, Optimatics Optimizer, ArcGIS

TECHNICAL PRESENTATIONS
"Management Using Full-System Hydraulic Models:The City of Waco's Master Plan Update," 2024 - Texas Water Conference

"An Integrated Approach to Wastewater System Revitalization: A Case Study of Copperas Cove," 2024 - Texas Water Conference

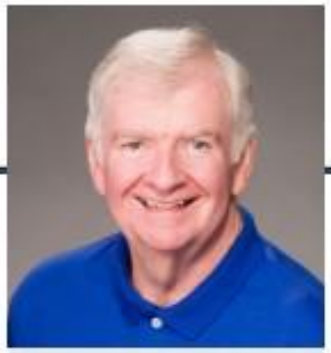
MEMBERSHIPS
American Water Works Association

Water Environment Federation

Underground Construction Technology Association

William Moriarty, PE, BCEE

Program Manager



Mr. Moriarty has extensive experience in the planning, design and construction management of water, wastewater and stormwater systems for major municipal utilities across the U.S., including serving as the former program manager for the Austin Clean Water Program. He is listed in "Who's Who in Environmental Engineering," serves as a diplomat for the American Academy of Environmental Engineers, and holds specialty certification in environmental sustainability. He has also been appointed by the Austin City Council as chairman of the Water and Wastewater Commission and the Austin Integrated Water Resources Task Force, as well as the City Council Open Space Environment and Sustainability sub-committee. As part of the City of Austin delegation, attended the China Study Tour, where he gave three presentations on water related topics to a global audience.

EDUCATION
MBA—Business Administration (University of Houston, 1985)

BS—Civil Engineering (Marquette University, 1974)

EXPERIENCE
49 years

REGISTRATIONS
PE—Texas #86069

CERTIFICATIONS
Board Certified Environmental Engineer

MEMBERSHIPS
American Academy of Environmental Engineers & Scientists

RELATED PROJECT EXPERIENCE

SECAP & Collection System Analytical Services, Little Rock Water Reclamation Authority, Arkansas —Consulting Project Manager. Multi-year initiative to eliminate SSOs by 2023 through systemwide evaluation and management. Updated the SECAP to comply with a consent administrative order (CAO). Conducted flow monitoring (86 meters/9 rain gauges) and InfoWorks hydraulic modeling (1.8M LF all-pipe). Developed future flow requirements using current and projected data, analyzed lift station performance and peak capacities for three WWTPs, and created phased improvement plans based on efficacy, risk, and costs. Prepared annual reports and updated prioritized CIP items.

Lower Gulpha Basin Interceptor Design, Hot Springs, Arkansas—Consulting Project Manager. Design services to upgrade 20,200 LF of 24- to 42-inch sewer pipelines and mitigate overflow conditions. The pipeline alignment offered unique construction challenges. It follows the Gulpha Creek with two AR DOT roadway crossings, one railroad crossing, and seven creek crossings. Elevations for the tie-in at the pump station, the lack of available ground cover over the granite topography, and significant public outreach also required creative solutions. Services included conceptual design, preliminary design, design survey, multi-sensor pipe inspection (20,200 LF), geotechnical investigations, environmental investigations, SUE investigations, easement preparation, and permitting (railroad, USACE 404, and ARDOT).

Water and Wastewater Asset Management Program, Wilmer, Texas—Consulting Project Manager. A phased water and wastewater asset inventory and risk-based management program identified, mapped, and prioritized system asset rehabilitation. Services included staff interviews, as-built research, gap analysis, field reconnaissance, and facility review. A comprehensive asset inventory was created, confirmed by field reconnaissance and GPS surveys, and used to develop a GIS for the City. Risk analysis, including likelihood and consequence of failure, informed a prioritized, risk-based asset management program with an inspection and preventative maintenance schedule.

3. Client References

The following presents detailed descriptions of a portion of Willdan's relevant recent experience. It must be emphasized that the ***professionals selected for the City's project team have managed or extensively participated in each engagement listed in this proposal.***

Please note that many of our projects completed in the last five years are for long-term ongoing clients. We are proud of the fact that many clients who initially engage us for rate studies are happy with our work product, and subsequently engage us again. We have helped many public agencies grow and expand and have worked for many of the clients identified within this submission for over a decade.

We are proud of our reputation for customer service and encourage you to contact these references regarding our commitment to completing our projects within budget and agreed upon timelines.

Bryant Arkansas | Water and Wastewater Rate Study, 2021

Willdan was engaged by the City of Bryant to prepare a water and wastewater rate study and long-term financial plan. The City is experiencing some modest growth but is also required to fund a significant amount of wastewater-related capital improvements. The project team recommended implementing a 5-year rate plan to gradually adjust rates, thus minimizing the impact of rate increases on its citizens. The plan passed by a unanimous Council vote.

Client Contact: Mr. Tim Fournier, Director of Public Works
210 West Third Ave, Bryant AR 72022
Tel #: (501) 943-0448 | email: tfournier@cityofbryant.com

Bryant Arkansas | Stormwater Fee Study, 2024

Willdan was engaged by the City of Bryant to prepare a stormwater rate study and long-term financial plan. The City seeks to implement a fee that will recover both the operating and the capital costs associated with the stormwater system. The City's objective is to ensure that both residential and non-residential stormwater fees are fair, just and reasonable, and reflect the impervious surface area contributed by non-residential clients. The study is currently under way and is expected to be completed in 2024.

Client Contact: Mr. Tim Fournier, Director of Public Works
210 West Third Ave, Bryant AR 72022
Tel #: (501) 943-0448 | email: tfournier@cityofbryant.com

North Little Rock Wastewater Utility, AR| Water and Wastewater Cost of Service Rate Study; 1999, 2003, 2007, 2011, 2015, 2021

Engaged by the North Little Rock Wastewater Authority originally in 1999 and again in 2003, 2007, 2011, 2015 and 2021The purpose of each engagement was remarkably similar -- analyze NLRWWU's wastewater-related financial, debt and operating obligations for the current year and 10 years into the future. The project team has presented recommendations for rate plans in each year of the study, which have enabled NLRWWU to meet operating, capital, and stipulated order requirements. The project team has addressed the NLRWWU Board of Directors and the North Little Rock City Council on numerous occasions, and in every instance the project team's recommendations were adopted. The latest 5-year rate plan was adopted in 2021. We are proud of our 25 year record with NLRWWU and look forward to further engagements in the future.

Client Contact: Mr. Michael Clayton, Director
7400 Baucum Pike, North Little Rock, AR 72117
Tel #: (501) 945-7186 | Email: mclayton@nlrwu.com

City of Hot Springs, AR | Water Wastewater Rate Study, Impact Fee Study, and Stormwater Rate Study; 2003, 2008, 2012 – 2024

Willdan (formerly Economists.com) is proud of its 20 year relationship with the City of Hot Springs. We were initially engaged in 2003, and again in 2008 to complete a comprehensive water and wastewater rate study. The study was designed to enable the City to finance significant capital improvements that would be required to service growth and the acquisition of new water supplies. This also included the construction of a new wastewater treatment facility, and the Lake Ouachita water treatment plant. The project team participated in several workshops as well as a public hearing to explain the need for, and justification behind, the recommended rates.

Since 2012 the project team has updated its findings and rate plans on an annual basis for the City. The project team has recently been engaged to complete a new update of water and wastewater rates, and is expected to be completed prior to the end of 2024.

The project team has also been engaged in 2024 to prepare a water and wastewater impact fee study. The project team completed a wastewater impact fee study for the City approximately 10 years ago. This new assignment is to complete both water and wastewater impact fees. The study must take into account the impact of the Ouachita Water Treatment Plant project on growth, as well as the need for a wastewater treatment plant expansion. This study is due to be completed prior to the end of 2024.

project team was instrumental in establishing the legal basis for cities to assess stormwater charges as fees for service in the state of Arkansas. This comes from our team's participation and assistance to the City of Hot Springs, who was the first city in Arkansas to establish a separate stormwater utility and monthly fee. In 2008 Hot Springs established an interim residential stormwater fee of $3.00/month and a commercial fee of $6.00 per month. The fee was intended to be only temporary, while a cost-of-service study was completed to develop a permanent fee structure. However, the City's plans were halted when a group of citizens filed a lawsuit against the City, alleging that the fee was instead an illegally implemented tax (Morningstar vs. Bush, No. 11-143). The City engaged project team member Dan V. Jackson to testify that the stormwater charge was a fee for service, was calculated in a just and reasonable manner, and was equivalent to those charged by other utilities throughout the country. The district court found in favor of the City, and the decision was affirmed by the Supreme Court of Arkansas, who ruled definitively that stormwater charges were fees for service. Both the District Court and the Supreme Court cited Mr. Jackson's testimony as pivotal evidence leading to its decision. Therefore, the team's efforts have provided cities across the state of Arkansas with legal basis and justification for the establishment of monthly stormwater fees.

Client Contact: Mr. Bill Burrough, City Manager
111 Opera Street, Hot Springs, AR 71902
Tel #: (501) 622-7978 | Email: bburrough@cityhs.net

Hot Springs Village Property Owners Association, AR | Water and Wastewater Rate Study; 2015, 2017, 2024

In April 2015, Hot Springs Village Property Owner's Association ("Hot Springs Village" or "HSV") engaged Willdan Financial Services, to conduct a water and wastewater rate study and long-term financial plan. The objective was to develop a long-term rate plan that will enable this rapidly growing community of 9,000 connections to recover sufficient funds to meet operating expenses, capital outlays, debt service and coverage requirements, while at the same time minimizing the impact on ratepayers. Further, the utility was interested in issuing long-term debt to fund capital improvements and system expansion, and the proposed rate plan enabled all debt service and coverage requirements to be sufficiently funded. In 2017 Willdan was engaged to update and revise the rate plan to enable additional long-term debt beyond what was forecast in 2015 to be adopted. The revised rate plan was adopted unanimously by the Board of Directors. The project team is currently undertaking a new rate study, but this engagement is currently on hiatus.

Client Contact: Mr. Ken Unger, Director of Public Services
895 DeSoto Blvd., Hot Springs Village AR 71909
(501) 922-5522 |Email: kunger@hsvpoa.org

Greenbrier, AR| Water and Wastewater Rate Study and Impact Fee Study; 2024

Willdan has been engaged by the City of Greenbrier to complete a comprehensive water and wastewater rate study, and a water and wastewater impact fee study. The City is beginning to experience modest growth, and it is faced with a significant level of capital improvements required to service this growth. The City seeks a rate structure that will be compliant with Arkansas Law 605 and will be fair, just and reasonable to its ratepayers. The City also seeks to establish impact fees that will ensure to the best extent possible that growth will pay for itself. The study is currently under way and is expected to be completed by Autumn 2024.

Client Contact: Mr. Kaleb Mack, Utilities Director
11 Wildon Farm Rd, Greenbrier, AR 72058
Tel #: (501) 287-7132 | Email: wastewater@gogreenbrier.com

Russellville Arkansas | City Corporation; 2014, 2017,2020, 2024

Willdan was engaged by City Corporation, the water and wastewater utility of the City of Russellville, in 2014 to prepare a water and wastewater rate study and long-term financial plan. City Corporation intended to fund as much as $31 million in long-term debt over a 5-year period and required a long-term rate plan that would enable it to meet debt service and coverage requirements. Additionally, City Corporation desired that its inverted block rate structure be further modified to encourage conservation. Due to significant changes in its capital improvement plan and debt funding requirements, City Corporation engaged Willdan in 2017 to update its rate study and to implement a modified long-term rate plan. The modified plan was presented to and adopted unanimously by both the City Corporation Board and the City Council. Another update was completed in 2020, and the project team is currently working on another updated in 2024. This engagement is expected to be completed by September 2024.

Client Contact: Mr. Steve Mallett, General Manager
205 West Third Place, Russellville AR 72811
Tel #: (479) 968-2080|email: smallett@citycorporation.com

McKinney, TX | Water and Wastewater Cost of Service Rate Study; 2016, 2019,2021, 2023, 2024

Willdan was engaged in 2016 and again in 2019, 2021, 2023 and 2024 to conduct a comprehensive review of the water and wastewater rates and complete a full cost of service rate study for the City of McKinney. The City has been experiencing significant growth in recent years, which has added to the challenge of maintaining a superior quality water system. Further, the City has had to absorb significant cost increases from its regional provider, North Texas Municipal Water District (NTMWD). The rapidity of growth and the frequency of NTMWD rate changes have necessitated frequent updates to the rate plans. Each study has recommended a new rate plan for the current year that will enable the City to fund its capital improvements and rate increases from NTMWD. The City Council unanimously adopted the recommendations of each study.

Client Contact: Mr. Mark Holloway, Chief Financial Officer
222 N. Tennessee, McKinney, TX 75070
Tel #: (972) 547-7536 | Email: mholloway@mckinneytexas.org

Seguin, TX | Water and Wastewater Impact Fee Study; 2021

The City of Seguin engaged Willdan in 2023 to prepare a water and wastewater impact fee study. Segin has begun to experience significant levels of growth, and has developed a substantial capital improvement plan necessary to fund this growth. Willdan prepared a study and recommendations for maximum water and wastewater impact fees, which were adopted by the City Council. The report was fully in compliance with the guidelines of TWC Chapter 395.

Client Contact: Mr. Rick Cortes, Assistant City Manager
205 N. River St, Seguin TX 78156
Tel #: (830) 401-2401 | Email: rcortes@seguintexas.gov

Brownsville PUB, TX | Water and Wastewater Rate Study; 2020

After a competitive bidding process the Brownsville PUB engaged Willdan to conduct a comprehensive water and wastewater rate study and long-term financial plan. The City has experienced significant growth and requires hundreds of millions of dollars of capital improvements to fund both growth and maintenance. Additionally, the PUB has a significant number of outside city customers and required a rate to be put in place that was fair, just, and reasonable. Finally, the PUB sought to develop a rate for its Resaca customers to ensure that they were paying for the cost of water they were extracting. The project team completed its analysis and presented its results, including the imposition of a multi-year rate plan, in late 2020. The City Council must adopt the Board's recommendation, and that is expected to occur in early 2021. The PUB has already expressed its intention to engage Willdan to conduct additional work.

Client Contact: Mr. Leandro Garcia, Chief Financial Officer
1425 Robinhood Drive, Brownsville, TX 78521
Tel #: (956) 983-6173; Email: lgarcia@brownsville-pub.com

Celina, TX | Water and Wastewater Cost of Service Study; 2018, 2021, 2022

Willdan was engaged in 2018 by the City of Celina to prepare a comprehensive water and wastewater rate study and long-term financial plan for FY 2019 and beyond. The City is experiencing rapid growth, like so many other cities in the Denton-Collin County region of North Texas. As a result, the City has to fund millions of dollars of capital improvements to expand its system to service this growth. The project team extensively with City staff to develop a five-year rate plan that funded this new debt, met debt service and coverage requirements, and ensured that any rate adjustments were as minimal as possible. The City Council unanimously adopted the project team's proposed rate plan. In 2021 Willdan was asked to update the rate study and propose a revised rate plan, which was also adopted by City Council.

Client Contact: Ms. Karla Stovall, Assistant City Manager
142 N. Ohio St. Celina TX 75009
Tel # : (972) 382-9943 | Email : kstovall@celina-tx.gov

Community Water System, AR | Water Rate Study 2023

CWS engaged Willdan in 2023 to conduct a comprehensive water rate study and long-term financial plan. CWS provides services to a combination of retail and wholesale customers, some of whom are growing at significant rates. Further, CWS is facing the need to issue as much as $32,000,000 in new debt to fund further capital improvements. Willdan presented a comprehensive rate plan that would enable CWS to fund its increasing operating and capital costs in a manner that minimized the impact on its customers. The project team also conducted a series of public meetings with customer representatives to lobby support for the rate plan. The CWS Board of Directors unanimously adopted the multi year rate plan. The final rate study report met all the requirements of state law 605.

Client Contact*:* Mr. Timothy Shaw, General Manager
299 Lakeshore Drive, Greers Ferr AR 72067
Tel #: (501) 825-7294 | Email: tshaw@cwswater.org

Hot Springs, AR | Water and Wastewater Impact Fee Study; 2024

Hot Springs engaged Willdan in 2023 to prepare a water and wastewater impact fee study. Willdan's predecessor firm, Economists.com, prepared the previous impact fee study. The City has only a nominal wastewater impact fee and no water impact fee. The project team is currently evaluating the capital improvement plan and preparing a schedule of maximum fees for the water and wastewater utilities. A final report is expected in 2024.

Client Contact: Mr. Bill Burrough, City Manager
111 Opera Street, Hot Springs, AR 71902
Tel #: (501) 622-7978 | Email: bburrough@cityhs.net

Seguin, TX | Water and Wastewater Cost of Service & Rate Design Forecast; 2015 to present

The City engaged Willdan /Economists.com to develop a comprehensive water and wastewater rate plan for the period FY 2015 through FY 2024. The City faces the need to spend tens of millions of dollars to repair and replace its aging water distribution and wastewater collection system. Further, the City is beginning to experience a significant level of growth in both its commercial and residential sectors.

The project team developed a multi-year water and wastewater rate plan that uniformly applied rate adjustments to all customer classes based on projected revenue requirements. The rate plan is intended to fully fund needed capital improvements over the next five years. Additionally, as part of this study, special rates were developed for a new large water customer based on that customer's cost of service. The rate model designed for the City included a specific cost of service for each class of water and wastewater customers in accordance with American Water Works Association (AWWA) and Water Environment Federation (WEF) ratemaking guidelines. City Council adopted the multi-year rate plan after a public hearing in open session in September 2015. The project team has prepared annual updates of the rate plan every year since 2015. The project team also provided a more in-depth analysis of the City's options regarding the financing of long-term capital improvements to the water and wastewater system. These options included the development of an impact fee to ensure that new growth paid its share of the capital improvement costs.

Willdan has provided ongoing assistance to the City on a variety of matters relative to their water and wastewater utility for the past decade. This includes service to the supplier co-owned by the City, the Schertz-Seguin Local Government Corporation.

Client Contact: Mr. Ricardo Cortes, Assistant City Manager
205 N River Street, Seguin, TX 78155
Tel #: (830) 401-2401 | Email: rcortes@seguintexas.gov

League City, TX | Water and Wastewater Multi-Year Financial Plan and Rate Design Study; 2019-2020

The City of League City engaged Willdan in late 2019 to prepare a comprehensive water and wastewater rate study and long-term financial plan. The City had been experiencing a significant amount of population and account growth, and was interested in developing a long-term plan that funded growth without disproportionately impacting existing ratepayers. The City was also experiencing significant increases from its wholesale water supplier, Gulf Coast Water Authority, and wanted to ensure that these costs were passed through to the ratepayers in a manner that minimized their financial and economic burden. Finally, the City sought to implement a rate plan for its non-residential ratepayers that did not disproportionately burden high volume commercial customers.

The project team worked extensively with City staff to develop a series of several rate plan alternatives, which were presented to the City Council. The City Council carefully reviewed all alternatives and in early 2020 adopted the chosen alternative, a multi-year plan with annual adjustments, by a unanimous vote.

Client Contact: Mr. John Baumgartner, City Manager
300 West Walker, League City, Texas 77573
Tel: 281-554-1414|email: john.baumgartner@leaguecitytx.gov

Harlingen Water Works, TX | Water and Wastewater Rate Study; 2023-2024

HWWS engaged Willdan in 2023 to conduct a comprehensive water and wastewater study and long-term financial plan. The city is facing the need to invest as much as $260 million in capital improvements in the next decade to maintain its existing system and fund new growth. The utility has not adjusted rates in over a decade and its operating revenues are now struggling to cover costs. Further, staff and the City Commission requested a comprehensive review of multi family rates, monthly charges and the potential implementation of senior citizen rates.

