CITY OF WASHINGTON

COMPREHENSIVE WATER AND SEWER RATE AND FEE STUDY

TECHNICAL PROPOSAL FOR PROFESSIONAL SERVICES / JANUARY 19, 2018

Contact Person: Tom Beckley - 3013 Main Street, Kansas City, MO 64108 /
Phone: 816.285.9024 / Email: tbeckley@raftelis.com

RAFTELIS
FINANCIAL CONSULTANTS, INC.

CMT

TABLE OF CONTENTS

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

RAFTELIS
FINANCIAL CONSULTANTS, INC.

3013 Main Street
Kansas City, MO 64108

Phone 816 . 285 . 9020
Fax 816 . 285 . 9021

www.raftelis.com

January 17, 2018

Mr. Jim Culotta
City Administrator
City of Washington
301 Walnut Street
Washington, IL 61571

RE: Technical Proposal for Comprehensive Water and Sewer Rate and Fee Study

Dear Mr. Culotta:

Raftelis Financial Consultants, Inc. (Raftelis), in association with our project partner Crawford, Murphy & Tilly (CMT), is pleased to submit our proposal to conduct a comprehensive water and sewer rate and fee study for the City of Washington (City). We appreciate the opportunity to submit this proposal which details our qualifications and experience within the municipal utility industry as well as our approach for conducting the services requested by the City.

To assist the City with these services, Raftelis is proposing a Project Team with unparalleled experience and a reputation for quality service. Our team combines financial experience and expertise coupled with an engineering perspective to assist the City in addressing the challenges it faces. I will serve as the Project Manager ensuring that the project stays on schedule, is within budget, and effectively meets the City's objectives. I have 17 years of experience with Raftelis providing financial and rate consulting services to water and sewer utilities across the United States. Collin Drat and Joe Collins will provide financial consulting support for the engagement, and our team will also have the support of engineering staff from CMT. Additional information on each member of our Project Team is provided within our proposal.

We believe that our unique combination of qualifications, extensive experience, and local presence will ensure an efficient and successful project for the City. Some of the reasons we believe that our Project Team is uniquely qualified to provide these services to the City are:

Depth of Resources. With more than 70 utility financial, rate, and management consultants, Raftelis has the largest water and wastewater financial and management consulting practice in the nation. In addition to our dedicated Project Team, all of our staff will be available to provide support for this project as necessary. Our depth of resources will ensure that the City's objectives for this project are met.

Experience. Our firm has assisted over 500 utilities across the United States and conducted thousands of studies. In the past year alone, we worked in 38 states and conducted more than 400 studies.

Industry Leadership. Our staff is involved in shaping industry standards by chairing and actively participating in various committees within the American Water Works Association (AWWA). We have written one of the leading books on water and wastewater rate studies, *Water and Wastewater Financing and Pricing: The Changing Landscape* and co-authored other industry standard books, such as AWWA's *Manual M1, Principle of Water Rates, Fees and Charges* (Manual M1) and the Water Environment Federation's (WEF) *Manual of Practice No. 27, Financing and Charges for Wastewater Systems*. We are also responsible for AWWA's biennial national *Water and Wastewater Rate Survey*.

Modeling Experts. We have developed some of the most sophisticated yet user-friendly financial planning/rate models available in the industry. These models are decision support tools that allow us and our clients to examine different policy options and their financial/customer impacts in real time. Our models are custom-built for each client in a cost-effective manner to ensure alignment with the client's financial and accounting structure and the functionality desired by each client. In a workshop environment, we are able to use our models to quickly review impacts of changes to different parameters, determine which policy option is feasible, and reach a consensus quickly.

Registered Municipal Advisor. As required by the Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank), we are registered as a Municipal Advisor under the rules of the SEC and the MSRB. As such, the City can be confident that the advice we will provide as part of this project, in particular recommendations on capital financing using debt, will be in compliance with applicable Federal laws and regulations and that we will meet the operating standards covered by the regulations.

Raftelis commits to perform the work within the time period, and, based on our previous experience with similar projects, we believe that this will provide sufficient time to successfully complete the project. Our proposal is a firm and irrevocable offer for the period covered.

We are proud of the resources that we can offer to the City of Washington and welcome the opportunity to be of assistance in this engagement. Please do not hesitate to contact me by phone at 816.285.9024 or by email at tbeckley@raftelis.com if you have any questions.

Very truly yours,
RAFTELIS FINANCIAL CONSULTANTS, INC.

Thomas Beckley
Senior Manager
(individual empowered to submit the bid and sign the contract with the City)

WHO IS RAFTELIS

RAFTELIS HAS THE **LARGEST AND MOST EXPERIENCED PRACTICE IN THE NATION** THAT IS FOCUSED ON FINANCIAL AND MANAGEMENT CONSULTING FOR THE WATER, WASTEWATER, AND STORMWATER UTILITY INDUSTRY.

In 1993, Raftelis Financial Consultants, Inc. (Raftelis) was founded to provide services that help utilities local governments function as sustainable organizations while providing the public with clean water and quality services at an affordable price. With this goal in mind, Raftelis has grown to have the largest and most experienced water, wastewater, and stormwater utility financial and management consulting practice in the nation. Raftelis has experience providing these services to hundreds of jurisdictions across the country and abroad, allowing us to provide our clients with innovative and insightful recommendations that are founded on industry best practices. Throughout our history, we have maintained a strict focus on the financial and management aspects of utilities, building a staff with knowledge and skills that are extremely specialized to the services that we provide, and thus allowing us to provide our clients with independent and objective advice.

Location of office conducting the work: 3013 Main Street, Kansas City, MO 64108 (CMT will be providing services from their Peoria office at 203 Harrison St. Peoria, IL 61602)

Size of the firm: Raftelis consists of 90 employees, including 79 consultants specializing in financial and management consulting for water, wastewater, and stormwater utilities

Visit www.raftelis.com to learn more about Raftelis' story.

OUR SUBCONSULTANT: **CMT**

At Crawford, Murphy & Tilly (CMT), we understand water is the world's most precious resource. Whether it is in the form of drinking water, wastewater, stormwater, groundwater or surface water, water impacts many facets of our daily lives. Our committed water professionals recognize the importance of all water and how the many forms of water interact and can impact each other.

We are constantly working together to improve our clients' ability to manage their water resources through treatment, conservation and reuse of drinking water, wastewater and stormwater. From planning to engineering, construction, operations support and program management, our services cover the full lifecycle of water resource assets. We understand water is never created; it is constantly in a cycle, and at no point does it become unimportant.

WHAT MAKES RAFTELIS UNIQUE?

DEPTH OF RESOURCES

With more than 70 utility financial, rate, and management consultants, Raftelis has the largest water-industry financial, rate, and management consulting practice in the nation.

BENEFIT TO THE CITY
Our depth of resources will allow us to sufficiently staff this project with the qualified personnel necessary to efficiently and expeditiously meet the City's objectives.

FOCUS

Raftelis' services are solely focused on providing financial, rate, and management consulting services to water-industry utilities.

BENEFIT TO THE CITY
This focus allows Raftelis professionals to develop and maintain knowledge and skills that are extremely specialized to the services that we provide, and will allow us to provide the City with independent and objective advice.

UNPARALLELED EXPERIENCE

Raftelis staff have assisted hundreds of water industry utilities throughout the country with financial, rate, and management consulting services.

BENEFIT TO THE CITY
Our extensive experience will allow us to provide innovative and insightful recommendations to the City, and will provide validation for the proposed methodology ensuring that industry best practices are incorporated.

MSRB REGISTERED
MUNICIPAL ADVISOR

Raftelis is registered with the U.S. Securities 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 utility financial planning in compliance with the applicable regulations of the SEC and the MSRB.

RATE ADOPTION EXPERTISE

Raftelis has assisted numerous agencies with getting proposed rates successfully adopted.

BENEFIT TO THE CITY

Our experience has allowed us to develop an approach that effectively communicates with elected officials about the financial consequences and rationale behind recommended rates to ensure stakeholder buy-in and successful rate adoption. This includes developing a "message" regarding the changes in the proposed utility rates that is politically acceptable, and conveying that message in an easy-to–understand manner.

MODELING EXPERTISE

Raftelis has developed some of the most sophisticated yet user-friendly financial/rate models available in the industry.

BENEFIT TO THE CITY

Our models are tools that allow us to examine different policy options and cost allocations and their financial/customer impacts in real time. Our models are non-proprietary and are developed with the expectation that they will be used by the client as financial planning tools long after the project is complete.

INDUSTRY LEADERSHIP

Our senior staff is involved in shaping industry standards by chairing various committees within the American Water Works Association (AWWA) and Water Environment Federation (WEF). Raftelis' staff members have also contributed to many industry standard books regarding utility rate setting.

BENEFIT TO THE CITY

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.

