RAFTELIS
FINANCIAL CONSULTANTS, INC.

CITY OF GARDEN GROVE WATER SERVICES DIVISION

WATER RATE STUDY

Proposal / July 27, 2016

RAFTELIS
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Ms. Katie Victoria
Sr. Administrative Analyst
City of Garden Grove
Garden Grove, CA 92840

July 25, 2016

Subject: Proposal for Water Rate Study

Dear Ms. Victoria:

Raftelis Financial Consultants, Inc. (RFC) is pleased to submit this proposal to assist the City of Garden Grove's Water Services Division (City) with a water rate study. RFC has a broad range of experience in conducting conservation-based (water budget and tiered) rate studies, cost of service studies, and long-term financial plans. Our Project Team has conducted over two dozen water budget rate studies in California and has a wealth of knowledge regarding the design and implementation of such rates.

We have the largest practice in California and the country specializing in financial and rate consulting for water, wastewater, and stormwater utilities. RFC is confident in our ability to facilitate the selection of an optimal rate structure and deliver a sustainable financial plan that is in compliance with Proposition 218 and the California Urban Water Conservation Council's best management practices, and meets the City's goals and objectives. We have assisted numerous agencies in California and across the United States with successfully implementing rate structures that fund capital infrastructure plans in a measured way, while minimizing impacts on customers. We are currently assisting agencies throughout the state in implementing rates including agencies in Orange County. These projects include financial/rate consulting assistance for: City of Orange, Tustin, San Clemente, Trabuco Canyon Water District, Huntington Beach, El Toro Water District, Walnut Valley Water District, Western Municipal Water District, East Valley Water District, City of Redlands, City of Ontario, Sierra Madre, Sweetwater Authority, Castaic Lake Water Agency, Metropolitan Water District, and many others.

I will serve as Project Manager and will be responsible for on-time and on-budget project completion. I have more than 18 years of public-sector consulting experience and have worked on numerous rate studies throughout California, including 15 water budget rate studies. Sudhir Pardiwala, PE will serve as Project Director. He has more than 39 years of industry experience and will be responsible for the overall project accountability. Steve Gagnon, PE will serve as Assistant Project Manager. Our Project Team has conducted 28 water budget rate studies between our team members. We will soon begin work on the City of Tustin's water budget rate structure.

If the City selects a water budget rate structure and plans on Santa Ana Watershed Project Agency (SAWPA) grant funding, our extensive experience regarding SAWPA grant requirements will ensure that the City will maximize the grant amount available.

RFC is excited to have the opportunity to share our experience and assist the City with this important study. If you have any questions, please do not hesitate to contact me at 213-327-4405.

Most sincerely,
RAFTELIS FINANCIAL CONSULTANTS, INC.

Sanjay Gaur
Vice President

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WHO IS RFC

RFC HAS THE **LARGEST CONSULTING PRACTICE IN THE NATION** FOCUSING ON THE FINANCIAL AND RATE ASPECTS OF WATER-INDUSTRY UTILITIES.

In 1993, Raftelis Financial Consultants, Inc. (RFC) was founded to provide services that help utilities function as sustainable organizations while providing the public with clean water at an affordable price. With this goal in mind, RFC has grown to have the largest and most experienced utility financial and rate consulting practice in the nation. RFC has experience providing these services to hundreds of utilities 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.

Visit www.raftelis.com to learn more about RFC's story.

WHAT MAKES RFC UNIQUE?

LOCAL & NATIONAL EXPERIENCE

RFC staff have assisted more than 500 water and/or wastewater utilities across the country on financial, rate, and management consulting engagements. These utilities include some of the largest and most complex utilities in the country. In addition, we have worked with numerous utilities throughout the State of California on hundreds of studies, including financial plans, cost of service, and pricing.

BENEFIT TO THE CITY

Our extensive national and local 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.

INDUSTRY LEADERSHIP

Our senior staff is involved in shaping industry standards by chairing various committees within American Water Works Association (AWWA) and Water Environment Federation (WEF). RFC's staff members have authored and co-authored many industry standard books regarding utility rate setting. RFC also publishes the national *Water and Wastewater Rate Survey*, which is co-published with AWWA, and the *CA-NV Water Rate Survey*, which is co-published with the CA-NV AWWA.

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.

EXPERTS ON CALIFORNIA REGULATORY REQUIREMENTS

The regulatory environment in California has become more stringent due to Proposition 218 and Government Code Section 54999. RFC staff are very knowledgable about these regulations and have made presentations on this subject for the Association of California Water Agencies (ACWA), California Society of Municipal Finance Officers (CSMFO), and CA-NV AWWA. In addition, we are frequently called on to be expert witnesses regarding these regulatory matters.

BENEFIT TO THE CITY

This expertise will allow the City to be confident that our recommendations take into account all of these regulatory requirements.

MSRB REGISTERED
MUNICIPAL ADVISOR

RFC 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 new 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. RFC's registration as a Municipal Advisor means our clients can be confident that RFC 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.

MODELING EXPERTISE

RFC has developed some of the most sophisticated yet user-friendly financial/rate models available in the industry. Our models are custom-built on a client-by-client basis, ensuring that the model fits the specific needs and objectives of the client.

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.

DEPTH OF RESOURCES

RFC has one of the largest water-industry financial and rate consulting practices in California and 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 objectives of the City.

FOCUS

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

BENEFIT TO THE CITY

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

RATE ADOPTION EXPERTISE

RFC 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.

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PROJECT **TEAM**

Our Project Team consists of some of the most knowledgeable and skilled rate consulting professionals in the water and wastewater utility industry. For this project, we have included senior-level personnel to provide experienced leadership, with support from talented consultant staff. RFC 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. RFC currently has a team of more than 55 consultants specializing in financial and management consulting services for wastewater, water, and stormwater utilities. In addition to our dedicated Project Team, the City will have the support of RFC's full staff. 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 members. Resumes are shown in Appendix A.

CITY OF
GARDEN GROVE
WATER SERVICES DIVISION

PROJECT DIRECTOR

SUDHIR PARDIWALA, PE will be responsible for overall project accountability, and will be available to provide insights into various cost of service and rate-setting matters.

PROJECT MANAGER

SANJAY GAUR 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. Mr. Gaur will serve as the City's main point of contact for the project.

TECHNICAL ADVISOR

HABIB ISAAC will provide oversight for the project ensuring it meets both RFC and industry standards.

ASSISTANT PROJECT MANAGER

STEVE GAGNON, PE will assist Mr. Gaur with managing 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 help Mr. Gaur lead the consulting staff in conducting analyses and preparing deliverables for the project.

STAFF CONSULTANTS

KHANH PHAN, HANNAH PHAN, KEVIN KOSTIUK, ANDREA BOEHLING, AKBAR ALIKHAN, VICTOR SMITH, CORRINE SCHRALL, NANCY PHAN, and MAGU DIAGNE, PE will work at the direction of Mr. Gaur and Mr. Gagnon to conduct analyses and prepare deliverables for the project.

RFC currently has a team of

55+

consultants

specializing in water/ wastewater utility financial and management consulting.

All of our staff will be available to provide support for this project as necessary.

SUDHIR PARDIWALA, PE

PROJECT DIRECTOR

(Executive Vice President)

EXPERIENCE: 39 years

CAREER HIGHLIGHTS

- Co-author of: WEF's *MOP No. 27, Financing and Charges for Wastewater Systems; & Water and Wastewater Finance and Pricing*
- Conducted over 300 water, wastewater, and recycled water studies
- Financial/rate consulting experience with Napa Sanitation District, Escondido, San Diego, Goleta West Sanitary District, Santa Barbara, & Ventura

EDUCATION

- MBA – University of California, Los Angeles
- MS – Arizona State University
- BS – Indian Institute of Technology, Bombay

Mr. Pardiwala has 39 years of experience in financial studies and engineering. He has extensive expertise in water and wastewater utility financial and revenue planning, valuation and assessment engineering. He has conducted numerous water, stormwater, reclaimed water and wastewater rate studies involving conservation, drought management, risk analysis, as well as system development fee studies, and has developed computerized models for these financial evaluations. Mr. Pardiwala has assisted public agencies in reviewing and obtaining alternate sources of funding for capital improvements, including low interest state and federal loans and grants. He has assisted several utilities with State Revolving Fund and Water Reclamation Bond loans. Mr. Pardiwala authored the chapter on reclaimed water rates in the *Manual of Practice, Financing and Charges for Wastewater Systems*, published by the Water Environment Federation (WEF) and presented papers at various conferences. He also authored a chapter entitled, "Recycled Water Rates," for the Fourth Edition of the industry guidebook, *Water and Wastewater Finance and Pricing: The Changing Landscape*. He was vice-chairman of the CA-NV AWWA Business Management Division and Chairman of the Financial Management Committee.

SANJAY GAUR

PROJECT MANAGER

(Vice President)

EXPERIENCE: 18 years

CAREER HIGHLIGHTS

- Regarded as a leader in innovative rate structures
- Co-author of: AWWA's *M1 Manual*; AWWA's *Water, Rates, Fees, and the Legal Environment*; & *Water and Wastewater Finance and Pricing*
- Financial/rate consulting experience with East Bay Municipal Water District, Metropolitan Water District of Southern California, La Habra Heights County Water District, & Huntington Beach

EDUCATION

- MPA – Harvard University
- MS – University of California, Santa Cruz
- BA – University of California, Santa Cruz

Mr. Gaur has 18 years of public-sector consulting experience, primarily focusing on providing financial and rate consulting services to water and wastewater utilities. His experience includes providing rate structure design, cost of service studies, financial analysis, cost benefit analysis, connection/development fee studies, conservation studies, and demand forecasting for utilities spanning the west coast. His project experience includes engagements with the Metropolitan Water District of Southern California, San Diego County Water Authority, Eastern Municipal Water District, Alameda County Water District, and East Bay Municipal Water District, among many others. Mr. Gaur is considered one of the leading experts in the development of conservation rate structures. He has often provided his insight into utility rate and conservation-related matters for various publications and industry forums, including: authoring articles in *Journal AWWA*; being quoted in various newspaper articles including the *Los Angeles Times* and the *New York Times*; participating in a forum regarding the future of water in Southern California sponsored by the Milken Institute; being quoted on National Public Radio; speaking at various industry conferences including American Water Works Association (AWWA), the Utility Management Conference, Association of California

Sanjay Gaur (Continued)

Water Agencies, and California Society of Municipal Finance Officers; and, co-authoring several industry guide books including AWWA's *Manual M1 Principles of Water Rates, Fees and Charges, 6th Edition* as well as AWWA's *Water Rates, Fees, and the Legal Environment, Second Edition*. Mr. Gaur co-authored a chapter entitled, "Understanding Conservation and Efficiency Rate Structures," for the Fourth Edition of the industry guidebook, *Water and Wastewater Finance and Pricing: The Changing Landscape*. Mr. Gaur is also active in a number of utility-related associations, including serving as a member of AWWA's Rates and Charges Committee.

STEVE GAGNON, PE

ASSISTANT PROJECT MANAGER

(Senior Consultant)

EXPERIENCE: 18 years

CAREER HIGHLIGHTS: Financial/rate consulting experience with Western Municipal Water District, La Habra Heights County Water District, Redlands, County of San Diego, & Olivenhain Municipal Water District

EDUCATION

- MBA - University of Southern California
- MS - University of Massachusetts
- BS - University of Massachusetts

Mr. Gagnon has 18 years of experience in financial analysis and environmental engineering. He has worked for leading engineering consultants as well as the federal government. His broad range of experience includes water and wastewater pricing studies, capacity fees and utility valuations. His financial experience includes water and wastewater rate studies for the City of Redlands, CA, Santa Fe Springs, Henderson, NV, City of Anaheim, La Habra Heights County Water District, Rowland Water District, Walnut Valley Water District, Sweetwater Authority, Helix Water District and Otay Water District. He has also performed strategic financial analysis of water sourcing alternatives and costing of ground water remediation alternatives, asset inventory and condition assessments, utility performance metrics, earned value analysis. He has also managed the construction and installation of water treatment equipment and oversaw Superfund remediation for the US Army.

HABIB ISAAC

TECHNICAL ADVISOR

(Manager)

EXPERIENCE: 13 years

CAREER HIGHLIGHTS: Financial/rate consulting experience with Elk Grove Water District, Coachella, Irvine, Lompoc, Modesto, Phelan Pinon Hills Community Services District, San Fernando, Sierra Madre, & Tulare

EDUCATION

- BS – San Diego State University

Mr. Isaac has extensive experience in financial and utility rate modeling and has been serving public agencies as a lead consultant for more than 13 years. With a background in applied mathematics and computer programming, Mr. Isaac has developed a number of financial models and has recently incorporated sophisticated macros into his models to create a user-friendly interface that can save and store scenarios "on-the-fly" for comparative analysis. Mr. Isaac is also well-versed with the cost of service principles and special benefit provisions of Proposition 218. In addition, he has also provided consulting services for conducting fiscal impact analyses for agencies in determining the impact generated by new development on services, and has prepared cash flow pro formas for securing bond issues, including mello-roos bonds, revenue bonds, and a number of refunding. Mr. Isaac has assisted clients in the preparation and presentation of public awareness and information programs related to municipal projects ranging from utility rate studies to agency-wide taxes, and feasibility

Habib Isaac (Continued)

studies. He has developed procedures and supervised the preparation of extensive computer models for utility rate studies. Such experience generally relates to performing budget analyses, customer and usage analyses, development of revenue requirements, and cost of service allocations related to the implementation of rate structures designed to promote conservation while accounting for revenue sufficiency and price elasticity. As a mathematician, Mr. Isaac understands the sensitivity between competing variables that are commonly present in utility rate studies, such as, cost based tiers and economic price signaling.

KHANH PHAN

STAFF CONSULTANT

(Senior Consultant)

EXPERIENCE: 10 years

CAREER HIGHLIGHTS: Financial/rate consulting experience with Alameda County Water District, Western Municipal Water District, El Toro Water District, & Rancho California Water District

EDUCATION

- MBA – California State University
- BS – University of California, Berkeley

Ms. Phan has served as Lead Consultant or Deputy Project Manager on numerous water and wastewater studies including rate, cost of service, reserve policy, financial planning, connection fee, conservation rate, and water budget rate studies. Her specific experience includes projects for the following utilities in California: Alameda County Water District, El Toro Water District, Elsinore Valley Municipal Water District, Mesa Consolidated Water District, Mojave Water Agency, Western Municipal Water District, Yorba Linda Water District, and the Cities of Camarillo, Glendora, Huntington Beach, Riverside, San Clemente, and Santa Cruz. She possesses strong analytical and management skills acquired from her background, education, and experience. Ms. Phan has advanced computer skills and is an excellent modeler. Ms. Phan also co-authored a chapter entitled, "Understanding Conservation and Efficiency Rate Structures," for the Fourth Edition of the industry guidebook, *Water and Wastewater Finance and Pricing: The Changing Landscape*.

HANNAH PHAN

STAFF CONSULTANT

(Senior Consultant)

EXPERIENCE: 9 years

CAREER HIGHLIGHTS: Financial/rate consulting experience with Castaic Lake Water Agency, East Bay Municipal Utility District, Napa Sanitation District, Santa Barbara, San Diego, & Beverly Hills

EDUCATION

- MBA – California State University, Los Angeles
- BS – California State University, Los Angeles

Ms. Phan has over 10 years of consulting experience in financial planning and cost of service studies. She has served as a lead consultant on numerous water, wastewater, and recycled water rate studies, cost of service studies, connection fee studies, and valuation studies. Her specific experience includes projects for the Cities of San Diego, Ventura, Palo Alto, Santa Barbara, Santa Monica, Anaheim, Ontario, Escondido, Redlands, and Banning, Napa Sanitary District, Central Contra Costa Sanitary District, East Bay Municipal Utility District, Goleta West Sanitary District, and Carpinteria Sanitary District, and the City of North Las Vegas, Nevada and Tacoma Environmental Services Department in Washington. Ms. Phan has an MBA and is an experienced modeler with strong analytical skills.

ANDREA BOEHLING

STAFF CONSULTANT
(Consultant)

EXPERIENCE: 8 years

CAREER HIGHLIGHTS: Financial/rate consulting experience with Elk Grove Water District, Rincon del Diablo Water District, Helix Water District, & Thousand Oaks

EDUCATION

- BS – University of Alabama in Huntsville
- Studied Computer Engineering, DeVry University

Ms. Boehling has a strong background in mathematics and accounting and has been serving public agencies for over 8 years. She possesses extensive analytical and modeling skills which she has used to perform various financial analysis such as cost of service user fee studies, utility rate studies, fiscal impact analysis, special district formations, cost allocation plan modeling, etc. Ms. Boehling is well-versed with the cost of service principles and special benefit provisions of Proposition 218. In addition, with over 6 years of experience in the auditing field, she is very familiar with monitoring and evaluating compliance with regulations, performing data analysis, and performing data integrity testing.

KEVIN KOSTIUK

STAFF CONSULTANT
(Senior Consultant)

EXPERIENCE: 8 years

CAREER HIGHLIGHTS: Financial/rate consulting experience with Goleta Water District, Riverside, Redlands, Simi Valley, Henderson, & East Valley Water Dsitrict

EDUCATION

- MEM – Duke University
- BA – University of California, Santa Barbara

Mr. Kostiuk has a background in economics and accounting and possesses extensive analytical skills. His expertise lies in financial accounting, analysis of water supply reservoir operations and management, environmental policy, and water quality trading programs; as well as United States Army Corps of Engineers (USACE) water supply and flood control policy.