The project team presented several rate scenarios for the Board and the City Commission to review. A series of public hearings were held in Spring 2024, and a multi year comprehensive rate plan was implemented by the City.

Client Contact: Mr. Ron De La Garza, Finance Director
121 E. Harrison, Harlingen TX 78551
Tel #: (956) 430-6155 | Email: rdelagarza@hwws.com

Harlingen Water Works, TX | Water and Wastewater Impact Fee Study; 2024

HWWS engaged Willdan in 2023 to prepare a water and wastewater impact fee study. Willdan's predecessor firm, Economists.com, prepared the previous impact fee study. HWWS' impact fees are currently recovering substantially below maximum allowable levels. The project team is currently evaluating the capital improvement plan and preparing a schedule of maximum fees for the water and wastewater utilities. The project is following the guidelines of TWC Chapter 395 and a final report is expected in 2024.

Client Contact : Mr. Ron De La Garza, Finance Director
121 E. Harrison, Harlingen TX 78551
Tel #: (956) 430-6155 | Email: rdelagarza@hwws.com

Edmond, OK | Water and Wastewater Rate Study; 2010, 2015, 2017, 2023 Edmond Public Works Authority (EPWA)

Willdan (formerly Economists.com) was initially engaged by EPWA in November 2009 to review their water and wastewater rates and prepare a comprehensive financial plan for the current budget year and beyond. This study required a comprehensive analysis and evaluation of the utilities cost of service and revenue requirements as well as a review of the system's known capital improvement needs. This forecast took into considerations such factors as inflation, system growth, forecast increases in accounts, volumes and billing units. The overall objective of the long-term rate plan was to enable EPWA to recover sufficient funds to meet all operating and capital expenses while minimizing the impact on ratepayers. The study included the development of equitable wholesale water sales and wastewater treatment rates for services provided to interested parties outside the Edmond municipal limits. Importantly, the long-term rate plan included the impact of additional future debt EPWA must acquire to finance its capital improvement plan for the water and wastewater system under many diverse and complex scenarios. The study was completed in October 2010 with the adoption of the five rate recommendations by Council.

In December 2014, Willdan was engaged to conduct a full water and wastewater cost of service rate study and to develop a 5-year rate plan which would support the City's plans to implement $200 million in bond funded capital improvements over the next 10 years. Council adopted this study's recommendations in June 2015. Several interim projects on impact fees and rates have been completed over recent years to integrate ongoing revisions to the water and wastewater CIP and advise staff on the impact of changes on the rate plan as well as any modifications needed.

Client Contact: Mr. Kris Neifing, Current Water Resources Superintendent
2004 Old Timbers Drive, PO Box 2970, Edmond, OK 73034
Tel #: (405) 216-7696 | Email: kris.neifing@edmondok.com

BRYANT PROJECT EXPERIENCE

For almost 50 years, RJN has worked closely with municipalities of varying sizes throughout the country. RJN is a licensed and experienced engineering firm that understands community needs.

FUTURE HORIZONS EXPERIENCE

RJN has been working with the City of Bryant since 2016, providing expertise in infrastructure growth to meet future population demands. Our team of engineers brings a depth of experience in delivering data-based projections that accurately forecast population growth and development. Our insights have helped to ensure our clients are able to meet service demands now and into future planning horizons.

HIGHLIGHT PROJECTS OVERVIEW	
SECAP Model Development with Update and Multi-Year Sewer Study Bryant, Arkansas	Multi-year sewer evaluation study to assess I/I in the system and develop mitigation measures. Services included flow monitoring (7 meters/4 rain gauges), InfoWorks ICM hydraulic model construction and calibration (480,000 LF of sewer, force main, and pump stations), manhole inspections (1,254), smoke testing (395,232 LF), dye testing (45 setups), and CCTV review (37,322 LF) to identify and evaluate I/I sources. A systemwide Sewer Evaluation and Capacity Assurance Plan (SECAP) was developed to provide a prioritized plan to improve existing facilities and address future needs.

CITY OF BRYANT PROJECTS	Population Growth & Land Use Development Analysis	Data Collection and Analysis	Hydraulic Modeling	Stakeholder Engagement	Regulatory Compliance
Four-Year Sewer Study Bryant, Arkansas		■		■	■
SECAP Hydraulic Model Development Bryant, Arkansas	■	■	■	■	■
SECAP Hydraulic Model Update Bryant, Arkansas	■	■	■	■	■
Stormwater Fee Study Bryant, Arkansas	■	■		■	
Rainfall and Spillway Monitoring Bryant, Arkansas		■		■	
Rain Gauge Dashboard and Spillway Monitoring Bryant, Arkansas		■		■	

Similar Clients

The chart below is a comprehensive listing of the Plano office's clients. It does not include the hundreds of additional clients served by other Willdan offices, or our international clients. We do not "pack" our proposals with representative engagements in which designated team members did not participate, as it is our belief that a company's general experience not shared by proposed team members is not useful to, nor relevant to, the City's needs and requirements.

Willdan Financial Services Client List -- Plano Office

	Texas			Arizona		Other	
1	Alamo Heights	63	Laredo	1	Arizona Dept. of Environmental Quality	**Arkansas**	
2	Allen	64	Lavon	2	Avondale	1	Bryant
3	Alvarado	65	Leander	3	Bisbee	2	Community Water System
4	Amarillo	66	League City	4	Buckeye	3	Conway
5	Aqua Water Supply Corporation	67	Liberty Hill	5	Bullhead City	4	Greenbrier
6	Aubrey	68	Little Elm	6	Camp Verde	5	Hot Springs
7	Arlington	69	Llano	7	Carefree	6	Hot Springs Village
8	Balch Springs	70	Los Fresnos	8	Casa Grande	7	North Little Rock Wastewater Utility
9	Bellaire	71	Marble Falls	9	Chino Valley	8	Russellville
10	Bellmead	72	Marfa	10	Clarkdale	9	Benton Washington Regional PWA
11	Beeville	73	Melissa	11	Clifton		
12	Brady	74	McKinney	12	Cottonwood	**Oklahoma**	
13	Brazos River Authority	75	McLendon-Chisholm	13	Chloride Domestic Water Imp. District	1	Ada
14	Brownsville Public Utility Board	76	Mercedes	14	Douglas	2	Chickasha
15	Burleson	77	Mesquite	15	Eagar	3	Lindsay
16	Castroville	78	Midlothian	16	Eloy	4	Potawatomi Nation
17	Cedar Hill	79	New Braunfels	17	Flowing Wells Irrigation District	5	Edmond
18	Celina	80	New Summerfield	18	Florence	6	Miami
19	Cinco Southwest MUD 1, 2, 3	81	North Fort Bend Water Authority	19	Gila Bend	7	Pryor
20	Cibolo Creek Municipal Authority	82	Oak Point	20	Globe		
21	Cibolo Valley Local Govt Corp	83	Parker	21	Goodyear	**USA**	
22	Cleburne	84	Plano	22	Holbrook	1	North Chicago, IL
23	Combes	85	Port Arthur	23	Jerome	2	South Adams County, CO
24	Coppell	86	Primera	24	Marana	3	Sarpy County, NE
25	Crandall	87	Princeton	25	Miami	4	Eustis, FL
26	Crystal Clear SUD	88	Prosper	26	Nogales		
27	Del Rio	89	Raymondville	27	Oro Valley	**Pacific Region**	
28	Denton	90	Richardson	28	Patagonia	1	Water Authority of Fiji
29	Denton County FWSD #1A	91	Richland Hills	29	Payson	2	Palau Public Utilities Corporation
30	Denton County FWSD #8C	92	Robstown	30	Picacho Peak	3	Kiribati PUB
31	Denton County Transportation	93	Rockport	31	Pine Strawberry WID	4	American Samoa Power Authority
32	DeSoto	94	Rockwall	32	Pomerene Domestic WID	5	Electric Power Corporation – Samoa
33	Denison	95	Rowlett	33	Prescott	6	Commonwealth Utilities Corporation – Saipan
34	Donna	96	Royse City	34	Prescott Valley	7	Guam Power Authority
35	Duncanville	97	San Benito	35	Quartzsite	8	World Bank
36	Eagle Pass	98	San Juan	36	Queen Creek	9	Asian Development Bank
37	East Medina County SUD	99	San Marcos	37	Safford	10	Pacific Region Infrastructure Authority
38	El Paso County WCID #4	100	Schertz	38	Show Low		
39	Fairfield	101	Schertz Seguin LGC	39	San Luis		
40	Fairview	102	Seguin	40	Somerton		
41	Ferris	103	Selma	41	Springerville		
42	Frisco	104	Sherman	42	Tombstone		
43	Graham	105	Sonora	43	Water Infrastructure Finance Authority of Arizona		
44	Grand Prairie	106	Southmost Regional Water Auth	44	Wellton		
45	Galveston	107	Taylor	45	Willcox		
46	Garland	108	Tomball	46	Winslow		
47	Glen Rose	109	Tornillo Water Improvement Dist	47	Yuma		
48	Graham	110	Troup				
49	Groesbeck	111	Van Alstyne				
50	Hackberry	112	Venus				
51	Harker Heights	113	Waco				
52	Harlingen	114	Waller				
53	Harris County MUD 188	115	Waxahachie				
54	Heath	116	Webb County				
55	Hempstead	117	West Harris County RWA				
56	Hewitt	118	Whitehouse				
57	Hutchins	119	Winona				
58	Jonah Water SUD	120	Woodway				
59	Kempner WSC	121	Yancey Water Supply Corporation				
60	Kennedale						
61	La Villa						
62	Laguna Madre Water District						

4. Project Objectives/Understanding and Approach

Description of Study Understanding

The project team understands that the City of Bryant ("the City") seeks a *comprehensive* water, wastewater and impact fee rate study with results that include *5-year recommendations for periodic rate and impact fee updates based on financial and demographic data*. The overall objective is to establish user rates and charges that are sufficient to meet future system revenue requirements including *future capital improvement needs based on the utility system's master plans*, debt service coverage, operating costs (including cost of water delivered and wastewater treated) and non-operating costs, and minimum operating reserves (typically 60 - 90 days). The project team will use its knowledge from past rate work with the City to develop a keener understanding of *water and wastewater systems, including its current rate structures*, establish rates around a broader set of goals and objectives, including but not limited to financial/rate stability, *senior citizen discounts*, conservation, consumption characteristics of the utility's customer classes, and minimizing customer impacts and maintaining competitive rates with neighboring communities.

In addition, the City is seeking to update its water and wastewater impact fees. *The project team will assess the impact of future growth on water and wastewater infrastructure needs*. The project team's methodology for calculating the maximum water and wastewater impact fees is both simple and flexible and *based on a proportionate share of growth-related capital improvements to the utility's infrastructure*. Simplicity is important so that the development community and the public can easily understand the justification for the fee program. At the same time, we will utilize our expertise to reasonably ensure that the program is technically defensible.

To accomplish these overall goals and objectives for the rate study, our team's approach will utilize the "generally accepted" cash basis rate setting methodology as delineated in AWWA's Manual M1 for the water utility and WEF MOP No. 27 for the wastewater utility. Most importantly and directly related to the City, *the project team approach to the rate study will also be guided by the Arkansas Natural Resources Commission Final Rule No. ANRC 138.00 entitled Rules Implementing Act 605 of 2021.* (Act 605 was codified as Arkansas Code Title 14, Chapter 234, Subchapters 801 – 807.)

Regarding the impact fee study, it is important to note that in the state of Arkansas, the development of any new or amended maximum impact fee must be in accordance with AR Code § 14-56-103. This statute defines development impact fees and generally lays out what can and cannot be included in the impact fee. Generally, the statute states development impact fees are "…for recouping expenditures of the municipality or municipal service agency that are reasonably attributable to the use and occupancy of the development." The project team approach and methodology will follow this statute. In addition, we will use generally accepted industry standards and publications such as System Development Charges for Water, Wastewater, and Stormwater Facilities, by Arhtur C. Nelson, as a guide to calculating the City's water and wastewater impact fee update.

The rate and impact fee study project team will collect from staff such standard inputs as *account growth projections*, outstanding debt service schedules, the current CIP, the current utility asset inventory, account/usage/revenue data from the City's billing system, and current budget information to develop the forecast of future costs and capital improvement requirements. The information developed during the course of this rate study will allow the City to choose *alternative capital plans that will minimize the impact on all classes of ratepayers*, while still allowing it to meet the increasing expense demands of operations and environmental standards and regulations.

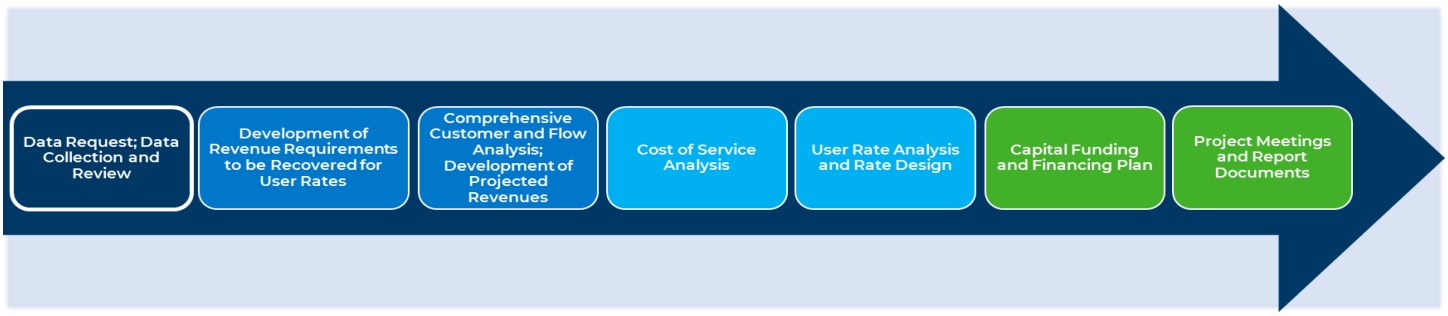
Upon finalization of the inputs outlined above, the project team will prepare comprehensive 10-year forecast Excel based rate and impact fee models that will present alternative long-term water and wastewater rate plans sufficient to fund operating expenditures, the forecast CIP and debt service.

The *rate study report* will have an executive summary that succinctly documents the rate study's findings and recommendations. We will also prepare a separate *impact fee report* for City staff to review that documents each step of the analysis, including schedule of maximum justified fees by facility type land use category.

The final deliverable will include preparations and separate delivery of rate study and impact fee *presentations to City Staff, City Water and Wastewater Advisory Committee and the City Council*. Working with the City, *the project team will establish a program that informs community members and developers about the rate and impact fee study process.* We will work tirelessly with staff to ensure that our recommended alternatives are successfully implemented.

Work Plan

Below summarizes the standard approach commonly employed by the project team to develop utility rates. Each step of the steps are typically performed in tandem.



Water and Wastewater Rate Study Scope of Work

The remainder of this section presents our approach to performing the major tasks required to successfully conduct a water and wastewater rate study and long-term financial plan engagement, in accordance with the City's RFP. Assuming timely responses to information/data requests by the City, ***we will complete the rate study work plan in 14 weeks.*** The period required to accomplish each work plan task is listed in the task header. Many of these tasks will be performed in tandem so the sum of each task's level of effort will not necessarily match the 14-week completion commitment.

Task I: Project Kick-off, Data Acquisition and Assessment — 4 Weeks

The project team will meet with City staff at the outset of this project. The purpose of this meeting will be to discuss study goals and objectives, review requirements for completing each task, establish responsibilities and lines of communication, and refine the work plan and schedule. *During this meeting we also plan to discuss establishing a program that informs community members and developers about the rate and impact fee study process*

Prior to this meeting we will provide a preliminary data request list to initiate data collection and organization. The initial data that will be required by the project team will include, but not be limited to, the following: current fiscal year utility budget; most recent audited financial statements; water and wastewater billing data/reports identified by customer class by month from the previous four years to present (**note**: *the project team has the City's billing data from January 2017 through September 2020 from the previous water and wastewater rate study prepared by Willdan*), cost and volumes delivered and treated by month and day for all months from the previous four years; debt schedules for all outstanding water/ww related debt; copy of the most recent *Capital Improvement Plans and utility master plans* approved by the City; wholesale contracts; and *current rate schedules.*

NOTE: Gathering this data and attending the kick-off meeting and work sessions with the project team represents the bulk of the time required by City staff.

Task II: Demographic Analysis — 3 Weeks

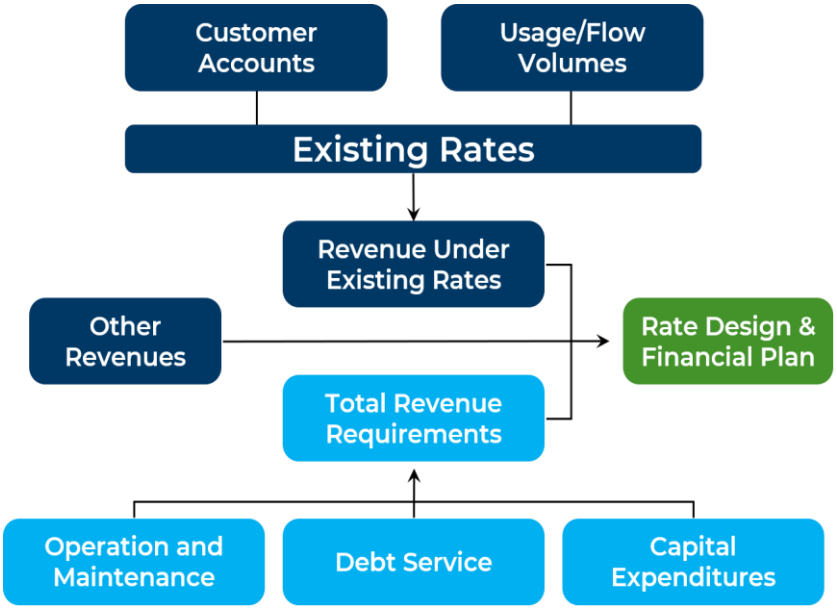
The project team will prepare a comprehensive demographic analysis of ratepayers as a pretext to the development of the water and wastewater rate plans. The project team will develop current data on: number of households; median household income; average water and wastewater monthly bills, both in total and as a percentage of household income. Using this data and the City's current rate schedule, the project team will *benchmark the City's current monthly rates against monthly rates and fees charged by other utilities in neighboring and similar communities for a comparison survey*.

Task III: Determine Revenue Requirements — 6 Weeks

In this task, the project team will analyze the City's existing water and wastewater fund financial condition and the planned infrastructure improvements developed by the project team as part of the impact fee study. Based on this analysis the project team will determine overall revenue requirements for the current year and for a ten-year forecast period. The revenue requirements consist of the total cost to provide this service, including operation and maintenance (O&M) costs *(*including cost of wholesale and retail water delivered and wastewater treated*)*, transfers to the General Fund, debt service payment and coverage requirements on existing and any proposed new debt, direct capital outlays financed by rates, and other financial needs. We will consider the levels of cash reserve funding required (typically 60 – 90 days) for the utility system's operation in our determination of the revenue requirements.

The development of a reasonable set of assumptions concerning future operating and non-operating costs and capital spending for repairs and replacements and system expansion is one of the most critical elements of the revenue requirement.

The project team will discuss *and analyze* all components of these categories with City staff, including: *the expected amount of CIP,* the impact of peak demands on the cost of providing service, inflation estimates, anticipated changes to operating costs, various funding alternatives, expected reserve requirements, and debt coverage requirements. The underlying assumptions used to project the water and wastewater financials will be clearly stated in all rate study presentations and the rate study report.



Finally, the revenue requirements will be calculated based on the Cash Basis for the City's retail customers. For Wholesale customers and retail customers outside city limits, the project team may need to calculate revenue requirement based on the "Utility Basis" to provide the City with a fair return on utility assets in accordance with AWWA M-1 guidelines. We will advise the City on the most appropriate and defensible method to determine the revenue requirement for these customers.