LEADING THE INDUSTRY

Raftelis staff shape industry standards for water and wastewater utility finance and rate setting through our active leadership in AWWA, WEF, and EPA. Raftelis' staff includes:

AWWA

- Chair and three members of Rates and Charges Committee
- Trustee of Management and Leadership Division
- Chair of Management and Leadership Division
- Member of Strategic Management Practices Committee
- Vice Chair and member of Finance, Accounting, and Management Controls Committee
- Division Liaison to Workforce Strategies Committee
- Trustee of Technical and Education Council

WEF

- Three members of Utility Management Committee
- Subcommittee Chair of Finance and Administration
- Member of Technical Practices Committee
- Two members of WEFTEC Conference Planning Committee
- Member of Utility Management Conference Planning Committee

EPA

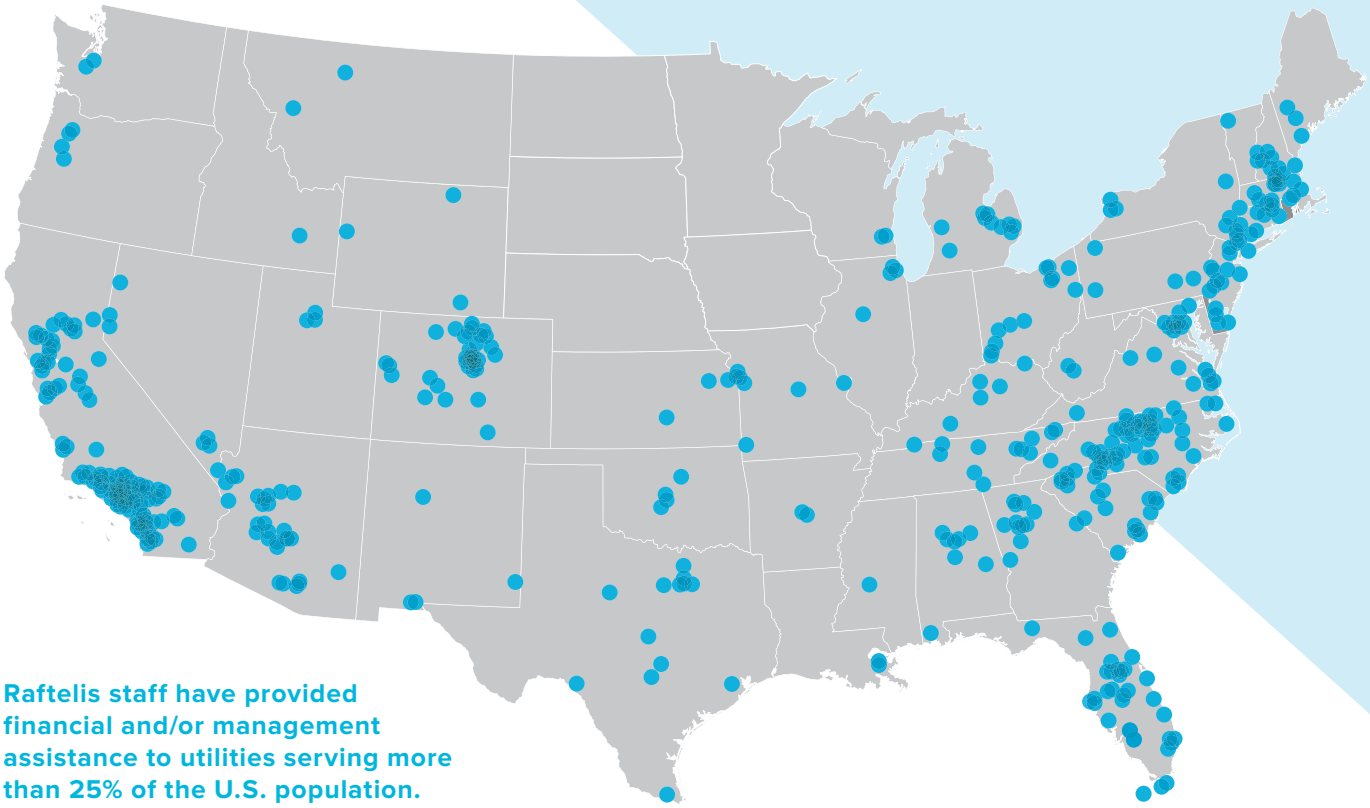
- Member of Environemental Financial Advisory Board

WE WROTE THE BOOK

Raftelis staff have co-authored many of the industry's leading guidebooks regarding water and wastewater financial issues and rate setting, including:

- AWWA's *Manual M1, Principles of Water Rates, Fees and Charges*
- AWWA's *Water Rates, Fees, and the Legal Environment, 2nd Edition*
- AWWA's *Manual M29, Water Utility Capital Financing*
- AWWA's *Financial Management for Water Utilities: Principles of Finance, Accounting, and Management Controls*
- AWWA's *Manual M5, Water Utility Management, 2nd Edition*
- WEF's *Manual of Practice No. 27 - Financing and Charges for Wastewater Systems*
- WEF's *The Effective Water Professional: Leadership, Communication, Management, Finance, and Governance*
- *Water and Wastewater Finance and Pricing: The Changing Landscape*

Raftelis also conducts and publishes the national *Water and Wastewater Rate Survey* in conjunction with AWWA. This survey is the most comprehensive collection of water and wastewater utility financial and rate data available in the industry.



Raftelis staff have provided financial and/or management assistance to utilities serving more than 25% of the U.S. population. This map shows some of the water, wastewater, and/or stormwater utility clients where Raftelis staff have provided financial/ management consulting.

EXPERIENCE

Raftelis has focused on financial and management consulting for water, wastewater, and stormwater utilities since the firm's founding in 1993, and our staff consists of some of the most experienced consultants in the industry. Raftelis has provided financial and management assistance to hundreds of water, wastewater, and stormwater utilities across the U.S. In the past year alone, Raftelis worked on more than 400 financial, rate, management, and operational consulting projects for over 300 water, wastewater, and/or stormwater utilities in 36 states, the District of Columbia, Canada, and Puerto Rico.

Our clients range from some of the larget, most complex utilties in the country to small agencies serving only a few thousand customers. We have extensive experience serving utilities that are similar in size and type to the City of Washington.

NATIONAL EXPERIENCE

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

		FINANCIAL AND RATE CONSULTING									MANAGEMENT CONSULTING									
STATE	CLIENT	AFFORDABILITY ANALYSIS AND PROGRAM DEVELOPMENT	DEBT ISSUANCE SUPPORT	DISPUTE RESOLUTION	FINANCIAL AND CAPITAL IMPROVEMENTS PLANNING	IMPACT FEES	RATE CASE SUPPORT	RATE STUDY	RISK ANALYSIS	STORMWATER UTILITY DEVELOMENT	CUSTOMER RELATIONSHIP MANAGEMENT	CUSTOM SOFTWARE AND TOOL DEVELOPMENT	DATA SERVICES	ORGANIZATIONAL OPTIMIZATION	PERFORMANCE MANAGEMENT AND BENCHMARKING	PROJECT/PROGRAM PROCUREMENT ASSISTANCE	PUBLIC/STAKEHOLDER EDUCATION, OUTREACH, AND FACILITATION	STORMWATER PROGRAM DEVELOPMENT SUPPORT	STRATEGIC BUSINESS PLANNING	WATER/WASTEWATER UTILITY VALUATION
AL	Birmingham Water Works Board	●	●	●	●	●		●	●				●		●		●		●	●
AL	Mobile Area Water & Sewer System				●			●												●	
AR	Central Arkansas Water				●			●						●	●					●	
AR	Little Rock Wastewater Utility				●			●						●	●		●				●
AZ	Peoria, City of		●		●	●		●													●
AZ	Phoenix, City of		●		●	●									●	●					
AZ	Pima County			●	●	●		●	●							●					●
AZ	Tucson Water				●			●									●				
CA	Beverly Hills, City of				●			●	●					●	●						
CA	MWD of Southern California			●	●			●							●						
CA	San Diego, City of				●	●		●	●												
CA	San Francisco PUC				●			●												●	
CO	Denver Water							●									●				
CO	Denver Wastewater, City of		●					●						●	●						
DC	DC Water				●	●		●	●				●	●	●					●	
DE	Wilmington, City of													●		●				●	
FL	Pompano Beach, City of				●			●						●							
FL	Port St. Lucie, City of				●	●		●													
FL	St. Johns County		●		●	●		●	●												
GA	Columbus Water Works		●		●			●	●								●				
HI	Honolulu ENV, City and County of				●			●													
IL	Bloomington, City of				●			●													
IL	Naperville, City of				●			●													
KS	Wichita, City of				●			●	●												
KY	Hardin County Water District #1				●		●	●													
LA	New Orleans, Sewerage & Water Board of		●		●			●		●			●		●	●	●	●			
MD	Baltimore, City of	●			●			●	●	●	●	●	●	●			●	●	●		
MI	Grandville, City of				●			●									●				
MI	Saginaw, City of				●			●									●				

		FINANCIAL AND RATE CONSULTING									MANAGEMENT CONSULTING									
STATE	CLIENT	AFFORDABILITY ANALYSIS AND PROGRAM DEVELOPMENT	DEBT ISSUANCE SUPPORT	DISPUTE RESOLUTION	FINANCIAL AND CAPITAL IMPROVEMENTS PLANNING	IMPACT FEES	RATE CASE SUPPORT	RATE STUDY	RISK ANALYSIS	STORMWATER UTILITY DEVELOMENT	CUSTOMER RELATIONSHIP MANAGEMENT	CUSTOM SOFTWARE AND TOOL DEVELOPMENT	DATA SERVICES	ORGANIZATIONAL OPTIMIZATION	PERFORMANCE MANAGEMENT AND BENCHMARKING	PROJECT/PROGRAM PROCUREMENT ASSISTANCE	PUBLIC/STAKEHOLDER EDUCATION, OUTREACH, AND FACILITATION	STORMWATER PROGRAM DEVELOPMENT SUPPORT	STRATEGIC BUSINESS PLANNING	WATER/WASTEWATER UTILITY VALUATION
MI	Saginaw-Midland Municipal Water Supply Corporation				●			●										●			
MI	Oakland County				●																
MI	Wyoming, City of				●			●										●			
MO	Metropolitan St. Louis Sewer District		●		●		●	●						●							
MO	Perryville, City of				●			●													
MS	Jackson, City of	●			●			●					●					●		●	
NC	Charlotte-Mecklenburg Utilities	●			●	●		●	●				●	●	●	●			●		●
NC	Raleigh, City of		●		●	●		●		●				●					●		
NV	Henderson, City of				●			●													
NY	New York City Water Board				●			●					●								
OH	Northeast Ohio Regional Sewer District	●			●			●		●		●	●		●				●		
OR	Portland Water Bureau, City of		●		●				●				●								
PA	Philadelphia Water Department	●	●		●									●	●					●	
RI	Newport, City of		●		●		●	●								●					
RI	Providence Water Supply Board				●		●	●						●	●						
SC	Greenville Water/ReWa		●		●			●						●							
SC	Spartanburg Water System		●		●			●	●						●						
TN	Johnson City, City of	●	●		●			●													
TN	Nashville and Davidson County MWS		●		●	●		●						●	●		●				
TX	Dallas, City of							●					●				●	●			
TX	El Paso Water Utilities PSB		●	●	●	●		●		●		●	●				●			●	
TX	San Antonio Water System	●			●	●		●	●								●				
UT	Salt Lake City, City of				●			●									●				
VA	Newport News Waterworks, City of		●		●			●	●				●								
VA	Richmond DPU, City of	●			●			●					●				●	●			
VA	Suffolk, City of		●		●			●	●												
WA	Tacoma, City of							●					●							●	
WI	Milwaukee Water Works				●		●	●													
Can	Ottawa, City of				●			●						●							

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

PROJECT TEAM

For this project, we have included senior-level leadership for the project, with support from talented consultant staff. Raftelis places a high priority on being responsive to our clients and, therefore, actively manages each consultant's project schedule to ensure appropriate availability for addressing client needs. Raftelis currently has a team of more than 70 consultants specializing in financial and rate consulting services for water, sewer, and stormwater utilities. In addition to our dedicated Project Team, the City will have the support of Raftelis' full staff for this project. Below, we have included an organizational chart showing the structure of our Project Team and roles for each team member. On the following pages, we have included brief profiles for each of our team along with detailed resumes in Appendix A.