AKBAR ALIKHAN

STAFF CONSULTANT
(Consultant)

EXPERIENCE: 5 years

CAREER HIGHLIGHTS: Financial/rate consulting experience with Thousand Oaks, Yorba Linda Water District, Central Contra Costa Sanitary District, & Napa Sanitation District

EDUCATION

- MPA – Cornell University
- BS – Cornell University

Mr. Alikhan has a background in economics, public policy and community outreach with a keen emphasis on public speaking and writing for non-technical audiences. His expertise lies in the areas of financial modeling, public works operations, and benchmarking.

VICTOR SMITH

STAFF CONSULTANT

(Consultant)

EXPERIENCE: 1 year

CAREER HIGHLIGHTS: Financial/rate consulting experience with Beverly Hills, Redlands, Chino Hills, Brea, & Watsonville

EDUCATION

- MEM - Duke University
- BA - University of North Carolina at Chapel Hill

Mr. Smith is a Consultant with a Masters in Envinronmental Management. He has worked on several rate studies including studies for the Cities of Brea, Watsonville, Redlands, Chino Hills, and Calleguas MWD. In addition to his expertise in financial modeling, Mr. Smith has a background in environmental and energy economics.

CORRINE SCHRALL

STAFF CONSULTANT

(Consultant)

EXPERIENCE: 1 year

CAREER HIGHLIGHTS: Financial/rate consulting experience with Alameda County Water District, Castaic Lake Water Agency, Camarillo, El Toro Water District, La Habra Heights County Water District, & Orange

EDUCATION

- MEM – Duke University
- BA – University of California, Santa Barbara

Ms. Schrall has a background in economics and policy. At Duke University, she focused on water resource issues, specifically exploring the challenges California faces. Her expertise lies in complex data analysis, project management, and environmental policy.

NANCY PHAN

STAFF CONSULTANT

(Associate Consultant)

EXPERIENCE: 3 months

CAREER HIGHLIGHTS: Financial/rate consulting experience with Ontario Municipal Utilities Company, Benicia, Goleta West Sanitation District, & County of Kauai (HI)

EDUCATION

- BA – University of California, Irvine

Ms. Phan has a background in business economics with a focus on data analysis, writing, and communications. Her expertise in working with large data sets brings efficiency and refinement to her financial modeling, and her emphasis on writing establishes a clear and concise communication style.

MAGU DIAGNE

STAFF CONSULTANT

(Consultant)

Mr. Diagne is a California Licensed Professional Mechanical Engineer with eight years of experience as a construction engineering consultant. He has a background in financial modeling and data analysis.

EXPERIENCE: 8 years

CAREER HIGHLIGHTS:

- Experience in financial planning, risk management, and life cycle cost analysis
- Experience developing business plans to finance energy efficiency upgrades for existing commercial buildings

EDUCATION

- MS – Pepperdine University
- MS – University of California, Riverside
- BS – University of California, Berkeley

LEADING THE INDUSTRY

RFC staff shape industry standards for wastewater and water utility finance and rate setting through our active leadership in the AWWA, WEF, and EPA. RFC's 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 Finance, Accounting, and Management Controls Committee
- Division Liaison to Workforce Strategies Committee
- Trustee of Technical and Education Council
- Member of CA-NV AWWA Finance Committee

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

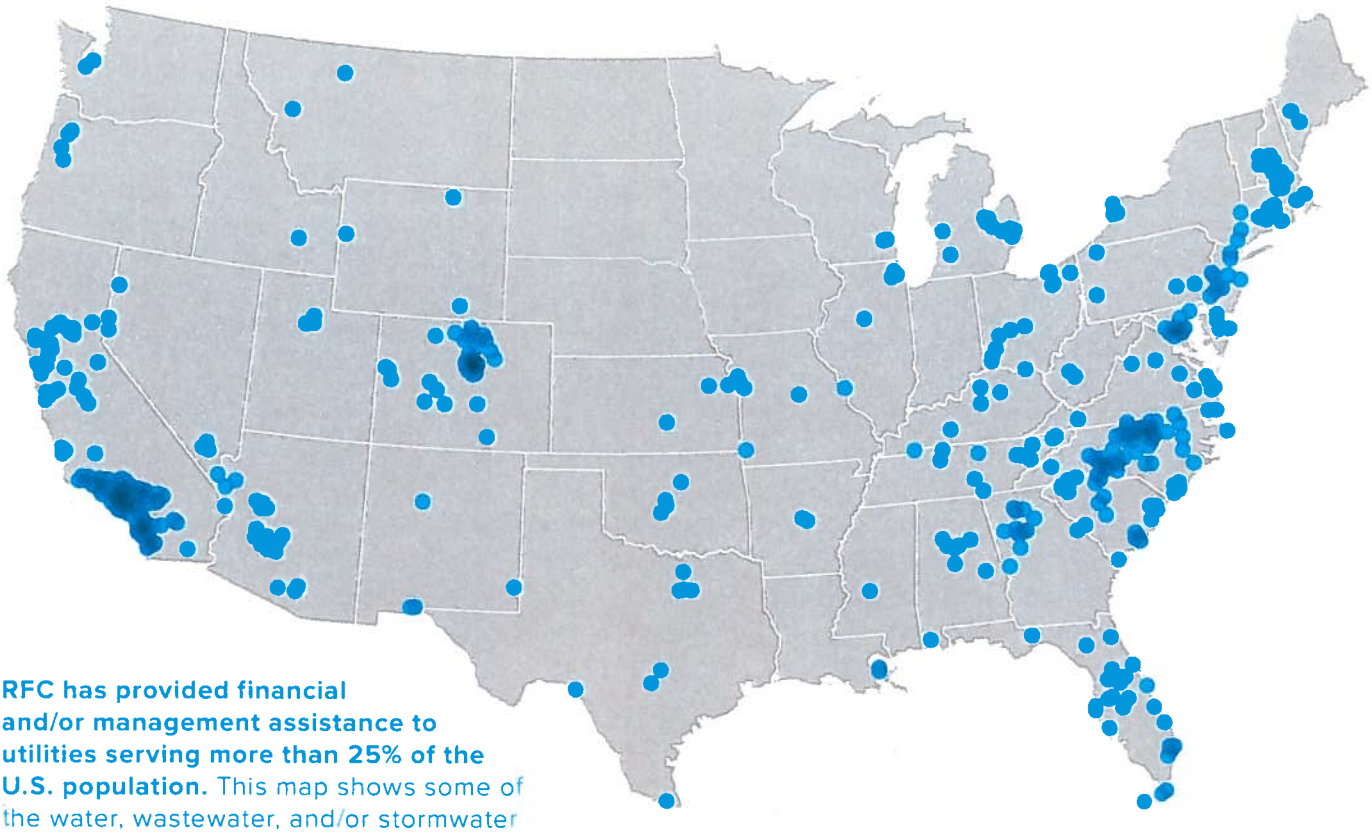
- Member of Environmental FinancialAdvisory Board

WE WROTE THE BOOK

RFC staff have co-authored many of the industry's leading guidebooks regarding wastewater and water 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*
- WEF's *Manual of Practice No. 27 - Financing and Charges for Wastewater Systems*
- *Water and Wastewater Finance and Pricing: The Changing Landscape*

RFC also conducts and publishes the national *Water and Wastewater Rate Survey* in conjunction with AWWA (which is the most comprehensive collection of water and wastewater utility financial and rate data available in the industry) and the California-Nevada Water and Wastewater Rate Survey in collaboration with the CA-NV Section of the AWWA.



RFC has 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 RFC staff have provided financial/management consulting.

EXPERIENCE

RFC 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. RFC staff have provided financial, rate, management, and/or operational consulting services to more than 500 utilities in the U.S., including some of the largest and most complex water, wastewater, and stormwater utilities in the U.S. and California. In the past year alone, RFC worked on more than 300 financial, rate, and management, and operational consulting projects for over 200 water, wastewater, and/or stormwater utilities in 30 states, the District of Columbia, Canada, and Puerto Rico.

CALIFORNIA EXPERIENCE

This table lists the California utilities that RFC has assisted over the past five years on financial, rate, and/or management consulting projects.

CLIENT	AFFORDABILITY ANALYSIS & PROGRAM DEVELOPMENT	DEBT ISSUANCE SUPPORT	DISPUTE RESOLUTION	FINANCIAL AND CAPITAL IMPROVEMENTS PLANNING	RATE CASE SUPPORT	RATE DESIGN	RISK ANALYSIS	COST OF SERVICE	DEVELOPMENT / IMPACT FEES	STORMWATER UTILITY DEVELOMENT	ORGANIZATIONAL OPTIMIZATION	WATER/WASTEWATER UTILITY VALUATION
Alameda County Water District		●		●		●	●	●				
Arcadia, City of				●		●		●				
Arroyo Grande, City of				●		●	●	●				
Bakersfield, City of		●		●		●		●				
Banning, City of		●		●		●		●	●			
Beverly Hills, City of		●		●		●	●	●	●		●	
Borrego Water District			●	●		●						
Brea, City of				●		●		●				
CAL FIRE/San Luis Obispo								●				
Calleguas Municipal Water District		●		●		●	●	●				
Camarillo, City of		●		●		●		●	●			
Carlsbad Municipal Water District		●		●		●	●	●				
Carpinteria Sanitary District				●		●	●	●				
Castaic Lake Water Agency			●	●		●	●	●	●			
Chowchilla, City of				●		●	●	●				
Corona, City of						●			●			
County of San Diego				●				●		●		
Cucamonga Valley Water District				●								
Delta Diablo Sanitation District											●	
East Bay Municipal Utilities District				●				●				
East Orange County Water District				●		●		●				
Eastern Municipal Water District				●								
El Toro Water District				●		●		●				
Elk Grove Water District	●			●		●	●	●	●			
Elsinore Valley Municipal Water District				●		●			●			
Escondido, City of		●		●		●	●	●	●			
Glendora, City of						●						
Goleta West Sanitary District			●	●		●	●	●	●			
Hollister, City of				●		●		●	●			
Holtville, City of				●				●				
Huntington Beach, City of				●		●	●	●				
Inland Empire Utilities Agency				●								
Jurupa Community Services District				●		●	●	●				
Kern County Water Agency					●							
La Canada Irrigation District				●		●		●				
La Habra Heights County Water District				●		●	●	●	●			
Laguna Beach, City of				●								
Lake Valley Fire Protection District				●			●	●				
Las Virgenes Municipal Water District				●		●		●				
Mammoth Community Water District				●		●		●				
Merced, City of				●		●		●	●			
Mesa Water District				●								
Metropolitan Water District of Southern California			●									
Mojave Water Company				●		●	●					
Monterey, City of		●		●		●	●					
Napa Sanitation District				●		●		●				

CLIENT	AFFORDABILITY ANALYSIS & PROGRAM DEVELOPMENT	DEBT ISSUANCE SUPPORT	DISPUTE RESOLUTION	FINANCIAL AND CAPITAL IMPROVEMENTS PLANNING	RATE CASE SUPPORT	RATE DESIGN	RISK ANALYSIS	COST OF SERVICE	DEVELOPMENT / IMPACT FEES	STORMWATER UTILITY DEVELOMENT	ORGANIZATIONAL OPTIMIZATION	WATER/WASTEWATER UTILITY VALUATION
Newhall County Water District						●						
Olivenhain Municipal Water District				●		●	●					
Ontario Municipal Utilities Company								●				
Palmdale Water District				●		●	●	●				
Palo Alto, City of				●		●	●	●				
Phelan Pinon Hills Community Services District	●			●		●		●	●			
Pleasant Hill Recreation & Park District				●				●				
Ramona Municipal Water District				●		●		●				
Rancho California Water District						●	●	●	●			
Redlands, City of				●		●	●					
Riverside Public Utilities				●		●	●	●	●			
Sacramento Regional County Sanitation District						●						
Sacramento, City of				●		●		●				
Salton Community Services District				●				●				
San Bernardino Valley Municipal Water District						●						
San Bernardino, County of				●		●		●	●			
San Clemente, City of				●		●	●	●				
San Diego, City of				●		●						●
San Diego County Water Authority												●
San Dieguito Water District		●										
San Elijo Joint Powers Authority				●	●	●	●	●	●			
San Gabriel, City of				●		●		●				
San Juan Capistrano, City of				●		●	●	●	●			
Santa Barbara, City of				●		●	●	●	●			
Santa Clara Valley Water District			●	●	●							
Santa Cruz, City of				●		●	●	●				
Santa Fe Irrigation District				●		●	●	●	●			
Santa Fe Springs, City of				●		●		●				
Santa Margarita Water District				●		●	●	●				
Sierra Madre, City of	●			●		●		●				
Signal Hill, City of				●		●		●				
Simi Valley, City of				●		●	●	●	●			
South Coast Water District						●						
South Mesa Water Company				●		●	●	●				
South Pasadena, City of				●		●		●				
Sunnyslope County Water District				●		●	●	●	●			
Thousand Oaks, City of				●		●	●	●	●			
Torrance, City of				●		●		●				
Triunfo Sanitation District				●		●		●				
Union Sanitary District				●		●	●	●	●			
Ventura Regional Sanitation District				●		●		●				
Ventura, City of	●	●	●	●	●	●	●	●	●			
Vista, City of				●		●			●			
Walnut Valley Water District				●		●		●				
Western Municipal Water District				●		●		●	●			
Yorba Linda Water District				●		●		●				

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	Anaheim, City of				●			●													
CA	Beverly Hills, City of				●			●	●					●	●						
CA	MWD of Southern California			●	●			●							●						
CA	San Diego, City of				●	●		●	●												
CA	San Francisco PUC				●			●												●	
CA	Santa Clara Valley Water District			●	●			●													
CA	Western Municipal Water District				●	●		●													
CO	Denver Water							●					●				●				
CO	Denver Wastewater, City of		●					●						●	●		●				
DC	DC Water				●	●		●	●				●	●	●					●	
DE	Wilmington, City of													●		●				●	
FL	Clearwater, 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	Naperville, City of				●			●													
KS	Wichita, City of				●			●	●												
KY	Hardin County Water District #1				●		●	●													
LA	New Orleans, Sewerage & Water Board 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
MD	Baltimore, City of	●			●			●	●	●	●	●	●	●			●	●	●	
MO	Metropolitan St. Louis Sewer District		●		●		●	●						●						
MS	Jackson, City of	●			●			●					●				●		●	
NC	Asheville, City of		●		●			●						●			●			
NC	Cary, Town of		●		●	●		●					●		●				●	
NC	Charlotte-Mecklenburg Utilities	●			●	●		●	●				●	●	●	●		●		●
NC	Durham, City of		●		●			●												●
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				●			●						●						

On the following pages, we have provided detailed descriptions of several projects that we have worked on 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.

EAST VALLEY WATER DISTRICT

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RFC prepared a 10-year financial plan evaluating the operating and capital expenses, debt service, and reserve requirements of the East Valley Water District (District) and associated rates to recover the required revenue. From inception, the District desired to adjust from the current uniform rate structure to one that complimented their long-term strategic goals of ensuring water efficiency and assisting with water management. As a result, the District decided to move forward with budget-Based rates that drilled down to the account level. Given the District's uniform rate structure, the analysis included the development of a sound nexus for determining appropriate tiered breakpoints per account as well as unit costs by tier to clearly show how higher tiered usage incurs additional cost of providing service. The model analyzed usage at the account level and provided water allotments to each for "indoor needs" and "outdoor needs." Outdoor needs incorporated GIS data for each account which was married to the District's consumption files.

The adopted rates, resulting from the comprehensive cost of service analysis, unbundled rate components to convey the true cost of various service components and to continue to equitably pass on the cost of water services to users. RFC designed a water budget rate structure which ensured revenue stability, financial sufficiency, and provided the appropriate price signal for different supply costs, peaking costs, and conservation program funding for the District. The following outlines the methodology used to develop the water budget rate structure:

- Indoor allocations varied by the number of occupants and outdoor allocations varied based on climate data and irrigable area compiled from GIS and parcel data
- The irrigable area was determined by the District's GIS consultants using aerial photography of parcel area less the building area acquired from the Assessors' Secured Roll

- The allocation budgets considered irrigation efficiency and type of landscape

Next, RFC developed a water budget rate model that allowed the District to quickly view the impacts of alternative rates and budgets, to aid policy makers in making well-informed decisions in a timely manner. This tool proved invaluable when presenting the results in a graphical format to the District Board of Directors because it enabled them to easily see the impacts of different water budgets on their customers in real-time. As a result, the Board adopted the water budget rate structure on March 25, 2015. The findings and recommendations resulting from the Study were summarized and documented in the Study Report.

ELSINORE VALLEY MUNICIPAL WATER DISTRICT

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Elsinore Valley Municipal Water District (District) provides public water service, wastewater treatment, and water recycling services to over 134,000 customers over its 97 square miles of service area within Riverside County and a portion of Orange County. As a member agency of Metropolitan Water District of Southern California (MWD) via Western Municipal Water District (WMWD), the District relies on imported water for approximately 70% of its potable water supply needs. Like many water agencies across Southern California, the District has been faced with the challenge of meeting demand despite dwindling water supplies and increased imported water costs. In order to promote conservation, the District adopted a water budget rate structure for all residential and recycled water accounts in July of 2009, which was most recently updated in July 2014.