Task IV: Determine User Characteristics and Customer Classes — 6 Weeks

A fundamental principle of cost-of-service ratemaking for water and wastewater utilities is for costs to be allocated to user groups based on the peak demands each group places on the system. In the case of water service, demands typically are measured in terms of base and peak demands that are critical to the sizing and operation of system facilities. For sewer service, demands usually are measured in terms of customer flows and sewage strength characteristics that determine sewer treatment plant influent loadings. These demands are collectively referred to as "user characteristics."

Using information gathered from the City's billing data, the City's current utility master plan, or other internal sources, this task involves determining the appropriate groupings of customers so that customers with similar user characteristics populate the same customer class. For cost-allocation purposes, customers are grouped into different classes based on differences in their user characteristics. The development of information for grouping customers and allocating costs to specific customer groups is an essential step in the ratemaking process, to ensure that costs will be recovered from these groups in direct proportion to their use of the system.

As with all our studies, AWWA Manual M-1 will provide the framework for our allocation methodology.

The determination of customer user characteristics as noted above will include a careful review of the City's sales volume histories and forecasts. The volume data must be considered as a whole and separately for each defined customer class. Methodologies for projecting water and sewer revenues will be assessed to confirm appropriate accounting for expected growth, water losses, inflow and infiltration, and normal weather conditions. The project team will analyze historical demand and consumption characteristics.

Historical water sales data used for forecasting purposes will be reconciled against water supply/production records; historical sewer flow and loadings data will be used to determine flows and loadings for the system and individual customer classes.

The utility system accounts and respective usage will be forecast for a 10-year planning period. Such projections will be developed by considering historical growth trends, peak demands, climatological patterns, local economic conditions, the potential for adding/losing major utility customers, changes in customer class usage patterns over time, and experienced judgment.

The forecast usage projections will be based on the projected number of utility accounts and a usage per account analysis to differentiate the historical effects of account growth and increased (decreased) average usage by customer class. The project team will finalize 10-year projections of sales volumes that will then be used to calculate projected revenues under current rates for the 10-year rate forecast period.

Task V: Cost Functionalization, Classification and Allocation — 3 Weeks

In this task the project team will calculate the cost of water transmission/distribution, water supply and treatment and wastewater collection and treatment based on the information gathered in previous tasks. As discussed in Task III, these costs include such categories as O&M (personnel, chemicals, contractual obligations, engineering, administrative, equipment maintenance, vehicles, customer service, materials, etc.), reserves, debt service, and capital outlays funded by rates (assuming that the Cash Basis is utilized). These costs will then be assigned to individual customer classes through a three-step apportionment process designed to prevent deviation from cost of service principles and enhance fairness and equity.

These steps are referred to as "functionalization," "classification," and "allocation." **Functionalization** involves the categorization of utility costs according to the utility functions these costs are incurred to perform. Typical water utility functions include treatment, pumping, storage, distribution, and customer billing; wastewater functions include treatment, collection, disposal, and customer billing. **Classification** is the apportionment of functionalized utility costs according to the types (or classes) of demands served by the utility, and is primarily applicable to the water utility. For water utilities, AWWA M-1 ratemaking methodologies prescribe classification of costs according to base, maximum-day, maximum-hour, and customer demands.

Water Environment Federation (WEF) and U.S. Environmental Protection Agency (EPA) methods classify sewer costs according to flow, biochemical oxygen demand (BOD) loadings, and total suspended solids (TSS) loadings. **Allocation** is the assignment of classified utility costs to individual customer classes. Costs are allocated proportionately to customer classes based on their contributions to total utility system demands.

Under typical circumstances, standard industry ratemaking principles and practices as outlined in AWWA and WEF ratemaking manuals and guidelines serve as the foundation for cost allocations to customer classes. These industry manuals and guidelines are not prescriptive and recognize the need to afford utility decision makers the flexibility to reflect local circumstances.

Task VI: Alternative Rate Designs for Current Year and Five-year Forecast — 5 Weeks

After allocating costs to customer classes, *a plan will be developed for evaluating rate design options* that will recover allocated costs, including O&M, debt service, and reserve requirements. *Because several rate alternatives will be examined in this report*, the project team proposes that for ease of evaluation the rate design process be segregated into a two-step process.

Importantly, we will ensure that any proposed rate design can be easily incorporated into the City's billing system.

In this task, the current year and 10-year forecast rate design alternatives will be presented separately. This will enable City staff to evaluate both its immediate short-term needs and its longer-term needs under each alternative.

The rate model spreadsheet will be developed in a dynamic manner such that the project team and City staff will be able to analyze various "What If" scenarios detailing the financial impacts under each scenario. The rate structure alternatives will be developed to recover the projected revenues needed to fund utility operations, recognizing equitable cost recovery by customer class*, establishing reasonable recovery of costs from existing and new utility customers, and complying with applicable regulations and policies*.

We intend to consult closely with City officials to develop a consensus on the most appropriate alternative rate designs for each of the alternatives. In this task we also intend to accomplish the following objectives:

- Determine whether any rate classes are subsidizing the others, and the degree to which any subsidy is equitable.
- *Evaluate multiple options regarding rate structures showing comparisons between rate increases: 1) with no adjustment to impact fees, 2) adjustment to rate structures with impact fee adjustment, and 3) adjustment to both impact fees and rate structures.*
- *Estimate the impact of the proposed rate structures regarding affordability* (*assisting low-income/senior citizen customers*) and conservation efforts.
- Provide a detailed delineation of the advantages and disadvantages of each alternative including industry best practices for rate design.
- Calculate the impact of any proposed "transition period" into the new rates.
- Compare the recommended rates to the City's historical rate structure; and
- Prepare the cost of water and wastewater utility service per household based on the new rate design (also known as a "bill impact analysis" which is commonly performed in our rate studies).

This will enable the project team to clearly demonstrate results of the RFP requirements to provide multiple options regarding rate structures showing comparisons between rate increases: 1) with no adjustment to impact fees, 2) adjustment to rate structures with impact fee adjustment, and 3) adjustment to both impact fees and rate structures.

Specific attention will be given to the sensitivity of system revenues to possible changes in customer usage prompted by a more aggressive affordability and/or conservation promoting rate structure. *We will also analyze the potential subsidies required from all customer classes by implementing various levels of senior citizens discounts*. Rate designs will be subjected to revenue generation tests and reviewed for administrative efficiency *and ease of explanation to the customers and other lay persons.*

In instances where cost-of-service-based changes in revenue responsibility will result in significant rate increases for any one customer class, the merits of implementing rate changes over a multiyear period will be discussed with City staff. If appropriate, multiyear rate transition plans will be developed that meet, to the extent possible, expressed criteria for rate change acceptance. The project team will meet with City officials prior to unveiling any recommendations to the City Council or the public to go over the initial alternatives and to make any revisions as deemed appropriate by City staff.

Task VII: Prepare and Present Draft and Final Reports — 4 Weeks

The project team will prepare a comprehensive draft and final rate study reports. The draft and final reports will include detail analysis of revenue requirements, document allocations of revenue requirements to functional parameters and customer classes, and alternative rate recommendations for the water and wastewater utilities. Information on the impact of recommended rate changes to customers' typical monthly bills will also be provided. The steps in the rate calculations will be described clearly so that there is a full understanding of the technical steps and assumptions contained in the determination of the rates.

The draft and final reports will include an executive summary that succinctly documents the rate study's findings and recommendations. Bound copies of the study with final recommendations will be presented to the City.

The final report will present the chart and table output of the water and wastewater rate model the project team prepared during the study analysis. The model will be designed to integrate the revenue produced by rates with the water and wastewater fund financial plan. This model will have specific input areas to update: consumption patterns and meter classifications, O&M, debt service and capital (CIP) costs and other financial data needed to develop a rate and financial plan forecast. Most importantly, the City's water and wastewater rate model will include an interactive executive dashboard. This will be a comprehensive financial tool to allow planning and evaluation of variable inputs and assumptions during the rate study. This dashboard includes pre-defined graphical presentation of consumption, revenue and expense data as well as other vital financial indicators to determine the *utility's ability to maintain financial integrity* as input assumptions change.

Task VIII: City Council and Public Meetings — 3 Weeks

With the approval of staff, we will be prepared to conduct the following formal meetings with the City: an initial staff meeting to review project goals and data requirements (with additional meetings with staff as necessary during the analysis segment of this project), *a formal meeting with senior management to present and review preliminary findings* and recommendations and to make adjustments as necessary based on staff input, a *workshop with City Water and Wastewater Advisory Committee and the City Council to present and review initial findings and recommendations*, and a final meeting and *public hearing* with City Council to approve the chosen rate plan.

Water and Wastewater Impact Fee Study Scope of Work

Outlined below is our work plan, which includes a description of each task and work product, in order to update the City's water and wastewater impact fees.

Task 1: Forecast Water and Wastewater Customer Growth and Demands

Objective: Determine the growth in new water and wastewater customers expected in the City's utility service area and infrastructure needed to meet the increase in customer demand realized from the growth.

Description:

- Develop a twenty year forecast of the City's population and utility customers (residential and non-residential) using national, state and local studies and reports.
- Translate the forecast customer growth into expected increases in demand for water and wastewater services.
- Identify the location of increased demands within the City's utility service area.

Task 2:	Prepare Capital Improvement Plan (CIP)

Objective: *Convert the forecast increase in utility service demand into a ten year CIP listing of infrastructure needs* that includes infrastructure renewal projects.

Description:

- Prepare an inventory of current utility system and create a system model of the existing water and wastewater capacity.
- Overlay new water and wastewater customer demands in the systems' locations to identify additional capacity needs.
- Develop infrastructure improvements needed in each location to meet or exceed new capacity requirements.
- Prepare a capital improvement plan to meet the existing and new capacity requirements.
- Estimate the cost of each CIP project in current dollars.
- Estimate the critical timing of project construction so that each project is completed as needed to meet new capacity needs.

Deliverables: An updated CIP report that lists the projects, project costs, timing of implementation and whether the project is applicable to impact fees (growth related) or not (renewal/replacement projects).

Task 3:	Identify Funding and Financing Alternatives

Objective: Determine the extent of alternative (non-fee) funding available for new facilities calculated in prior steps by engineering staff.

Description: There are two types of alternative funding sources that we will identify:

1. Funding from non-development impact fee sources to correct existing deficiencies; and
2. Funding from new development other than development impact fees that must be credited against new development's impact fee contributions, possibly including taxes paid to finance facilities.

Identify anticipated alternative funding based on information from City staff or note that funds are still to be identified based on a list of probable funding alternatives. If development impact fees will fund debt service, include financing costs in the total cost of facilities.

This scope assumes facilities to be funded predominantly on a combination of long-term debt and a pay-as-you-go basis.

Task 4:	Calculate Fees and Prepare Summary of Findings

Objective: Provide technically defensible development maximum impact fee calculations that comprehensively documents project assumptions, methodologies, and results. The methodology used to calculate the water and wastewater impact fees will be *based on a proportionate share of growth related capital improvements to the utility's infrastructure.*

Description: Generate a fee schedule (impact fees and exactions) to apportion facility costs to individual development projects.

Calculate rate credits using a revenue credit calculation based on future debt payments from bonds issued to fund capital improvements that are included in rates and paid by new customers. This credit may be subtracted from the maximum calculated impact fee.

The project team will take into account any existing fees and *compare the projected fees to nearby and comparable municipalities*.

Prepare draft report tables for City staff to review that document each step of the analysis, including schedule of maximum justified fees by facility type land use category.

Following one round of comments on the draft, prepare a final report revised to account for the comments received during the circulation of the draft.

Deliverables: We will provide a Word and PDF copy of our analysis for inclusion in the Impact Fee final report.

Task 5:	Coordinate Meetings

Description: In order to comply with AR Code § 14-56-103 and *to include community members as well as developers*, the project team recommends public hearings on an amended CIP Plan and Impact Fee calculations. This task will list the meetings, including this recommended meeting, in which the project team will participate during this engagement.

1) Staff Meeting 1 -- collect documents, gain insight into budgeting and growth issues
2) Staff Meeting 2 -- review and evaluate preliminary development impact fees
3) Water and Wastewater Advisory Committee Briefings – we will coordinate and attend Advisory Committee meetings
4) City Council Briefing – the project team will brief the City Council to review the proposed impact fees.
5) CIP Public Hearing – we will coordinate, attend and present at the Amended CIP public hearing
6) Impact Fee Public Hearing – we will coordinate, attend and present at the Impact Fee public hearing

Project Disclaimer

The City of Bryant represents, acknowledges, and agrees that:

(i) The City 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 City is not looking to Willdan to provide, and City 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 City with respect to financial, economic or other matters relating to a prospective, new or existing issuance of municipal securities of the City, (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 City, 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 City 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 City 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 City is not asking Willdan to provide, and Willdan is not in fact providing or required to provide, any municipal advisory services. Rate and Financial Planning Model

Project Management Process/Approach

The project team utilizes *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 the rate study and impact fee study discussions leading to important policy decisions and/or the choice of critical assumptions used in constructing *both the rate analysis and impact fee study*. Following key stakeholder discussions, we will schedule a call to summarize findings and direction with Utility staff, to make certain that we are in agreement with stated objectives, and that feedback is incorporated as appropriate.

The following chart presents the salient components of the project team's project management initiatives for both the rate study and the impact fee study.

Project Management				
				
Define the project	**Plan the project**	**Manage the project**	**Review the project**	**Communicate the project**
▪ Identify the 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 timeline 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 project timeline.	▪ Review all work product and deliverables. ▪ Utilize structured quality assurance process involving up to three levels of review at the peer level, project manager level. ▪ 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.

Quality Assurance / Quality Control Process

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:

1) Peer review;

2) Project Manager review; and

3) 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.

Quality Assurance Goals		
Goal	**Lead**	**Task**
Quality Assurance / Control Process	**Dan Jackson**	▪ Establish a set of planned and systematic actions for maintaining a high level of quality in the professional services performed; ▪ Emphasize quality in every phase of work; ▪ Ensure efficient use of resources; ▪ Establish a consistent and uniform approach to the services performed; and ▪ Implement appropriate quality control measures for each work task of the project.
Quality Control Plan	**Dan Jackson and Dan Lanning**	▪ Contract deliverables; ▪ Specific quality control procedures; ▪ Special quality control emphasis; ▪ Budget and manpower requirements; ▪ Overall project schedule and budget; and ▪ Project documentation requirements.

Willdan Models Guide You to Your Optimal Solutions

During this project, we will be utilizing our Microsoft Excel-based model, with its interactive dashboard, as a comprehensive financial tool to allow planning and evaluation of variable inputs and assumptions, thereby ***creating a thorough analysis of revenue requirements to address the City's goal of ensuring predictable and stable revenue.*** These analyses are then seamlessly integrated with the rate development component of the model to demonstrate and project various rate design alternatives, and the effects they would have on the City's financial outlook.

The Financial Planning component of the model provides transparency such that users can develop a viable financial plan and understand the reasons for needed revenue adjustments.

The model is used in meetings, in order to efficiently cycle through rate scenarios and establish the most viable rate plans for the City. During these interactive meetings we invite the City staff to participate in scenario planning/"what-if" sessions, where we use the dashboard to demonstrate and evaluate the financial/rate impact of alternative data (CIP, operating costs, etc.) and assumptions (interest rates, customer growth, cost escalation, etc.) in real-time to focus on the most critical drivers of the analysis. This ensures the resulting rate plan alternatives are viable from a financial, operational, managerial, and political perspective. The rate plan alternatives will then be incorporated into the water and wastewater rate study report, which will provide the City every assumption, data item, and calculation used in the development of each rate plan alternative.

Real-Time Financial Modeling

The goal of financial forecasting is to provide clear vision regarding the potential financial outcomes of current management decisions. Our goal is to help you mold the existing knowledge base of the City into a viable financial management and rate plan. At Willdan, the development and use of real-time financial models in an interactive, collaborative process is an integral part of the model development.

Model Development as Part of the Consulting Process

Each model is designed with the following elements:

- Graphical dashboard to clearly show the results of various scenarios to the user;
- Assumptions;
- Data tables; and
- Calculation engine.

Each model is "baselined" after an initial meeting with staff to ensure that we have the correct data and a basic understanding of the financial dynamics of your system. We will then conduct interactive financial planning sessions with City staff. After validating our data, calculation approach, and baseline assumptions, we will explore alternative scenarios, varying a number of assumptions and financial planning techniques:

- Rate increase magnitude and timing;
- Alternative timing of capital projects;
- Alternative financing options (alternative combinations of pay-as-you-go, revenue bond debt and State Revolving Fund (SRF) debt, for example);
- Alternative growth/demand forecasts and other "what-if" analyses, such as the impact of a loss of one or more service areas or addition of wholesale customers; and
- Effect of increases in other sources of funds, such as impact fees.

The model is self-solving through the use of controlled feedback loops, and therefore does not require significant manipulation by the user to solve correctly. Given any combination of cost requirements (both operating and capital), non-rate sources of funds, and forecast assumptions, rate increases are generated that:

- Meet specified reserve targets;
- Fully fund capital expenditures using specified financing techniques; and
- Meet legal and contractual requirements that are financially measurable, such as debt service coverage on revenue bonds.

Alternatively, the user can specify rate increases and then examine the results to determine if the desired/required parameters are met.

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.
- **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.

In like manner, the rate design model can be used to explore the impact of various rate structures on bills for each customer class over the relevant consumption range.

Willdan's Suite of Financial Models – Description of Product Features

The key to success is a robust, real-time financial forecasting model, customized to simulate the utility's financial dynamics. Highlights of Willdan's modeling products are outlined below.

Suite of Models:

- Financial planning;
- Cost of service design
- Rate design.

The suite of models includes financial planning tools for water, wastewater, recycled water, stormwater and virtually any utility or municipal government fund, and has the ability to analyze any rate structure and determine the levels of revenue generated by each customer class. In addition, the rate design model can use the City's detailed billing data to develop a bill impact analysis on individual customer bills, which, can be updated for each rate design scenario.

Features:

- Excel-based open architecture that allows easy integration of City financial data;
- Modular design that allows for maximum design flexibility;
- Easy to update through open architecture and modular design, which equates to easy annual data updates;
- Automated calculation engine that optimizes financial plan based on user-set constraints;
- Navigation features to quickly move around the model;
- Side-by-side scenario analysis comparison; and
- Healthy listing of user defined assumptions that can be customized to meet the City's needs.

Our utility rate Excel-based model is the most user friendly, comprehensive and well-designed utility rate model currently used in the industry and has the elements necessary to provide analysis and feedback to facilitate meaningful policy discussions and conduct a full financial and rate study. The comprehensive and efficient design of our models allows us to complete the scope items in an effective manner during our interactive meetings. A sample dashboard is presented below, which shows how the data, assumptions, and calculations are summarized into an easy-to-understand graphical interface which updates with each alternative scenario evaluated.



		2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Water Rate Adjustments											
Meter Charge		0.00%	3.00%	3.00%	3.00%	3.00%	3.00%	2.00%	2.00%	2.00%	2.00%
Volume Charge		0.00%	3.00%	3.00%	3.00%	3.00%	3.00%	2.00%	2.00%	2.00%	2.00%
		42	40	100	84	107	109	147	153	187	214
Sewer Rate Adjustments											
Base Charge		0.00%	9.00%	9.00%	9.00%	9.00%	9.00%	3.00%	3.00%	3.00%	3.00%
Volume Charge	Residential	0.00%	9.00%	9.00%	9.00%	9.00%	9.00%	3.00%	3.00%	3.00%	3.00%
	Non-Residential	0.00%	9.00%	9.00%	9.00%	9.00%	9.00%	3.00%	3.00%	3.00%	3.00%



WILLDAN

5500 Democracy Drive, Suite 130
Plano, TX 75024
Phone: 972.378.6588

www.willdan.com

RAFTELIS

City of Bryant

Comprehensive Water, Wastewater, and Impact Fee Rate Study

PROPOSAL / MAY 24, 2024



RAFTELIS

May 24, 2024

Tim Fournier
Director of Public Works
City of Bryant
210 SW Third Street
Bryant, AR 72022

Subject: Proposal for Comprehensive Water, Wastewater, and Impact Fee Rate Study

Dear Tim Fournier:

Raftelis is pleased to submit this proposal to assist the City of Bryant (City) with a water, wastewater, and impact fee rate study. We appreciate the opportunity to submit this proposal, which details our project approach to meet the City's objectives as well as our qualifications and experience within the water and wastewater utility industry.