CITY OF **WASHINGTON**

PROJECT MANAGER

Tom Beckley 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.

LEAD CONSULTANT

Collin Drat will serve as the Lead Consultant conducting analyses and preparing deliverables for the project.

ENGINEERING SUPPORT

Scott DeSplinter, PE, CFM will provide engineering support for the project.

STAFF CONSULTANT

Joe Collins will work at the direction of Mr. Beckley and Mr. Drat in conducting analyses and preparing deliverables for the project.

with

70+

WATER, WASTEWATER, & STORMWATER UTILITY FINANCIAL/MANAGEMENT CONSULTANTS, RAFTELIS HAS THE **LARGEST PRACTICE** IN THE NATION.

Raftelis can draw upon other staff to provide support for this project as necessary.

TOM BECKLEY

PROJECT MANAGER

Senior Manager (Raftelis)

EXPERIENCE: 17 years

CAREER HIGHLIGHTS

- Co-author of *Water and Wastewater Finance and Pricing: The Changing Landscape*
- Series 50 - Registered Municipal Advisor Representative
- Financial/rate consulting experience with Naperville, Bloomington, Northwest Water Commission, & St. Louis MSD

EDUCATION

- MPA – University of Kansas
- MBA – Tulane University
- BS – Webb Institute

Mr. Beckley has 17 years of experience with Raftelis conducting finance and rate related projects. He has assisted a wide range of municipal water and wastewater utilities in conducting cost of service, financial feasibility, privatization, system development fees, and other finance-related studies. Mr. Beckley 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 papers at various national and state conferences.

SCOTT DESPLINTER, PE, CFM

ENGINEERING SUPPORT

Water & Wastewater Engineer (CMT)

EXPERIENCE: 16 years

CAREER HIGHLIGHTS

- Extensive experience with the City of Washington and other Illinois cities

EDUCATION

- BS – Bradley University

Scott has been with CMT since 2001, serving as a civil engineer and senior engineer for various land development, transportation, water and wastewater projects. His involvement in these projects has included site layout, drainage studies, drainage design, geometric design, sanitary sewer design and rehabilitation, water main design, utility layout, site evaluation, permitting and overall project coordination. He has used AutoCAD, MicroStation, Geopak, HEC-RAS, HEC-HMS, StormCAD, Pond Pack, Culvert Master and Flow Master to accomplish these tasks.

COLLIN DRAT

LEAD CONSULTANT

Senior Consultant

EXPERIENCE: 5 years

CAREER HIGHLIGHTS: Financial/rate consulting experience with Saginaw, Lawrence (KS), Round Rock (TX), Topeka (KS), Suffolk (VA), & Providence (RI)

EDUCATION

- MPA – Indiana University
- BA – Wheaton College

Mr. Drat has a background in public finance and statistical modeling. Since joining Raftelis, he has had the opportunity to participate in an array of utility financial and rate consulting engagements involving water and wastewater demand analysis, financial planning, cost of service analysis, cost of service review and rate design.

JOE COLLINS

STAFF CONSULTANT

Associate Consultant

EXPERIENCE: 2 years

CAREER HIGHLIGHTS

- Financial/rate consulting experience with Little Blue Valley Sewer District
- Served as an Energy Management Fellow for Bloomington Utilities (IN)

EDUCATION

- MPA – Indiana University
- BS – Truman State Universtiy

Mr. Collins has a background in economics, public policy analysis, and municipal finance as well as utility energy management.

STUDY APPROACH

Our proposed approach covers all areas of analysis and review required to meet the comprehensive water and wastewater rate and fee study needs of the City of Washington as identified in the City's Request for Proposals. Completion of the designated tasks will enable us to successfully determine revenues and revenue requirements (Financial Plan), conduct cost of service analyses, and design schedules of rates for water and wastewater service to ensure that the City's water and wastewater utilities are operated as financially self-sufficient enterprises consistent with the City's financial objectives for its utilities.

Our approach is characterized by the following elements:

- Regular communication and working relationship with the City to ensure that there are no surprises
- Effective presentations to ensure successful implementation
- Consistent and competent project management to control budget, stay on schedule, and meet study objectives
- Multi-year financial plan to support financially stable and efficiently operated wastewater services
- User charges to equitably recover class cost of service

The following tasks detailed in the RFP define our proposed approach and scope of work. The tasks are structured to provide interactions with City staff throughout the study to ensure results meet expectations of the City and policymakers. It should be noted that while we have listed these tasks consecutively, some tasks will overlap and be conducted concurrently. To ensure the City that all the tasks identified in the City's scope of work are incorporated into our work plan, we have included the following matrix which shows the elements identified in the City's RFP and which elements of our scope would address those items.

MAPPING RFP SCOPE OF WORK TO OUR TASKS

	Raftelis Tasks				
City of Washington Scope of Work	1 - Multi-Year Financial Plan	2 - Cost of Service Analysis	3 - Rate Design	4 - Report and Rate Model	5 - Presentation of Findings
RFP Section 2 B.					
1	X				
2	X	X	X		
3a	X				
3b	X				
3c	X				
3d	X				
3e	X				
3f			X		
3g		X			
3h	X	X	X		
4			X		
5			X		
6		X	X		
7			X		
8			X		
9			X		
10				X	
11			X		
12				X	
RFP Section 2 C.					
Onsite Kickoff	X				
Final Report (RFP p. 3)				X	
Two Public Presentations					X

TASK 1: MULTI-YEAR FINANCIAL PLAN

TASK 1.1 PROJECT KICKOFF MEETING AND DATA COLLECTION

This task will begin the study so that it progresses in an efficient and deliberate manner and includes an on-site project kickoff meeting completed with the City, and the collection of all relevant data. This task includes a review of project schedule and deadlines and discussion of current methodologies and data requirements.

Project Kickoff Meeting

Raftelis will facilitate a Project Kickoff Meeting to start the study. This workshop will provide a solid foundation for the project and serve as a forum in which City staff can meet with members of the Raftelis Project Team and provide input on study expectations, study issues, project approach, scope, schedule, and priorities. As part of this meeting, Raftelis will:

- First and foremost, discern the major drivers of the study
- Identify current financial and rate making policies
- Evaluate the various policy options available to meet the City's goals and objectives
- Discuss project scheduling

Data Request

It is our understanding that the City has set April 27, 2018 as the date for delivery of the final report. Given the expedited timeframe, we have provided an initial data request list later in this section of our proposal. Providing as many of these items as possible, prior to the kickoff meeting, will allow the project team to review the data, ask questions and develop some preliminary analysis, which can be reviewed at the initial kickoff meeting.

TASK 1.2 PROJECTION OF REVENUES UNDER EXISTING RATES

This task will include a detailed analysis of historical billable water and wastewater volumes and customers served by class and development of projections of billable volumes and number of customers for the multi-year study period. The results of this analysis will provide the foundation for estimating future water and wastewater volume related operating expenses such as power and chemicals. Specific activities will include:

Customer Account and Volume Projections – We will project the number of City customers and billable water and wastewater volumes for the multi-year study period by considering historical population and customer growth trends, billing units associated with meter and unmetered accounts, major local economic events, changes in customer class usage patterns over time, and experienced judgment of both Raftelis and City staff. This analysis will examine five years of historical data as available. Volume projections will recognize the projected number of City customers by customer class, and average historical billed water and wastewater volume per account to help differentiate the historical effects of weather, and account for growth and increased or decreased billable volume by existing customers.

Projection of Revenues Under Existing Rates – Projections of the City's revenue under existing rates and charges will be developed for the study period, recognizing projected accounts, billable water and wastewater volume, and the existing water and wastewater rate structures.

Projection of Other Income – Revenue from sources other than rates, such as penalties, connection fees, infrastructure availability fees, engineering related fees and service charges, excess strength surcharges, interest earnings, and other miscellaneous sources, will be reviewed and projected.

TASK 1.3 DEVELOPMENT OF REVENUE REQUIREMENTS AND MULTI-YEAR FINANCIAL PLANS

The development of revenue requirements will be based on an examination of historical financial reports, current operating budgets, and the proposed capital improvement and replacement program. By combining the revenue and revenue requirements projections, cash flow analyses of operating and capital financing needs will be developed for the study period. Detailed utility analyses will provide an indication of the magnitude of overall adjustments in annual revenue levels

needed to meet the projected revenue requirements.

Projection of Operation and Maintenance Expense – Projections of operation and maintenance expense will be developed to facilitate financial analysis and cost allocations. We will project operation and maintenance expense based on a review and analysis of historical financial records and trends, and available City budget estimates of future operation and maintenance expense. Projections will recognize estimated increases in the number of customers served and billable volumes of water and wastewater, as well as the potential effects of inflation in cost levels, the addition of new system facilities, any anticipated changes in operation and staffing, and other factors which may influence future expense levels.

Routine Capital Expenditures – Based on analyses of historical and budget data, available City assessments of future needs, and discussions with City staff, we will forecast the requirements for those water and wastewater capital outlays that tend to recur on an annual basis. Such costs typically consist of expenditures for the normal and ongoing replacement of worn out or obsolete equipment. These requirements are typically financed directly from utility operating revenues.