In order to better financially manage all 15 enterprise funds, the District needed a comprehensive, yet user-friendly financial plan model which could be used to facilitate communications between staff and the District's Board of Directors about the financial implications of different financial policies and capital projects. In 2012, the District engaged RFC to develop a customized 25-year Financial Plan Model (Model) with the ability to conduct scenario analysis. The interactive dashboard of the Model displays the Long-Term Financial Plan of the 15 enterprise funds in graphical format. The built-in scenario manager enables the Model users to save, load, and compare the results of different assumptions, inputs, and CIP scenarios. Customized financial reports in preset printed format can be generated at individual enterprise level and at aggregate level for the whole District. The Financial Plan Model was submitted to the District in April 2014 to be used and updated by the District staff annually to ensure the District's financial health and solvency.

Proposition 218 requires a nexus and proportionality between the fees charged for a service and the cost to provide that service. Proposition 218's position on the use of tiered rates was clarified in the case of Capistrano Taxpayer's Association v. City of San Juan Capistrano. The Fourth Appellate District of California ruled that tiered rate structures are not a violation of Proposition 218, so long as they are supported by actual cost of service calculations. Tiered rate structures that do not demonstrate a nexus between each tiered rate and the cost to provide service to higher-tier users are in violation of Proposition 218 and can be invalidated. In summary, agencies must now "show their work" and explain the methodology behind the charges for service.

ELSINORE VALLEY MUNICIPAL WATER DISTRICT (CONTINUED)

In December of 2013, the District retained RFC to revise and fine tune the water budget rate structure, and to develop cost of service-based rates for its water and recycled water utilities to promote further conservation and to develop the nexus requirement for each charge for services as required by Proposition 218. In this Study, RFC developed the Water Budget Rate Model (Rate Model) with the ability to review different water budget factors, such as default household size, gallons per capital per day (GPCD) for indoor use and landscape factors for outdoor use and drought factors to be used during water supply shortages to reduce water allocation. The Rate Model also had the ability to revise the Tier definitions and included the detailed cost allocations to appropriately allocate revenue requirements to different cost categories using industry standards practices and ultimately to assign to different rate components to develop the nexus requirements between the costs and the rates. The Rate Model included the usage and customer information for each account within the District's service area to conduct detailed usage analysis to help assessing the impacts of different water budget factors and rate structures on customers. As part of the Study, RFC developed the 2015 Water Rate Study Report (Report) to be used as an administrative record. The Report highlighted the major issues and decisions made during the course of the Study, and explained the cost of service analysis and methodology used to develop the final rates. The explanation of the methodology found within the Report demonstrates that the rates are equitable, reflect the District's policies and values, and are driven by the District's revenue requirements.

Through late 2014 and into early 2015, California has experienced one of the most severe droughts in state history. The District currently purchases 70 percent of its potable water supply from MWD via WMWD. To address water supply issues MWD developed the Water Supply Allocation Plan (WSAP) which provides reduced allocations to wholesale customers within MWD's service area. In turn, WMWD adopted a methodology to determine the allocation to its retail agencies. Retail agencies, such as the District, can purchase water above the allocation, but such purchases are subject to severe penalties.

In May 2015, the District engaged RFC in a Drought Rate Study to develop the water reduction methodology to ensure demand stay within allocation for each drought stage and to develop drought surcharges applied on monthly billed usage to recover the drought related costs for each stage. As part of the Study, RFC conducted financial impact analyses on revenues, expenditures to determine the drought related costs for each drought stage.

HELIX WATER DISTRICT

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In 2014, Helix Water District (the District) contracted with RFC to conduct a water cost of service and rate study to develop a financial plan as well as design water rates for the District over the next five years. The District provides water service to approximately 55,000 customer accounts, serving a population of approximately 270,000 residents in San Diego County.

More than 10 years had passed since the District's last adopted "Cost-of-Service" study and a new one had to be performed per Government Code Section 54999.7(c), which requires it be performed at least once every 10 years.

Given the length of time since the last adopted comprehensive rate study, one specific project challenge was determining the best rate structure for the District to implement moving forward. As such, RFC conducted a pricing objective workshop with the Board to explore rate alternatives that would best fit the District's goals and objectives. Based on the results from the pricing objectives workshop, RFC was able to develop a rate structure that met the District's needs and was fully compliant with Proposition 218.

Based on the financial plan developed by RFC, the District would have positive net cash at Fiscal Year End 2015-16; however, without future revenue adjustments, the water utility was projected to have a slight operating deficit by FYE 2016-17 and needed to draw on reserves to offset annual shortfalls for each subsequent year. In addition, the District had substantial annual planned capital improvement expenditures, averaging approximately $12M over the next five years. The District currently had a healthy level of reserves, but reserves were not enough in consideration of the large capital investment necessary during the study period. Therefore, revenue adjustments were needed to ensure that the District's maintains its strong financial position moving forward.

The financial plan and revenue requirement were driven by meeting the following criteria:

- Positive net operating income each fiscal year
- Fully fund capital through Pay-As-You-Go (PAYGO) (cash on hand)
- Achieve an ending fund balance equal to 10% of projected annual revenues in 5th year
- Level revenue adjustments to mitigate drastic rate increases in any one particular year

- Utilize existing funds, if available, to mitigate rates

RFC recommended that the District incorporate a pass-through component for any potential rate increases implemented by the District's wholesale water supplier. Introducing a pass-through component mitigates risk of unknown rate increases by the wholesaler.

Several recommendations were made with respect to the District's rate structure:

- RFC recommended maintaining the 3-tiered rate structure for domestic (single-family residential) accounts, with slight modifications to the Tier 1 and Tier 2 allotments.
- RFC recommended maintaining uniform rates for multi-family residential and non-residential accounts due to the data limitations for these two groups of customers. In the absence of improved meter data, a uniform rate provided the most equitable rate structure between accounts within the customer class.
- RFC recommended changing the irrigation rate structure from a 3-tiered budget-based rate structure to a 2-tiered budget-based rate structure. The District had previously defined efficient use for each account by providing a unique water allotment each month that is specific to each account's landscape area. Therefore, Tier 1 would reflect the amount of water needed (within their water budget) and Tier 2 would signal when an account went over their water budget.

RANCHO CALIFORNIA WATER DISTRICT

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In 2009, Rancho California Water District (District) engaged RFC to conduct a water budget rate study and design a water budget rate structure for its 35,000 residential and irrigation accounts in both Rancho and Santa Rosa Divisions. Budgets were based on average population density for indoor allocations and weather data and irrigation area for outdoor allocations. The formula for developing allocation budgets considers irrigation efficiency and type of landscape. The concept is to encourage efficient use of water by providing users with adequate water while penalizing wasteful water-use practices.

RFC assisted the District in evaluating different methodologies to allocate its water sources, mainly imported water and groundwater, to different customer classes. RFC also performed numerous analyses on the usage and landscape area relationships to create a rational landscape area cap for residential accounts. RFC consulted the District in developing the variance programs to accommodate customers' inquiries about their water budgets. In addition, RFC thoroughly analyzed the associated impacts of the proposed water budget rate on the District's finances and its customers so policy makers could make informed decisions.

RFC developed a water budget rate model that allowed the District to quickly view the impacts of alternate rates and budgets. The water budget rate structure was designed to ensure revenue stability, financial sufficiency, and conservation program funding for the District. This tool allowed us to present results to the District Board of Directors in a graphical format so that they could see the impacts of different water budgets, different water source allocation methodologies, and different landscape area caps on their customers in real-time.

In December 2009, the District engaged RFC to conduct a New Water Demand Offset Fee Study. The New Water Demand Offset Program is a form of funding of conservation measures that will help to create sustainable, zero water footprint development. New developments will pay fees called New Water Demand Offset Fees to create potable water savings in the existing system to support water demand generated by new developments. Water savings can be achieved by converting irrigation accounts to recycled water or installing high-efficiency retrofits to replace inefficient fixtures for existing accounts in the District. Implementation of the New Water Demand Offset Program is a key component to support sustainable new development without generating

additional net demand on the existing system. RFC researched water savings and costs for each conservation program/fixture at various agencies, calculated the estimated water demand of new accounts using water budget, and built a model to calculate the individualized water demand offset fees based on the characteristics of the new development, such as lot size and landscape area. The Study was completed and the results were presented to the Board in the same month.

The District's current water capital facilities financing program estimates $323 million to be spent by the end of 2030. Due to the significant amount of capital spending expected, in November 2011, the District commissioned RFC to evaluate its existing capacity fee methodology and update the fee to ensure that new customers pay an equitable share when joining the District's system. The proposed capacity fees were calculated based on the updated asset values and adjusted Capital Improvement Plan values (from the 2005 Water Facilities Master Plan Update), which will benefit future development, and estimated incremental demand. Utilizing the methodologies used in the 2011 Water Budget Update Study, RFC estimated the yearly demand for a residential user with a ¾-inch meter (or 1 equivalent dwelling unit, EDU) for both divisions. Meter equivalency ratios based on AWWA hydraulic capacities (AWWA M6) are used to project water demand estimates for customers of varying meter sizes. The results were summarized in the Water Capacity Fee Study Report and presented to the Board in March 2012.

In 2012 and 2014, the District again engaged RFC to update the Water Budget Rate Models to address arising issues and challenges. For the past several years, due to increased temperatures, the efficient outdoor water sales exceeded projected sales and the District experienced inadequate cost recovery for marginal water supply costs. In the 2014 Study, RFC updated the Water Budget Rate Model to fine tune the water allocation factors and the allocation of water supply to the tiers. By aligning the available water supply and water demand, the risk of purchasing more expensive water for Tiers 1 and 2 was reduced

RINCON DEL DIABLO WATER DISTRICT

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In 2014, Rincon del Diablo Water District (District) contracted with RFC to conduct a Water Cost of Service and Rate Study to develop a financial plan as well as design water rates for the District for the next five years. The District is located approximately 25 miles north of the City of San Diego and serves portions of the cities of Escondido and San Marcos, as well as unincorporated areas of San Diego County. The District provides potable water service to a population of approximately 30,000 customers.

Like many water agencies in California, the District was faced with challenges related to the reduction in water usage as a result of conservation, the slow economy, increasing water supply costs, and the recent Executive Order by Governor Brown to reduce water consumption by 25% Statewide. The District was operating in an environment where operational costs and external costs associated with imported water continue to increase and the reinvestment of funds to its infrastructure is required as outlined within the District's updated Master Plan.

Based on the financial plan developed by RFC, without future revenue adjustments the water utility was projected to have a slight operating deficit by FYE 2015-16 and would need to draw on reserves to offset annual shortfalls. RFC recommended the District adjust revenue by 5% for each of the next five years and incorporate a pass-through provision. The pass-through provision would allow the District to pass on increased imported water costs onto retail customers, without having to undergo the rate adjustment process for its own rates.

Several recommendations were made with respect to the target reserves. RFC recommended increasing the Operating Reserve to 90 days of operating expenses, maintaining the current Capital Repair and Replacement Reserve Target equal to 35% of the 5-yr annual average capital improvement plan, and adjusting the Rate Stabilization Reserve Target to 10% of purchased water costs.

Furthermore, RFC recommended that the District issue debt totaling $10M in FY 2016-17 to help fund capital improvements. Given the useful life of these capital improvements, funding these items through debt provides inter-generation equity between existing customers and future customers by spreading the cost over a debt-term of 30-years.

In addition, recommendations were made with regards to the rate structure.

RINCON DEL DIABLO WATER DISTRICT (CONTINUED)

RFC recommended changing the Residential (Residential, Apartments, and Mobile Home Parks) water rate structures from 5-tiered to 3-tiered inclining rate structures to ensure compliance with Proposition 218. The recommended structure reflects the true cost of providing service at different usage levels and is therefore more defensible.

RFC recommended changing Non-Residential (Commercial/Industrial and Medical Care Facilities) water rate structures from a 3-tiered rate structure to a uniform rate structure as Non-Residential commercial uses and related water needs can vary drastically between accounts.

Finally, RFC recommended changing the Agricultural and Irrigation rate structure from a 5-tiered budget based rate structure to a 2-tiered budget based rate structure. The District has previously defined efficient use for each account by providing a unique water allotment each month that is specific to each account's landscape area. Therefore, Tier 1 would reflect the amount of water needed (within their water budget) and Tier 2 would signal when an account went over their water budget.

WESTERN MUNICIPAL WATER DISTRICT

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As a member agency of MWD of Southern California, Western Municipal Water District provides water and wastewater service to approximately 24,000 retail and 8 wholesale customers in western Riverside County. Like many utilities in California and across the country, in 2009, the District had seen a significant reduction in demand due to the economic recession, the increase in water conservation awareness, drought conditions, cooler weather, and a variety of other factors, which resulted in a decrease in the District's revenue. To ensure revenue stability at this reduced level of customer demand, while also promoting efficient water use and meeting the California regulatory requirements of SBx7-7, RFC assisted the District in the development and implementation of a water budget rate structure.

First, RFC identified and examined three potential water budget rate structures for the Murrieta and Riverside service areas. To analyze the impacts of these potential rate structures, RFC developed a Microsoft Excel-based water budget rate model. The model allowed the District to change the key factors for water allocations, provide revenue and impact analysis, and generate sample customer monthly bills under existing and proposed rates. RFC conducted meetings and workshops with District staff and the Board to analyze various rate structure scenarios to ensure that the new structure would meet the District's objectives. Through these meetings, a water budget rate structure was selected to effectively meet the District's needs, and this structure was successfully adopted.

Since the adoption of this water budget rate structure, the District has increased revenue stability, promoted water efficiency, and increased customer satisfaction.

In addition to developing the water budget rate structure, RFC also developed a customized, long-term 30-year financial plan model to help the District financially manage all 14 of its enterprises. This comprehensive yet user-friendly model is used to facilitate communication between staff and the District's Board of Directors about the financial implications of different financial policies and capital improvement projects. The model also assists with coordination and decision making between engineering and finance staff as they work to prioritize capital projects and define a capital financing plan to achieve a sustainable and achievable solution. The model includes a variety of tools to allow the user to view and analyze various aspects of the

District's long-term financial plan including:

- A CIP manager to save customized CIP scenarios to be used for financial implication evaluations
- A scenario manager to save, load, and compare the results of different assumptions, inputs, and CIP scenarios
- Customized financial reports in preset printed format that can be generated at the individual enterprise or aggregate level
- A rate calculation module

Since 2011, RFC was also retained by the District to develop and update the connection fees for the District's retail water and wastewater services. For this project, we worked closely with District staff to develop a connection fee framework. RFC then developed a connection fee model to evaluate different policy options related to allocations of tertiary recycled water treatment to potable, wastewater, and to calculate the connection fees for these services. Finally, RFC conducted a workshop with District staff to present the results of the project. In 2014, the District updated its Water and Wastewater Master Plan for all service areas, and requested RFC update the connection fees using the most up-to-date capital costs and other relevant financial information.

In 2015, the District engaged RFC in the development of a comprehensive water budget rate structure for each of the District retail service areas. RFC conducted policy workshops to discuss current challenges and issues facing the District's retail services and policy options associated with the development of water budget rates. RFC developed a flexible Excel-based Rate Model that evaluates adjustments to the indoor and outdoor water budgets and corresponding tier widths, analyzes different methodologies for allocating water supply sources and assessing property taxes, and evaluates the effects of supplemental water supplies and , adjustments to water demand, etc. Using the provided annual revenue requirements, the Model calculates the tier prices corresponding with the proportional cost of providing water service to each tier and analyzes customer impacts for the proposed rates in each scenario. With the support of the Rate Model, RFC led several policy framework workshops to evaluate each rate scenario and refine the District's retail rate structures.

CITY OF SAN JUAN CAPISTRANO

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The City of San Juan Capistrano was recently sued by its ratepayers regarding a tiered rate structure developed by the City's previous rate consultants. The plaintiffs were concerned that the previous rate structure did not meet the cost of service test per the requirements of Proposition 218. The courts determined the administrative records were not sufficient to establish a clear nexus for the rates.

The City selected RFC to assist with resolving this matter. One factor in the City's decision for selecting RFC was the rigorous nature of our approach for defensible rate structures as compared to many practitioners in the industry. In the case of the City and other agencies, a common practice has been to base tier prices on multipliers. This leaves agencies exposed to courts opining that their multiplier approach violates the "arbitrary and capricious" provision of Proposition 218.

In resolving the City's matter, RFC implemented its approach for satisfying a clear nexus for the rates; there needs to be a clear justification of the tiers and pricing. RFC achieved this nexus by developing rate components which were used to justify the various tiers for the proposed rate structure. RFC's work withstood the rigorous scrutiny of several City Council meetings, including a multi-hour discussion confirming the defensibility of RFC's cost of service approach. The rates were approved and adopted in 2014.

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In 2012, RFC was engaged in a Water and Wastewater Rate Study (Study) for the Las Virgenes Municipal Water District (District). The District was just coming to the end of a five-year rate plan and required a review of revenue requirements and rates for an additional five years. As with much of Southern California, the District had experienced a drop in consumption in recent years due to the drought. The reduction in usage brought along with it a reduction in revenue and left the water utility with the potential need for significant rate increases. RFC is developing multiple scenarios relating to alternate CIPs and varying levels of sales going forward and developing a financial plan and rate structure that would ensure the financial viability of the District's enterprises.