Raftelis was established 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 rate and financial consulting practice in the country, with more than 180 consultants. Our staff has provided rate and/or financial planning assistance to over 1,700+ local governments and utilities across the United States and have conducted thousands of studies. Our mission has always been focused on assisting our clients in meeting their goals of financial viability.

Raftelis understands that the City would like to develop multi-year financial plans for the water and wastewater utility and examine its water and wastewater user rates as well as impact fees for new development. The City has also indicated that they would like to involve stakeholders in the process including the City Council, Water and Wastewater Advisory Committee, members of the community, and developers. We propose to work with staff to develop a stakeholder involvement plan that identifies the timing and content of stakeholder engagement throughout the study process

We strongly believe our team would successfully complete the study and provide significant value to the City of Charlotte for several reasons, including:

- **Breadth of experience** – We have conducted thousands of financial projects for more than 1,700+ local governments and utilities across the country, many of them similar to this study, including for Central Arkansas Water and the Little Rock Water Reclamation Authority.
- **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, the City's expectations.

To assist the City with this project, we have assembled a team with extensive experience and a reputation for quality service. I have provided similar services to over 100 clients in my 23-year career with Raftelis.

We appreciate this opportunity to be of service to the City and submit this proposal. If you have any questions, please do not hesitate to contact me at any time at 816-682-1328 or tbeckley@raftelis.com.

Sincerely,



Thomas A. Beckley
Vice President

DEI@ RAFTELIS

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.

Table of Contents

Firm Overview 1

Experience 3

Scope of Work 9

Project Team 17

Cost 18

Schedule 18

Appendix: Resumes 19

This page was intentionally left blank to facilitate two-sided printing

FIRM OVERVIEW

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 700 organizations in the last year alone.

We believe that Raftelis is the *right fit* for this project. We provide several key factors that will benefit the City 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 180 consultants, Raftelis has the largest water-industry financial and management consulting practice in the nation, including many of the industry's leading rate consultants and experts in key related areas, like stakeholder engagement and data analytics. Our depth of resources will allow us to provide the City with the technical expertise necessary to meet your objectives.

DEFENSIBLE RECOMMENDATIONS: When your elected officials and customers are considering the validity of recommended changes, they want to be confident that they were developed by experts using the latest industry standard methodology. Our staff are involved in shaping industry standards by chairing committees within the American Water Works Association (AWWA) and the Water Environment Federation (WEF) and co-authoring many industry-standard books regarding utility finance and rate setting. Being so actively involved in the industry will allow us to keep the City 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 1,700+ local governments and 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 the City 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 the City 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. We offer model options including Microsoft Excel-based and web-based tools that 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 focus on effectively communicating with elected officials about the financial consequences and rationale behind recommendations to ensure stakeholder buy-in and successful rate adoption.

30 YEARS OF SERVICE

How we stack up

OUR TEAM INCLUDES

180+ 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

1,700+ public agencies and utilities

that serve more than **25%** of the U.S. population

including the agencies serving **41** of the nation's 50 largest cities

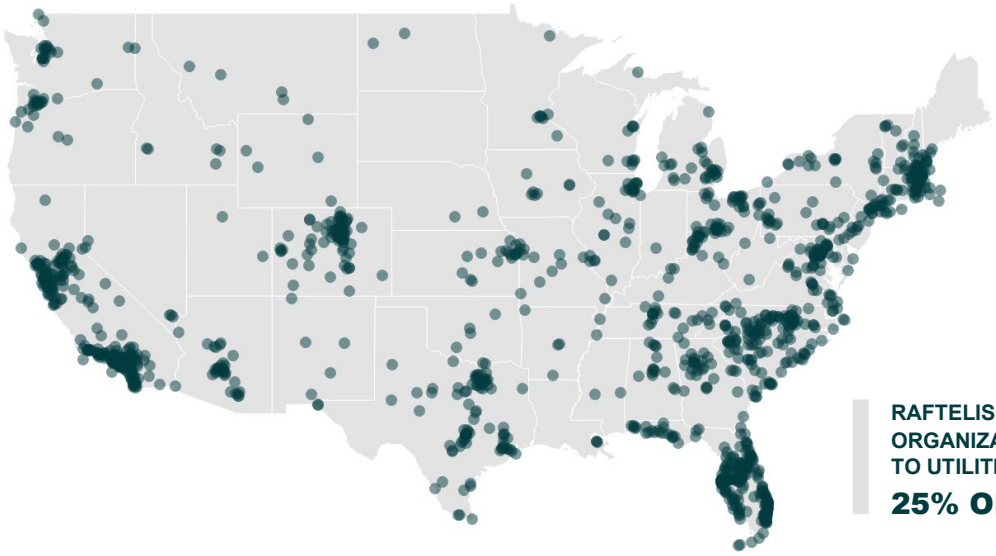
in the past year alone, we worked on **1,300+** projects for **700+** agencies in **47** states

EXPERIENCE

Experience

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

Our staff has assisted more than 1,700 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 1,300 financial, organizational, and/or technology consulting projects for over 700 agencies in 47 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 the City'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.



RAFTELIS HAS PROVIDED FINANCIAL/ ORGANIZATIONAL/TECHNOLOGY ASSISTANCE TO UTILITIES SERVING MORE THAN

25% OF THE U.S. POPULATION.

Central Arkansas Water AR

Reference: Tad Bohannon, Chief Executive Officer
P.O. Box 1789, Little Rock, AR 72203 / P: 501.377.1345 / E: tad.bohannon@carkw.com

Reference: Cynthia Edwards, CPA, Director of Finance
221 East Capitol Avenue, Little Rock, AR 72202 / P: 501.377.1214 / E: cynthia.edwards@carkw.com

Raftelis assisted Central Arkansas Water (CAW) with several projects since 2011. The primary engagements included comprehensive cost-of-service and rate design studies in 2012, 2015, 2018, and 2022. The 2018 study resulted in a recommendation to adjust CAW's rate structure and phase-out of the minimum volume allotment in the fixed charge. The 2022 study's primary focus was working with CAW staff on developing a 10-year rate plan and a 30-year financial plan to provide a financial roadmap for the utility that aligns with their 2050 Strategic Plan and funds approximately $700 million in capital improvements planned for the next ten years. Raftelis also completed a number of other studies for CAW, including a wholesale rate study in 2014 and a financial feasibility

analysis as part of a larger feasibility analysis in 2015 related to incorporating the assets and service of a small neighboring utility into CAW's system. In 2016, Raftelis performed an operational efficiency assessment for the Water Quality Division, which was incorporated into the utility's strategic plan.

Little Rock Water Reclamation Authority AR

Reference: BJ Harrison, Director of Accounting and Finance
11 Clearwater Drive, Little Rock, AR 72204 / P: 501.688.1467 / E: billy.harrison@lrwa.com

In 2011, Raftelis was retained by Little Rock Water Reclamation Authority (LRWRA) to perform a comprehensive cost-of-service analysis and system valuation study. LRWRA was implementing a significant capital improvement program in compliance with a consent order with the State of Arkansas and the EPA to eliminate sanitary sewer overflows. The requirements of this consent order were placing substantial pressure on LRW's costs and wastewater rates and fees. The major components of the project included:

- Development of a 10-year comprehensive financial plan including LRWRA's operation, maintenance, and administration as well as financing of its major capital improvement program
- Determination of LRWRA's cost of providing wastewater service to its various customer classes
- Development of wastewater user rates to fairly and equitably recover the cost of providing wastewater collection, treatment, and disposal service from the various customer classes
- Review and update of miscellaneous fees
- Analysis of alternative system growth charges to be assessed to new customers
- Determination of the current value of LRWRA's collection and treatment assets

In addition to the financial planning and cost-of-service aspects of this engagement, the Raftelis team worked closely with the LRWRA-created Rate Advisory Committee (RAC). The RAC was made up of community leaders who were known and trusted by the customers of the LRWRA. At the outset of the engagement, Raftelis explained the process and logic behind the financial planning and cost-of-service study approach. We also sought feedback from the RAC regarding the most important objectives that the community had for the wastewater rates. Throughout the engagement, we regularly engaged with the RAC to share updates on the process and seek additional feedback. At the conclusion of the engagement, the RAC drafted a memorandum supporting the recommendations of the study.

In 2015, LRWRA again engaged Raftelis to update the 10-year financial plans and cost-of-service analysis, including a scope of services similar to the 2011 study. Raftelis finalized the updated study and provided an updated financial planning model for the City's future use.

LRWRA has recently selected Raftelis in a competitive procurement to again update the multi-year financial plan and cost-of-service analysis in the near future.

City of Sterling Heights MI

Reference: Jennifer Varney, Finance and Budget Director
40555 Utica Road, Sterling Heights, MI 48313 / P: 586.446.2302 / E: jvarney@sterling-heights.net

Raftelis was engaged by the City of Sterling Heights (City) to complete a comprehensive water and wastewater financial planning, cost-of-service, and rate study in 2020.

The financial plans focused on developing a sustainable plan for funding ongoing operations and additional debt service associated with several large capital projects. The majority of the City's costs are related to regional water

and sewer wholesale providers, Great Lakes Water Authority and Macomb County. This includes the cost of purchased water and sewer service, as well as regional sewer projects associated with the Oakland and Macomb Interceptor Drainage Districts (OMID and MID). The project team worked with City staff to develop a financial plan to fund projected expenses while building to a reserve balance that aligned with best financial management practices. The cost-of-service analysis evaluated the usage characteristics and the City's residential and commercial customers to determine the extent to which revenue recovery from each class aligned with each class's contribution to the City's costs. Raftelis provided recommendations for adjusting this recovery to improve alignment between revenues and costs.

Raftelis also worked with City staff to significantly simplify the City's rate structure. The existing structure had three different types of fixed charges including a meter-size-based charge, specific GLWA and Macomb County charges, and a minimum charge. The City also had a policy which discounted the bills of all customers 25% in the summer. Raftelis developed a more simplified structure which included one fixed charge by meter size and no minimum charge. Raftelis also recommended that the City use average winter water consumption for sewer billing purposes. The result is an increase in equity especially for small volume customers (who are no longer charged for a minimum volume), customers that irrigate (who are no longer charged for water not returned to the sewer system), and commercial customers (who now pay a rate reflective of their lower impact on the water system. These rates were approved by the City Council on and went into effect on July 1, 2021.

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			
State	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		●	●		●	●										

		Finance							Organization						Technology			
State	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
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					●	●									●	
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	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	Oklahoma City Water Utilities, City of					●	●										

		Finance							Organization					Technology			
State	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
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		●	●		●	●						●			●	
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		●	●		●			●	●		●					

SCOPE OF SERVICES

Scope of Services

Task 1: Project Initiation, Management, and Stakeholder Engagement

Raftelis will conduct project kick-off meetings with City staff, the City Council and the Water and Wastewater Advisory Committee. The staff kick-off meeting will focus on study logistics including work plan, the project timeline, data requirements, and deliverables. Prior to the staff kick-off meeting, we will review the data provided by City staff and begin framing preliminary analyses and formulate any questions. We will also work with City staff to finalize stakeholder involvement throughout the study process.

The kick-off meetings with the City Council and Water and Wastewater Advisory Committee will provide an overview of these issues, but will focus on issues of policy surrounding rate setting, to ensure staff and the project team have appropriate direction moving forward.

Throughout the project we will manage the process via consistent communication, regular meetings (virtual and onsite) with City staff and a robust QA/QC process.

PLANNED MEETINGS:

- Kick-off meeting with City staff
- Kick-off meeting with City Council
- Kick-off meeting with Water and Wastewater Advisory Committee

DELIVERABLES:

- Kick-off meeting materials
- Kick-off meeting summary memorandum and project timeline

Task 2: Financial Plan Development

The project team will develop long-range financial plan for the water and wastewater utilities. The financial plan will identify the overall level of revenue necessary to fund operations and maintenance expense (O&M), routine



OPTIMIZING CAPITAL SPENDING

Revenue requirements are only as good as the operating and capital spending needs and assumptions that go into them. If there is uncertainty in operating or capital spending needs, then revenue requirements, cost of service, and the associated rates being requested may be too high or too low. If your utility is concerned with capital spending needs and would like a third-party review of your needs and/or assumptions, Raftelis' subject matter experts in capital project development and delivery are here to help. Likewise, if your utility is interested in opportunities to take advantage of the new Integrated Planning Law added to the Clean Water Act in 2019, Raftelis can help. Contact us to discuss these value-added services, which can be provided under an optional task or a separate scope of work.

repair and replacement capital expenditures, and repayment of debt service (current and future), while also achieving the City's financial management objectives. Determining the revenue requirement involves a detailed cash flow forecast, which compares projected baseline revenues to projected expenditures and identifies any adjustments to revenues necessary to fund utility operations in a financially sustainable manner. This involves the following subtasks: a projection of revenue under existing rates (Task 2.1); a projection of O&M expense (Task 2.2); a projection of routine and major capital expenditures (Task 2.3); and a projection of revenue adjustments based on detailed cash flow analysis (Task 2.4).

The projections we develop for the City will include the balance of the City's current fiscal year, plus the following 10 fiscal years. To the extent that the City has identified major capital improvements or incremental increases in O&M which lie outside of the 10-year window, we can extend the plans to include the additional years at no additional cost to the City.

Task 2.1 — Projection of Revenue Under Existing Rates

Raftelis will develop revenue projections under existing rates and projected customer usage by customer class. This will serve as a baseline for revenues if no adjustments to rate levels or structures are made. In Task 2.4, we will compare these baseline revenue projections to projected expenditures to determine the overall level of revenue necessary (including any revenue increases) to fund these projected expenditures and achieve the City's financial performance objectives.

Using historical customer billing data, we will evaluate trends in customer accounts and usage per account and establish a normalized usage per account, which avoids assigning undue weight to usage in wetter or drier periods. In addition to evaluating usage data considering weather patterns and conservation trends, we will also work with City staff to understand any potential changes in the local economy that might impact the demands of City customers.

We will then calculate revenues under existing rates at projected consumption levels. We will also incorporate analysis and projections of miscellaneous revenues, including impact fees. We will compare these revenues to the operating and capital expenses forecast in Tasks 2.2 and 2.3 to understand the sufficiency of existing revenues to fund projected expenditures.

Task 2.2 — Projection of O&M Expense

The City's budgets (for the current year and any available future years) will serve as the starting point for the projection of O&M expense. To project O&M expenses for the forecast period we will make three adjustments: budget performance adjustments, incremental expense adjustments, and inflationary adjustments.

Budget performance adjustments will be made based on a detailed review of budgeted O&M expense compared to actual performance. To the extent that the utility tends to outperform in certain areas (i.e., spend less than budgeted), we will discuss potential adjustments so that the projection of baseline O&M (i.e., before any incremental expenses and inflationary adjustments) is a reasonable reflection of what is likely to occur.

Incremental expense adjustments account for expected future changes in O&M expense that exceed inflation. There are two reasons such adjustments are typically made. First, the City anticipates adding new personnel or programs that are not currently captured in the existing budgets. In this case, an adjustment will be made to include the costs of those additional personnel or programs. The current budget may also include one-time expenses that are not expected to be incurred in the future. In this case, the one-time expense will either be excluded from future years or, if it occurs periodically, normalized in future years.

Inflationary adjustments account for expected future inflation in O&M expense, after accounting for budget performance and any incremental expenses. Inflationary adjustments will be based on the best and most relevant data possible. Expenses driven by customer growth and usage (e.g., power and chemicals) will be adjusted based on the projections in Task 2.1. Personnel costs will be adjusted based on planned compensation adjustments from the City. For expenses where less detailed data is available, we will rely on historical trends, discussions with City staff, and our experience working with similar utilities throughout the United States.

Task 2.3 — Projection of Routine and Major Capital Expenditures

Task 2.3 involves developing a capital improvement financing plan that identifies the City's capital projects (routine and major) and the mix of cash and debt used to finance them. The cash flow impact of the capital financing plan is incorporated into the cash flow analysis in Task 2.4 as annual cash outlays (i.e., PAYGO or revenue-funded capital) and new debt service.

To develop the capital financing plan, we will review the City's approved capital improvement plan (CIP) and work with City staff to ensure that the appropriate level of investment is balanced against the potential rate implications. To the extent that the CIP is in current year dollars, we will include adjustments for future construction cost inflation based on an analysis of trends for the appropriate cost indices (e.g., Engineering News Record). We will also incorporate any projects that the City already has in progress from prior approved CIPs that will be completed in the first few years of the forecast period. The CIP will incorporate both routine repair and replacement expenditures as well as major capital improvements. Given the recurring nature of routine expenditures (i.e., sewer line replacement), many utilities employ a PAYGO funding approach. Major capital improvements are funded with debt to spread out the financial burden on customers and to ensure that the cost of major improvements is borne by all customers, not just current customers. We will work with City staff to develop an optimal mix of cash and debt financing to achieve the City's financial management objectives. The projected capital costs, including PAYGO and any new debt service, will be incorporated into the cash flow projections in Task 2.4.

Task 2.4 — Utility Cash Flow Forecasts and Revenue Adjustments

We will develop a detailed cash flow forecast for the multi-year planning horizon. This forecast will compare existing revenues (Task 2.1) to forecast expenditures (Tasks 2.2 and 2.3), identifying any deficiencies in funding under existing revenues. Throughout Task 2.4, we will discuss the City's existing financial policies and objectives (formal and informal). This will include a review of the performance of the utility relative to key financial ratios (e.g., days cash, capital structure, and debt service coverage). Throughout these discussions, we will provide recommendations to ensure the City's financial management strategies align with industry best practices.

We will structure rate adjustments to achieve the City's strategic financial management objectives and maintain alignment with best financial management practices regarding debt service coverage ratios and reserve balances. Where possible, revenue adjustments will be smoothed, mitigating the impact on customers in any given year. The ultimate outcome of Task 2.4 will be the identification of the overall level of revenue required (including any adjustments to revenue) to fund the provision of safe and reliable water and wastewater service in a financially sustainable manner.

A key aspect of determining the revenue adjustments will be looking at the mix of adjustments to the water and wastewater rates as well as revenue generated through the City's water and wastewater impact fees. We will look at different options of adjustments to each to determine the appropriate adjustments to both the rates and the impact fees based on feedback from City staff as well as other stakeholders included in the study process.

PLANNED MEETINGS:

- Virtual meetings as needed.
- Meet with City staff to review draft financial plan, confirm strategy and identify any issues.

DELIVERABLES:

- Meeting materials
- Meeting summary memorandum

Task 3: Rate Design and Analysis of Bill Impacts

The project team will recommend adjustments to the City's water and wastewater rate structure to improve alignment with cost of service, industry best practices, and the community values identified in Task 1. Task 3 may include the development of rate alternatives, which evaluate different approaches to recovering the City's revenue requirement (fixed versus volume charges, rates by customer class, phase-in of any recommended changes)

Once rate alternatives are established, the project team will assess the impact on City customers via traditional methods, such as typical customer bills, peer benchmarking and a high level affordability analysis using the United States Census Bureau American Community Survey (ACS) Data. We will work with City staff to ensure that any recommended changes are compatible with the City's billing system.