Major Capital Improvement Program Financing Plan – We will develop a financing plan for the Capital Improvement Program (CIP) based on available schedules of project dates and estimated costs to be provided by the City. The project team will work with City staff to ensure that the potential capital costs associated with current or future regulations are appropriately incorporated in the CIP.

Debt Service Expense – Principal and interest requirements on outstanding bonds used to finance water and wastewater system assets will be identified and summarized by utility. Debt service requirements for any bonds anticipated to be needed to finance the CIP will be estimated based on anticipated interest rates, bond term, and funding of required reserves.

Reserve Funds – We will evaluate existing reserve fund levels, including debt service reserve, working capital reserve, and capital improvement reserve. Our evaluation will recognize City financial policies as well as the financial risks faced by the City's water and wastewater utilities and how those risks can be mitigated with reserve funds such as working capital reserve, CIP reserve, and emergency repair and replacement reserve.

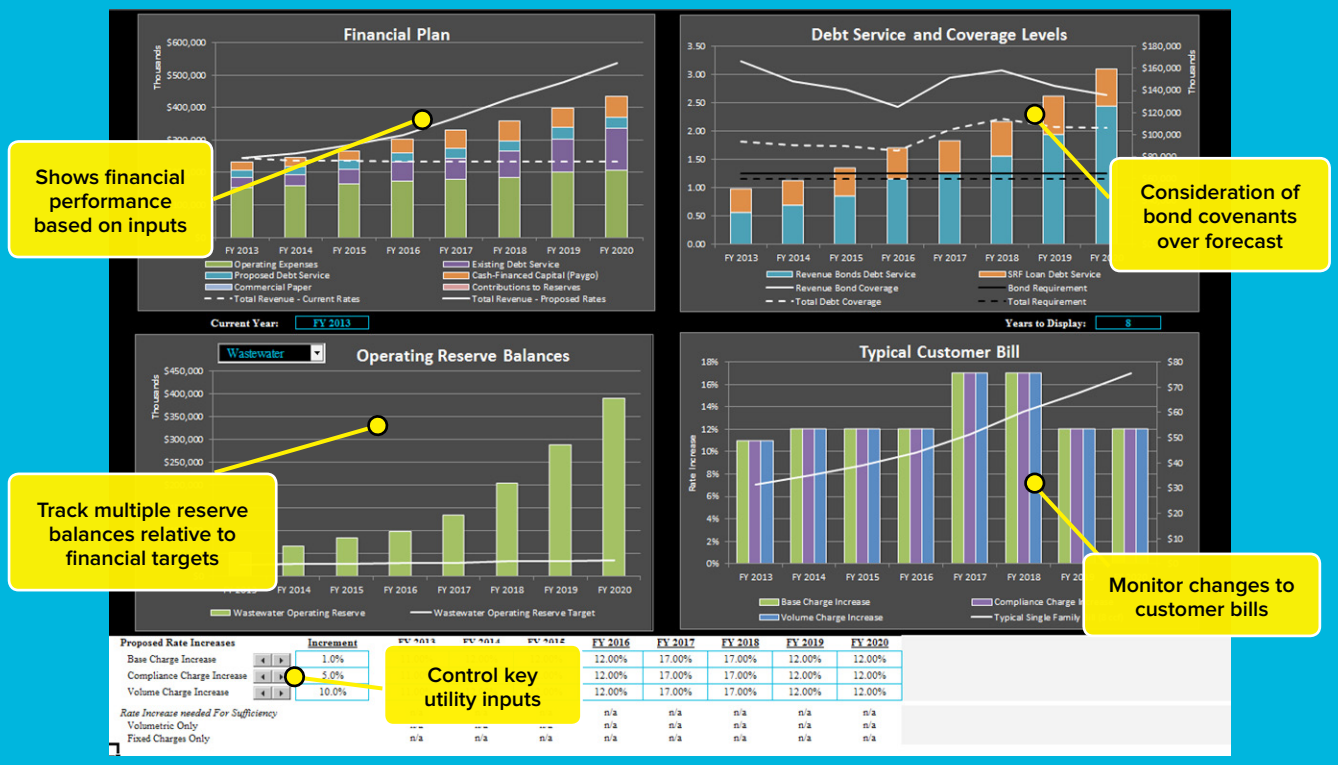
Cost Benchmarking – As we develop the forecast of revenue requirements we will work with the City to identify the benchmarks which are of greatest interest to City stakeholders and develop comparisons between City metrics and known industry benchmarks.

MSRB REGISTERED
MUNICIPAL ADVISOR

Raftelis is registered with the U.S. Securities 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 utility financial planning in compliance with the applicable regulations of the SEC and the MSRB.

SAMPLE MODEL DASHBOARD

The dashboard allows quick decision-making by visually displaying impacts of changes to selected variables.



Multi-Year Financial Plan – We will prepare cash flow analyses summarizing the above projections of revenues and revenue requirements to determine the adequacy of revenues under existing rate levels to meet operating and capital needs for the study period for the water and wastewater utilities. The study period will be 20 years, including a focus on the first 5 years and a longer run extrapolation for the remaining 15 years. Adjustments will be made to allow any required revenue increases to be phased in over the study period to minimize the impact of rate increases on the City's customers. Preliminary forecast results will be provided to City staff for review and comment. After receiving input from the City, Raftelis will incorporate any suggested revisions into the final multi-year financial plan.

Task 1 Deliverable: *Multi-year financial plans for water and wastewater utilities*

TASK 2: COST OF SERVICE ANALYSIS

TASK 2.1 IDENTIFY SPECIFIC COST OF SERVICE METHODOLOGY ISSUES

Specific cost of service methodology issues that are sensitive to the assignment and apportionment of cost of service to customer classes will be identified and discussed with the City. It is expected that these issues may include, but not necessarily be limited to, some of the following items:

- Determination of appropriate basis for system revenue requirements
- Cost functionalization and allocation methodology
- Determination of customer class use of the system via base and peak demand calculations (for water) and volume and strength calculations (for wastewater)

TASK 2.2 CUSTOMER DEMAND INFORMATION

We will identify and propose specific methodology issues and concerns relating to customer

demand information. While jointly working with the City, we will estimate class demand factors for each of the customer classes, recognizing the bill distribution analysis, applicable data available from City records, engineering judgement about class service requirements, and experience with other utility operations with similar usage characteristics and patterns. We will provide rationale for any suggested revisions to current practices.

TASK 2.3 REVENUE REQUIREMENT DETERMINATION

Using AWWA- and WEF-recommended methodologies for revenue requirement determination, we will identify and propose specific methodologies that the City should consider for implementation.

TASK 2.4 REVENUE REQUIREMENT FUNCTIONALIZATION

Each expense and rate base item used to develop total water and wastewater system revenue requirements will be assigned to one or more service functions depending upon its nature. We will determine appropriate functional categories for each the water and wastewater system, these functional categories may include:

Water System

- Water Treatment
- Treated water transmission
- Treated water distribution
- Fire protection
- Meters
- Customer service

Wastewater System

- Collection mains – laterals
- Collection mains – small (<18")
- Collection mains – (>=18")
- Other collection system
- Treatment costs
- Meters

TASK 2.5 REVENUE REQUIREMENT COST CLASSIFICATION

We will determine appropriate cost classification components for each the water and wastewater utility. Cost assignment components may include the following:

Water System

- Annual Volume
- Peak Demand
- Maximum Day
- Maximum Hour
- Customer
- Fire Protection

Wastewater System

- Average Daily Volume
- Biochemical Oxygen Demand (BOD)
- Suspended Solids (TSS)
- Customer

TASK 2.6 REVENUE REQUIREMENT COST ALLOCATION

We will determine the revenue requirement cost allocations to assign costs to customer classes. These allocations will be based on generally accepted industry practices as well as AWWA and WEF recommended methodologies. Customer units of service will be estimated based upon customer class requirements for volume, peak demand or capacity, strength of wastewater, and customer service considerations.

Subsequent allocation of costs to customer classes will utilize a unit cost approach. Application of unit costs to the service requirements of customers will result in determining each class's proportional responsibility for total system costs.

Task 2 Deliverable: *Allocated Costs by Customer Class for Water and Wastewater Utilities*

TASK 3: RATE DESIGN

TASK 3.1 RATE DESIGN

We will identify and propose a specific rate design methodology for various levels or classes of service. The City's RFP mentions specifically, the desire to choose a rate structure that does not decrease revenue stability vis-à-vis the existing rate structure. On the other hand, the financial impact to ratepayers (i.e. affordability) is also a concern. In developing the rate designs for this task we will review various rate structure options with City staff, identifying the advantages and challenges of each. Ultimately, three options, which balance the City's objectives will be presented, along with the project teams recommendation. While the decision to select a structure is ultimately a policy decision for City staff and the governing body, the Project Team will be happy to recommend a structure which we believe best

aligns with the City's objectives as we understand them.

The rate design methodology will be assessed to determine the adequacy of the rate schedules to:

- Recover class cost of service
- Recover the short and long-term revenue requirements of the utilities
- Be supported by existing record-keeping practices and the City's billing system
- Be simple to understand, explain and justify
- Reflect practical implementation limitations.
- Meet the City's rate objectives.

TASK 3.2 CUSTOMER IMPACTS

We will calculate the impact of the proposed water and wastewater rates on the City's customers. This analysis will be summarized using a variety of typical bills within each customer class and will show the absolute and percentage changes in bills under the proposed rates compared to bills under existing rates.

TASK 3.3: SUBDIVISION DEVELOPMENT AND UTILITY CONNECTION FEES

In addition to the water and sewer rate recommendations, the City is requesting a review of the subdivision connection fees, which recover the cost of the distribution and collection system and connection fees, which recover the costs of the water and sewer treatment plants. We will review the underlying basis and calculations for these charges and recommend adjustments as necessary.