As part of its ongoing effort to meet mandatory water reductions such as those mandated by the Water Conservation Act of 2009 (SB x7-7), the District Board approved an action plan for budget-based water rates on March 25, 2014,. At 276 gallons per capita per day, the District is already ahead of other agencies in terms of meeting the goal set by SB x7-7, and in meeting its interim target of a 10% reduction by 2015. The District recognizes, however, that the second half of the goal represents a more significant challenge. Not only are there diminishing returns on conservation pricing signals, but the District must also continue to maintain a secure base of revenue in order to provide reliable potable water, recycled water, and sanitation services. In addition, newly developed recycled water and sanitation rate structures must complement the budget-based rates for the potable water enterprise and exhibit strong pricing signals to reduce urban runoff and excessive irrigation. In 2014, the District retained RFC to conduct its Water, Wastewater and Recycled Water (RW) Rate Study (2014 Study) to conduct a financial analysis and rate design for each of its three enterprises. The main objectives of the 2014 Study include: 1) Development of budget-based rate structures for the potable water and recycled water enterprises that are transparent to customers, promote water reductions, and enable the District to continue providing reliable service in a fiscally responsible manner; 2) Thorough review for each enterprise's financial and reserve status and projected needs; and 3) Development of an administrative record documenting the nexus for the proposed rate structures to meet the requirements of Proposition 218. In October 2015, the Board unanimously approved the proposed rates.

CITY OF SAN CLEMENTE

CLIENT REFERENCE

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The City of San Clemente (City) provides recycled water, sewer, and water services to over 17,500 accounts within City limits. For the past few years, the City has experienced a steady decline in water demand, from roughly 10,000 acre-feet (AF) four years ago to a total water usage of approximately 8,600 AF in FY 2012. As a result of this decreased demand, revenues generated from water sales (along with several other forms of miscellaneous revenues) have been unable to fully fund the City's expenditures; as a result, the City has been operating at a deficit. The approved fiscal year (FY) 2012 budget projected the City's Water and Sewer Funds to operate at a combined deficit of approximately $1.7 million. In addition to these issues, the City wished to develop a financial plan that incorporated the City's expansion of recycled water production at its sewer facility. The City had approximately 100 irrigation customers it intended to convert from potable water consumption to non-potable water consumption.

In 2011, the City engaged RFC to conduct a Recycled Water, Sewer, and Water Rate Study (Study) to address these concerns and establish equitable rates in compliance with Proposition 218. The Study included the development of the financial plans for Water and Sewer Enterprise Funds (to ensure financial sufficiency in order to meet operation and maintenance (O&M) costs, to ensure sufficient depreciation funding for capital replacement and refurbishment (R&R) needs, and to improve the financial health of the enterprises), the development of fair and equitable water and sewer rates, the review of the current rate structure for recycled water (RW), and the modeling of impacts resulting from the recycled water system expansion.

In addition, RFC evaluated the benefits and costs of implementing a water budget rate structure. RFC assisted the City in merging the County parcel data with the water consumption by addresses for single family residential accounts. Based on this information, RFC developed a water budget model that examined different estimates for weather factors (seasonal or historical daily) and landscape estimates (percentage of lot size, grouping of lots sizes by bins, and lot size minus footprint). The analysis concluded that due to recent water conservation efforts and the unique characteristics of the City, potential outdoor water savings provided by water budget rates for residential customers were minimal and not substantial enough to offset the increased costs of implementation and administering such a rate structure. The usage analysis also suggested changing to the season and tier definitions for the

current water rate structures. RFC also developed a web-based bill calculator for the City's residential customers as a public outreach tool for the recommended changes to the water and sewer rates. The bill calculator was posted on the City's website for residential customers to easily assess the actual impacts on their monthly bills.

As part of the Study, RFC developed the Recycled Water, Sewer and Water Rate Study Report (Report) to be used as an administrative record. The Report highlighted the major issues and decisions made during the course of the Study, provided an overview of operations, CIP, and the financial plan, and discussed and explained the cost of service analysis and methodology used to develop the final rates. The explanation of the methodology found within the Report demonstrates that the rates are equitable, reflect the City's policies and values, and are driven by the City's revenue requirements. The Final Report was submitted to the City in May 30, 2012 for the Public Hearing in June 2012. Rates were adopted on August 1, 2012.

Since the Recycled Water, Sewer, and Water Rate Study in 2011, each year RFC was retained by the City to update its water, RW and sewer financial plan with updated financial information including the operating budget, and projections for sales, and water supply costs. In 2013, the City again requested RFC to conduct the cost of service study for its Recycled Water (RW) Rates as the Water Reclamation Plant (WRP) expanded to a peak capacity of 5.0 million gallons per day (MGD) from 2.2 MGD. The Study involved the evaluations of the RW financial plan using the updated projected sales and relevant financial information and the cost of service analysis and rate development for existing and expanded water services.

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PROJECT UNDERSTANDING

RFC is familiar with water rates throughout Orange County and the various water supplies within the County given that we recently assisted the Municipal Water District of Orange County, El Toro Water District, Trabuco Canyon Water District, Huntington Beach, San Clemente, San Juan Capistrano, and Santa Margarita Water District on financial and rate consulting projects. We are currently assisting the City of Orange in developing water and wastewater rates, and will soon start on water budget-based rates for the City of Tustin. Through these projects we have gained a thorough understanding of local agency water rate-setting practices.

The proposed project team has developed over two dozen water budget rate structures in California and is a trusted advisor for the most complicated water budget rate structure issues. Our understanding of the overarching goals for this study are as follows:

1. Evaluate Conservation-Based Rate Structures
2. Develop a 10-Year Financial Plan
3. Present to City Council and at a Public Hearing

AGENCY NAME	WATER BUDGED RATE STUDIES CONDUCTED
East Valley Water District	2014 - 2015
Elsinore Valley MWD	2013 – 2015
El Toro Water District	2009 Original Study & 2010 – 2016 Updates
Helix Water District	2014 – 2015
Las Virgenes Municipal Water District	2014 – 2015
Rancho Califronia Water District	2009 – 2010 Original Study & 2014 Update
Rincon Del Diablo Water District	2014 – 2015
Western Municipal Water District	2009-2011 Original Study & 2013 Update
City of San Juan Capistrano	2013 – 2014
City of San Clemente	2012 Original Study & 2013 – 2015 Updates

GOAL 1: EVALUATE CONSERVATION-BASED RATE STRUCTURES

WATER BUDGET-BASED RATES

The City would like to analyze the feasibility of water budget-based rates. RFC has conducted hundreds of water and wastewater rate studies and we are a leader in the development of water budget rates. Sanjay Gaur, Project Manager, has completed 15 water budget rate studies. Habib Isaac, Technical Advisor, has conducted 5 and Sudhir Pardiwala, PE, Project Director, has conducted 8 water budget rate studies. The table shown above displays a sample of the water budget rate studies in California completed by RFC team members. Contact information, for reference purposes, is provided in the Experience section.

TIERED RATES

RFC will review the City's current tiered rates and develop revised

tiers if deemed appropriate. Two recent challenges facing California water utilities are: 1) decreased water sales due to the drought; and, 2) ensuring rates meet Proposition 218 requirements. For agencies with tiered rates such as Garden Grove, that means rates must be based on the cost to serve water in those tiers to meet Proposition 218 requirements. Tiered rates depend on supply sources and costs, the peaking characteristics of each tier, and the City's conservation programs. RFC has established tiered rates and water budget-based rates for hundreds of water purveyors in California. RFC assisted both the City of San Juan Capistrano and the Sweetwater Authority in dealing with legal challenges related to their tiered rate structures. Tiered rates do not violate Proposition 218 as long as the tiered rate derivation clearly shows the link between the derived rate and the cost to serve each tier. The City currently has a capital improvement charge to pay for the capital improvement program as well as a pass through component. We will review and update these as appropriate.

RFC published a well-known reference on water and wastewater pricing entitled *Water and Wastewater Finance and Pricing, The Changing Landscape*. RFC staff members also contribute to AWWA's *Manual M1* (including our Project Manager, Sanjay Gaur), which is the authoritative reference on water rate setting. Therefore, RFC has rate-setting and cost of service (COS) experts that are skilled at explaining the basic principles of COS-based rates.

GOAL 2: DEVELOP A TEN-YEAR FINANCIAL PLAN

It is crucial to have a sound financial plan with which to set rates. The financial plan will project revenues, operating and capital expenses, and reserve (fund balance) levels for a ten-year period. The model will incorporate pass-throughs and multi-year revenue adjustments. The City's revenue will be affected by changes in total water demand and, therefore, RFC will review population projections, assess new development potential, and incorporate recent customer consumption.

RFC's models include a dashboard through which users can instantaneously appreciate the impacts of changes to assumptions/variables such as water use, revenue adjustments, reserve funding/use, CIP, and debt issues. The user can quickly analyze and view in graphical format the effect of each variable on the financial plan. RFC models can save multiple scenarios (for example - various levels of capital funding, reserve funding, and reductions in water use during a drought) so City staff can compare between scenarios to understand the implications of each scenario. The model's dashboard will be an indispensable tool in helping Council and staff evaluate the use of reserves, rate adjustments, and debt issuance. Financial planning helps fund future capital needs through a steady, measured build-up of cash reserves as opposed to requiring drastic rate spikes.

GOAL 3: PRESENT TO CITY COUNCIL AND AT A PUBLIC HEARING

As an option, RFC can do a pricing objectives workshop with City Council at the beginning of the project in which we define the pricing objectives and solicit feedback regarding City Council's rate-setting goals. We will explain the pros and cons of each rate structure and each rate structure's ability to achieve the pricing objectives so that City Council can make an informed decision regarding the selection of the most appropriate rate structure for its community.

To implement our study findings, RFC and the City must generate consensus with the City's constituency. Therefore, our rate explanation must be clear and simple. RFC has helped implement rates for hundreds of agencies and is well known for presenting thoughtful and concise presentations and reports. RFC will present three times to City Council in which the last presentation is the Public Hearing. RFC can also assist the City with its public outreach efforts and Proposition 218 notice materials.

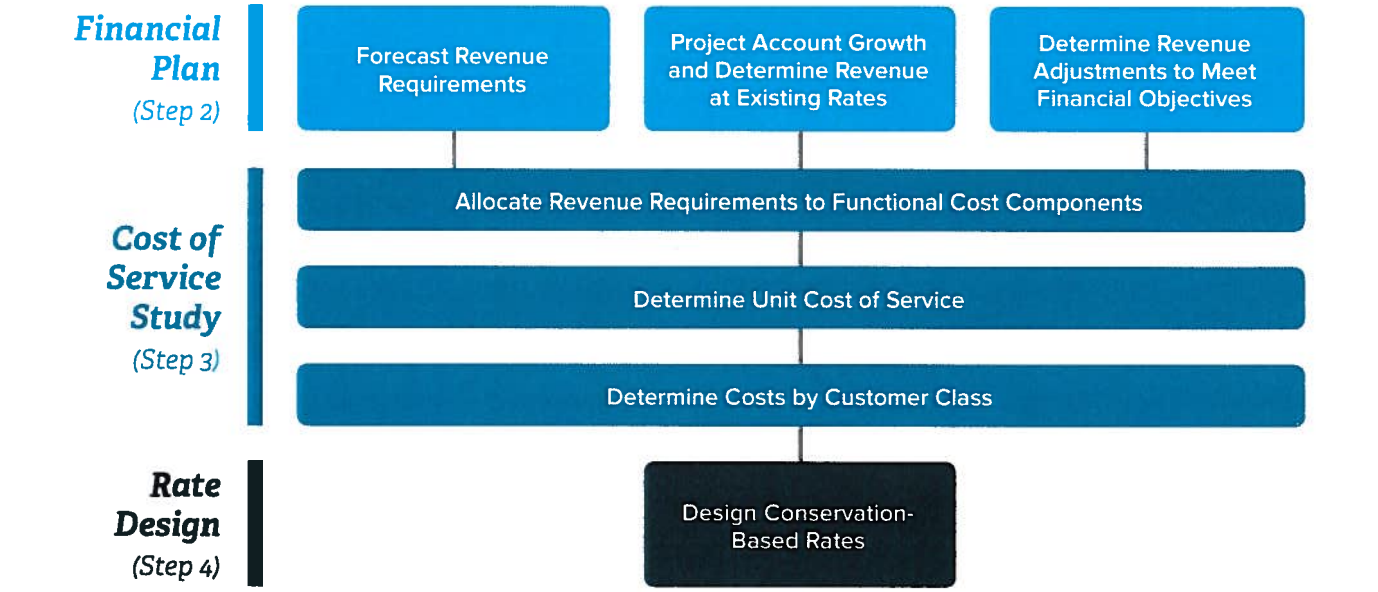
RATE STUDY PROCESS

Our proposed project approach entails several distinct, yet interrelated work efforts that will require coordination between City staff and RFC team members. RFC will collaborate with City staff via scheduled in-person meetings and web conferences for the orderly transfer of information and to cultivate City staff's sense of ownership over the final work product. The study consists of five main steps as described in the following.

1. POLICY REVIEW
RFC will start the rate-making process with a due diligence phase to understand the underlying reason and/or goals for the rate study. This includes a kick-off meeting with staff to ascertain goals and objectives. We will review your policies prior to the kick-off meeting, such as reserve policies and debt service covenants to understand the financial constraints with which to build a financial plan in Step 2.

2. FINANCIAL PLAN DEVELOPMENT
We will then determine future revenue requirements to sufficiently fund the utility's operation and maintenance (O&M) and capital replacement and refurbishment (R&R) program. To preserve the utility's financial integrity, we will evaluate current and projected revenues, water usage, expenses including water purchase costs, and the appropriate use of debt. We will quantify the drought's effect on future City revenue, water purchase and treatment costs, and incorporate major capital projects – financed with either long-term debt, equity (cash from reserves), or both. As such, the City's most recently completed Master Plans will be folded into the financial plan to fully fund its capital needs throughout the planning horizon. Steps 2 through 4 are further described and broken down in the graphic below.

Rate-Setting Process



RATES DO MORE THAN SIMPLY RECOVER COSTS. PROPERLY DESIGNED RATES SHOULD SUPPORT AND OPTIMIZE A BLEND OF VARIOUS UTILITY OBJECTIVES, SUCH AS AFFORDABILITY FOR ESSENTIAL NEEDS, FAIRNESS AND EQUITY, REVENUE SUFFICIENCY AND STABILITY, AND ENSURING EASE OF IMPLEMENTATION.

3. COST OF SERVICE ANALYSIS

The annual costs of providing water services should be allocated among customer classes commensurate with their service requirements – i.e., how they use the water system. In this step, costs are functionalized (supply, treatment, distribution etc.) and then allocated to cost components (base, extra capacity, fire etc.) and distributed to respective customer classes according to the industry standards provided in AWWA's *Manual M1* for water-related services. RFC staff has contributed to several chapters in AWWA's *Manual M1*.

4. RATE DESIGN

Rates do more than simply recover costs. Properly designed rates should support and optimize a blend of various utility objectives, such as affordability for essential needs, fairness and equity, revenue sufficiency and stability, and ensuring ease of implementation. In this step, RFC will design rates according to industry standards that meet the City's rate-setting objectives and are defensible in light of recent court cases. RFC will develop a customized rate model to assess different rate alternative customer impacts to facilitate informed decision-making. The results will be summarized in both an easy-to-understand graphical format and a tabular format to ease communication with elected officials.

5. RATE ADOPTION

In the last step of the rate-making process, to comply with the Proposition 218 requirements, the results of the analyses are documented in a Study Report to help educate the public about the rationale and justifications behind the proposed changes and their anticipated financial impacts in layman's terms. This will serve as the administrative record to justify the proposed rate structure. At a public hearing, 45 days after sending out the public notices, RFC will present our recommendations to assist the City's adoption of the new water rates.

SCOPE OF **SERVICES**

The utility industry consistently seeks RFC as an advisor to lead the national discourse on rates and rate structures. The value RFC adds to the rate design process is based not only on the level of technical expertise that results from broad and deep experience, but the ability to glean the best ideas and strategies through a collaborative process with its clients.

TASK 1 – PROJECT MANAGEMENT AND INITIATION (TASKS 1 AND 2 IN THE RFP)

TASK 1.1 – ONGOING PROJECT MANAGEMENT AND QUALITY ASSURANCE/QUALITY CONTROL PROCESS

Our project management approach stresses communication, teamwork, objectivity, and accountability. This task includes general administrative duties including client correspondence, billing, project documentation, and administration of the study control plan. We believe in a no-surprises approach and communicate with clients on a regular basis through face-to-face meetings, web conferences, and telephone conferences so that the client is aware of the project status at all times.

RFC's quality assurance / quality control (QA/QC) process ensures high quality, accurate work. QA/QC is conducted by the Project Manager, the Project Director, and the Technical Advisor. The Technical Advisor's primary responsibility is to review the work effort for consistency, accuracy, and validity and ensure that the cost of service and rate model is functioning properly and is based on sound rate-making principles. The Technical Advisor also reviews the report not only to ensure that it is a high quality comprehensive report that is consistent with model results, but that it also clearly conveys the rate derivation.