PLANNED MEETINGS:

- Meet with City Staff and other stakeholders as directed by the City to review proposed rate alternatives

DELIVERABLES:

- Presentation materials
- Meeting summary memorandum

Task 4: Determine Impact Fees

There are a variety of options for recovering the cost of infrastructure constructed to serve new customers, but all are premised on the concept that existing customers, by definition, have the infrastructure required to serve them. Since these customers will not *directly*[1] benefit from infrastructure constructed to serve new customers, it is common to determine one-time fees charged to new development to offset these costs under the "growth pays for growth" concept. In practice, it is uncommon for these one time fees to fully cover the cost of the growth related projects, but they are an approach to mitigating the financial impact of growth related infrastructure on existing customers. There will always be a timing difference between when growth related infrastructure must be financed and constructed (in large discrete chunks) and when the growth and related fees are realized. To the extent that funding is needed now for projects that will serve new customers added over a longer time horizon, rate revenue from existing customers is often the backstop, though there are communities that use outside sources of funding (non-utility) to cover these differences as well.

The most common approach to recovering growth related costs is system development charges (SDCs). The term SDC, which is identified in American Water Works Association's (AWWA) Manual M1: Principles of Rates, Fees and Charges is also referred to as:

[1] Existing customer do benefit indirectly from the addition of new customers. The most important financial benefit is improved economies of scale which are realized as new customers are added to the system.

- System Development Fees (SDF)
- Development Impact Fees (DIFs)
- Impact Fees
- Equity Fees
- Capacity Fees
- Availability Charges

For ease of reference, this scope of work will refer to these fees as capacity fees. Regardless of terminology used, these one-time fees all refer to payments made by developers to offset the cost investment in growth related infrastructure. This differs from tap fees or connection fees, which recover the cost of physically connecting the customer to the local distribution or collection main. Capacity fees recover the cost of backbone infrastructure constructed to serve new customers and do not include the cost of local distribution and collection infrastructure or the cost of installing a new customer's service line and meter. Generally, these are not area specific, but based on the cost of the growth related infrastructure, available capacity, and the level of service received by the new customer.

The two most common approaches to water and wastewater capacity fees are the equity buy-in approach and the marginal incremental cost approach. The *equity buy-in approach* is used for systems that have existing system capacity (usually treatment capacity) that is available to serve new customers. This approach determines the equity investment in the backbone system by determining the value of backbone assets, less the portion funded by any debt whose payments are funded by customer rates. The value of the backbone assets is generally adjusted to reflect the replacement cost of the assets, which reflects the value of the system today, as opposed to when it was constructed. The equity is divided by the capacity of the system (usually treatment capacity) to determine the cost for each unit of capacity. This can then be scaled to match the flow requirements of the new customer.

The second capacity fee approach is the *incremental cost* approach, involves a similar calculation but uses future project costs as the cost basis. Under the incremental cost approach, the cost of future capacity is divided by the incremental units of capacity added to determine the unit cost. Whereas the equity buy-in approach uses the value of the investment already made in assets with available capacity as its cost basis, the incremental approach uses the cost of future investment as its cost basis. The incremental approach is more commonly used in systems that do not have sufficient capacity to serve new customers and will need to construct new assets to serve the additional demand.

A *hybrid approach*, which uses a weighted average of the two foregoing approaches is also employed for systems which have some available capacity, but not enough to serve all the growth over the planning period.

In addition to capacity fees some communities use fees which recover the cost of *specific* infrastructure. The cost to extend a water or wastewater main to serve a new area might be recovered by a fee charged to new development connecting to that specific component of infrastructure. These fees are typically determined based on the cost of that specific project and the number of customer connections that can be served and often charged on a front footage basis. Special assessments are another approach to the same concept but utilize taxes in place of fees.

Raftelis will work with City staff to further our understanding of the projected growth anticipated in the City, and the historical context surrounding the City's current cost of growth recovery strategy. Raftelis will then provide recommendations surrounding the specific fee and fee calculation approach for both water and wastewater.

Task 4.1 — Determine Cost Basis for Fee

For capacity fees, the first step involves determining the cost basis for the fees. Generally, capacity fees recover the cost of capital improvements that expand capacity or recoup of the cost of prior capital improvements that have capacity available to serve new development. The cost basis for capacity fees, in other words, includes the cost of constructing new capacity and the cost of previous investment in existing available capacity. These costs must be related to the existing service requirements of customers and cannot improve the level of service. This aligns with the equity buy-in (existing available capacity) and incremental (new capacity) approaches outlined above. Raftelis will calculate the cost basis under all three approaches (equity buy-in, incremental and hybrid).

Under the equity buy-in approach, Raftelis will examine the City's fixed asset records to determine the original cost of investment in water and wastewater assets. This will then be escalated to replacement cost using relevant construction cost indices (Engineering News Record, Handy-Whiteman) and adjusted for accumulated depreciation. The value will only include backbone infrastructure with additional capacity for new development. This value will be divided by system capacity (likely treatment capacity) to determine a unit cost of the City's existing investment in capacity.

Under the incremental approach, Raftelis will work with staff to identify growth related projects in the City's capital improvement program as well as the capacity projected to be added over the planning period. The projected cost, divided by the projected capacity, will serve as the unit cost for the incremental approach. The hybrid approach will be based on the weighted average of the buy-in and incremental approaches.

If appropriate, any area or infrastructure specific charges will be determined based on the projected cost of the infrastructure divided by the appropriate units of service (e.g., total front footage) to determine a unit cost for that specific area.

Task 4.2 — Determine Level of Service

Once the cost basis is determined, a level of service for new customers must be determined, such that the calculated fee is proportional to the additional capacity demands of each unit of new development. Level of service is the amount of demand each new customer connection places on the City's water and sewer system and is typically expressed on a similar basis as the cost basis determined in Task 3.1. In addition, the level of service is typically expressed as the demand for a single-family residential customer, or an equivalent residential unit (ERU) basis. The level of service can scaled up for multi-family residential and non-residential based on their flow requirements. Level of service information can be derived from customer billing records or planning studies conducted by the City (master plans). Raftelis will work with City staff to identify the appropriate level of service for the types of development anticipated in the City. Since the fees can only include the cost of available or additional capacity, not the cost of an improved level of service, the level of service for new customers will be the same as existing customers with the same demand characteristics.

Task 4.3 — Calculate Fees

The calculation for each fee involved multiplying the unit cost determined in Task 3.1, by the single family residential equivalent level of service to determine the fee for 1 ERU. From there fees can be scaled up for larger customers based on meter capacity ratios or by customer type using the number ERUs represented by that type. As noted above in Task 3.2, the number of ERUs for customers other than single family can be calculated using the level of service for the larger customer relative to that of the single-family customer (i.e., twice the flow would be 2 ERUs). Raftelis will calculate fees under the various approaches above. The fees presented would represent the maximum supportable fee using the calculations outlined above. The City could reasonably enact *lower* fees than those calculated, at its discretion.

PLANNED MEETINGS:

- Meet with City staff and other stakeholders (e.g., developers) as directed by City staff to review impact fee analysis

DELIVERABLES:

- Presentation materials for meetings

Task 5: Stakeholder Engagement

Throughout the project the Project Team will work with City staff to engage various stakeholders, as identified by the City, which may include the City Council, community members, developers, and the Water and Wastewater Advisory Committee. We anticipate that the general scope and timing of this stakeholder engagement will be determined in coordination with the City during contract finalization.

PLANNED MEETINGS:

- Stakeholder meetings as determined in coordination with City staff throughout the study process

DELIVERABLES:

- Presentation materials for stakeholder meetings

Task 6: Rate Study Report and Presentation of Study Results

The project team will produce a report which summarizes the results of the study. Drafts will be circulated to City staff and any comments will be incorporated into a Final Draft report, which will be provided in hard copy and electronic format to the City. Senior members of our project team will also present the draft final results of the study to the Utility Board and the City Council. After incorporating feedback from the Water and Wastewater Advisory Committee and City Council, the project team will present the final study results at a meeting for adoption of the rate ordinance and be available to answer any final questions.

PLANNED MEETINGS:

- Meetings as needed to review interim deliverables and materials for onsite meeting.
- Meeting with Water and Wastewater Advisory Committee to present draft rate study.
- Present draft final study to City Council
- Present final report to City Council at meeting for rate adoption.

DELIVERABLES:

- Presentation materials
- Rate Study Report

Task 8: Development of the Cost-of-Service Model

The project team will develop a user- friendly rate model in Excel, which the City can use as a decision support tool moving forward. This model will be non-proprietary and accessible by the City without any licensing restrictions or fees. We will also provide up to 8 hours per year of model support at no additional cost to the City.

PLANNED MEETINGS:

- Virtual meetings for model training.

- Virtual meetings for model support (up to 8 hours/year).

DELIVERABLES:

- Water and Wastewater Rate Models, including Impact Fee calculations



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.

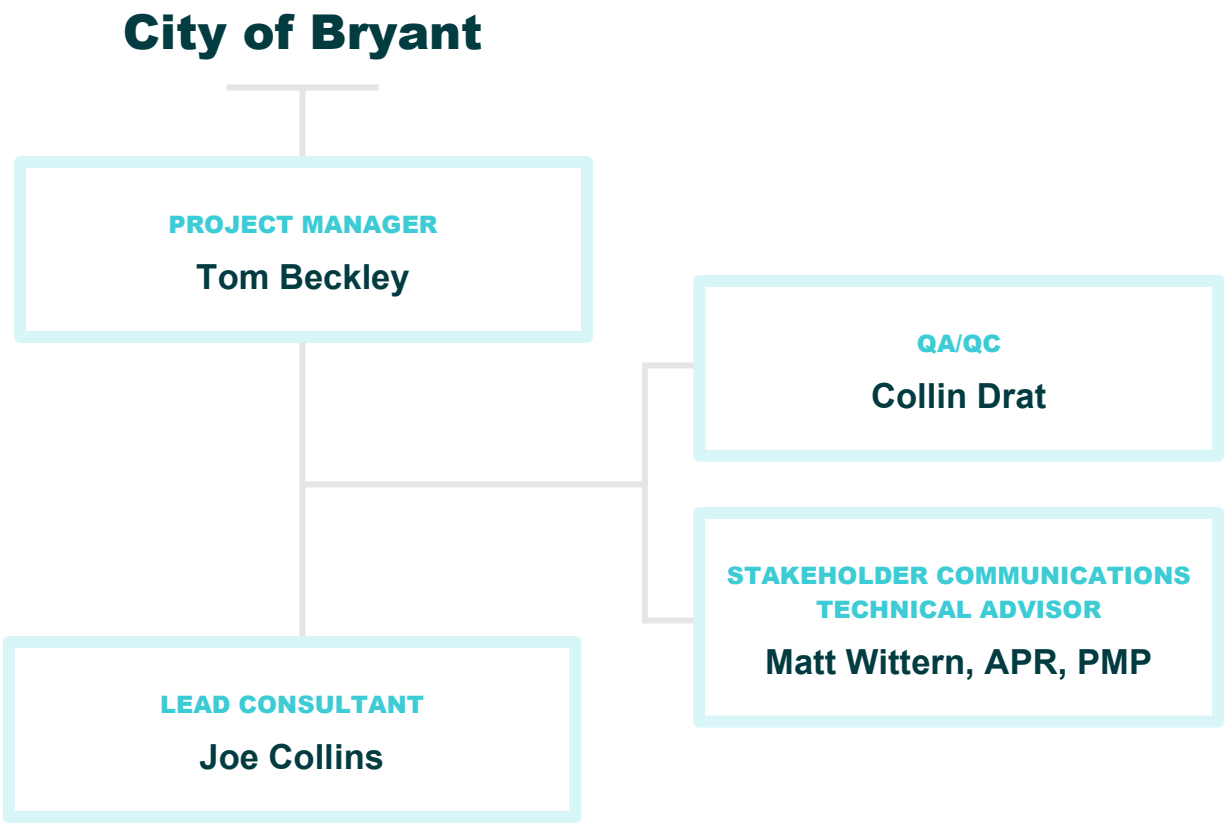
PROJECT TEAM

Project Team

WE HAVE DEVELOPED A TEAM OF CONSULTANTS WHO SPECIALIZE IN THE SPECIFIC ELEMENTS THAT WILL BE CRITICAL TO THE SUCCESS OF THE CITY'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 the City with confidence in our capabilities.

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



COST

Cost

As discussed with the Utility Director, the final scope of this engagement would need to be negotiated. In particular, the frequency, breadth, and scope of stakeholder involvement need to be finalized to provide a firm not-to-exceed cost. Depending on the final negotiated scope, including the number and type of stakeholder meetings, we would anticipate the not-to-exceed cost of this project to be $80,000 to $120,000.

SCHEDULE

Schedule

The schedule for this project will depend on the final scope to be negotiated if our firm is selected. We would anticipate a schedule of approximately six months for a project of this nature., but this could be longer depending on the scope and nature of stakeholder involvement.

APPENDIX: RESUMES

Appendix: Resumes

Tom Beckley

PROJECT MANAGER

Vice President



ROLE

Tom will manage the day-to-day aspects of the project ensuring it is within budget, on schedule, and effectively meets the City's objectives. He will also lead the consulting staff in conducting analyses and preparing deliverables for the project. Tom will serve as the City's main point of contact for the project.

PROFILE

Tom has 23 years of experience with Raftelis conducting financial and rate consulting related projects. He has assisted a wide range of municipal water, wastewater, and stormwater utilities in conducting cost-of-service, rate setting, financial feasibility, privatization, system development fees, and other finance-related studies. Tom authored a chapter entitled, "Designing Water and Wastewater Rate Structures," for the Fourth Edition of the industry guidebook, *Water and Wastewater Finance and Pricing: The Changing Landscape*. He is also an active member of AWWA and WEF, as well as ICMA, and has presented at various national and state conferences.

KEY PROJECT EXPERIENCE

City of Bentonville (AR): Water Utility Rate Study

Tom served as project director for a water utility rate study conducted for the City of Bentonville (City). The City engaged Raftelis to provide a cost-of-service study for the water utility of their fast growing community. Raftelis participated in meetings with the City Council to establish pricing objectives to guide the ultimate recommendations for rates that were approved in late 2020.

The City has subsequently engaged Raftelis to conduct a wastewater cost-of-service study that is currently underway.

Little Rock Water Reclamation Authority (AR): Cost-of-service Study and Model; Rate Advisory Committee Assistance; Rate Review; System Growth Charge Study; Valuation Study

Tom served has served as the project manager for two rate study engagements with Little Rock Water Reclamation Authority (LWRA). In 2011, Raftelis was retained by Little Rock Water Reclamation Authority (LRWRA) to perform a comprehensive cost of service analysis and system valuation study. LRWRA was implementing a significant capital improvement program in compliance with a consent order with the State of Arkansas and the EPA to eliminate sanitary sewer overflows. The requirements of this consent order were placing substantial pressure on LRW's costs and wastewater rates and fees. The major components of the project included the development of a 10-year comprehensive financial plan, determination of LRWRA's cost of providing wastewater service to its various customer classes and the development of wastewater user rates to fairly and equitably recover the cost of providing wastewater collection, treatment, and disposal service from the various customer classes. In 2015, Tom

Specialties

- Utility cost-of-service & rate structure studies
- Conservation rate studies
- Bond forecasts & feasibility studies
- Economic feasibility studies
- Industrial waste charge studies
- Capital recovery fee studies

Professional History

- Raftelis: Vice President (2020-present); Senior Manager (2014-2019); Manager (2000-2013)

Education

- Master of Public Administration - University of Kansas (2008)
- Master of Business Administration (Concentration in Finance) - A.B. Freeman School of Business, Tulane University (2000)
- Bachelor of Science in Naval Architecture & Marine Engineering - Webb Institute (1995)

Certifications

- Series 50 Municipal Advisor Representative
- Series 54 Municipal Advisor Principal

Professional Memberships

- AWWA
- WEF
- ICMA

led an update to the original 2015 study and has advised LWRA on other financial issues on an as-needed basis since that time.

City of Grosse Pointe (MI): Water and Wastewater Rate Study

Tom serves as project manager to the City of Grosse Pointe (City) performing a comprehensive water and wastewater cost-of-service study including benchmarking analysis allowing the City to compare their performance with respect to key performance criteria to the performance of other similar utilities. Tom has also been responsible for the development of a 10-year financial plan for the City's Utilities Department, and creation of a financial planning and rate model for use by City staff in preparing annual updates to the water and wastewater rates.

City of Suffolk (VA): Water and Wastewater Rate Studies (multiple)

Tom serves as project manager for Raftelis' multi-year engagement with the City of Suffolk (City) to provide financial services to the City's Department of Public Utilities (DPU). The scope of services includes an annual update of the 10-year comprehensive financial plan, determination of water and sewer costs of service, development of proposed water and sewer rates for the upcoming fiscal year, and an assessment of the City's water and sewer system availability fees. In addition, Raftelis also conducts an annual true-up analysis for wholesale water service to the Authority. The true-up analysis recalculates the water rates using actual cost and water usage data to determine the actual cost-of-service to the Authority during the prior year.

City of Wichita (KS): Water and Wastewater Cost-of-service Study and Wholesale Water Rate Analysis

Tom served as project manager for cost-of-service studies for the City of Wichita's (City) water and wastewater utility. Raftelis was engaged by the City to perform a comprehensive cost-of-service study in 2010 and in 2015. Raftelis worked with the City to allocate costs between the water and wastewater utilities and to functions in each utility to determine cost-of-service for each of the City's customer classes. Raftelis then worked with the City to determine appropriate rates that not only recovered the City's cost-of-service, but also addressed their concerns related to revenue stability.

In another engagement with the City, Tom served as lead consultant and assisted the City in performing an analysis of wholesale water rates by evaluating billing data for the past three years for all of the City's wholesale customers and provided recommendations to improve the recovery of revenue requirements from these customers. Raftelis has also performed a rate study to determine a raw water rate for a proposed new industrial customer seeking service from the City. Raftelis also analyzed the City's rate structure to determine its effectiveness for providing stable revenues during varying weather conditions.

City of Naperville (IL): Water and Wastewater Cost-of-service Study

Tom is serving as project manager for Raftelis' engagement with the City of Naperville (City). The City has engaged Raftelis to provide a comprehensive cost-of-service study for their water and wastewater utility and propose updated rates to meet the City's pricing objectives. Raftelis worked with City staff to determine their pricing objectives in a workshop setting and then used the results of that exercise to propose cost-of-service-based rates that met those objectives. The City has also engaged Raftelis to provide assistance in updating their contract for wholesale wastewater service with the City of Warren. Raftelis is working with the City to ensure that the contract is recovering the appropriate costs related to their service to the City of Warren.

Kansas City Water Services Department (MO): Wastewater Cost-of-service and Rate Study

Tom served as lead consultant for a wastewater cost-of-service and rate study for the Kansas City (City) Water Services Department. Raftelis prepared a financial plan for the wastewater utility, forecasted revenue requirements, and determined the City's cost-of-service to its various customer classes and wholesale customers. A cost-of-service

analysis and review of the City's wholesale contracts provisions resulted in the development of wastewater rates which were approved by the City Council.

Town of Grand Lake (CO): Water Rate Study

Tom served as the project manager for a water rate study for the Town of Grand Lake (Town). The Town's water utility serves approximately 950 customers in and around the Town. Raftelis was engaged by the Town to determine revenue requirements for the utility, prepare a financial plan that provided for funding of the utility's operations and maintenance as well as capital requirements, and propose rates to recover the necessary revenues. Raftelis worked with Town staff to develop an appropriate financial plan and presented the results to the Town's Mayor and Board in a public meeting.

City of Lee's Summit (MO): Water and Wastewater Rate Study

As lead consultant, Tom performed comprehensive water and wastewater cost-of-service studies for the City of Lee's Summit (City) as well as provided an update of the City's system development charges collected from new customers.