Task 3 Deliverables:

- *Proposed user charge rate designs for water and wastewater utilities*
- *Customer impacts under existing and proposed rate designs*
- *Recommendations regarding adjustment of subdivision development and utility connection fees*

TASK 4: PREPARE COST-OF-SERVICE RATE STUDY REPORT

Raftelis will provide an electronic version of a draft study report to the City for review and comment. The draft report will contain text, tables, and graphics covering development of revenue requirements, financial planning, cost of service allocations, and rate design findings and recommendations. Any comments or recommendations from the City will be incorporated into a final rate study report. Raftelis will also deliver a functional rate model in Microsoft Excel format which the City will have full rights to use and distribute. Raftelis will provide a 2-hour webinar for any City staff who require training in the use and update of the model. In addition, Raftelis will provide the City with up to four hours of technical support each year on the use and update of the model after this engagement is completed, at no additional cost to the City.

Task 4 Deliverables:

- *Draft and final cost of service reports for water and wastewater utilities*
- *Rate model for water and wastewater utilities*
- *Training for rate models*
- *Future technical support for rate models*

TASK 5: PRESENT FINDINGS

Raftelis will prepare presentations on the methodology, results and findings of this study. We will provide drafts of meeting materials and/or presentations to the City prior to the presentation. Timing and content of the final presentation will be determined in conjunction with City staff. The not-to-exceed price includes two public meetings (in addition to the onsite kickoff meeting). Any additional meetings would be billed separately on a flat rate basis of $2,500 per meeting based on the attendance of Project Manager, Tom Beckley.

Task 5 Deliverables:

- *Draft and final meeting materials and/or presentations for two public meetings*

RECORDS AND DOCUMENTATION EXPECTED FROM THE CITY

To the extent possible, all information should be provided in an electronic format, Microsoft Excel and Word preferably.

GENERAL FINANCIAL INFORMATION

- Debt service schedules for all outstanding debt
- Detailed actual revenues and expenditures for the last two fiscal years
- Detailed operating budget for the current fiscal year and any future fiscal years (if available)
- Fixed asset records showing original cost, in-service date, useful life, and accumulated depreciation for all assets

UNITS OF SERVICE INFORMATION

- Number of customers by classification and water meter size at the end of each of the last five fiscal years and currently
- Number of public fire hydrants
- Number (by connection size) of private fire connections
- Total and water and wastewater volumes billed and corresponding revenues for each of the last five fiscal years and current year to date, broken down by month
- Total pounds of pollutants billed to high strength surcharge customers (if available)
- System max day water production (amount and date of occurrence) for the last five fiscal years
- Monthly amounts of wastewater treated at the City's treatment plant for each of the last five fiscal years and current fiscal year to date
- Monthly amounts of water produced at each of the City's water treatment plants for the last five fiscal years and the current fiscal year to date

ENGINEERING DATA AND OTHER SYSTEM INFORMATION

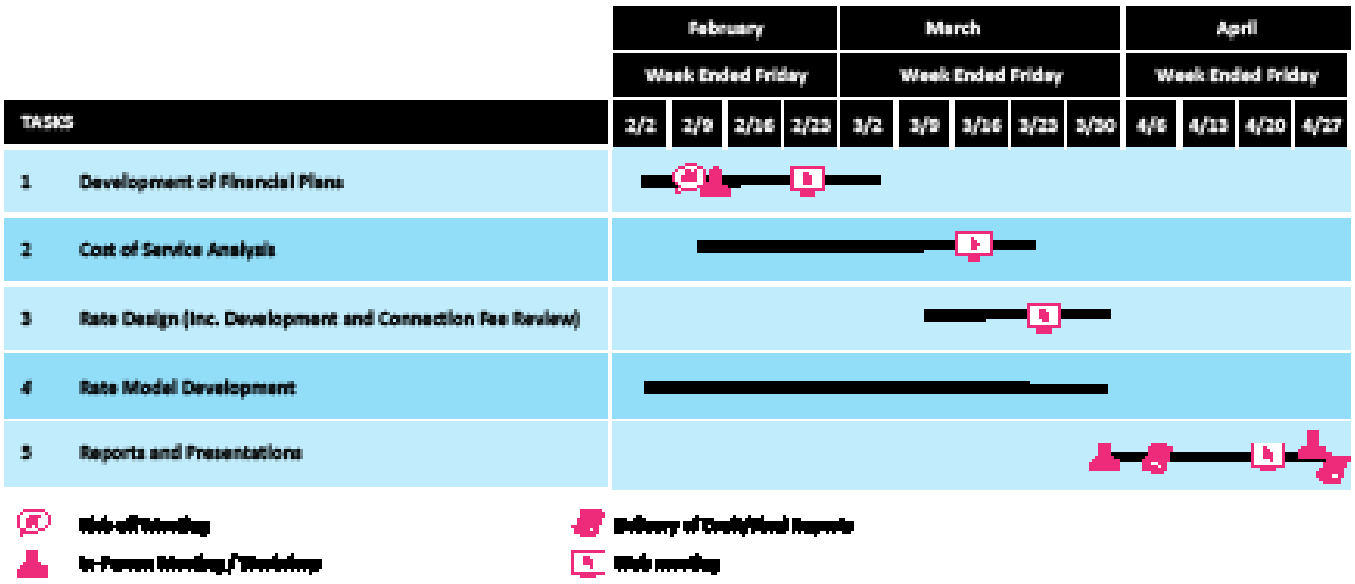
- Capital improvement program(s) for the Utility, including:
  - Project descriptions
  - Total cost, including studies, design, and construction
  - Project phasing, including start dates and duration
  - Estimated expenditure schedules

SUPPLEMENTAL DATA REQUESTS

As the study progresses and after initial data are evaluated, we will submit request for additional data and clarifications of initial data received, as necessary.

PROJECT SCHEDULE

We expect to complete this project in approximately three months as shown in the schedule below. The schedule would be finalized to meet the objectives of the City at the beginning of the project. This schedule is based on the objective of delivering a final report on April 27, 2018. The City's prompt provision of data will be critical in meeting the timeframe outlined.



On the following pages, we have provided detailed descriptions of several projects that are similar in scope to the City's project. We also selected these projects because many of our proposed Project Team members worked in similar roles on them. 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 CLIENT REFERENCES

CITY OF BLOOMINGTON

CLIENT REFERENCE
Kevin Kothe, PE
City Engineer
P.O. Box 3157
Bloomington, IL 61702-3157
P: 309.434.2435
E: kkothe@cityblm.org

The City of Bloomington (City) engaged Raftelis to develop sanitary sewer and stormwater financial plans and planning models. 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.

Over the next 10 years, the City is anticipating relatively large capital expenditures associated with mitigating overflows from its combined sewer and stormwater system as well as ongoing collection system maintenance. A key component of this engagement will involve developing capital financing strategies to allow the utilities to meet their operational and regulatory objectives while minimizing the impact on rate payers. Raftelis is developing Excel-based sanitary sewer and stormwater financial planning models, which will allow Raftelis to work with the City to develop alternative financial planning scenarios and model the impact of varying levels of capital reinvestment on customer bills.

In addition to the financial planning efforts for the sanitary sewer and stormwater utilities, Raftelis was also engaged to develop charges for the City's solid waste utility.

CITY OF **NAPERVILLE**

CLIENT REFERENCE

James E. Holzapfel, P.E., Director
Department of Public Utilities - Water/ Wastewater
400 South Eagle Street
Naperville, IL 60566
P: 630.305.5320
E: HolzapfelJ@naperville.il.us

In December 2010, the City of Naperville's (City) Department of Public Utilities engaged Raftelis to conduct a comprehensive water and wastewater cost of service analysis. The purpose of this analysis was to determine the rate increases required during the period of FY 2012-FY 2016 to provide adequate operational funding and ensure the long-term financial viability for the City's Water and Sewer Fund. As part of the cost of service analysis, Raftelis developed comprehensive "stand-alone" long-range financial plans for the City's water and wastewater utilities as well as a consolidated long-range financial plan for the City's Water and Sewer Utility Fund. Based on the results of the financial planning process, Raftelis then performed a cost of service rate study to determine the water and wastewater rates that must be paid by each customer class during the period FY 2012-FY 2016.

A critical component of the financial planning process was the development of water and wastewater demand forecasts that better reflected actual customer consumption patterns than the City's previous cost of service analysis which was completed in 2005. A key driver of the City's required water rate increases are the purchased water costs charged by the City's wholesale water supplier. As requested by the Department of Public Utilities, Raftelis' recommended volumetric rate design for water featured a separately identified component for purchased water charges.

As part of the engagement, Raftelis conducted a preliminary review of the rate structure currently employed by the City to charge a wholesale wastewater customer served by the City's wastewater treatment facility. The purpose of this review was to develop conceptual alternatives to the current pricing structure that would allow the City to appropriately recover the cost of providing wholesale wastewater service. Raftelis also reviewed the useful life assumptions used by the Department of Public Utilities to depreciate water and wastewater infrastructure assets. As part of the review, the depreciation rates used by the City were compared to selected Raftelis clients in order to develop recommendations regarding potential modifications to the depreciation rates used by the City for selected categories of water and wastewater assets.

CITY OF **LAWRENCE**

CLIENT REFERENCE

Mike Lawless, P.E.
Deputy Director of Utilities
P.O. Box 708
Lawrence, KS 66044
P: 785-832-7862
E: mlawless@lawrenceks.org

The City of Lawrence engaged Raftelis to develop water and wastewater financial plans, cost of service studies and rate designs. Key aspects of this engagement involve modeling the financial impact of the Wakarusa Wastewater Treatment Plant, which is anticipated to come online in 2018. This involves modeling the incremental operating and capital costs associated with constructing and operating the new plant, as well as developing a capital financing plan to provide funding. Another important aspect of this engagement involves the development of alternative water and wastewater rate structures which meet the City's objectives for the utilities. Raftelis is examining the existing cost of service based rate structure, and two additional structures designed to promote conservation.

A key deliverable is a flexible financial planning model which will allow for the development and comparison of various financial planning scenarios. The City plans on using the model on a going forward basis to compare the rate impact of various capital improvement plans and financing strategies.

CITY OF **PERRYVILLE**

CLIENT REFERENCE
Brent Buerck
City Administrator
215 N West Street
Perryville, MO 63775-1327
P: 573.547.2594
E: brentbuerck@
cityofperryville.com

Raftelis Financial Consultants, Inc. (Raftelis) was hired in 2016 by the City of Perryville, MO (City) to establish retail water and wastewater rates that are equitable and adequate.