TASK 1.2 – PROJECT INITIATION AND DATA COLLECTION

RFC uses the kick-off meeting to perform our due diligence to ensure that project stakeholders agree to the project's goals, approach, work plan, schedule, and the study's priorities. As part of the meeting, RFC will:

- First and foremost, discern the study's major drivers
- Discuss the City's current rates and how they were developed
- Identify any new customer classes (if warranted) that may be considered as part of the update
- Work with staff to identify and prioritize pricing objectives
- Identify alternative rate structures
- Discuss reserves and reserve policies
- Discuss debt policies (if the City has debt or plans to take on debt) for capital funding
- Evaluate the various policy options available to meet the City's goals and objectives
- Review the data request list and pinpoint data gaps or questions

We will submit a detailed data request prior to the kick-off meeting so that the City can assemble the appropriate data in the required format. The Project Team will study this data diligently to understand the City's revenue streams, operating and capital expenses, and customer base and use patterns. In addition, RFC will review the City's current reserve structure and propose reserve recommendations that are consistent with

industry standards as well as the City's risk management tolerance to maintain financial stability.

Meetings: *On-site kick-off meeting with City staff*
Deliverables: *Data request list and kick-off meeting minutes*

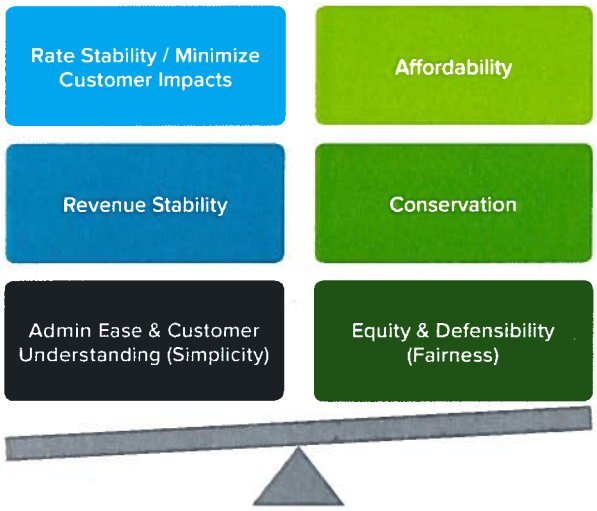
OPTIONAL TASK 1.3 – RATE SETTING AND PRICING OBJECTIVES WORKSHOP WITH CITY COUNCIL

RFC can conduct an optional rate-setting and pricing objectives workshop with the City Council. The workshop will begin with an overview of the rate study process and RFC's cost of service methodology. The goal of the workshop is for RFC to understand the City's rate-setting vision and identify the most important pricing objectives. Pricing objectives often compete with one another and, therefore, knowing what is most important to stakeholders helps RFC recommend a proper rate structure that best coincides with the City's objectives, current best management practices and current rates. As part of the pricing objectives overview, RFC would define each pricing objective and describe the interrelation of each pricing objective.

TASK 2 – FINANCIAL PLAN DEVELOPMENT (TASKS 3, 4, AND 5 IN THE RFP)

TEN-YEAR FINANCIAL PLAN MODEL DEVELOPMENT

This task includes Tasks 3,4, and 5 of the RFP. During the financial plan development, we will assess the additional revenue needed to ensure the utility's financial integrity. We will do so by projecting the City's existing rate revenue, other operating and non-operating revenues, debt service payments (if the City has debt), and operating and capital expenses over a seven-year period. Existing rate revenue is based on anticipated water sales – which during the last few years have been declining for many water purveyors. With the recent drought conditions, many agencies have seen curtailed water use which must be incorporated into future rates. RFC will make prudent water sales assumptions with input from City staff. This task will also project yearly O&M expenses such as annual water purchase costs, salaries and benefits, power, materials, reserve contributions, and debt service using City-approved inflationary assumptions.



CAPITAL IMPROVEMENT PLAN

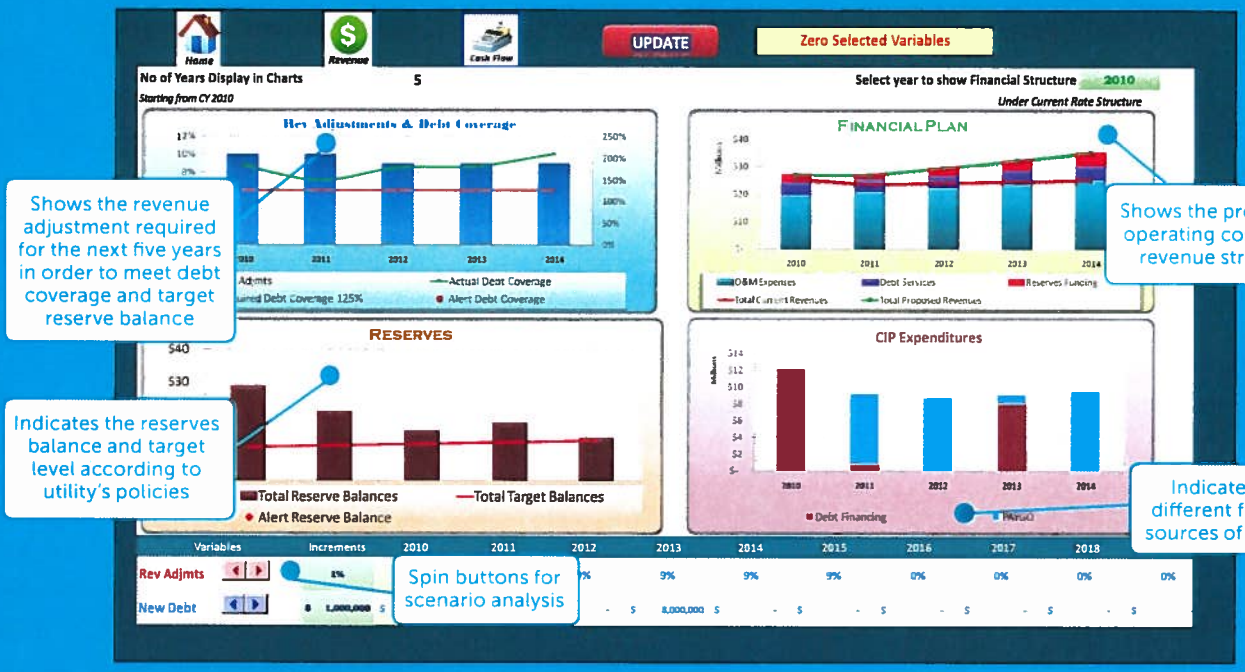
The ten-year financial plan will also model the sources and uses of funds for the operating reserve and capital reserve. For a typical capital reserve, the sources of funds include system development charges (capacity/impact fees), rate revenue, cash reserves, debt proceeds (if applicable), and grant funding. Modeling the yearly ending balance in the capital reserve allows stakeholders to determine the rate impacts of various capital improvement plan scenarios and assess the proper use of debt and reserves to fund capital projects.

REVENUE REQUIREMENTS

RFC will develop a ten-year cash flow analysis to determine the revenue adjustments needed while minimizing sharp rate fluctuations, and will also review reserve policies to recommend appropriate reserve balances (operating, capital, rate stabili-

SAMPLE MODEL DASHBOARD

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



zation, etc.) that are consistent with industry standards as well as the City's risk tolerance. The financial plan will be presented to City staff in an easy-to-understand format on an interactive dashboard which will show the impacts of various assumptions so that staff can make informed decisions regarding revenue adjustments, capital financing alternatives through rates, debt, and reserve balances. A snapshot of a sample dashboard is shown above. Several features of the model's dashboard include the ability to show:

- Revenue adjustments for the next ten years in order to meet debt coverage (as applicable), fund capital projects, and reserves
- Reserve balances and reserve targets as well as debt service coverage ratios
- Projected operating costs and revenue streams
- Operating cost break down (O&M, water purchases)
- Different funding sources of CIP such as PAYGO (rate funding), debt financing including the City's debt capacity
- Spin buttons (dynamic selection options) that allow the quick selection of inputs for scenario analyses
- Toggle to include/exclude a "pass-through" mechanism for certain costs, which then automatically update the necessary revenue adjustments of the model

As adjustments are made to different assumptions, the model has the capability to save adjustments as separate scenarios so that City staff and elected officials can review and select the most appropriate financial plan and rate design. To review separate scenarios, RFC has developed a scenario manager which saves multiple scenarios for a comparative analysis. The City will be able to evaluate several scenarios since the dashboard and scenario manager are fast and efficient ways to compare between various scenarios. This has proven to be particularly useful when making presentations to staff or Council members, allowing them to fully appreciate the impacts of their decisions instantly.

RFC will conduct one to four web meetings with City staff to develop different financial plan scenarios.

Meetings: *Up to four web meetings with City staff*
Deliverables: *Financial plan model in Microsoft Excel 2013*

TASK 3 – COST OF SERVICE ANALYSIS (TASKS 6 AND 7 IN THE RFP)

The cost of service analysis will be based on industry standards and methodologies approved by AWWA and described in their *Manual M1* (of which our Project Director, Sanjay Gaur, was a contributing author). Cost allocations among customer classes will be based on the AWWA-approved Base-Extra Capacity approach which focuses on the different usage patterns (or peaking factors) demonstrated by each customer class. At this stage, RFC will identify if different customer classes are warranted to ensure an equitable rate for each class.

Based on the revenue requirements identified in Task 2, O&M expenses will be allocated to the various cost components including capacity-related costs, commodity (base) costs, customer costs, pass-through components, conservation costs, and other direct and indirect costs consistent with industry standards. The end goal of this task is to distribute the cost components to the customer classes based on the cost responsibility of each. The result is the total cost to serve each customer class and is used as the basis to develop rates.

Throughout the water cost allocation process, RFC will incorporate the City's policy considerations, as well as current federal, state, and local rules and regulations such as Proposition 218 and California Urban Water Conservation Council guidelines. RFC is very familiar with Proposition 218 requirements and its implications on water rates. RFC has assisted many Orange County agencies including Santa Margarita Water District, San Clemente, San Juan Capistrano, El Toro Water District, and Yorba Linda Water District, to name a few. Our Project Team has extensive experience with Proposition 218 and has conducted numerous conference sessions on the topic.

Meetings: *Up to three web meetings with City staff as necessary*
Deliverables: *Cost of service analysis for water enterprise in Microsoft Excel 2013*

TASK 4 – UTILITY RATE DEVELOPMENT (TASKS 8 AND 9 IN THE RFP)

CALCULATE WATER RATES

RFC will develop a water rate model with the flexibility to compare the current rate structure with at least two proposed rate structure alternatives including water budget-based rates. The model will have the capability to examine different rate scenarios such as increasing revenue stability in light of competing objectives such as affordability, customer conservation, and other City pricing objectives. We will also revise the capital rate component, the pass-through charges and multi-year rates. We will plan on two presentations to City Council during the rate development process. Task 6 is for the Public Hearing.

TASK 4.1 - TIERED RATES

For tiered rates to meet Proposition 218, we will show the nexus between the cost to serve water in each tier and the rate in each tier by tabulating the tiered rates to show each rate component - which may include, but is not limited to, water supply costs, delivery costs, peaking costs, and conservation costs, to name a few. This rate calculation will communicate to customers the cost drivers behind the rate for each tier. An example of this derivation is shown by the rates RFC developed for the El Toro Water District, which are shown in the table on the following page. Water supply unit rates in Tier 1 and Tier 2 are associated with low water supply costs, and Tier 3 and Tier 4 are based on the cost to expand the supplemental water supply and to fund conservation programs. While RFC is not a law firm, we have extensively used this methodology for rate calculations so that rates and tiers are defensible and meet Proposition 218 requirements.

TASK 4.2 - WATER BUDGET RATES

Water budget rates are tiered rates in which the tiers are defined by each customer's water budget. With water budgets, the tiers can be defined for the single-family (SFR) class based on an allotment for indoor use and an allotment for outdoor water use. RFC will develop a water budget rate model that will calculate

Sample Water Rate Components

Rate components communicate to customers the drivers and rationale behind the rates

WATER RATES ($/HCF)	WATER SUPPLY	DELIVERY (PEAKING)	CONSERVATION	RECYCLED WATER	REV OFFSET	FY 2015
Tier 1 – Essential Indoor	$2.38	$0.15	$0.00	$0.00	-$0.19	$2.34
Tier 2 – Efficient Outdoor	$2.38	$0.30	$0.00	$0.00	$0.00	$2.68
Tier 3 – Inefficient Use	$2.38	$0.45	$0.35	$1.86	$0.00	$5.04
Tier 4 – Excessive Use	$2.38	$0.60	$0.35	$3.71	$0.00	$7.04
Uniform – CII	$2.38	$0.17	$0.04	$0.19	-$0.15	$2.63

rates and customer impacts and conduct sensitivity analyses. The water budget rate model will take into account household population, seasonal effects associated with the amount of water (in inches) needed to support certain vegetation - with turf having one of the highest irrigation demands. Depending on whether we do a simplified water budget or a customer-specific water budget, the City may have to integrate County or Santa Ana Watershed Project Agency (SAWPA) parcel data and City GIS data with the City's consumption data from the billing system, so that we know each customer's lot size and irrigable area. The water budget rate model will have the following features:

- **Water Budget Allocation** - The ability to evaluate different policy options associated with defining indoor and outdoor use efficiency such as landscape area and weather. In addition, users can easily adjust variables for household size and the gallons used per capita per day. Outdoor water budgets may be determined through the use of SAWPA GIS data and derived based on the definitions outlined and established by the SAWPA PA22 Committee. To do so, the City will need to integrate water account data with SAWPA data. We will then compare the water budget-based rates with the tiered rates.
- **Rate Calculations and Customer Impact Analysis** - The model will calculate the revenue recovered in each tier and the associated price for each tier. In addition, the model will be able to easily update tiered rates based on future revenue requirements. In the example at the top of the following page, our analysis reflects how each customer class uses water in relation to their established water budget for indoor and outdoor needs.

OUR MODELS

The sample rate dashboard (shown on page 47) displays key variables and results in real-time and will facilitate water budget discussions. To help facilitate informed decision making, the model will also include a financial impact summary on customers resulting from the proposed budget-based rate structure as shown by the graphs 5 and 6 on the sample rate dashboard on page 47. The itemized list below describes each section of the sample water budget rate dashboard.

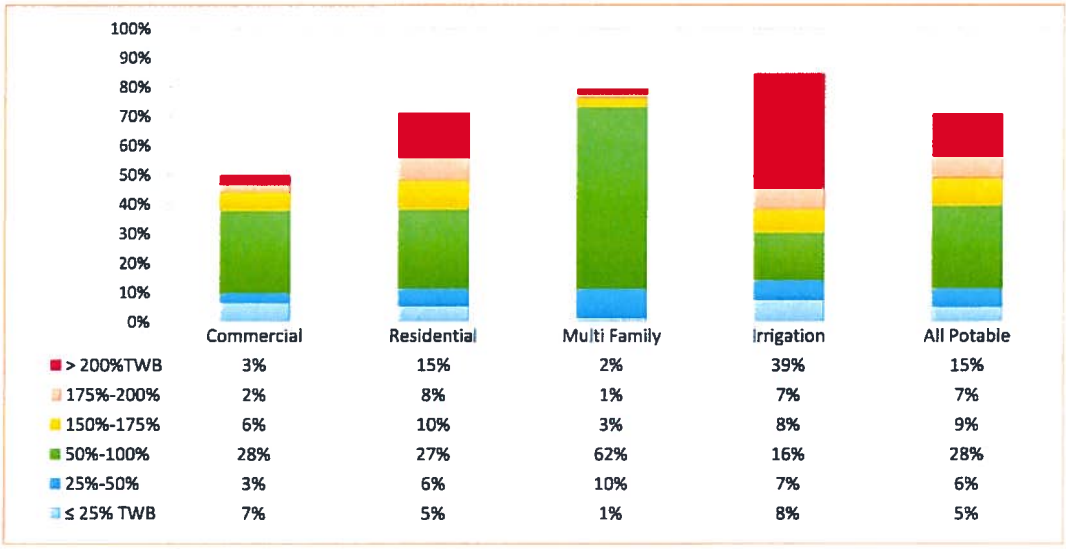
Key Variables

1. Allocations to cost components — The total revenue requirement is first functionalized - such as water supply, pumping, treatment, etc. and then allocated to the cost components (supply, delivery, conservation etc.).
2. Water Supply Cost information — The water supply costs in increasing order which are the primary driver for higher rates in the higher tiers.
3. Cost recovery in tiers — This area shows which costs components are recovered in each tier.

Results

4. Resulting Proposed Rates — The proposed rates based on the key variables.

Potable Water Customer Impacts Summary
FY 2014 Usage with 2015 and 2016 Rates



	Commercial	Residential	Multi Family	Irrigation	All Potable
> 200%TWB	3%	15%	2%	39%	15%
175%-200%	2%	8%	1%	7%	7%
150%-175%	6%	10%	3%	8%	9%
50%-100%	28%	27%	62%	16%	28%
25%-50%	3%	6%	10%	7%	6%
≤ 25% TWB	7%	5%	1%	8%	5%

5. Sample SFR bill impacts at various usage levels — A graphical representation of how the proposed rate structure will impact customers' bills. Note the ability to change the meter size, lot size, pumping zone, and the billing period for the bill calculations. This tool has proven particularly useful for public outreach campaigns and during the Proposition 218 process.
6. Overall customer impact — A summary of customer bill impacts. RFC will compare the impact between traditional tiers versus budget-based tiers. In either case, the rates will be cost-based. This is an invaluable tool to facilitate informed decision making and to assist the City in determining whether budget-based rates are an appropriate rate structure for the City and its customers.