City of Denton (TX): Water and Wastewater Cost-of-service and Rate Study

Tom assisted the City of Denton (City) with a comprehensive water and wastewater cost-of-service and rate study. He conducted a pricing objectives workshop with City Staff to identify the City's pricing objectives. These pricing objectives were used to develop proposed conceptual designs, specifically for the water utility, that would better meet the objectives of the City.

Tom worked with the City to review its existing water and wastewater financial plans and ensure they met the needs of the City and provided the capital financing and reserve levels necessary. The City's financial plan was incorporated into a new cost-of-service and rate model designed and developed specifically for the City's needs. The City also provides wholesale water and wastewater service under contract, and the City's existing wholesale rate methodologies were incorporated into the new cost-of-service and rate model developed for the City.

Tom reviewed the results of the cost-of-service and rate study with City Staff and prepared draft and final reports documenting the study process and results. He presented the findings of the study to the City's Utility Commission. Tom also provided City Staff with training on the update and use of the model developed.

City of Kansas City (MO): Sewer Cost-of-service Analysis

Tom served as the project manager for the Raftelis engagement to conduct a comprehensive cost of service study for the City of Kansas City (City) wastewater utility. The City provide retail service both within the City and to other nearby communities as well as wholesale service throughout the region.

Des Moines Water Works (IA): Cost-of-service Study

Tom has served as project manager on a cost of service study for the Des Moines Water Works (DMWW). DMWW provides retail service to the City of Des Moines and several other suburbs in addition to wholesale water service throughout the Des Moines metropolitan area. Raftelis was engaged to assist DMWW in performing a cost of service analysis to address concerns over the equity of their existing rate structure. Since completing the initial analysis the DMWW has engaged Raftelis in additional projects to support proposed regionalization of water supply and production assets in the region.

City of Saginaw (MI): Water Cost-of-service Study, Water Rate Study, and Wholesale Water Contract Negotiations

Tom has served as project manager for cost-of-service studies for the City of Saginaw (City) water utility since 2005. The City provides retail service in the City and wholesale service to eighteen other utilities in their region, and Raftelis was first engaged by the City to assist in repairing their relationship with the wholesale customers. Since 2005 Raftelis has worked with the City and the wholesale to develop a positive relationship through transparency in the rate-setting process.

City of Fort Worth (TX): Cost-of-service and Rates of the Wholesale Wastewater Service

Tom served as project manager for a review of the cost-of-service and rates of the wholesale wastewater service for the Water Department for the City of Fort Worth (City). The City owns, manages and operates a water supply, treatment, transmission and distribution system, and a wastewater collection, treatment and disposal system serving residents and businesses within and outside the City. Service to areas outside the City is provided through 28 wholesale water agreements and 23 wholesale wastewater agreements. The Water Department uses four separate computer models to assist in the cost-of-service and rate setting process. Wholesale water and wastewater rates are determined in accordance with specific revenue requirements and cost allocation methodologies contained in the wholesale water and wastewater contracts.

The City's practice has been to retain the services of an expert financial and rate consultant to update the wholesale rates on a three-year cycle. Tom is currently working with the City to review and evaluate the cost-of-service methodology, make recommendations on changes or improvements to the methodology, and determine and verify the resulting rates. He will also participate in several workshops presenting the methodology and results to a Wholesale Customers Advisory Committee (WCAC) and sub-committee, and the final results will be presented to the City Council for adoption for fiscal year 2014.

City of Hobbs (NM): Financial Planning; Water and Sewer Rate Study

Tom served as the lead consultant on the City of Hobbs (City) water and wastewater rate study. The City was faced with significant capital expenditures to upgrade their wastewater treatment plant and wanted to ensure that the water and wastewater utilities were operating in a self-sufficient manner. Raftelis worked with City staff as well as the City Council and Water Board to determine the City's rate setting goals. Raftelis then developed water and wastewater rate structures that addressed these goals; in particular, conservation, while providing for adequate capital financing.

Arlington County (VA): Cost-of-service Study and System Development Charge Update

Tom has been the lead consultant on a series of engagements for Arlington County (County). Raftelis has conducted cost-of-service studies for the County for the past several years, updated the County's System Development Charge methodology, conducted pricing objective workshops with County staff as well as a citizen's advisory group that provided input into the rate setting objectives for the cost-of-service study. Raftelis has also assessed the equity of existing user rates and charges and evaluated the customer impacts associated with alternative rate structures. In addition, the County has also requested assistance in evaluating financing alternatives related to its capital improvement program, which may also include the utilization of the rate model to facilitate the preparation of a written feasibility report to be used by the County in obtaining a bond rating or credit enhancement for debt obligations. Raftelis is also developing new infrastructure availability fees for the County along with a model for use by County staff in the future.

Northwest Water Commission (IL): Wholesale Valuation and Rate Analysis

Tom served as project manager for Raftelis' engagement with the Northwest Water Commission (Commission), a wholesale water provider located in the northwest Chicago suburbs. The Commission engaged Raftelis to review its assets and determine a valuation for use in potentially providing service to additional customers. Raftelis also assisted the Commission in analyzing potential methodologies for recovery of costs from potential customers, including potential rates.

Fort Gratiot Township (MI): Port Huron Study

Tom served as the lead consultant on an engagement for Fort Gratiot Township (Township) to review proposed water rates from the City of Port Huron (City). The City provides wholesale water service to the Township and was concerned about the level of proposed rate increases they were facing, so they engaged Raftelis to review the proposed rates to ensure they were appropriate.

Great Lakes Water Authority (MI): Long Term CSO Control Plan Update

Tom served as the project manager for Raftelis' engagement with the Great Lakes Water Authority (GLWA). Raftelis worked closely with GLWA staff as well as the Member Partners to review the existing charge methodology and propose updates to the methodology to meet the objectives of the Member Partner communities to simplify the methodology while ensuring it remained fair and equitable.

St. Louis Metropolitan Sewer District (MO): Rate Change Review (multiple)

Tom has served as the project manager for multiple engagements with the St. Louis Metropolitan Sewer District (District). In 2007, 2008, and 2011 Raftelis served as the Consultant to the Rate Commission in the District's Rate Commission process. In this role Raftelis provided support to the Rate Commission in reviewing the proposal prepared by District Staff and the District's Rate Consultant for proposed rates.

In 2012 Raftelis was engaged by the District to serve as the Rate Consultant to the District and has performed cost of service analyses in support of the District Rate Commission proceedings in 2015, 2018, and 2019. In addition, Raftelis has served as the District's Feasibility Consultant for all new revenue bond issuances since 2012 totaling over $1 billion.

Loudoun County Sanitation Authority (VA): Bond Issuance Assistance and Cost-of-service Study

Tom served as the lead consultant on two engagements for Loudoun County Sanitation Authority (Authority), a cost-of-service rate study and a bond feasibility study. The Authority's goal for the rate study was to maintain the current rate structure and minimize rate increases while still preserving a sufficient fund balance to meet all internal coverage requirements. The follow-up bond feasibility study used the newly developed rate model to ensure the Authority's financial capability to issue new debt.

City of Olathe (KS): Impact Fee Study, Rate Model Update, System Development Charge Study, and System Development Charge Update

Tom has been the lead consultant on a series of engagements for the City of Olathe (City). Raftelis first performed an analysis of the City's existing System Development Fee methodology and provided guidance on how the fees could be updated and improved. Raftelis provided the subsequent revisions and updates and presented these findings to City Council. Raftelis has subsequently been engaged by the City to analyze proposed wastewater impact fees that would supplement system development charge revenue, to update the City's cost-of-service computer model, and to assist with the determination of wholesale wastewater rates.

City of Peoria (AZ): Sanitation Fees Study and Water and Wastewater Impact Fee Study

In February 1998, the City of Peoria (City) engaged Raftelis to conduct a comprehensive water and wastewater rate and financial planning study, which incorporated a water and wastewater utility rate study, an update of its water and wastewater development fees, the development of a water resource fee, and the development of an appropriate financial plan and bond feasibility forecast. Following these initial engagements, Raftelis has assisted the City in updating its water and wastewater rates, utility financial plan, and utility development fees on a biennial basis (2000, 2002, 2004 and 2006). As part of these updates, the City implemented a uniform service area approach to determining its development fees.

In 2003, Raftelis further assisted the City in determining utility development fees for a separate service area located west of the Aqua Fria River. Although the City assesses uniform water and wastewater development fees to customers in all other areas of its water and wastewater system, proposed development in this independent service area requires significant investment in capital improvements and certain portions of the required infrastructure will be financed through a Community Facilities District. Since these fees will be separate and unique from the fees assessed to other customers within the City's current service area, the City requested that Raftelis calculate the fees based upon the specific costs for the infrastructure they are intended to recover.

City of Phoenix (AZ): Bond Feasibility Study (multiple)

Tom has assisted the City of Phoenix (City) by providing bond feasibility analyses and parity test certifications for over $1 billion in water and wastewater revenue bonds over the past 10 years, including a $600,000,000 in Junior Lien Water System Revenue Refunding Bonds issued in 2005. These engagements included reviews of the City's financial statements and other financial data to prepare the feasibility analyses and parity test certifications.

City of Wyoming (MI): Water and Wastewater Wholesale Contract Negotiations and Water Rate Study

Tom has served as lead consultant and project manager for several engagements with the City of Wyoming (City) over the past seven years. Raftelis' largest engagement was to perform a water cost-of-service study and to provide assistance in the negotiation of new wholesale contracts for water and wastewater service. The City engaged Raftelis to perform a water cost-of-service study to support the negotiation of new wholesale water contracts. Raftelis has also provided expertise in areas including rate of return, cost-of-service allocations, industrial surcharges, and rate design across several engagements with the City.

PROJECT LIST

- Little Rock Wastewater Utility (AR) - Cost-of-service study and model, Rate Advisory Committee assistance, rate review, system growth charge study, and valuation study
- Allegheny County Sanitary Authority (PA) - Industrial surcharge review and rate study
- Arlington County (VA) - Cost-of-service study and system development charge update
- Birmingham Water Works Board (AL) - Bond feasibility study
- City of Baltimore (MD) - Cost model, wastewater rate study, and water rate arbitration assistance
- City of Denton (TX) - Water and wastewater cost-of-service and rate study
- Fort Gratiot Township (MI) - Port Huron study
- City of Fort Worth (TX) - Cost-of-service and rates of the wholesale wastewater service
- City of Gladstone (MO) - Wholesale rate review
- Town of Grand Lakes (CO) - Water rate study
- City of Grosse Pointe (MI) - Water and wastewater rate study
- Harlingen Water Works System (TX) - Water and wastewater rate study
- City of Hobbs (NM) - Financial planning and water and sewer rate study
- City of Kansas City (MO) - Sewer cost-of-service analysis

- City of Lee's Summit (MO) - Water and wastewater rate study
- City of Liberty (MO) - Wholesale rate review
- Loudon County Sanitation Authority (VA) - Bond issuance assistance and cost-of-service study
- City of Macomb (MI) - Feasibility analysis for acquisition and wastewater rate litigation assistance
- City of Naperville (IL) - Water and wastewater cost-of-service study
- Metropolitan Government of Nashville and Davidson County Water Services (TN) - Budget review
- Northwest Water Commission (IL) - Wholesale valuation and rate analysis
- Oakland County (MI) - Water and wastewater master plan study
- City of Olathe (KS) - Impact fee study, rate model update, system development charge study, and system development charge update
- Peace River Manasota Regional Water Authority (FL) - Feasibility study
- City of Peoria (AZ) - Sanitation fees study and water and wastewater impact fee study
- City of Phoenix (AZ) - Bond feasibility study (multiple)
- City of Providence (RI) - Rate filings (multiple)
- City of Saginaw (MI) - Water cost-of-service study, water rate study, and wholesale water contract negotiations
- Saginaw-Midland Municipal Water Supply Corporation (MI) - Feasibility study
- City of San Francisco (CA) - Wholesale water contract negotiations
- St. Louis Metropolitan Sewer District (MO) - Rate change review (multiple)
- City of Suffolk (VA) - Water and wastewater rate studies (multiple)
- United States Navy - Rate review and negotiations
- City of Wichita (KS) - Water and wastewater cost-of-service study and wholesale water rate analysis
- City of Wyoming (MI) - Water and wastewater wholesale contract negotiations and water rate study

Collin Drat

QA/QC
Senior Manager



Specialties
- Utility strategic financial planning
- Cost-of-service analysis
- Water, wastewater, & stormwater rate design
- Conservation rate design
- Statistical analysis

Professional History
- Raftelis: Senior Manager (2023-present); Manager (2019-2022); Senior Consultant (2016-2018); Consultant (2014-2015); Associate Consultant (2012-2013)

Education
- Master of Public Affairs (Public Finance) - Indiana University (2012)
- Bachelor of Arts in International Relations - Wheaton College (2010)

Professional Memberships
- AWWA
- Water Environment Federation (WEF): Utility Management Committee
- Finance and Administration Subcommittee for WEF
- AWWA/WEF Young Professionals Annual Summit: Chair (2020); Co-chair (2019)

ROLE

Collin will provide oversight for the project ensuring it meets both Raftelis and industry standards.

PROFILE

Collin has over 10 years of experience advising municipally owned water, wastewater, stormwater, electric and natural gas utilities throughout North America. Collin has conducted a 80+ studies for dozens of utility clients in 20 states. This experience includes not only establishing cost justified utility rates but also critiquing and defending them in court and before state public service commissions.

KEY PROJECT EXPERIENCE

Central Arkansas Water (AR): Water and Wastewater Rate Study

Collin served as lead consultant for Raftelis' engagement with Central Arkansas Water (CAW). Raftelis was retained to develop a long-term financial forecast for CAW, a cost of service analysis which attributed CAW's costs to its various customer classes based on their use of the CAW system and rate design recommendations which aligned with CAW strategic objectives. Collin worked closely with Raftelis' project manager and support staff to develop a new rate model for CAW. The Raftelis team used this model to support working meetings with staff and the CAW board throughout the process. Collin also aided in the development and review of presentation materials throughout the study.

City of Bentonville (AR): Water Rate Study, Wastewater Rate Study

Raftelis has completed two engagements with the City of Bentonville. Collin currently served as lead consultant for Raftelis' first engagement, a water rate study. Raftelis developed a comprehensive water financial plan and cost of service study for the City. The study identified the funding needs for the water utility and rates which appropriately recovered those costs from the City's retail and wholesale customers based on their use of the City system. Raftelis recently completed a similar analysis for the City's wastewater utility, focusing on developing a plan to fund over $100 million in anticipated capital improvements over the next 10 years. Collin served as the project manager for this engagement.

City of Sterling Heights (MI): Water and Wastewater Rate Study

Collin served as project manager for Raftelis engagement with the City of Sterling Heights (City). Raftelis was engaged to perform a financial planning, cost of service and rate study for the City. The study will identify the level of revenue needed for ongoing financial sustainability and determine how it should be recovered from the City's customer classes. A key aspect of this engagement involves the determination of appropriate capital charges which will ensure that new customers pay for their share of capacity in the City's water and sewer system.

City of Marquette (MI): Water and Wastewater Rate Study

Collin served as the lead consultant for Raftelis' initial engagement with the City of Marquette (City). This engagement involves the development of water, sewer and stormwater financial plans and rate designs. A key aspect of this engagement involved the evaluation and integration of the City's performance management contract with Johnson Controls, Inc into the financial plans. Collin also worked closely with the City's consulting engineer providing support and documentation of the financial elements of the City's Stormwater and Wastewater (SAW) asset management grant reporting requirements. Since that initial study, Raftelis has been reengaged twice to update the analysis and provide recommendations to City staff and the City Commission. Collin served as project manager for the two updates.

City of Saginaw (MI): Water Rate Study

Collin currently serves as the lead consultant for Raftelis' engagement with the City of Saginaw (City). This engagement involves the update of the City's water rate model to establish updated water service rates. A key aspect of this engagement involves the development of water service rates for the City's 18 wholesale customers. This required the development of a five-year financial plan and an allocation of operations and maintenance, depreciation and return on rate base to each of the City's wholesale customers, based on each customer's unique contribution to the City's operating and capital costs. The City's wholesale customers currently pay a commodity charge which recovers the cost of providing water service based on their current demand and a capacity charge which recovers costs on the basis for their contracted average and maximum day demand.

City of San Diego (CA): Water Rate Study

The City of San Diego (City) engaged Raftelis to conduct a comprehensive financial planning, cost of service, and rate design study for its water utility. Collin served as lead consultant for this engagement, supervising consulting staff, coordinating and leading working meetings and preparing deliverables. A key aspect of this engagement involved restructuring the City's residential tier structure to encourage conservation in a cost-justified manner, taking into account Proposition 218 and ongoing litigation around the City's water rates.

Marana Water (AZ): Water and Water Reclamation Rate Study, Impact Fee Study, Litigation Support

Collin has led Raftelis project teams supporting multiple engagements with Marana Water, the utility providing water and wastewater service to the Town of Marana. As lead consultant, Collin supported the development of water and wastewater financial plans, cost-of-service analyses and alternative rate designs. Subsequently, Raftelis was engaged to develop water, water resources and water reclamation impact fees. Collin served as the project manager for this engagement. Raftelis is currently providing expert witness support regarding the Town's prior impact fees (not prepared by Raftelis), which were challenged by the Southern Arizona Homebuilders Association (SAHBA).

City of Lawrence (KS): Water, Wastewater and Stormwater Rate Study, Utility Financial Policies

Collin serves as the project manager for Raftelis' ongoing engagement with the City of Lawrence (City). The City serves 35,000 retail customers (including the University of Kansas) and 7 wholesale customers. Raftelis completed its initial rate study for the City in 2017. That engagement involved the development of a comprehensive 10-year financial plan, water and wastewater cost-of-service studies, conservation rate designs and system development charges. Since the initial study, Raftelis has been retained to update analysis for the 2018, 2019, 2020, 2021 and 2022 budget years. Raftelis also developed a stormwater financial planning model for the City and has been advising the City regarding updates to their stormwater rate structure to reflect current best practices. Collin serves as the project manager for the stormwater engagement.

Bloomfield Township (MI): Water and Wastewater Rate Study

Collin served as the project manager for two engagements with Bloomfield Township (Township). Raftelis was originally retained to conduct a water and sewer rate study. Collin and the Raftelis team worked closely with Township staff and members of the Township Board to develop a financial plan which will sustainably fund the two utilities, and rate structure alternatives which meet the Townships policy priorities. Raftelis was reengaged to update the study projections. Collin served as project manager for the update.

City of Boulder City (NV): Electric, Water, Wastewater, Solid Waste Rate Study

Collin served as lead consultant for Raftelis' initial engagement with the City of Boulder City (City). The engagement involved a comprehensive financial planning, cost of service and rate study for the City's electric, water, wastewater, and solid waste utilities. A key aspect of the financial plans involves incorporating alternative sources of capital improvement funding available to the City such as land sales and solar lease revenues. The City has not performed a cost-of-service analysis in many years. Accordingly, a key component of this study involved explaining potential variances between existing customer revenues and cost of service and developing a plan to address these over time. Following the initial engagement, Raftelis was reengaged by the City to update the study, focusing on revenue sufficiency and rate structuring to encourage conservation and account for the City's rising electric costs. Collin served as project manager for the update, working closely with City staff and the Utilities Advisory Committee to develop recommendations which were ultimately approved by the City Council.

City of Suffolk (VA): Water and Wastewater Rate Study, Availability (Impact) Fees

Collin has been providing financial consulting services to the City of Suffolk (City) for over 10 years and currently serves as Raftelis' project manager. The scope of services includes an annual update of the City's rate study, monthly cash flow forecasting (production, consumption, revenue, delinquent accounts), a water audit, and a true-up determination for the City's wholesale customer Isle of Wight. In addition to these services Raftelis has supported the City on several as-needed analyses including affordability analysis, regionalization analysis, public and private fire protection rates, economic development rates, availability fees and among others.