The major objectives of the study included the following:

- Develop financial plans for the water and wastewater enterprises to ensure financial sufficiency, meet operation and maintenance (O&M) expense, current debt service, future debt service for a $20 million expansion of the City's wastewater treatment plant (WWTP), and improve the financial health of the utilities.
- Determine a level of ongoing CIP funding needed to properly reinvest in the water and wastewater systems.
- Develop sound and sufficient reserve fund targets.

Raftelis worked closely with the City Manager and his staff to meet these goals. The study projected current operating costs and additional future operating costs resulting from the WWTP expansion as well as ongoing CIP requirements to maintain the health of the system. With the input of the City Manager, Raftelis developed new rates and projected future rate increases to fairly recover costs from customers and delivered the final recommendations to the City in June 2017.

METROPOLITAN **ST. LOUIS** SEWER DISTRICT

CLIENT REFERENCE
Brian Hoelscher
Executive Director
2350 Market St.
St. Louis, MO 63103
P: 314.768.6245
E: bhoelscher@stlmsd.com

Raftelis has been engaged by MSD on many different financial, rate, and management consulting projects since 2007. From 2007 through 2012, Raftelis served as the Rate Consultant to MSD's Rate Commission. In this role, Raftelis provided the Rate Commission with consulting services that included review of the rate change prepared for MSD by their consultants, recommendation of alternative approaches for rates, review of testimony filed by all parties in the case, preparation of direct testimony, and other consulting services as needed. Raftelis provided these services for three rate change proposals in 2007, 2008, and 2012.

In 2010, Raftelis participated in MSD's periodic management audit. In this role, we worked with MSD management to conduct a self-assessment of MSD in relation to the 10 Attributes of Effectively Managed Utilities and the 5 Keys to Management Success as defined by the Effective Utility Management (EUM) framework. This framework was developed by six industry associations, including AWWA and WEF, in conjunction with the EPA.

In 2012, Raftelis was engaged by the District to serve as its Rate Consultant. In this role, Raftelis has worked with MSD to develop new rate models for its wastewater and stormwater utilities, evaluate rate structures, assist in debt issuance, and provide other rate and financial consulting services as necessary over the course of the engagement. This latest cost of service study included a comprehensive analysis of the District's cost for collecting, treating, and disposing of wastewater and its associated pollutants as well as examining the levels of infiltration, inflow, and stormflow within the collection system both in terms of annual volumes and peak rates of flow. The Rate Change Proposal was accepted by the Rate Commission with only minor changes and without having to extend the schedule of the Rate Commission proceedings as had been necessary in the previous Rate Commission process.

Over the past five years Raftelis has provided feasibility reports for five bond issuances totaling $890,580,000.

CITY OF WASHINGTON

CLIENT REFERENCE
Ed Andrews, PE
Public Works Director - City of Washington
301 Walnut Street
Washington, IL. 61571
P:309.444.1136

The City of Washington, located east of Peoria, is a modest-sized city with a population of approximately 17,000. The City is a vibrant community offering a high quality of life supported by excellent schools and safe neighborhoods. The City experienced significant growth over the past decade and has maintained focus on their existing infrastructure to ensure its resiliency and ability to support future growth. CMT has had the opportunity to team with the City in recent years on a number of projects with these goals in mind.

Water Treatment Evaluation: CMT teamed with the City staff to complete an evaluation of the Water Treatment Facilities. The evaluation included the review of the existing equipment, buildings, operational records, previous reports and IEPA inspections to develop a final planning report. The report included recommendations on maintenance items, capital improvements and areas of additional study.

Water Model: CMT developed a water distribution system model in the WaterGEMS modeling program using GIS data along with record drawings provided by the City. The model was used for the analysis of water system operations including the evaluation of a third elevated storage tank, existing system pressures, and potential fire flow availability. The City plans to use the model in the future to evaluate impacts of potential development on the existing distribution system and prioritize watermain removal and replacement.

Water Treatment Plant No. 1 - 2017 Improvement Project: The project included the construction of a separate fluoride feed room to address IEPA concerns. The room was added to the east side of the building and included new fluoride feed equipment along with an eye wash station and emergency shower. The project also included the construction of two new brine tanks to replace the existing deteriorated brine tank and to provide the necessary 30-days storage.

Water Meter Upgrade Project: The City requested CMT assistance with the review and evaluation of an upgrade to their existing water meters and an automatic meter reading system. CMT worked with the City to evaluate and ultimately select the Sensus IPERL system. Since the project has been completed the City has been able to identify potential leaks and collect critical data that will be able be utilized in additional modeling of the distribution system.

CITY OF **PEORIA**

CLIENT REFERENCE
Scott Reeise
Public Works Director -
City of Peoria
3503 North Dries Lane
Peoria, IL 61604
P: 309.494.8801

I thoroughly enjoyed my time working with CMT, and came to know them as a truly valuable asset and partner to our Public Works Team

Scott Reeise
Director of Public Works

Peoria has been working for decades to reduce the frequency and impacts from combined sewer overflows and stormwater problems throughout the community. A team led by CMT was selected to lead the community through the development of a Stormwater Utility initiative to address the growing capital needs. This includes evaluating the facility, maintenance, operational needs, and program funding options for the city's storm drainage system within its jurisdictional limits and developing a stormwater program within the context of a comprehensive wet-weather management plan. The project involves a highly-energetic outreach program, which has been successful in earning acceptance, from leadership to the general public, for a new stormwater utility fee.

CMT's team worked closely with city public works staff and CSO consultant to develop a comprehensive strategy to address the wet weather infrastructure needs of the entire community. CMT was the principal author of a future stormwater program that addressed activities and revenue needs over a five-year period for maintenance, inspections, cleanings, repairs and replacements, planning and design, equipment needs, MS4 regulatory compliance, and utility administration. The recommended program included the storm sewer system, ditches, channels, natural streams, and constructed ponds withing the municipal boundary. The financial analysis team developed rate models for alternate methods to generate revenues to fund the stormwater program. Public outreach efforts targeted all sectors of the community through small group meetings. Public advisory committee recommendations were provided to city staff and elected officials as part of a comprehensive approach to funding sanitary, combined, and storm sewer systems.

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

APPENDIX A: PROJECT TEAM RESUMES

TECHNICAL SPECIALTIES

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

PROFESSIONAL HISTORY

- Raftelis Financial Consultants, Inc.: Senior Manager (2014-present); 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, Naval Architecture and Marine Engineering - Webb Institute (1995)

PROFESSIONAL MEMBERSHIPS

- American Water Works Association
- International Water Association
- Water Environment Federation

CERTIFICATIONS

- Series 50 - Registered Municipal Advisor Representative

TOM BECKLEY

PROJECT MANAGER
Senior Manager (Raftelis)

PROFILE

Mr. Beckley has over 16 years of experience with Raftelis conducting finance and rate related projects. He has assisted a wide range of municipal water and wastewater utilities in conducting cost of service, financial feasibility, privatization, system development fees, and other finance-related studies. Mr. Beckley 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 papers at various national and state conferences. Some of his past clients include: San Francisco Public Utilities Commission (CA); City of Phoenix (AZ); City of Peoria (AZ); City of Naperville (IL); Northwest Water Commission (IL); City of Hobbs (NM); Birmingham Water Works Board (AL); City of Orlando (FL); Arlington County (VA); Loudoun County Sanitation Authority (VA); City of Suffolk (VA); City of Saginaw (MI); City of Wyoming (MI); City of Grosse Pointe (MI); City of Denton (TX); and City of Olathe (KS).

RELEVANT PROJECT EXPERIENCE

CITY OF BLOOMINGTON (IL)

Mr. Beckley served as Project Manager for developing sanitary sewer and stormwater financial plans and planning models for the City of Bloomington (City). 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. Over the next 10 years, the City is anticipating relatively large capital expenditures associated with mitigating overflows from its combined sewer and stormwater system as well as ongoing collection system maintenance. A key component of this engagement will involve developing capital financing strategies to allow the utilities to meet their operational and regulatory objectives while minimizing the impact on rate payers. Raftelis is developing Excel-based sanitary sewer and stormwater financial planning models, which will allow Raftelis to work with the City to develop alternative financial planning scenarios and model the impact of varying levels of capital reinvestment on customer bills. In addition to the financial planning efforts for the sanitary sewer and stormwater utilities, Raftelis was also engaged to develop charges for the City's solid waste utility.

CITY OF NAPERVILLE (IL)

Mr. Beckley 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.

NORTHWEST WATER COMMISSION (IL)

Mr. Beckley 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.

CITY OF SAGINAW (MI)

Mr. Beckley served as the Project Manager for several water costs of service engagements for the City of Saginaw (City). These engagements include development of a comprehensive financial plan, cost of service analysis and design of water rates. In addition to its retail customers, the City also provides water service to 19 wholesale customers, which use approximately 60% of the water produced. A key element of the engagement involved presentations to the wholesale customer group and meetings with individual wholesale customers to explain in detail the cost of service allocation methodology and the effect on the customer's water rates.

CITY OF WICHITA (KS)

Mr. Beckley served as Project Manager for two 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 to address revenue shortfalls caused by declining usage in the City and to fund a large water source of supply project. 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. Raftelis is also working with the City to develop a proforma model that will be used by City staff on an ongoing basis as a management decision tool based on the City's actual experience during the course of each fiscal year.

In another engagement with the City, Mr. Beckley 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 WYOMING (MI)

Mr. Beckley has served as Lead Consultant and Project Manager for several engagements with the City of Wyoming (City) over the past decade. 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. A key element of the water rate study was working with the City's wholesale customers to review the

methodology and results in a collaborative manner to ensure they were comfortable with the rate and methodology. 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.

CITY OF GROSSE POINTE (MI)

Mr. Beckley 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. Mr. Beckley has also been responsible for the development of a ten 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.

FORT GRATIOT TOWNSHIP (MI)

Mr. Beckley 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.