TASK 4.3 – PERFORM CUSTOMER IMPACT ANALYSIS

Rate adjustments stem from: 1) a change in revenue requirements; or, 2) a change in the rate structure. The total rate adjustment can sometimes cause "rate shock" to customers. As such, RFC will determine the potential financial impact on customers that result from the proposed rate structure as opposed to a revenue requirement increase. In our impact analysis graphics, we generate monthly bills at each level of usage assuming the new proposed rate structure was already in place to determine the true impact of the new rate structure on City customers. The customer impact analysis will include a series of tables and figures that show projected rate impacts by customer class at various levels of usage. As an example, the customer impact illustration displayed on page 48 shows that 64 percent (46% + 18%) of the customers will see no more than a $2 increase in their bill.

TASK 4.4 – MODEL TRAINING

RFC understands the importance of creating a model that will be used by staff for future rate setting. We will instruct staff not only on model use, but also on the theory of rate setting so that staff can prepare future rates.

Meetings: *Three meetings are part of this task. Two in-person meetings with City Council to review proposed water rates and customer impacts, and the third meeting is for model training. The Public Hearing is accounted for in Task 6. RFC would also hold web meetings with City staff as necessary to prepare for the City Council meetings.*

Deliverable(s): *Draft water rate model in Microsoft Excel 2013 showing proposed rates and customer impacts*

Sample Waer Budget Rate Dashboard

Features of the Dashboard denoted with letters and numbers in the model below are described in the text.

Cost Allocation Factors		Usage Rate				Readiness-To-Serve		
						Capacity	Meters	B&CS
Revenue Requirements w/o Rev Offsets	Total Cost of Service	Water Supply	Delivery	Energy	Conservation	Current Charges	Current Charges	Current Charges
Water Supply	$3,470,283	100%						
Base	$4,876,559		41%			59%		
Energy	$1,571,000			100%				
Peaking Costs	$438,151				67%	33%		
Meter Service	$231,800						100%	
Billing & Customer Service	$2,531,972				10%			90%
Conservation	$241,736				100%			
Total	$13,361,500	$3,470,283	$1,998,230	$1,571,000	$789,656	$3,021,706	$231,800	$2,278,824

1

Cost Allocation to Tiers	Delivery	Conservation	Rev Offsets	Usage in Tiers	Water Supply Info	Unit Costs	Quantity Available
Water Budget				*2,656,152 ccf*	Baseline	$0.86 /ccf	11,441 AF
Tier 1	100%		100%	993,979 ccf	MWD Tier 1	$1.73 /ccf	2,300 AF
Tier 2	100%			1,208,838 ccf	MWD Tier 2	$2.24 /ccf	
Tier 3		100%		288,749 ccf	Water loss	3%	
Tier 4		100%		164,586 ccf			
Others				*1,387,617 ccf*			
Within BA	100%		100%	929,717 ccf			
Outside BA		100%		457,900 ccf			

3

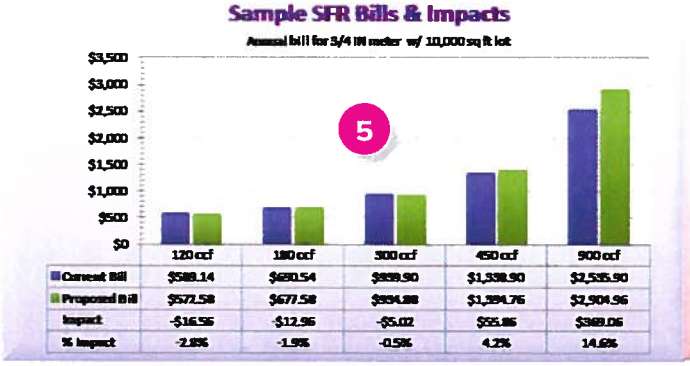
2

Readiness-To-Serve	Current	Proposed	Capacity	Meters	B&CS	Energy Rates	Current	Proposed
Inside City						Projected Revenues	$1,571,000	$1,571,000
5/8 IN	$64.39	$64.39	$35.17	$2.70	$26.52	Zone 1	$0.25	$0.25
3/4 IN	$64.39	$64.39	$35.17	$2.70	$26.52	Zone 2	$0.39	$0.39
1 IN	$83.71	$83.72	$45.73	$3.51	$34.48	Zone 3	$0.53	$0.53
1 1/2 IN	$139.01	$139.01	$75.93	$5.83	$57.25	Other Zones	$1.29	$1.29
2 IN	$199.62	$199.62	$109.03	$8.37	$82.22			
3 IN	$296.21	$296.22	$161.80	$12.42	$122.00			
4 IN	$450.78	$450.79	$246.22	$18.90	$185.67			
6 IN	$785.65	$785.66	$429.13	$32.94	$323.59			
8 IN	$1,107.62	$1,107.65	$605.00	$46.45	$456.20			

Quantity Rates		Current	Proposed	Water Supply	Delivery	Conservation	Rev Offsets
Water Budget							
	Tier 1	$1.44	$1.28	$0.86	$0.64	$0.00	-$0.22
	Tier 2	$1.44	$1.50	$0.86	$0.64	$0.00	$0.00
	Tier 3	$2.41	$2.60	$1.73	$0.00	$0.87	$0.00
	Tier 4	$2.41	$3.11	$2.24	$0.00	$0.87	$0.00
Others							
	Tier 1	$1.44	$1.28	$0.86	$0.64	$0.00	-$0.22
	Tier 2	$2.41	$2.60	$1.73	$0.00	$0.87	$0.00

4

Lot Size: 10,000 sq ft | Month: Annual
Meter Size: 3/4 IN | Zone: Zone 1 | Usage: 900 ccf
Select Customer Class to Display on Customer Impact Chart: All



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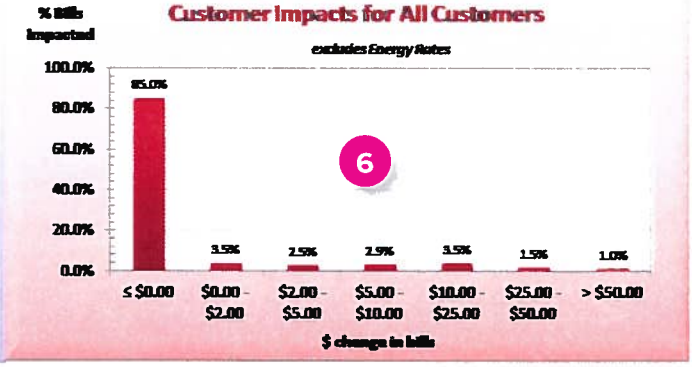

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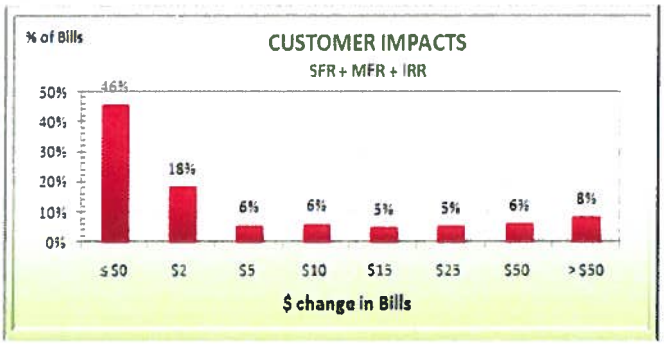
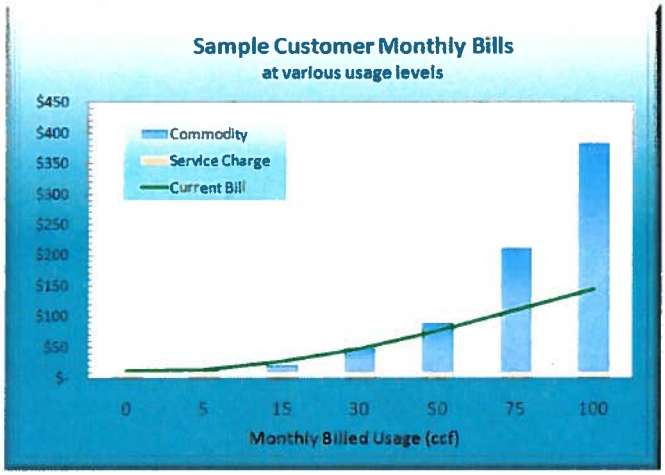
The graphical representations of overall financial impacts on customers are tools for stakeholders to make informed decisions regarding different policy options and variables.





TASK 5 – REPORT PREPARATION

TASK 5.1 –DRAFT REPORT PREPARATION

The draft report will include an executive summary highlighting the major issues and decisions reached during rate development meetings with stakeholders. The main body of the report will include a brief physical description of the water system, an overview of operation and maintenance expenses, the capital improvement plan, the financial plan, and the proposed rates. It will also contain a discussion on rate structure alternatives, rate design assumptions, and methodologies used to develop the rates. The City and the City's Attorney will provide comments for incorporation into the final draft. The report will serve as the City's administrative record and will show the nexus between City costs and proposed rates.

TASK 5.2 – FINAL REPORT

RFC will incorporate all prior City staff and Council input into the final draft. The final report will be submitted to address Proposition 218 requirements.

Meetings: *Up to three conference calls to review draft report*
Deliverables: *Fifteen hard copies of each report and an electronic copy of each report*

> *"Steve (Gagnon), I want to say that this is the best Rate Study that I have ever reviewed. You really took to heart what I have been asking rate consultants to do for some time. You thoroughly explained the process you used, and you tied your explanation directly to each table."*
>
> - Kelly Salt, Attorney at Best, Best and Krieger
> (Reviewed RFC reports for Sweetwater Authority and Santa Fe Irrigation District)

TASK 6 – PROPOSITION 218 PRESENTATION

Task 6 is the Public Hearing presentation as required by Proposition 218. This task includes time to prepare a presentation, incorporate City staff comments into a final presentation, and present at a Proposition 218 hearing and answer Council and stakeholder questions.

Meetings: *One in-person Public Hearing presentation*
Deliverables: *One draft and final presentation (graphics and/or charts either in Microsoft PowerPoint format or handouts)*

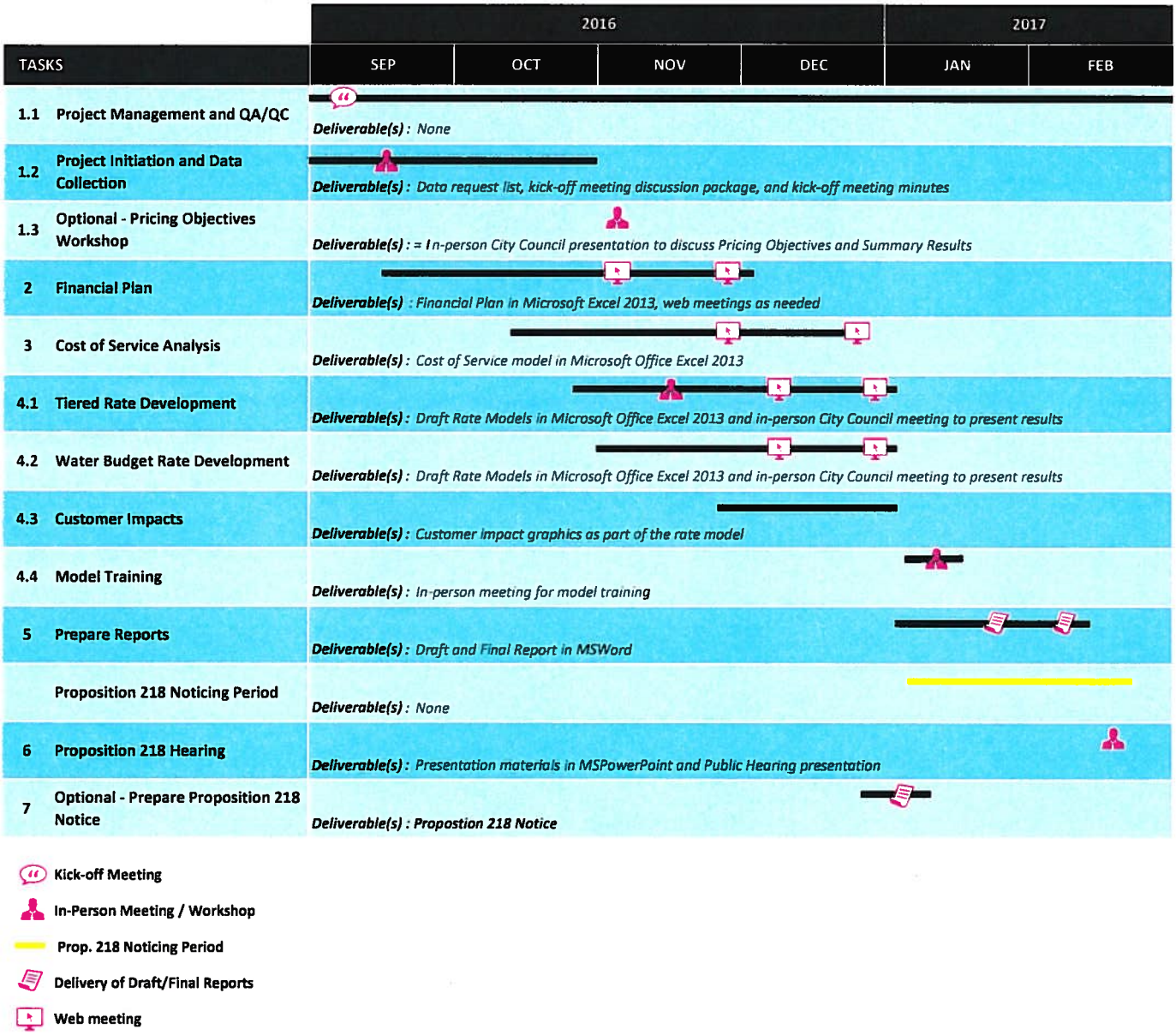
OPTIONAL TASK 7 – PROPOSITION 218 NOTICE

RFC can prepare the Proposition 218 Notice and for review by the City's Attorney. The notice will outline the proposed rate changes, explain the right to challenge the rates, and will meet and comply with the noticing requirements of Proposition 218.

Meetings: *One conference call to discuss the Proposition 218 Notice*
Deliverables: *Proposition 218 Notice*

PROJECT **SCHEDULE**

While the City has not requested a schedule, RFC proposes the schedule below, which is the typical six-month duration for most rate studies and recognizes the time it takes to procure data associated with water budget rate studies. We will work with the City to make any adjustments necessary to the schedule to meet the City's needs.



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COST ESTIMATE

RFC proposes to complete the scope of work outlined in our proposal on a time-and-materials basis with a not-to-exceed cost of **$72,118** without inclusion of the optional task, including related expenses. The not-to-exceed cost including the optional task is **$79,864**. The following table provides a breakdown of the estimated level of effort required for completing each task described and the hourly billing rates for the personnel scheduled to complete the project. Expenses include costs associated with travel, and a $10 per hour technology charge covering computers, networks, telephones, postage, etc.

	Task Descriptions	Web Meetings	In-Person Meetings	Hours Requirements							Total Fees & Expenses
				PD	PM	APM	TA	SC	Admin	Total	
	HOURLY RATES			$305	$275	$195	$225	$170	$75		
1.1	Project Management and QA/QC				2	24				26	$5,490
1.2	Project Initiation and Data Collection		1		6	10		14		30	$6,526
2	Financial Plan	4			1	16		26		43	$8,245
3	Cost of Service Analysis	3			1	16	2	24		43	$8,355
4.1	Tiered Rate Development				1	16	2	26		45	$8,715
4.2	Water Budget Rate Development		2	2	4	20	2	48		74	$15,245
4.3	Customer Impacts					2		12		14	$2,570
4.4	Model Training		1			2		12		14	$2,761
5	Prepare Reports			2		14	2	40	4	60	$11,490
6	Proposition 218 Hearing		1			8		4	2	14	$2,721
	TOTAL ESTIMATED MEETINGS / HOURS	7	5	4	15	128	8	206	6	363	
	PROFESSIONAL FEES			$1,220	$4,125	$24,960	$1,800	$35,020	$450	$67,575	
										Total Fees	$67,575
										Total Expenses	$4,543
										TOTAL FEES & EXPENSES	$72,118

OPTIONAL TASKS

	Task Descriptions	Web Meetings	In-Person Meetings	Hours Requirements							Total Fees & Expenses
				PD	PM	APM	TA	SC	Admin	Total	
	HOURLY RATES			$305	$275	$195	$225	$170	$75		
1.3	Optional - Pricing Objectives Workshop		1		1	14	1	10		26	$5,381
7	Optional - Prepare Proposition 218 Notice					1		12		13	$2,365
	TOTAL ESTIMATED MEETINGS / HOURS	0	1	0	1	15	1	22	0	39	
	PROFESSIONAL FEES			$0	$275	$2,925	$225	$3,740	$0	$7,165	
										Total Fees	$7,165
										Total Expenses	$581
										TOTAL FEES & EXPENSES	$7,746

PD - Project Director - Sudhir Pardiwala
PM - Project Manager - Sanjay Guar
APM - Project Manager- Steve Gagnon
TA- Technical Advisor - Habib Isaac
SC - Staff Consultant
Admin - Administrative Staff

TOTAL FEES & EXPENSES (INCLUDING OPTIONAL TASKS): $79,864

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APPENDIX A: PROJECT TEAM RESUMES

SUDHIR PARDIWALA, PE

PROJECT DIRECTOR
Executive Vice President

PROFILE

Mr. Pardiwala has 39 years of experience in financial studies and engineering. He has extensive expertise in water and wastewater utility financial and revenue planning, valuation and assessment engineering. He has conducted numerous water, storm water, reclaimed water and wastewater rate studies involving conservation, drought management, risk analysis, as well as system development fee studies, and has developed computerized models for these financial evaluations. Mr. Pardiwala has assisted public agencies in reviewing and obtaining alternate sources of funding for capital improvements, including low interest state and federal loans and grants. He has assisted several utilities with State Revolving Fund and Water Reclamation Bond loans. Mr. Pardiwala authored the chapter on reclaimed water rates in the *Manual of Practice, Financing and Charges for Wastewater Systems*, published by the Water Environment Federation (WEF) and presented papers at various conferences. He also authored a chapter entitled, "Recycled Water Rates," for the Fourth Edition of the industry guidebook, *Water and Wastewater Finance and Pricing: The Changing Landscape*. He was vice-chairman of the CA-NV AWWA Business Management Division and Chairman of the Financial Management Committee.