City of Calgary (AB): Water and Wastewater Rate Study

Collin provided analytical and technical support in association with Mooreview Management Consulting for a comprehensive water, wastewater cost-of-service and rate study. Collin assisted with analysis of water and wastewater customer data, cost of service model development and the production of presentation materials to support the Raftelis and the Mooreview project team.

Clearwater Gas System (FL): Natural Gas Rate Study

Collin serves as the lead consultant for Raftelis' engagement with Clearwater Gas System (CGS). Raftelis developed a multi-year financial plan, cost of service study and rate design recommendations. A key aspect of the study involved CGS' rate riders to ensure they remained appropriate with respect to the costs incurred. Raftelis is currently updating the study for CGS as part of a multi-year consulting engagement.

City of Fort Morgan (CO): Natural Gas Rate Study

Collin serves as project manager for Raftelis' engagement with the City of Fort Morgan (City). This engagement involves the development of long-term financial plan for the City's gas department which will identify the revenue needed to fund the City's ongoing operating costs and repair and replacement costs, while maintaining appropriate reserve levels. The study will evaluate the sufficiency of the City's gas delivery charge to fund the City's cost of distributing gas to customers. Raftelis is also evaluating the City's gas supply charge, which recovers the City's cost of gas.

Providence Water (RI): Rate Case Support

Collin served as the lead consultant for the Providence Water Supply Board (PWSB), preparing schedules for the Board's five most recent rate filings (Dk. 4571, Dk. 4406, Dk. 4571, Dk. 4618, Dk. 4994) with the Rhode Island Public Utilities Commission (RIPUC). These filings involve the development of detailed rate year revenue requirements, updating cost-of-service allocations and rate design. Collin prepared calculated rates in accordance with PWSB's existing rate structure as well as alternative rates designed to promote water conservation. In addition, Collin assisted in authoring expert testimony to the RIPUC, prepared responses to data requests and adjusted rate schedules as necessary.

Regional Water Customers Group (AB): Cost of Service Review, Demand Forecasting

Collin has served as lead consultant for Raftelis' ongoing engagement with the Regional Water Customer Group (RWCG) since 2013. The Regional Water Customer Group (RWCG) is a consortium of nine water service providers located in suburban Edmonton who purchase treated water supplies from EPCOR Water Services Group, Inc. (EPCOR). Collin provided staff consulting support during the RWCG's negotiations with wholesale provider EPCOR following litigation at the Alberta Utilities Commission. Collin reviews EPCOR's prospective and actual cost-of-service models annually to ensure they comply with the agreed to methodology. Collin has also performed sensitivity analyses around RWCG's peak usage, which heavily influences its allocated cost-of-service form EPCOR. This analysis aided the RWCG in weighing the cost of reducing peak usage (asking customers to conserve on peak days) with the potential financial benefit.

PROJECT LIST

- Central Arkansas Water (AR) – Water and Wastewater Rate Study
- City of Bentonville (AR) – Water Rate Study, Wastewater Rate Study
- Capital Regional Parkland Water Services Commission (AB) – Water Rate Study
- City of Calgary (AB) – Water and Wastewater Rate Study
- Regional Water Customers Group (AB) – Cost of Service Review, Demand Forecasting
- Strathcona County Utilities (AB) – Wastewater Rate Study
- Sturgeon County (AB) – Water and Wastewater Study
- Town of Stony Plain (AB) - Stormwater Financial Plan
- Marana Water (AZ) – Water and Water Reclamation Rate Study, Impact Fee Study, Litigation Support
- City of San Diego (CA) – Water Rate Study
- City of Fort Morgan (CO) – Natural Gas Rate Study
- Clearwater Gas System (FL) – Natural Gas Rate Study (multiple)
- City of Bloomington (IL) – Wastewater and Stormwater Rate Study
- Northwest Water Commission (IL) – Valuation Study (multiple), Rate Analysis
- Silverleaf Resorts, Inc (IL, MO, TX) – Rate Case Support
- Village of Northfield (IL) - Water and Wastewater Rate Study
- City of Atchison (KS) - Water and Wastewater Rate Study
- City of Junction City (KS) – Water and Wastewater Rate Study (multiple)
- City of Lawrence (KS) – Water, Wastewater and Stormwater Rate Study (multiple), Utility Financial Policies
- City of Topeka (KS) – Water, Wastewater and Stormwater Rate Study
- Hardin County Water District No. 1 (KY) – Rate Case Support
- City of Baltimore (MD) – Stormwater Impervious Area Delineation
- Bloomfield Township (MI) – Water and Wastewater Rate Study (multiple)
- City of Alpena (MI) – Litigation Support
- City of Flint (MI) – Water and Wastewater Rate Study (multiple)

- City of Marquette (MI) – Water and Wastewater Rate Study (multiple)
- City of Marquette and Marquette Township (MI) – Joint Water Rate Study (multiple)
- City of Rochester (MI) – Water and Wastewater Rate Study (multiple)
- City of Saginaw (MI) – Water Rate Study (multiple)
- City of Sterling Heights (MI) – Water and Wastewater Rate Study
- Detroit Water and Sewerage Department (MI) – Water and Wastewater Rate Study, Fire Protection Study
- Marquette Charter Township (MI) - Fire Protection Study, Water Supply Valuation Study
- Port Huron Township (MI) – Wheeling Rate Study
- State of Michigan Department of Treasury (MI) – Various financial analysis regarding City of Flint
- City of Boulder City (NV) – Electric, Water, Wastewater, Solid Waste Rate Study (multiple)
- City of Aztec (NM) – Electric, Water and Wastewater Rate Study
- Masonic Villages at Sewickley (PA) – Litigation Support
- Gran Melia (PR) – Rate Case Support
- Providence Water (RI) – Rate Case Support
- City of Clarksville (TN) – Natural Gas Rate Study
- City of Cookeville (TN) – Water and Wastewater Rate Study, Natural Gas Rate Study, PGA Model
- City of Round Rock (TX) – Water and Wastewater Rate Study (multiple), Rate Case Support
- City of Alexandria (VA) – Rate Case Support (multiple)
- City of Suffolk (VA) – Water and Wastewater Rate Study (multiple), Availability (Impact) Fees
- Franklin Water Utility (WI) – Water Supplier Analysis
- Waukesha Water Utility (WI) – Water Supplier Analysis

PRESENTATIONS AND PUBLICATIONS

- “Making Cents of Affordability: How to Assess and Address Challenges in Your Community,” MOAWWA/MWEA Joint Annual Meeting, KWEA/KSAWWA Joint Conference (2022)
- “Smaller Utilities, Bigger Challenges: Small Utilities Gain the Most from Financial Planning and Stakeholder Outreach,” NACWA Clean Water Advocate (Winter 2020)
- "Financial Breakdown in the Vehicle City: Finding a Way Forward for Flint Finances in the Wake of the Water Crisis," AWWA/WEF Utility Management Conference (2017)
- "Ratemaking 101: Best Practices for the Financially Sustainable Utility," KWEA and KSAWWA Joint Annual Conference (2016)
- "Which Came First? An Integrative and Iterative Approach to Funding Infrastructure in Junction City," KWEA and KSAWWA Joint Annual Conference (2015)
- "Principals of Water, Wastewater and Stormwater Rate Setting," NYAWWA Edwin C. Tifft Jr. Water Supply Symposium (2015)

Joe Collins

LEAD CONSULTANT
Manager



ROLE

Joe will serve as the Lead Consultant and will work at the direction of Tom in conducting analyses and preparing deliverables for the project.

PROFILE

Joe has a background in economics, public policy analysis, and municipal finance as well as utility energy management. Joe's areas of expertise include water and wastewater demand analysis, financial planning, cost-of-service analysis and rate design. Joe has developed decision support tools and analyses for some of the largest and most complex agencies in the nation.

Specialties
- Financial modeling
- Utility rate studies
- Bond feasibility reports
- Statistical analysis

Professional History
- Raftelis: Manager (2023-present); Senior Consultant (2021-2022); Consultant (2019-2020) Associate Consultant (2016-2018)

Education
- Master of Public Administration - Indiana University (2016)
- Bachelor of Science in Economics - Truman State University (2014)

Professional Memberships
- AWWA
- WEF

KEY PROJECT EXPERIENCE

City of Suffolk (VA): Water and Wastewater Rate Study, Availability (Impact) Fees

Joe currently serves as a staff consultant for Raftelis' multi-year engagement with the City of Suffolk (City) to provide financial services to the City's Department of Public Utilities (DPU). The scope of services includes an annual update of the 10-year comprehensive financial plan, determination of water and sewer costs of service, development of proposed water and sewer rates for the upcoming fiscal year, and an assessment of the City's water and sewer system availability fees. In addition, Joe maintains monthly records of actual billing data, which is evaluated against prior demand forecasts and used to adjust forecasts for future years.

City of Atchison (KS): Water and Wastewater Rate Study

Joe currently serves as the lead consultant for Raftelis' engagement with the City of Atchison (City). Raftelis is developing a comprehensive water and wastewater financial plan and cost-of-service study. A unique aspect of this engagement involves the development of appropriate rates for the City's commercial and industrial customers, who represent approximately 50% of the City's annual water sales. The City also provides wholesale service to 4 rural water districts outside of the City. Raftelis is developing cost-of-service rates for these customers, which can be used in future contract negotiations.

City of Lawrence (KS): Water, Wastewater and Stormwater Rate Study

Joe currently serves as the staff consultant for Raftelis' most recent engagement with the City of Lawrence (City). Raftelis completed its initial rate study for the City in 2017. That engagement involved the development of a comprehensive 10-year financial plan, water and wastewater cost-of-service studies, wholesale rates, conservation rate designs and system development charges. Following the initial study, Raftelis was retained to update the rate projections for the 2019 budget year. Joe is currently working to update the water and sewer rate projections for the 2020 budget cycle. Joe is also developing a stormwater financial plan for the City, to appropriately recover the cost of handling stormwater run-off from City customers.

City of Junction City (KS): Water and Wastewater Rate Study

Joe serves as the lead consultant for Raftelis engagement with the City of Junction City. This engagement involves the development of comprehensive water and sewer financial plans and rate designs. Joe will be reviewing the previous financial business plans Raftelis developed as compared to the actual results and will be developing an updated plan, which will establish the level of rate revenue necessary to fund ongoing operations and capital reinvestment in a sustainable manner.

City of Saginaw (MI): Water Rate Study

Joe currently serves as the staff consultant for Raftelis' engagement with the City of Saginaw (City). This engagement involves the update of the City's water rate model to establish updated water service rates. A key aspect of this engagement involves the development of water service rates for the City's 20 wholesale customers. This required the development of a five-year financial plan and an allocation of operations and maintenance, depreciation and return on rate base to each of the City's wholesale customers, based on that customers unique contribution to the City's operating and capital costs.

Detroit Water and Sewerage Department (MI): Water and Wastewater Rate Study, Fire Protection Study

Joe serves as a staff consultant for Raftelis' engagement with the Detroit Water and Sewerage Department (Department). The engagement involves financial planning and rate design for the water and sewer utilities. Key aspects of this engagement involve analyzing and projecting costs from wholesale provider Great Lakes Water Authority, analyzing customer affordability and developing rates which mitigate the impact on lower income customers. Joe also served as a staff consultant for the development of the Department's private fire line charge.

Allendale Township (MI): Water and Sewer Commodity Rate and Connection Fee Study

Joe served as the staff consultant for Raftelis' engagement with Allendale Township. The engagement involved the development of utility rate and water and sewer financial planning models for Allendale Township. The financial plans involve a forecast of water and stormwater revenue, the development of a capital financing plan to fund improvements to the wastewater and stormwater systems and a detailed cash flow analysis for each utility indicating the rate adjustments necessary to ensure operational sustainability. Additionally, a key component of this engagement involved developing new system development charges for new connections to the water and sewer systems.

Des Moines Water Works (IA): Cost-of-service Study

Joe currently serves as a staff consultant for Raftelis' engagement with Des Moines Water Works (DMWW). This engagement involves a review of DMWW's existing cost-of-service and financial planning methodology and the development of an updated financial planning tool for the City to use going forward.

City of North Kansas City (MO): Water and Sewer Rate Study

Joe served as the staff consultant for Raftelis' engagement with the City of North Kansas City (City). Joe developed a utility rate and financial planning model, which would allow the City to evaluate the financial impacts of potential choices concerning future water supply, major water treatment facility renovations, and increased system maintenance costs.

City of Perryville (MO): Water and Sewer Rate Study

Joe served as the staff consultant for Raftelis' engagement with the City of Perryville (City). The City sought to calculate rates sufficient to finance the construction of major wastewater treatment facility renovations and increased system maintenance costs. Joe assisted in developing a rate and financial planning model to provide a forecast of rates, revenues, expenses, debt service coverage, and reserves over a 10-year forecast period.

City of Edgerton (KS): Water and Sewer Rate Study

Raftelis has assisted the City of Edgerton (City) with various studies. Joe played a key role in the 2017 update of the water and sewer financial planning model Raftelis had previously developed for the city. The process included analysis of the City's customer demand, operating expenses, and future needs for expansion. He also assisted with an analysis of customer growth and wholesale sewer rates to evaluate the impacts of new development.

City of Columbia (MO): Water Rate Study, Connection Fees Study

Joe serves as the staff consultant for Raftelis' engagement with the City of Columbia Department of Water and Light (CWL). Joe developed a water rate and cost-of-service study for CWL. CWL is seeking a comprehensive analysis of the existing and projected cost basis of utility operations and an evaluation of the appropriateness of its existing rate structure for providing water services. Joe has assisted in developing a rate and financial planning model to provide a forecast of rates, revenues, expenses, debt service, debt service coverage, and reserves over a 15-year forecast period. Joe has also developed cost-justified connection fees.

City of Washington (IL): Water and Sewer Rate Study

Joe served as the staff consultant for Raftelis engagement with the City of Washington (City). The Raftelis developed a comprehensive water and sewer financial plan for the City. This involved projecting water and sewer revenues and operating and capital expenses and identifying revenue adjustments which would maintain ongoing financial sustainability for the water and sewer funds.

City of Edwardsville (IL): Retail and Wholesale Water Rate Study

Joe served as the staff consultant for Raftelis' engagement with the City of Edwardsville (City). This engagement involved the development of a comprehensive water financial plan, which compared projected revenues against operating and capital expenditures and identified the level of rate revenue necessary to support ongoing financial sustainability for the City's water fund. A key aspect of this engagement involved the development of alternative financial planning scenarios which would achieve the City's goals of positive cash flow and repayment of funds loaned to the water fund from the City's general fund.

Mammoth Community Water District (CA): Water and Wastewater Rate Study

Mammoth Community Water District (MCWD) engaged Raftelis to complete a water and wastewater cost of service study. Joe serves as the lead consultant on this project, creating the financial models and working closely with staff to update water rates. MCWD also desires a new rate structure to recover wastewater costs. Joe is assisting with the development of several rate scenarios, including a detailed review with staff and elected officials to determine the best option for the community.

City of El Segundo (CA): Water and Wastewater Rate Study

Joe served as the lead consultant on Raftelis' engagement with the City of El Segundo (City) to conduct a rate study for the water and wastewater utilities. A key aspect of the study involved ensuring the financial health of the wastewater enterprise, which had not increased rates in four years. Raftelis developed a financial plan that allowed the utility to fully fund its capital improvement program and reach its reserve fund targets within five years. The study also included development of new rate structures for the water and wastewater utilities. The proposed rates greatly simplified the City's complex rate structure and more equitably recovered costs from customers.

Jurupa Community Services District (CA): Water and Wastewater Rate Study, Cost Allocation Plan

Raftelis was engaged to complete a water and wastewater cost of service study as well as a cost allocation plan for the Jurupa Community Services District (District). Joe served as the lead consultant on Raftelis' effort to develop

the cost allocation plan to fairly allocate overhead costs such as finance, human resources, maintenance, information technology, and board oversight to the water, wastewater, and parks enterprises. After reviewing budget documents and performance reports and leading discussions with key stakeholders, Raftelis recommended a methodology that more equitably recovered overhead costs.

Marina Coast Water District (CA): Recycled Water Rate Study

Joe serves as the lead consultant on an engagement with Marina Coast Water District (MCWD). MCWD is currently finalizing construction of a new recycled water distribution system to provide non-potable water produced through a partnership with Monterey One Water. Raftelis is developing several rate scenarios to ensure that MCWD is able to immediately provide recycled water service at equitable rates upon the completion of the necessary infrastructure.

Victor Valley Wastewater Reclamation Authority (CA): Recycled Water Rate Study

Joe served as the lead consultant on an engagement with the Victor Valley Wastewater Reclamation Authority to develop new rates for providing wholesale recycled water service. The project involved identifying the specific tasks and direct costs relevant to recycled water operations and forecasting water demand for several new customers. The study resulted in a set of rates to fairly recover costs from a group of unique customers while ensuring that the recycled water service would not be subsidized by the wastewater enterprise.

Metropolitan St. Louis Sewer District (MO): Stormwater Funding and Rate Study

Metropolitan St. Louis Sewer District (MSD) provides retail wastewater and stormwater services to the City and County of St. Louis, serving a population of approximately 1.3 million. MSD is interested in funding its stormwater management program through impervious area fees and, building on its longstanding relationship with Raftelis, has engaged the firm to provide stormwater funding and rate policy services. Joe aided in the development of the stormwater funding model and rate proposal and has begun work on MSD's forthcoming sewer rate proposal.

Little Blue Valley Sewer District (MO): Bond Feasibility Study

In July 2016, Raftelis was engaged by the Little Blue Valley Sewer District (District) to complete a financial feasibility evaluation of proposed revenue bonds. Joe evaluated historic and projected revenues, expenses, and debt service for the District and the sewer subdistrict it governs.

Great Lakes Water Authority (MI): Long Term CSO Control Plan Update

Joe served as the staff consultant for Raftelis' engagement with the Great Lakes Water Authority (GLWA). Raftelis worked closely with GLWA Staff as well as the Member Partners to review the existing charge methodology and propose updates to the methodology to meet the objectives of the Member Partner communities to simplify the methodology while ensuring it remained fair and equitable. Joe provided analytical support throughout the engagement.

Genesee County Drain Commission - Division of Water and Waste Services (MI): Water and Sewer Rate Studies

The Genesee County Drain Commission's Division of Water and Waste Services (GCDC) provides potable water transmission and distribution and wastewater collection, conveyance, and treatment to over 200,000 customers within its 700 square mile service area. Raftelis was engaged to develop a water and wastewater financial planning, cost-of-service and rate model for GCDC. Joe currently serves as the lead consultant for this engagement. A key aspect of this engagement has involved capturing all of the various levels of service provided by GCDC to the various communities which it serves. The model developed by Joe will allocate the cost of providing water service to GCDC's customers in proportion to their use of GCDC's water and wastewater system.

Matt Wittern APR, PMP

STAKEHOLDER COMMUNICATIONS TECHNICAL ADVISOR

Manager



Specialties

- Strategic communication planning
- Stakeholder engagement
- Public involvement
- Community outreach
- Primary & secondary research
- Expert positioning
- Media relations
- Social media
- Art direction
- Reputation management
- Coalition building
- Advocacy campaigns

Professional History

- Raftelis: Manager (2023-present); Senior Consultant (2019-2022)
- Denver Water: Senior Community Relations Specialist/Communications Manager (2015-2019)
- Communication Infrastructure Group: Counselor (2006-2015)
- CollegeInvest: Marketing Communications Manager (2005-2006)
- Transportation Expansion (T-REX) Project: Community Relations Manager (2002-2005)
- LawsComm: Client Service Coordinator (1998-2002)

Education

- Bachelor of Arts in Technical Journalism (Public Relations) - Colorado State University (1999)

Professional Memberships

- Public Relations Society of America: Accredited in Public Relations (APR)
- Project Management Institute - Project Management Professional (PMP)
- International Association of Public Participation (IAP2) - Certified in Public Participation
- WEF
- AWWA

ROLE

Matt will provide input for the stakeholder engagement portion of the project.