CITY OF STILLWATER (OK)

Mr. Beckley served as Project Manager for a cost of service study for the City of Stillwater's (City) water and wastewater utility. During the course of this study Raftelis worked with City Staff as well as the City Council and the community to develop alternative rate structures to meet the pricing objectives of the City. A key element of this was the engagement of the community through workshops, the City conducted three workshops throughout the process to solicit their input and feedback. Raftelis personnel lead these workshops, collecting information from the community participants, in particular through the use of a pricing objectives workshop, then presenting alternative rate structures that would address the key pricing objectives identified by them.

LITTLE ROCK WASTEWATER (AR)

Mr. Beckley has served as Project Manager on several engagements for Little Rock Wastewater (LRW), including two cost of service analyses, asset management assessment, and debt issuance assistance. For one cost of service study Raftelis assisted the utility with the creation and use of a Rate Advisory Committee (Committee). This Committee consisted of stakeholders from the community including resident groups, business groups, large businesses, and environmental groups. The Committee participated in a series of meetings that educated them on the operations, capital needs, and rate structure of LRW. The Committee provided input throughout the cost of service study process and ultimately prepared a report supporting the proposed rate increases and changes to the rate structure, including the implantation of a system development fee.

CITY OF SUFFOLK (VA)

Mr. Beckley 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 ten-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.

ARLINGTON COUNTY (VA)

Mr. Beckley 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.

CITY OF HOBBS (NM)

Mr. Beckley 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.

KANSAS CITY WATER SERVICES DEPARTMENT (MO)

Mr. Beckley served as Lead Consultant for a wastewater cost of service and rate study for the Kansas City Water Services Department (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)

Mr. Beckley 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)

As Lead Consultant, Mr. Beckley 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.

LOUDOUN COUNTY SANITATION AUTHORITY (VA)

Mr. Beckley 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)

Mr. Beckley 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 devel-

opment charge revenue, to update the City's cost of service computer model, and to assist with the determination of wholesale wastewater rates.

CITY OF PHOENIX (AZ)

Mr. Beckley 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 FORT WORTH (TX)

Mr. Beckley 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. Mr. Beckley 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.

OTHER RELEVANT PROJECT EXPERIENCE

- Allegheny County Sanitary Authority (PA) - Industrial Surcharge Review and Rate Study
- Birmingham Water Works Board (AL) - Bond Feasibility Study (2)
- City of Baltimore (MD) - Cost Model, Wastewater Rate Study, and Water Rate Arbitration Assistance
- City of Gladstone (MO) - Wholesale Rate Review
- Harlingen Water Works System (TX) - Water and Wastewater Rate Study
- City of Macomb (MI) - Feasibility Analysis for Acquisition and Wastewater Rate Litigation Assistance
- Metropolitan Government of Nashville and Davidson County Water Services (TN) - Budget Review
- Oakland County (MI) - Water and Wastewater Master Plan Study
- Peace River Manasota Regional Water Authority (FL) - Feasibility Study
- City of Providence (RI) - Rate Filings (multiple)
- 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)
- United States Navy - Rate Review and Negotiations

SCOTT DESPLINTER, PE, CFM

ENGINEERING SUPPORT
Water & Wastewater Engineer (CMT)

PROFILE

Scott has been with CMT since 2001, serving as a civil engineer and senior engineer for various land development, transportation, water and wastewater projects. His involvement in these projects has included site layout, drainage studies, drainage design, geometric design, sanitary sewer design and rehabilitation, water main design, utility layout, site evaluation, permitting and overall project coordination. He has used AutoCAD, MicroStation, Geopak, HEC-RAS, HEC-HMS, StormCAD, Pond Pack, Culvert Master and Flow Master to accomplish these tasks.

RELEVANT PROJECT EXPERIENCE

CITY OF WASHINGTON, ILLINOIS

- Project Manager for Washington Water Treatment Plant Evaluation. Project included the evaluation and assessment of the existing water treatment facilities to identify maintenance needs and potential capital improvements.
- Project Manager for Washington Water Meter Upgrade Project. Project included the evaluation and selection of Automatic Meter Reading (AMR) systems for the City's water distribution system.
- Project Manager for Washington Water Distribution System Model. Project included the development and calibration of the existing water system steady state hydraulic model.
- Project Manager for the Water Treatment Plant No. 1 – 2017 Improvement Project. Project included a fluoride room expansion with all new chemical feed equipment and two brine tanks.
- Project Manager for the STP #2 – Tornado Damage Repair Chlorine Building. Project included the replacement of the existing chlorine building and equipment that was damaged during the tornado.

VILLAGE OF GERMANTOWN HILLS, ILLINOIS

- Village Engineer/Village Representative on engineering matters since 2009.
- Project Manager for the Sanitary Sewer System Facility Plan – The sanitary sewer system is comprised of two wastewater treatment plants, 10 pumping stations and the collection system. The plan identified improvement projects over the next 10 years and phased the improvements to balance the funding needs of the Village.
- Project Manager for Capacity, Management, Operations and

TECHNICAL SPECIALTIES

- Drainage studies and design
- Geometric design
- Sanitary sewer design and rehabilitation
- Water main design
- Utility layout
- Site evaluation and layout
- Permitting and overall project coordination

YEARS OF EXPERIENCE

- 16 years

EDUCATION

- Bradley University, BSCE, 2001

REGISTRATIONS AND CERTIFICATIONS

- Professional Engineer - Illinois, Iowa
- Certified Floodplain Manager

PROFESSIONAL MEMBERSHIPS

- Illinois Association of Floodplain and Stormwater Managers
- Association of State Floodplain Managers
- Heart of Illinois of Illinois Water Pollution Control Operators Group
- Illinois Water Environment Association
- Illinois Potable Water Supply Operators Association

CONTINUING EDUCATION

- Advanced Asset Management Practices for Water and Wastewater Utilities - University of Wisconsin, Madison
- Control of Water Quality in Municipal Distribution Systems - University of Wisconsin, Madison
- Fundamentals of Drinking Water Treatment - University of Wisconsin, Madison
- Pumping Equipment and Systems: Selecting, Operating, Maintaining, and Troubleshooting – University of Wisconsin, Madison
- HEC-RAS Training - University of Wisconsin, Madison
- XP-SWMM Software Training - XP Software, Inc.

Maintenance (CMOM) – Assisted the Village with the Development of a CMOM plan to meet the NPDES permit requirements.
- Project Manager for Development and permitting of the Village's Municipal Separate Storm Sewer System (MS4) program to meet the NPDES permit requirements
- Project Manager for WWTP No. 1 Improvement Project – A $1.5 million update to the existing wastewater treatment plant which included a new intermediate pump station, backwash water tank, and upgrade to the existing SCADA system.

TOWN OF NORMAL, ILLINOIS
- Project Manager for the Sanitary Sewer Master Plan. The project consists of the development of a master plan establishing priorities/goals for maintenance, repair, replacement, and capacity improvements to the sanitary sewer system. The plan will be developed based on successful collection system practices and applicable regulatory requirements governing the Town's sanitary sewer system. The plan will provide specific actions for the initial five years and broader recommendations for the subsequent five years.
- Project Manager for various watermain replacements. Projects included the installation of 7,900 lineal feet of watermain over a 3 year period.
- Project Manager for the construction of installation of 9,000 lineal feet of 16-inch forcemain to replace the existing Ironwood pump station forcemain.

VILLAGE OF MORTON, ILLINOIS
- Project Manager for the Water Treatment Plant Chlorination Modification Project – The upgrade of the existing chlorination system for 3 existing water treatment plants.
- Project Manager for the CSO Flow Control Structure Improvement Project – The project includes the removal of the existing CSO control structure and the replacement with a series of structures to control, screen, sample and measure combined sewer overflows.
- NPDES Permit – Assist with the NPDES permit required public information meeting on CSO LTCP, Operation and Maintenance Manual, Pollution Prevention Plant and the Post Construction Water Quality Monitoring.

GREATER PEORIA SANITARY DISTRICT, PEORIA, IL
- Project Engineer for the evaluation, repair recommendations and plan production to address various problems and deficiencies in older sewer mains and connections. The project included sewer reconstruction and realignment, replacement and separation of service connections in 10 locations, mostly on private property. The project included the acquisition of approximately 45 easements, numerous IEPA permits, IDOT utility permitting and utility coordination.
- Project Manager for the conveyance portion of the Outfall 005/006 elimination project. The project includes the conversation of two separate sanitary sewer overflow treatment facilities to pump stations that will convey any sewer overflow to the existing wastewater treatment facility. The proposed improvements will include a 2 MGD pump station, 3 MGD pump station, and approximately 3.5 miles of 16-inch diameter forcemain.

FARMINGTON SANITARY DISTRICT, FARMINGTON, ILLINOIS
- District Representative on all engineering matters.
- Project Manager for the rehabilitation of the influent pump station at the wastewater treatment plant. Project included replacement of existing pumps with two 1,000 gpm and one 2,000 gpm suction lift pumps.
- Project Manager/Engineer for the rehabilitation of two intermittent sand filters. The project involved the removal and replacement of 4 inches of media and the cleaning of the entire 1.2-acre filter.

TECHNICAL SPECIALTIES

- Utility strategic financial planning
- Cost of Service analysis
- Water, wastewater, and stormwater rate design
- Conservation rate design
- Statistical analysis

PROFESSIONAL HISTORY

- Raftelis Financial Consultants, Inc.: Senior Consultant (2016-present); 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)

COLLIN DRAT

LEAD CONSULTANT
Senior Consultant (Raftelis)

PROFILE

Mr. Drat has a background in public finance and statistical modeling. Since joining Raftelis, he has had the opportunity to participate in an array of utility financial and rate consulting engagements involving water and wastewater demand analysis, financial planning, cost of service analysis, cost of service review and rate design.

RELEVANT PROJECT EXPERIENCE

CITY OF BLOOMINGTON (IL)

Mr. Drat served as the Lead Consultant for Raftelis' engagement with the City of Bloomington (City). This engagement involves the development of comprehensive wastewater and stormwater financial plans and planning models for the City's use. 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. A key component of this engagement will involve modeling the impact on rate adjustments of various levels of capital reinvestment.