RELEVANT PROJECT EXPERIENCE

CITY OF SAN DIEGO (CA)

Mr. Pardiwala conducted numerous studies for the City of San Diego (City), including a water, wastewater and reclaimed water rate study. The entire wastewater rate study was conducted with extensive stakeholder group involvement because of the changes required in the wastewater rate structure to meet regulatory requirements. In addition, Mr. Pardiwala served as project manager for the City's reclaimed water rate study, impact fee studies for both water and wastewater, and a transportation charges study for agencies contributing to the City's regional wastewater facility. Mr. Pardiwala also managed a water demand study which involved statistical analysis of historical water consumption to model projections based on weather, economic activity, population, inflation, etc. Mr. Pardiwala evaluated the feasibility of a water budget rate structure for the City. He assisted the City with the Proposition 218 noticing and public outreach.

CITY OF BEVERLY HILLS (CA)

Mr. Pardiwala served as Project Manager for RFC's engagement with

TECHNICAL SPECIALTIES

- Cost of service rate studies
- Conservation and drought management studies
- Economic analyses
- Water and wastewater utility cost accounting
- Valuation
- Financial and revenue planning
- Assessment engineering
- Reviewing/obtaining capital improvement funding
- Computer modeling

PROFESSIONAL HISTORY

- Raftelis Financial Consultants, Inc.: Executive Vice President (2013-present); Vice President (2004-2013)
- Black & Veatch: Principal Consultant (1997-2004)
- MWH: Principal Engineer (1985-1997)
- CF Braun: Senior Engineer (1979-1985)
- PFR Engineering Systems: Research Engineer (1977-1979)

EDUCATION

- Master of Business Administration - University of California, Los Angeles (1982)
- Master of Science in Chemical Engineering - Arizona State University (1976)
- Bachelor of Science in Chemical Engineering - Indian Institute of Technology, Bombay (1974)

PROFESSIONAL REGISTRATIONS

- Registered Professional Engineer: CA (Chemical (1981) and Civil (1988))

PROFESSIONAL MEMBERSHIPS

- American Water Works Association
- Water Environment Federation
- California Municipal Finance Officers Association

the City of Beverly Hills (City) water and wastewater rate studies. RFC was engaged by the City to develop a rate and financial planning model that would be used to evaluate alternative rate structures and to provide more detailed forecasts to assist in the preparation of updating rates in future years. RFC modeled numerous alternative rate structures and reviewed customer and revenue impacts before recommending that the City modify its current three tiered rate structure to include a fourth tier that targets large irrigation usage. In addition, RFC recommended that the costs of service based on flow and strength. RFC continues to provide biennial updates to the City model so that rates may be projected in future years.

CITY OF SANTA BARBARA (CA)

Mr. Pardiwala has been assisting the City of Santa Barbara (City) with their water, wastewater and recycled water financial plans and cost of service rates studies involving rates for different customer classes including agriculture, outside City, tiered residential, commercial etc. Wastewater rates were developed for various funding sources including grants and SRF loans. The City is facing severe water supply shortages and water rates included evaluation of multiple drought stages, the rates and impacts on customers as well as funding desalination to provide adequate supplies for the City's customers. RFC also evaluated system capacity fees for new water and wastewater customers.

CITY OF REDLANDS (CA)

Mr. Pardiwala has managed several financial projects for the City of Redlands (City) including water, wastewater and reclaimed water projects. The studies were conducted with extensive stakeholder input and multiple meetings with a Utilities Advisory Commission composed of local residents, businesses, and other interested parties. The first rate studies involved significant rate adjustments as well as rate structure adjustments to ensure financial stability, meet debt coverage and regulatory requirements. The analysis included calculation of outside-City charges and impact fees. The City received user-friendly working rate models for future updates. Mr. Pardiwala assisted the City with State Revolving Fund loans for reclaimed water and potable water. He helped them find grants for the reclaimed water project and water treatment plant upgrade. He has been assisting the City biennially with their water, wastewater and recycled water rates.

CITY OF PALO ALTO (CA)

Mr. Pardiwala was Project Manager for a study for the City of Palo Alto (City) to determine the cost of service rates consistent with Proposition 218. The study involved review of fire service charges, booster pumping rates, strict adherence to cost of service principles. The study was conducted with the participation of a citizens' advisory committee. RFC developed an user friendly rate model, provided City staff training on use of the model. The proposed rates were implemented July 1, 2012. RFC assisted The City with an update developing conservation rates with the State mandated reductions in usage.

CITY OF ONTARIO (CA)

Mr. Pardiwala served as Project Manager on multiple water, wastewater and solid waste rate studies. The study included a comprehensive review of the City of Ontario's revenue requirements and allocation methodology, review of user classifications, a cost of service analysis, and rate design for City users.

RFC designed tiered water rates, recycled rates and wastewater rates considering IEUA rates. Solid waste rates were designed to recover costs. RFC provided the City with a model that is used for planning purposes by the City. The City has engaged RFC multiple times to update these rates, optimize water sources to minimize costs.

OLIVENHAIN MUNICIPAL WATER DISTRICT (CA)

Mr. Pardiwala assisted the Olivenhain Municipal Water District (District) in conducting a water financial plan study and a recycled water rate study to determine the recycled water rates charged to customers. The water financial planning model was developed to assist the District in evaluating different financing alternatives to minimize rate impacts and ensure financial stability. The water model was effec-

tively used in Board meetings and presentations to evaluate the impacts of various scenarios. Additionally, RFC calculated drought/conservation rates for different stages of cutbacks. The recycled water rate study was conducted to determine the recycled water rates charged to customers given that the District obtains recycled water from four different sources: the City of San Diego, Vallecitos Water District, Rancho Santa Fe Community Services District, and the 4S Regional Recycled Water System. The existing agreements defined the costs of different sources of recycled water to the District. To address all of those issues and concerns, RFC developed a recycled water financial and rate model to determine the costs of providing service and the required revenue to be collected from customers. In addition, the model is built to evaluate when the District is able to take over the 4S Regional Recycled Water System, as stated in the agreement with the developer.

CITY OF SACRAMENTO (CA)

Mr. Pardiwala managed a wastewater rate study to examine the charges associated with different types of residential and non-residential customers. The study included a comprehensive review of the City's revenue requirements and allocation methodology, review of City's user classification, a cost of service analysis, and rate design for City users. Sacramento is one of the few large Cities in the State that does not meter residential and a significant number of non-residential customers. The strength and flow allocation to these customers was revised. The resultant rates were fair and equitable and met the fiscal needs of the City's wastewater utility in the context of the City's overall policy objectives and were designed for simplicity of administration, cost effective implementation and ease of communication to customers.

CITY OF VENTURA (CA)

Mr. Pardiwala served as Project Manager for a water, wastewater, and recycled water cost of service and rate study for the City of Ventura (City). The City had not updated its rate structure in 20 years. Additionally, the City was under a cease and desist order that required the City to carry out improvements estimated at more than $55 million, and which the City wanted to start funding to mitigate impacts. The goal of the study was to develop conservation-oriented rates consistent with cost of service to recover adequate revenues to pay for necessary capital improvements, meet debt service coverage requirements, as well as maintaining sufficient reserve requirements. The study included a comprehensive review of the City's revenue requirements and allocation methodology, review of the City's user classification, usage patterns, a cost of service analysis, and rate design for City users. RFC developed long-range financial plans so that the water and wastewater utilities could be financially stable and save costs in the long run. We also assisted the City with developing different water and wastewater rate alternatives with various scenarios as well as calculating outside-city rates. The study was conducted with several meetings and input from stakeholders comprised of customers within the City. RFC educated the Citizen Advisory Committee on the basics of rates, cost allocations, and rate design to obtain their buy-in through the use of the dashboards in the rate models we developed for them to demonstrate the impacts of various revenue adjustments on the long-term financial stability of the enterprises. RFC also developed a schedule for funding a major wastewater program required by environmental groups. Recommended rates were implemented for two years in July 2012. RFC updated rates for the City in 2014 and provided water drought rates.

GOLETA WEST SANITARY DISTRICT (CA)

Mr. Pardiwala has been Goleta West Sanitary District's (District) financial consultant for over more than 15 years. During that time he has assisted the District with financial planning, development and financing their replacement and refurbishment program, developing a rate structure, annexation fees, connection fees, miscellaneous fees, reserves policy development, and other financial issues. The District charges customers on the tax roll. RFC developed the data to be included on the tax roll and the District now manages it.

CLARK COUNTY WATER RECLAMATION DISTRICT (NV)

Mr. Pardiwala was Project Manager for a cost of service study for the Clark County Water Reclamation District (District) to help evaluate the current system of rates and charges to ensure that users were being charged appropriately. The District has not updated its rate structure system for many years and the current system based on fixture units is believed to need restructuring. RFC managed the sampling and wastewater flow monitoring from different types of users to determine the definition of an equivalent dwelling unit and the flows from different types of users. There are multiple outreach meetings with member agencies and interested stakeholders to educate them on the process and to obtain buy-in.

CITY AND COUNTY OF SAN FRANCISCO (CA)

The City conducts water, wastewater and stormwater studies every five years to ensure that charges are consistent with cost of service and conforms with the City's Propositions. Mr. Pardiwala served as Project Manager for two cycles of rate studies for the City. The City has a combined wastewater and stormwater system and costs for stormwater are integrated with wastewater. The City was engaging in a multi-billion dollar capital improvement program that would have significant impact on rates. The City has unique microclimates and RFC analyzed the water usage characteristics of single family and multi-family users to develop a rate structure that would provide incentives for conservation. RFC evaluated incentives to encourage low impact development, reviewed stormwater practices to provide credits for best management practices to reduce stormwater generation. RFC performed an overhead cost allocation study consistent with federal requirements of OMB Circular A-87 to assign costs appropriately to different departments in order to obtain federal reimbursement for projects that are eligible for federal assistance.

NAPA SANITATION DISTRICT (CA)

Mr. Pardiwala was Project Manager for a recycled water rate study for the District. The District was required to restrict summer discharge of its wastewater into the river. The District had made improvements to its treatment plant to produce recycled water and provided incentives to recycled water customers to use the water. Agreement with customers were to end within a couple of years and the District wanted to enlarge the recycled water facilities and enroll new customers into the recycled water program. The District wanted to review the economics of the improvements and determine the impacts resulting from implementing new recycled water rates. RFC developed a financial and rate model that considered the new customers and revised rates and the impact of providing discounted rates on wastewater customers. The District held meeting with the recycled water users and obtained input on issues of concern to them. RFC provided support to the District and evaluated the results of the surveys conducted to define the rates.

CITY OF HENDERSON (NV)

Mr. Pardiwala served as Project Manager for the engagement with the City of Henderson (City). In Phase I, RFC assisted the City in conducting a water and wastewater financial assessment. RFC developed a financial vision which will ultimately shape the utilities for the next ten years. As part of our conceptual design process, RFC recommended several alternative rate philosophies to be evaluated as part of Phase II. The Model was also developed to evaluate certain rate philosophies and user charge structure modifications focused on improving the equitable recovery of costs from different user classes, legal defensibility of the rates and system development charges, revenue predictability, and conservation incentives. RFC developed an allocation or budget for different meter sizes to ensure that the tiered rates set up would fairly collect revenues from customers. RFC updated the City's financial plan by participating in the City's rate implementation process. This included presentations of final findings and recommendations to City Council and the Citizen's Advisory Committee.

CITY OF NORTH LAS VEGAS (NV)

Mr. Pardiwala was the Project Manager for the water and sewer financial planning and rate study

conducted for the City of North Las Vegas (City). At the time, the City had experienced rapid growth and had a significant amount of capital projects including construction of their own treatment plant. The City faced many financial challenges at a time when there were signs of a slowing economy. RFC conducted a multi-year financial plan that examined various customer growth, capital funding, and rate revenue assumptions. RFC prepared rate models for both water and wastewater and trained City staff on their use. The models provided dashboards for ease of use and decision making.

CITY OF PORTLAND (OR)

The City of Portland (City) wanted a financial planning and rate model to determine rates for its wholesale and retail customers. Mr. Pardiwala served as Project Manager for this study. The City provided wholesale water to 19 agencies under old agreement that were expiring soon. The City was finalizing long-term agreements with explicit terms on rate setting. The City wanted to develop rates consistent with the new agreement for the wholesale agencies, review rate structure alternatives for its retail customers, review impacts and provide flexibility for planning for the next 20 years.

The City's existing retail rate structure consisted of an increasing 3-tier rate structure for all customers with fixed tiers for single family customers and tiers based on the average usage in the preceding 12-month period for the remaining customers. The current retail rates applied to all classes and did not take into account peaking which factors can vary significantly from class to class. RFC developed alternative rate structure options for retail customers and explore the creation of more classes to increase equity and fairness and encourage conservation. Alternative rate structures included uniform volume rates, seasonal rates, increasing and "V" or "U" shaped block rates, and a range of individualized block rates with cutoffs based on average account usage, seasonal usage, or customer characteristics. RFC provided the City with the computer model and provided training and a manual in the user of the model.

In 2012, Mr. Pardiwala managed a bond feasibility study for the City's Bureau of Environmental Services. The City needed to issue bonds for several hundred million dollars to meet regulatory requirements related to its wastewater and stormwater systems. RFC met with City staff and reviewed the CIP, business processes, rates and rate setting procedures, and provided a certificate of parity showing that the City could meet its coverage requirements under the current rates so that the City could sell bonds with a good rating.

CITY OF TACOMA (WA)

Mr. Pardiwala was Project Manager for a study to develop financial plans and rate models for the City's Environmental Services including wastewater, surface water and solid waste utilities. The study involved development of user friendly financial and rate planning models that would allow the City to update rates on an annual basis, quickly make changes, and review rates. The model also provided capability to compare the status of the CIP, and actual revenues and expenses against budgets on a month by month basis. To make this process easy, the model was integrated with the City's SAP and E Builder system. The financial plan and rates were reviewed with input from the City's Environmental Services Commission. RFC turned over the models to the City, provided training and computer manuals in the use of the models.

Mr. Pardiwala also provided financial planning models to the City's water utility, which included user-friendly features and benchmarking tools to maximize improvements in operations and management.

CITY OF LOS ANGELES (CA)

Mr. Pardiwala was Project Manager on studies to develop rates and rate models for solid waste and wastewater utilities. The City wanted to have a planning tool in-house to evaluate what if scenarios, impacts and determine rates for various customers. The model incorporated many user friendly features to assist the City update rates and prepare financial plans on an annual basis. Solid waste rates

included non-residential customers based on size of containers and frequency of collection. Wastewater rates to the 27 subscribing agencies discharging to the City's wastewater treatment facilities were also determined. This involved complex calculations and allocations to wastewater loadings, conveyance distance, etc. Connection or impact fees were also included in the model. User training, model documentation, regular updates and ongoing service were also included in this project.

Mr. Pardiwala also served as Project Manager on a wheeling charges study for the Los Angeles Department of Water and Power. The City was interested in determining the appropriate charges to be levied on various customers that may wish to use the extra capacity in the City's system—from the Los Angeles Aqueduct to the distribution network—to transfer water.

CITY OF PASADENA (CA)

Mr. Pardiwala was Project Manager for a study for the City of Pasadena (City) to determine roll-out charges for solid waste services provided by the City. Certain customers in the City needed assistance with rolling out their containers and replacing them again. Mr. Pardiwala analyzed the costs associated with this service and set up a charge for it.