PROFILE

Matt has a 20+ year public relations career serving clients and customers in the local government, public utility, engineering, and construction sectors. He excels at designing and implementing strategic communications campaigns that incorporate stakeholder input to inform, advocate and achieve behavior change. His specialty is successfully translating complex subjects and concepts into messages that are easily understood by target audiences. At Raftelis he manages strategic communications planning and implementation, as well as stakeholder engagement initiatives. Prior to joining Raftelis, Matt managed a variety of public affairs efforts at Denver Water, which included designing the public engagement and public information strategies for nearly a billion dollars' worth of infrastructure projects, spearheading the public process for the utility's policy decision regarding Community Water Fluoridation, and led development of processes to gain stakeholder support for preventative maintenance on critical infrastructure. He earned a B.A. in journalism, is Accredited in Public Relations (APR) from the Public Relations Society of America (PRSA) and achieved status as a Project Management Professional (PMP) from the Project Management Institute. Matt has presented at national conferences including the American Water Works Association's ACE and the City-County Communications and Marketing Association's (3CMA) Annual Conference. Matt's work has earned prestigious Gold Pick Awards from the Colorado Chapter of PRSA and SAVVY Awards from 3CMA.

KEY PROJECT EXPERIENCE

Oklahoma City Water Utilities Trust (OK): Water Rate Change Stakeholder Engagement and Communications

Raftelis was hired by this major central US utility to perform comprehensive water rates, solid waste, and tap fee studies to ensure its ability to fund a major pipeline project, ensure adequate reserves to fund winter storm cleanup operations and maintain its outstanding bond rating. Matt designed and facilitated a series of stakeholder workshops at the start of the study to gather input that would set the course of the studies. As the results came into focus, Matt led the team in developing an immersive set of communications tools that effectively communicated key elements and findings of the studies to elected officials and decision makers. Ultimately, these efforts paid off with the City's approval of rate and fee recommendations.

Elbert County (CO): Impact Fee Study Stakeholder Involvement and Outreach

During a recent update of Elbert County's impact fees for Parks/Recreation, Public Facilities, Sheriff, and Transportation, Matt was the strategist behind development of the strategic communications and community outreach plan. It prescribed an extensive stakeholder engagement process featuring interactive online meetings and surveys, which informed the study prior to online work sessions with County Commissioners. County leaders credited this work with raising awareness in the community, making the study and recommendations less controversial and thus more politically acceptable.

City of Greeley (CO): Impact Fee Study Stakeholder Involvement and Outreach

Matt was the architect of two key elements of the impact fee study project the City of Greeley hired Raftelis to perform. On the front end, Matt managed the stakeholder outreach component that brought together key influencers and gathered input that subsequently informed the study. This was primarily accomplished by hosting a series of public virtual open houses where information was shared and feedback was gathered. Matt also lent his skills to the development of slide decks that greatly simplified the issues and helped City Council understand critical components of the process. Ultimately, the process was successful in providing "maximum supportable" impact fee recommendations to Council, who later adopted lower than maximum fees.

La Plata County (CO): Impact Fee Study Stakeholder Involvement and Outreach

Matt was the architect of a comprehensive stakeholder outreach process that informed La Plata County's impact fee study. Matt brought together key influencers and gathered input that subsequently informed the study. Input gathered helped staff at the County understand the significant resistance to impact fee adoption, and the process was shelved as impacts of the COVID-19 pandemic became more and more pronounced.

City of Lawrence (KS): Strategic Planning Stakeholder Involvement

Raftelis was hired to develop and implement a stakeholder involvement component to supplement the City's Strategic Planning process (also led by Raftelis). As part of the engagement team, Matt facilitated stakeholder involvement sessions that gathered critical information about the vision residents had for the future of Lawrence; information that helped chart the course of the City's Strategic Plan.

Town of Jackson (WY): Water Rate Change Stakeholder Engagement and Communications

The Town of Jackson, located in Teton County, boasts among the highest incomes of any county in the United States. Juxtaposed against that is the thousands of hourly and service industry jobs that support the vibrant tourism industry, and Raftelis accepted the challenge to develop a water and wastewater rate structure that was fair and equitable, while pricing in complications such as the prevalence of seasonal homes that only had seasonal demand and impact on the system. Matt led the creation of a Citizen Review Committee made up of representatives from myriad stakeholder groups. Through a series of meetings facilitated by Matt, the CRC ensured that the recommendation ultimately delivered to the Town Council was representative of the community and included measures for affordability. In addition, Matt was the architect of a multi-pronged strategic communications program that helped raise awareness of, and support for, changes to the rate structure among town residents. This included developing a suite of communication tools including newsletter articles, website copy, bill stuffers, graphics, social media content, and a capstone printed piece that summarized the study process.

Northern Colorado Water Conservancy District (CO): Strategic Communications and Stakeholder Outreach

Like many parts of the state, Northern Colorado is experiencing exceptional growth, with a population that is expected to double to a half-million people by 2050. As a key raw water provider to municipalities and agricultural

interests, the Northern Colorado Water Conservancy District began plans in the 1980s to provide valuable source water to 15 partners working together to make the Northern Integrated Supply Project a reality. Today, on the cusp of state and federal regulatory approvals, NISP faces opposition from a very small but vocal minority who threaten to derail the public process and stop the project by any means necessary. Millions of dollars, years of planning and thorough environmental study and protections hangs in the balance. Raftelis was hired to assist Northern with development of a comprehensive public outreach and information campaign to ensure continued public support for this critical $1.1 billion project. Matt Wittern conducted thorough primary and secondary research to inform a plan that when implemented will ensure those who will benefit most from the project will understand the value it brings and its role to help ensure a continued thriving community for years to come.

City of Wheat Ridge (CO): Stakeholder Engagement and Brand Identity Development

Matt was the project manager on the team hired to design and implement a community-based brand identity development for the City of Wheat Ridge (City). The City's existing brand was designed by a high school student in the mid-1970s and despite the brand's age and dated nature, there were voices in the community opposed to the City's rebranding. Matt designed a process that brought together key community stakeholders using a variety of public engagement techniques to draw out from them their view of what was quintessentially Wheat Ridge. These elements were then distilled down to core themes that were woven into the City's new identity. While there was no consensus on what made Wheat Ridge Wheat Ridge, each group could literally point to an element of the brand and buy-in to the brand as a whole. The result was a process that members of City Council praised as the model for how City staff should encourage public involvement. A post-project survey found that 70 percent of respondents agreed that the new identity represents the City as a positive, progressive community.

Denver Water (CO): Government and Stakeholder Relations

Matt served for many years in Denver Water's Public Affairs Division, where he managed community outreach and public information initiatives from small water main replacement projects impacting neighborhoods all the way up to strategic communications for the half-billion-dollar project to raise Gross Reservoir Dam to increase the facility's storage capacity. Matt also spearheaded the public process to evaluate alternatives related to the Denver Water Board of Water Commissioners' Community Water Fluoridation policy.

City of Santa Cruz (CA): Water Rate Change Stakeholder Engagement and Communications, Proposition 218 Compliance

Residents of this popular tourist destination are some of the most water wise in the entire country, and pride themselves on their low per-capita water usage. Raftelis was engaged to perform a detailed water rates study that included a concurrent public involvement component. Over a period of 18 months – and made more difficult by the COVID-19 pandemic – Matt and colleagues at Raftelis provided strategic communications counsel and facilitated stakeholder outreach and engagement activities that informed the rate study process. This process included development of an online engagement community from scratch, multiple community presentations and strategic communication tools. Further, Matt led development and provided art direction on the Proposition 218 Notice, which is a legal requirement before City Council votes to adopt rate change recommendations.

Madera County (CA): Solid Waste Management Study Stakeholder Engagement and Communications

Matt served as lead strategist and facilitator for this solid waste management study in 2023. There were significant challenges, as a highly vocal and organized group in the east part of Madera County had sued the government about past solid waste management practices. Using stakeholder engagement techniques, Matt and the team at Raftelis brought all stakeholders to the table for discussions on what the best solution would be for them – providing value for the dollar, while also conforming to new more stringent state regulations. The study also benefitted from strong key messaging and use of myriad county-owned publications and earned media coverage. In the end, Raftelis was

able to show where input from stakeholders greatly influenced the recommendations of the study, which was adopted by the County Board of Supervisors.

Tuolumne Utilities District (CA): Stakeholder Engagement and Proposition 218 Compliance

Matt was the project manager on an engagement to build stakeholder awareness of and support for the District's efforts to acquire its own water rights. The rights – some dating back to the Gold Rush era – are owned by power provider PG&E. While PG&E was offering the rights and associated water collection infrastructure at a good price, the acquisition would require customer water rates to increase. Starting with in-depth interviews of community leaders and individuals who were skeptical of the acquisition, Raftelis designed a multi-pronged campaign designed to create a fact-based community conversation about the opportunity and anticipated bill impacts. As the community became more aware, sentiments from one-on-one conversations and coverage in local media started to change. Unfortunately, just as the District sent out a Proposition 218 notice to cement its legal ability to close the deal, leadership at PG&E changed and the utility pulled out of the deal. The campaign is on indefinite hold until PG&E returns to the negotiating table.

Charlotte Water (NC): Bill Payment Plan Communications

Matt was the project manager for the team that designed and implemented a campaign that help Charlotte Water reduce the number of past-due accounts by promoting the utility's payment assistance program. Raftelis created a nine-month, measurable promotional campaign that included in-person events, posters placed in local businesses, direct mail, paid digital ads, transit advertising, social media, Spotify ads, billing inserts, newsletter articles, website updates, and direct emails to account holders.

Water Environment Federation: Biosolids Communication Toolkit

WEF hired Raftelis to develop a communication toolkit to help wastewater agencies communicate confidently about biosolids. Matt was on the copywriting team that researched biosolids media coverage and interviewed agencies with successful outreach programs; then wrote a comprehensive guide and training module that walks readers through the steps needed to develop and execute a successful biosolids communication effort. The toolkit includes guidance for making the business case for proactive outreach, it covers best practices for handling a "hit piece," for managing pushback from the community, using social media and much more, including downloadable imagery, infographics, social media posts and templates. The team also supported WEF with training on the use of the toolkit.

Fairfax County/City (VA): Community Redevelopment Communications and Engagement

Matt played a support role in implementing the strategic communications and engagement plan for the joint redevelopment of the Sherwood-Willard health and community center. The Raftelis team guided a large, multi-disciplinary team of city and county employees through a discovery and planning process to assure key stakeholders are informed of the project and opportunities to provide input into the design.

EPIC: Water Quality Communications (CCR Report Template)

Matt was on a multi-disciplinary team of writers, graphic designers and data visualists to develop an award winning entry into the Environmental Policy and Innovation Center's contest to reimagine the Consumer Confidence Report. Raftelis' team created an online and print template for the CCR that improved its accessibility to all audiences, using the CDC Clear Communication Index, the Flesch-Kincaid reading scale, and best-in-class design. Raftelis was selected through a competitive process to also design a national template for the CCR. That project is underway now.

Augusta County Service Authority (VA): Water Quality Communications (CCR Report)

Based on their first-place win on the CCR contest sponsored by EPIC, Raftelis was invited by The Virginia Health Catalyst to help them develop a CCR template to be used by Augusta County Service Authority. That project is underway now, with Matt serving as project manager.

City of Port Hueneme (CA): Water Rate Change Stakeholder Engagement and Communications

A rate study had not been performed for some time for this small coastal city, and the City Council stressed that affordability was a key factor for their approval. They also stressed the importance of transparency, especially as it related to ensuring the community's significant population of individuals for whom English was not their primary language. As the strategic communications project coordinator, Matt conducted public outreach efforts for the City of Port Hueneme (City) that included the development of an infographic that explains the City's rate structure changes, a Proposition 218 notice, and facilitated three public workshops to explain the changes. All materials were translated into Spanish-language versions to enable communication across a potential language barrier. Raftelis' recommended rates were subsequently adopted by City Council.

Montecito Water District (CA): Water Rate Change Communications

This coastal community faced the opportunity to reduce its reliance on surface water sources that are becoming less and less certain due to the effects of climate change and drought. Their solution was to switch over to a guaranteed source using a state-of-the-art desalination plant. This change modified the cost structure paid by customers, but also came with benefits that were not obvious at first glance. Matt managed the implementation of a strategic communications plan that included development of a variety of communication tools and pieces that effectively made the case for why the changes planned will provide long-term community benefits. Raftelis' recommended changes were subsequently adopted by the board of directors, who also voiced appreciation for the communications and outreach performed in the months leading up to their vote.

City of Arcadia (FL): Water Rate Change Communications

Rarely do we find ourselves in the position to recommend a reduction in water and sewer rates, but that was the case in early 2021 for the City of Arcadia, FL. Matt worked closely with the City to develop a set of compelling key messages, graphics, and communication tools the City published and distributed to explain rate structure benefits to its customers. As a measure of the value, the client wrote that the deliverables were "the best money (she'd) ever spent on consulting services."

Sterling Heights (MI): Water Rate Change Communications

As part of Raftelis' rate study, the City made changes to its rate structure and rates to ensure they remained fair and reasonable, as low as the best service will allow, and supported a financially strong system that delivers high-quality water to you today and in the future. Matt was the architect of the strategic communications plan that included detailed analysis of key stakeholders, messages designed to communicate complex concepts in a clear and concise manner, and printed tools designed to raise awareness and support for the changes.

Town of Erie (CO): Water Rate Change Communications

Late in the rate study process, with dollars remaining unspent in the project budget, Matt was engaged to liaise with the town's Public Information Officer to develop messages and communication tools to build awareness and support for proposed changes. These tools helped the Town overcome objections from opponents to proposed rate changes by helping communicate the value of water and the need for critical infrastructure investments.

Bullhead City (AZ): Water Utility Acquisition Communications

In a bid to take over the City's privately-owned water utility and make it owned by its customers, Raftelis was engaged by Bullhead City to develop a defensible valuation. The owners of the utility were resistant to the idea and launched a public relations campaign in a bid to scuttle the effort. Raftelis developed a series of communication tools that refuted the existing disinformation campaign and set the record straight. In the end, voters in Bullhead City approved the vision and authorized the City to continue down the path of purchasing the utility.

PRASA (Puerto Rico): Water Rate Change Communications

Raftelis was hired by PRASA – the government entity in Puerto Rico charged with providing water and wastewater treatment services to the island – to perform a comprehensive rates and fees study and provide strategic communications services. As the study neared completion, Raftelis delivered a turnkey public information campaign with accompanying messages, tools, and tactics. The PRASA communications staff took it from there, and worked diligently to share the information with stakeholders and customers.

Cucamonga Valley Water District (CA): Water Rate Change Communications

The Cucamonga Valley Water District, in California's Inland Empire, was updating its rates and fees to account for a modified pass-through fee for State Water Project water, along with aligning its tiered rate structure to more closely follow the varied costs of different sources of water. In addition, CVWD's financial plan and Capital Investment Plan called for infrastructure upgrades to its aging water infrastructure before costly breaks and outages became more common. Matt coordinated the implementation of a strategic communications and outreach plan that included communication tools such as bill stuffers, FAQs, a fact sheet/infographic, and Proposition 218 notice. Misinformation about the proposed rate increase was quickly rebutted and the board of directors unanimously approved Raftelis' rate recommendation in 2021.

Crestview-Lake Arrowhead Water Agency (CA): Proposition 218 Compliance

Crestview-Lake Arrowhead Water Agency (CLAWA) had not had a rate increase in 26 years and needed to ensure compliance with California's Proposition 218 requirements. CLAWA sought specialized assistance communicating the purpose and need for rate increases to customers on a strict implementation timeline. Matt provided strategic communications assistance, including guidance on messaging strategy and tactics, resulting in a successful adoption of the recommended rate adjustment.

Amador Water Agency (CA): Water Rate Change Stakeholder Engagement and Communications

Amador Water Agency (AWA or "Agency") provides treated water, untreated water, and wastewater collection and treatment services to approximately 10,000 customers across 568 square miles in Amador County. Over the years, the Agency has absorbed a variety water and wastewater systems that collectively make up its current system. These systems joined Amador Water Agency in various states of repair – often operating below industry standards and best practices. Prior rate adjustments were difficult, and the Agency struggled to perform maintenance and make improvements on its systems to raise levels of service. Raftelis was engaged early in the rate study process, and Matt developed a customized strategic communications plan and messaging that helped the agency tell its story effectively. Using a suite of communications tools, the Agency successfully made the case for the need for rate adjustments and set itself on a path to success.

City of St. Helena (CA): Water Efficiency Communications

Like many of its neighbors, the City of St. Helena is working to combat the effects of climate change. For this community in California's wine country, customers needed to dramatically curtail their water usage to avoid more painful water restrictions. But with a modest in-house staff, the city asked Raftelis to jump in to help communicate a

suite of conservation messages. Within just a period of days, Matt developed conservation messaging, social media content, infographics, newsletter articles, giveaways, fact sheets, and other tools to raise awareness among the city's water customers, which helped result in considerable water conservation.

Western Municipal Water District (CA): Expert Positioning

Following a successful water rate study and after defeating a court challenge, the District hired Raftelis to draft an article to share its story with other nearby providers on the tricky issue of water budgets. Working closely with the District Manager and legal counsel, Matt authored a piece and developed accompanying graphics that was published in *Journal AWWA* and subsequently won an award at ACE 2023.

City of Newport Beach (CA): Water Rate Change Communications and Proposition 218 Notice

The City of Newport Beach (City) Utilities Division provides water service to more than 86,000 people over 50 square miles. A high-income community composed of primarily single-family residential properties, there was significant resistance to past water rate increases. For the past four years, City Council declined to increase rates, but with costs such as purchasing supplemental water rising by 75% in recent years, the time had come for action. Matt was on the Raftelis team charged with developing a comprehensive strategic communications plan, messages and communications tools, including a Proposition 218 notice. The effort communicated the great need for infrastructure improvements to ensure continued deliver of high-quality drinking water and water for fire protection. City Council voted to increase rates at the end of 2019.

PRESENTATIONS

- "Strategic Communications Bootcamp" 2023 Raftelis Performance Academy
- "Building Support For That Thing You Want to Do" 2023 City/County Communications and Marketing Annual Conference
- "Building Support For That Thing You Want to Do" 2023 NACWA StratCom Conference
- Panelist, 2023 NACWA Winter Conference
- "Developing Water Conservation Communication Campaigns That Aren't All Wet" 2022 North Texas Water Conservation Symposium
- "Is This Working? Determining Utility Communications Success" 2022 NACWA Strategic Communications H2O Workshop
- "Internal Communications: How to Effectively Talk with Your Own Employees" 2022 NACWA Strategic Communications H2O Workshop
- "Building Support for Water Rate Increases" AZ Water Association 2022 Annual Conference
- "Building Support for Water Rate Increases" Colorado Municipal League 2021 Annual Conference
- "Biosolids Communication Toolkit Workshop" Water Environment Federation
- "Re-imagining Engagement: Harvesting what we've learned about virtual public engagement for the future" ACE '21 Annual Conference
- "Re-imagining Engagement: Harvesting what we've learned about virtual public engagement for the future" Arizona Water Association 2021 Annual Conference
- "It's Human Nature: Using Social Science to Enhance Your Communications," RMSAWWA/RMWEA, 2020
- "Ensuring Public Process Legitimacy Through the Lens of The Community Water Fluoridation Issue," AWWA ACE Conference, 2016

PUBLICATIONS

- "Protecting Against Water Rate Challenges With the Equivalent of Bear Spray", Article, Journal AWWA, 2022 (Earned award at ACE)
- "Leverage Social Media in Times of Crisis", Article, Journal AWWA, 2020