CITY OF LAWRENCE (KS)

Mr. Drat currently serves as Lead Consultant for Raftelis' engagement with the City of Lawrence. This engagement involves the development of a financial planning, cost of service and rate model, which will be used by the City to set rates on a going forward basis. A key aspect of this engagement involved modeling the incremental financial impact of the City's Wakarusa Treatment Plant, which comes online in 2018. Additionally, the City also sought direction on rates to encourage responsible water use and low income affordability. Mr. Drat developed rate alternatives which are tailored to each individual customer's demand, charging lower rates for essential indoor use and higher rates for discretionary use.

CITY OF SAGINAW (MI)

Mr. Drat 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 retail and wholesale 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 O&M, depreciation and return on rate base to each of the City's wholesale customers, based on that customer's unique contribution to the City's operating and capital costs.

CITY OF FLINT (MI)

Mr. Drat has served as the Lead Consultant for two of Raftelis' engagements with the City of Flint (City). The initial engagement involved the development of comprehensive financial plans, cost of service analyses and water and wastewater rate design. A key component of the analysis involved modeling the impacts of a transition from the City's bulk water purchases from the Detroit Water and Sewerage Department (DWSD) to participation in the Karegnondi Water Authority (KWA). Mr. Drat used operating and capital expenditure data provided by the City to evaluate the incremental expenditures and savings under each scenario. The plan is currently being implemented by the City and is anticipated to produce savings over the alternative of remaining a customer of DWSD. Raftelis was then retained a second time to review the update the water and wastewater financial plans and evaluate each utilities actual performance against the prior projections and against the alternative of remaining a customer of DWSD.

CITY OF TOPEKA (KS)

Mr. Drat served as the Staff Consultant for the City of Topeka's Office of Utilities and Transportation (City). Mr. Drat has assisted in the development of water and wastewater demand forecasts, various alternative financial planning scenarios for the each of the City's utilities, cost of service analyses and rate design alternatives. The rate design services include the development of irrigation rates, readiness to serve charges, conservation rates, and system development charges.

CITY OF JUNCTION CITY (KS)

Mr. Drat served as the Lead Consultant for Raftelis' engagement with the City of Junction City (City). The scope of work for this engagement involved the development of water and wastewater demand forecasts, comprehensive financial plans and rate design. A key aspect of this engagement involved financial planning and rate design which minimizes the financial impact of the City's relatively large planned capital improvements, while encouraging conservation among the City's customers. Mr. Drat and the project team worked collaboratively with the City's engineering consultant to develop three alternative financial planning scenarios based on various levels of capital expenditures. The recommended financial planning scenario and associated rates were presented before and accepted by the City Commission.

CITY OF ROUND ROCK (TX)

Mr. Drat served as the Lead Consultant for Raftelis' engagement with the City of Round Rock (City). This engagement involves the development of water and wastewater financial planning, cost of service, rate design services. The project team began the engagement by assessing the rate model currently used by the City, and later produced an updated model to meet the City's needs. A key component of the financial planning process involved planning for the additional capital expenditures associated with new assets constructed by the Brushy Creek Utility Authority, in which the City is a participant. The engagement also involved the preparation of wholesale water and wastewater rates based on the utility basis cost allocation methodology.

CITY OF SUFFOLK (VA)

Mr. Drat currently serves as the Lead 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 ten-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. A key aspect of this engagement involves determining rates for the City's wholesale customer Isle of Wight. These rates are scrutinized annually by a third party consultant to ensure they meet the terms of the wholesale contract.

CITY OF PROVIDENCE (RI)

Mr. Drat served as the Lead Consultant for the Providence Water Supply Board (PWSB), preparing schedules for the Board's 4 most recent rate filings with the Rhode Island Public Utilities Commission (RIPUC). The filing involves the development of detailed rate year revenue requirements, updating cost of service allocations and rate design for both retail and wholesale customers. These rates are reviewed by the expert witnesses on behalf of the Commission as well as the wholesale customers. Mr. Drat prepared calculated rates in accordance with PWSB's existing rate structure as well as alternative rates designed to promote water conservation. In addition, Mr. Drat assisted in authoring expert testimony to the RIPUC, prepared responses to data requests and adjusted rate schedules as necessary.

STRATHCONA COUNTY UTILITIES (AB)

Mr. Drat served as the Lead Consultant for Raftelis' engagement with Strathcona County Utilities (SCU). This engagement involved the development of a comprehensive financial planning model, cost of service analysis and rate design services. This engagement involved a thorough review of the SCU's existing rate modeling practices, the development of an updated rate model and the development of several wastewater rate alternatives to meet the County's objectives. Particular issues addressed by the study were a review of the County's charges for third party wastewater treatment, an examination of fixed cost recovery, rate consolidation customers with similar service levels and pricing policy recommendations regarding customers with non-continuous wastewater usage (i.e. snowbirds).

OTHER RELEVANT PROJECT EXPERIENCE

- Northwest Water Commission (IL)—Utility System Valuation
- Pennichuck East Utility (NH)—Water Cost of Service Study
- Regional Water Customers Group (AB)—Utility Rate and Cost of Service Review
- Gran Melia (PR)—Utility Rate and Cost of Service Review
- City of Baltimore (MD)—Stormwater Utility Implementation
- St. Louis Metropolitan Sewer District (MO)—Rate Analysis Support
- Tacoma Public Utilities (WA)—Econometric Water Demand Modeling
- Orangeburg Department of Public Utilities (SC)—Water, Wastewater, Nat. Gas, Electric Rate Study
- Clarksville Gas and Water (TN)—Natural Gas Rate Study
- City of Aztec (NM)—Water, Sewer, and Electric Rate Study
- City of Marquette and Marquette Township (MI)—Joint Water Rate Study
- City of Waukesha (WI)—Wholesale Rate Review

TECHNICAL SPECIALTIES

- Financial modeling
- Utility rate studies

PROFESSIONAL HISTORY

- Raftelis Financial Consultants, Inc: Associate (2016-present)
- City of Bloomington (IN) Utilities: Energy Management Fellow (2014-2016)

EDUCATION

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

JOE COLLINS

STAFF CONSULTANT
Associate Consultant (Raftelis)

PROFILE

Mr. Collins has a background in economics, public policy analysis, and municipal finance as well as utility energy management.

RELEVANT PROFESSIONAL EXPERIENCE

CITY OF PERRYVILLE (MO)

Mr. Collins supports the development of a rate study and financial plan for the City of Perryville, MO. The City is seeking a study to calculate rates sufficient to finance the construction of major wastewater treatment facility renovations and increased system maintenance costs. Mr. Collins has 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.

LITTLE BLUE VALLEY SEWER DISTRICT (MO)

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

CITY OF NORTH KANSAS CITY (MO)

Mr. Collins is currently assisting the development of a utility rate and enhanced financial planning model for North Kansas City, MO. The City is seeking a tool to help evaluate the financial impacts of potential choices concerning future water supply, major water treatment facility renovations, and increased system maintenance costs.

RELEVANT PROFESSIONAL EXPERIENCE

While in graduate school at the Indiana University School of Public and Environmental Affairs, Mr. Collins served as a Service Corps Fellow for the City of Bloomington Utilities Department. There he worked on a variety projects related to energy management and financial planning, including a life-cycle analysis of the financial costs and environment impact of the water and wastewater treatment processes used by Bloomington Utilities. He also conducted an analysis of the effects of various fees and charges that could be implemented by the department and assisted in developing feasibility models for energy efficiency projects at treatment plants and created a database system for efficiently tracking energy use data. Other responsibilities included regular analysis of energy costs and uses for monthly management meetings.

In his time at Indiana University, Mr. Collins also worked as a consultant on a project for the city of Noblesville, IN concerning community perceptions of economic development policies. The project's focus included developer and citizen relationships with the utilities and public works departments regarding property taxes, stormwater fees, and system development charges. His team's work led to a series of recommendations to Noblesville officials related to streamlining processes and improving transparency related to fees charged by the city.

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

APPENDIX B:

SAMPLE REPORT

As an example of the quality of our work and deliverables, on the following pages, we have included a copy of the Water and Wastewater Financial Business Plan that we developed for the City of Junction City, KS.

COMPREHENSIVE WATER AND SEWER RATE AND FEE STUDY

COST PROPOSAL FOR PROFESSIONAL SERVICES / JANUARY 19, 2018

Contact Person: Tom Beckley - 3013 Main Street, Kansas City, MO 64108 /
Phone: 816.285.9024 / Email: tbeckley@raftelis.com

Below we have included our cost proposal to complete the project approach as described in our Technical Proposal. This table includes a breakdown of the hours for each of our Project Team members and their hourly billing rates. Expenses include costs associated with travel, and a $10 per hour technology charge covering computers, networks, telephones, postage, etc. We anticipate finalizing our level of effort and fee with the City during contract development.

Task	Task Descriptions	Hours Requirements				
		Raftelis Financial Consultants, Inc.				CMT
		TB	CD	JC	Admin	SD
	HOURLY RATES	$260	$205	$150	$70	$175
1	Development of Financial Plans	4	8	40	2	6
2	Cost of Service Analysis	2	2	20		2
3	Rate Design (Inc. Development and Connection Fee Review)	2	4	8		
4	Rate Model Development			8		
5	Reports and Presentations	2	2	16	2	2
	TOTAL ESTIMATED MEETINGS / HOURS	10	16	92	4	10
	PROFESSIONAL FEES	$2,600	$3,280	$13,800	$280	$1,750
					Estimated Fees	$21,710
					Technology and Communication Charge	$1,280
					Travel Expenses	$2,500
					TOTAL ESTIMATED FEES & EXPENSES	$25,490

TB - Tom Beckley
CD - Collin Drat
JC - Joe Collins
SD - Scott DeSplinter, PE
Admin - Administrative Staff

Note: We propose to complete this project for a price not to exceed $25,490. Any special requests or broadening of scope will be billed on a time and materials basis at the billing rates indicated below. Price includes one on-site kickoff meeting and two public presentations. Additional meetings will be billed at a flat rate of $2,500 per meeting when Tom Beckley is in attendance.

RAFTELIS FINANCIAL CONSULTANTS, INC.

Thomas A. Beckley
Senior Manager *(individual empowered to submit the bid and sign the contract with the City)*