OTHER RELEVANT PROJECT EXPERIENCE

- City of Anaheim (CA) – Water Rate Study
- City of Atwater (CA) - Water and Wastewater Rate Study
- City of Banning (CA) - Recycled Water Revenue Program
- Beaumont Cherry Valley Water District (CA) - Water Rate and Connection Fee Study
- City of Brea (CA) - Water Rate Study, Connection Fees and Related Fees and Charges Study
- City of Buenaventura (CA) – Water and Wastewater Rate Study
- City of Burbank (CA) - Bond Feasibility Study, Reclaimed Water Study, and Water and Wastewater Rate Study
- Carpinteria Sanitary District – Wastewater Rate Study
- Casitas Municipal Water District – Water Rate Study
- Castroville Water District (CA) – Water and Wastewater Rate Study
- City of Carlsbad (CA) - Asset Replacement Study and Water, Wastewater and Reclaimed Water Revenue Program
- City of Chino (CA) - Valuation Study and Water Rate Study
- City of Chowchilla (CA) – Water and Wastewater Rates Study
- City of Cloverdale (CA) - Water and Wastewater Connection Fees and Rate Study
- City of Corona (CA) - Water and Wastewater Rate Study
- El Toro Water District (CA) – Water Budget and Wastewater Rate Studies and Connection Fees
- City of Encinitas (CA) - Water and Wastewater Rate Study
- City of Escondido (CA) - Valuation Study, Water and Wastewater Rate Study
- City of Glendora (CA) - Water and Wastewater Financial Planning and Rate Study
- City of Livingston (CA) – Water, Wastewater and Solid Waste Rates Study and Litigation Support
- Los Angeles Department of Water and Power (CA) – Water Rate Study and Wheeling Charge Review
- City of Madera (CA) - Water and Wastewater Rate Study
- Mammoth Community Water District (CA) – Water and Wastewater Rate Study
- Metropolitan Wastewater Joint Powers Authority (CA) - Wastewater Valuation Study and Capacity Valuation Study
- Palmdale Water District (CA) – Water Budget Rate Study
- City of Poway (CA) – Wastewater Rate Structure Analysis
- Ramona Municipal Water District (CA) – Water Rate Study
- City of Rialto (CA) – SRF Funding and Water and Wastewater Rate Study
- County of San Bernardino (CA) - Water and Wastewater Rate Study and Connection fees

- San Diego County Water Authority (CA) - Capacity Valuation, Rate Analysis, Valuation Study, and Wheeling Charge Study
- City of San Fernando (CA) – Water and Wastewater Rates Study
- San Gorgonio Pass Water Agency (CA) - Financing Plan
- City of San Jose (CA) - Sewer Service Related Fees and Charges
- City of San Luis Obispo (CA) - Stormwater Financial Feasibility Study
- City of Santa Fe springs – Water Rate Study
- Santa Fe Irrigation District (CA) - Wastewater Treatment Plant Cost Evaluation, Water Connection Fees Study, and Water Rate Study and Update
- City of Santa Monica (CA) - Wastewater Rate Study
- City of Scottsdale (AZ) - Impact Fee Study
- City of South Pasadena (CA) – Water and Wastewater Rate Study
- City of Springfield (OR) – Wastewater Rates Model
- Ojai Valley Sanitary District – Wastewater Rate Study
- Tacoma Public Utilities (WA) - 2008 Business Planning Assistance and Financial Model
- City of Upland (CA) - Valuation Study
- Town of Windsor (CA) - Impact Fee Review, State Revolving Fund Loan Application Assistance, Water and Wastewater Connection Fees and Rates Study, and Water and Water Reclamation Rate Studies

TECHNICAL SPECIALTIES

- Model development
- Financial analysis
- Cost of service studies
- Conservation rate structure design
- Connection/development fee studies
- Economic analysis
- Cost benefit analysis
- Demand forecasting
- Econometric analysis

PROFESSIONAL HISTORY

- Raftelis Financial Consultants, Inc.: Vice President (2015-present); Senior Manager (2012-2014); Manager (2009-2012)
- Red Oak Consulting, Division of Malcolm Pirnie (2007-2009)
- MuniFinancial (2005-2006)
- A & N Technical Services (1999–2003)
- United States Peace Corps, Bulgaria (1995-1997)

EDUCATION

- Master of Public Administration, Public Administration/International Development, Kennedy School of Government - Harvard University (2003)
- Master of Science, Applied Economics - University of California, Santa Cruz (1994)
- Bachelor of Arts, Economics and Environmental Studies - University of California, Santa Cruz (1992)

PROFESSIONAL REGISTRATIONS

- Who's Who in America, 63rd Edition (2009)
- Finalist, National Venture Competition (2003); Goldman Sachs Foundation
- Roy Environmental Fellowship (2002), Kennedy School of Government, Harvard University
- Academic Scholarship (2001-2003), Kennedy School of Government, Harvard University
- Certificate of Outstanding Service (1997), United States Peace Corps

PROFESSIONAL MEMBERSHIPS

- American Water Works Association - Rates and Charges Committee
- California Society of Municipal Finance Officers

SANJAY GAUR

PROJECT MANAGER
Vice President

PROFILE

Mr. Gaur has 18 years of public-sector consulting experience, primarily focusing on providing financial and rate consulting services to water and wastewater utilities. His experience includes providing rate structure design, cost of service studies, financial analysis, cost benefit analysis, connection/development fee studies, conservation studies, and demand forecasting for utilities spanning the west coast. His project experience includes engagements with the Metropolitan Water District of Southern California, San Diego County Water Authority, Eastern Municipal Water District, Alameda County Water District, and East Bay Municipal Water District, among many others. Mr. Gaur is considered one of the leading experts in the development of conservation rate structures. He has often provided his insight into utility rate and conservation-related matters for various publications and industry forums, including: authoring articles in *Journal AWWA*; being quoted in various newspaper articles including the *Los Angeles Times* and the *New York Times*; participating in a forum regarding the future of water in Southern California sponsored by the Milken Institute; being quoted on National Public Radio; speaking at various industry conferences including American Water Works Association (AWWA), the Utility Management Conference, Association of California Water Agencies, and California Society of Municipal Finance Officers; and, co-authoring several industry guide books including AWWA's *Manual M1 Principles of Water Rates, Fees and Charges, 6th Edition* as well as AWWA's *Water Rates, Fees, and the Legal Environment, Second Edition*. Mr. Gaur co-authored a chapter entitled, "Understanding Conservation and Efficiency Rate Structures," for the Fourth Edition of the industry guidebook, *Water and Wastewater Finance and Pricing: The Changing Landscape*. Mr. Gaur is also active in a number of utility-related associations, including serving as a member of AWWA's Rates and Charges Committee.

RELEVANT PROJECT EXPERIENCE

EL TORO WATER DISTRICT (CA)

Mr. Gaur assisted El Toro Water District in the development and implementation of a water budget rate structure. This included facilitating the discussion on the policy options associated with the allocation factors for indoor and outdoor needs with staff and the Board, the development of a water budget model, and

ensuring the billing system is compatible with the new requirements associated with the water budget rate structure. The new rate structure was adopted in June 2010.

RANCHO CALIFORNIA WATER DISTRICT (CA)

Mr. Gaur assisted Rancho California Water District (District) in the development of a water budget rate structure. The project required the consultant to develop a flexible water budget model that could do multiply block with allocation and determine the appropriate revenue within a month. The team was successfully able to accomplish this task and assisted the District in implementing the new water budget rate structure. The rates where successfully adopted in November 2009.

Mr. Gaur also assisted the District in the development of a New Water Demand Offset Fee. The New Water Demand Offset Program is a form of funding of conservation measures that will help to create sustainable, zero water footprint development. New developments will pay fees called New Water Demand Offset Fees to create potable water savings in the existing system to support water demand generated by new developments. Water savings can be achieved by converting irrigation accounts to recycled water or installing high efficiency retrofits to replace inefficient fixtures for existing accounts in RCWD. This fee is expected to be adopted in February 2010.

WESTERN MUNICIPAL WATER DISTRICT (CA)

Mr. Gaur served as Project Manager for the implementation of a water budget rate study, which included facilitating and leading a discussion on the policy options associated with the development of a water budget rate study. Based on these policy options, a water budget model was developed that can evaluate different allocation factors for indoor and outdoor water use, determine price ratios for the corresponding tiers, and develop the corresponding rates and customer impacts.

Mr. Gaur served as the Project Manager for the development of a financial model for the District. The model has the ability to examine the 14 different fund centers of the District, develop and save different Capital Improvement Plan scenarios, examine the financial consequences of these scenarios and compare the results. In addition the model has the ability aggregate the fund centers by water, wastewater or by the whole District. The model is currently being utilized by the District to examine long term health of the District.

EASTERN MUNICIPAL WATER DISTRICT (CA)

Mr. Gaur served as Project Manager for rate structure evaluation study by assisting Eastern Municipal Water District (EMWD) managers and Board in the evaluation and assessment of the feasibility of implementing a water budget rate structure. Mr. Gaur also moderated a series of three interactive workshops to examine a water budget rate structure and its ability to meet EMWD policy goals such as equity, conservation and revenue stability. EMWD was successfully able to implement a water budget rate structure in April 2009.

EAST BAY MUNICIPAL UTILITY DISTRICT (CA)

Mr. Gaur is currently serving as Project Manager for a comprehensive wastewater cost of service study for East Bay Municipal Utility District (District). The last comprehensive cost of service study was done in 2000 for the wastewater treatment charges. As part of the study, RFC thoroughly examined the District's cost structure, analyzed wastewater flow and customers data, and evaluated alternative rate structures to develop an equitable rate structure that meets Proposition 218 requirements and the District's goals and objectives. While the proposed treatment rates retain the current rate structure, which includes a fixed monthly service and strength charge and a variable flow charge with a cap at 10 hundred cubic feet (hcf) per dwelling unit per month for residential customers, and a fixed monthly service charge and a variable flow charge per hcf based on customer classification for apartment buildings and non-residential customers, the individual rates are realigned to reflect the cost of service. The District's current rate structure also includes a fixed annual charge per dwelling units (up to five dwelling units) for single- and

multi-family customers and per parcel for non-residential customers for wet weather facilities. This rate structure was developed in late 1980s. RFC and District staff evaluated various alternatives for the wet weather facilities charge to ensure equity amongst customer classes. The proposed wet weather facilities charge will be based on the average parcel size for each customer class, which has a stronger cost of service basis than the current rate structure.

CITY OF HUNTINGTON BEACH (CA)
Mr. Gaur served as Project Manager for a sewer cost-of-service and rate design study. The engagement called for the redesign of rates to achieve City's policy goals associated with improving inter-class equity, reducing administrative burden, and maintaining revenue stability, while adhering to cost-of-service principles.

Mr. Gaur also served as the Project Manager in evaluating a water budget rate structure for the City. This included workshop with staff on developing a water budget framework that is consistent with City policy and the development of a water budget model that can calculate the associated rates and estimate customer impacts.

ALAMEDA COUNTY WATER DISTRICT (CA)
Alameda County Water District (District) currently has a uniform rate structure and is interested in developing a conservation rate structure that will assist them in promoting water efficiency, comply with regulatory requirements of SBx7-7, achieve revenue stability and is equitable. Mr. Gaur served as the Project Manager and led a series of workshop with the Executive Management and the Board of Directors in evaluating and identifying the proper rate structure that meets their objectives. Based on this outcome, RFC developed a conservation rate structure that can compare different types of inclining and water budget rate structure and evaluate the customer impacts associated with these rate structures.

PASADENA WATER AND POWER (CA)
Mr. Gaur served as Project Manager for comprehensive water cost-of-service and rate design study. Developed long-range financial plan with evaluation of recycled water program, rate stabilization fund, and drought scenarios. He also performed a cost-of-service analysis and redesigned rates to adhere to cost-of-service principles and the legal requirements of California Proposition 218.

CITY OF RENO (NV)
Mr. Gaur served as Project Manager for sewer rate and connection fee study and included the development of a long-range financial plan for sewer fund with evaluation of several different capital improvement program scenarios, debt/cash funding combinations and reserve funds. As part of the study, Mr. Gaur also performed a cost-of-service analysis and developed sewer rates and connection fees to meet policy goals of revenue stability and fairness.

CITY OF RIO VISTA (CA)
This engagement called for a preliminary study for water and sewer rate and impact fee.

SAN DIEGO COUNTY WATER AUTHORITY (CA)
Mr. Gaur examined SDCWA's prior practices, made recommendations, and developed an index model that determined the appropriate inflation and escalation factor for capital projects. A Monte Carlo simulation was used with the escalation factor of the index model to develop distribution estimates.

Mr. Gaur also developed a rate model for the water authority which allocated resources and costs to member agencies. The model was used to develop different allocation scenarios based on historical and spatial factors and served as a tool to guide decision making process in determining fair and equitable allocations.

AMERICAN WATER COMPANY (CA)
The City of Monterey's water rate structure allowed for water budget programs determined by household size, lot size, zip code, and the number of large animals in the service area. Mr. Gaur examined and developed a water rate model for the service

area. He also assisted in the design of various water budget structures that allowed for accountability and examined customer impact of different rate structures. Results were presented at the California Public Utility Commission.

CITY OF CALEXICO (CA)
Mr. Gaur performed a water and sewer rate study for the city and examined the implication of Proposition 218 on lifeline rates. He assisted in the development of a rate model to determine the appropriate rates for meeting future capital and reserve needs. Mr. Gaur facilitated a rate workshop and presented final results to City Council. The City Council adopted both the recommended water and sewer rates, which will pay for capital projects associated with water and sewer.

CITY OF CHOWCHILLA (CA)
Mr. Gaur served as a Project Manager for the City of Chowchilla, Water and Wastewater study. There are two major areas of the study; the first is the development of a financial plan that can fund their mandatory CIP, while meeting their reserve requirements. The second part of the study is the development of a fair and equitable rate structure, given that the majority of the customers do not have meters.

CITY OF CORONA (CA)
Mr. Gaur served as a Project Manager for the City of Corona, Water Budget Rate study. He facilitated a workshop on the policy options associated with the development of a water budget rate structure. Based on these policy options, a water budget model was developed that can conduct sensitivity analysis on allocation factors, price ratios, revenue requirements and customer impacts.

EAST ORANGE COUNTY WATER DISTRICT (CA)
Mr. Gaur served as the Project Manager in assisting East Orange County Water District in evaluating a water budget rate structure. Mr. Gaur educated the Board of Directors on the benefits of water budget rate structure; developed a water budget model to determine the associated rates and customer impacts.

CITY OF HOLLISTER (CA)
Mr. Gaur developed a sewer rate and impact model to examine the rate and impact fee implication of $120 million treatment project. He also conducted a workshop and presented final results to City Council. The Council adopted the recommended sewer rates, which will finance the $120 million treatment plant project.

INLAND EMPIRE UTILITIES AGENCY (CA)
Mr. Gaur conducted a series of workshops for Inland Empire Utilities Agency on the different types of conservation rate structure and how they can assist them in meeting the requirements of SBx7-7, achieving revenue stability and promoting equity.

INDIO WATER AUTHORITY (CA)
Mr. Gaur served as Project Manager for user fee study to evaluate current user fees and their ability to recover associated administrative and other operational costs. He developed a new schedule of user fees to meet City's policy objectives of fairness and defensibility.

Mr. Gaur also conducted a water rate study and presented results to City Council. The Council adopted the recommended water rates, which provided an equitable allocation of cost between fixed and variable rates.

IRVINE RANCH WATER DISTRICT (CA)
Mr. Gaur evaluated the District's conservation program by conducting econometric analysis that controlled for exogenous factors, such as weather conditions. The results from the study provided information on which conservation program provided the greatest return on investment.

LA HABRA HEIGHTS COUNTY WATER DISTRICT (CA)
Mr. Gaur assisted the District in calculating a wheeling rate for a neighboring District. Mr. Gaur presented his finding to the Board of Director.

CITY OF LIVINGSTON (CA)
Mr. Gaur conducted a water rate study that incorpo-

rated various capital improvement scenarios.

CITY OF LOMITA (CA)
Mr. Gaur conducted a water rate workshop with concerned citizens to explain how rates were assessed and calculated, using laymen's terminology to foster understanding among community members. City Council adopted the recommended rates.

LOS ANGELES DEPARTMENT OF WATER AND POWER (CA)
Mr. Gaur performed a econometric analyses on daily demand based on deviation from mean temperature. Results from the study helped redesign engineer estimates on sizing of water lines.

CITY OF LYNWOOD (CA)
Mr. Gaur developed a cost allocation model to determine the appropriate amount of transfer ($3 million) between the Water Enterprise Fund and the City General Fund. The report met the requirements associated with Proposition 218.

CITY OF MERCED (CA)
Mr. Gaur completed a water and sewer rate and impact fee study, including examination of financing options associated with a $200 million treatment plant. The engagement included the development of a rate and impact fee model that explored and assessed different capital project scenarios. He also conducted a workshop and presented final results to City Council. The council adopted the recommended impact fees for water and sewer.

METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA (CA)
Mr. Gaur developed a drought allocation model for Metropolitan Water District of Southern California member agencies. The allocation is based on severity of drought, historical usage, and demand-hardening factor. The model served as a tool to guide decision making process in determining fair and equitable allocations.

Mr. Gaur also served as project manager for long-range financial plan study and facilitated workshops with management, member agencies, and stakeholders to assess the economic, political, and technical feasibility of a growth-related infrastructure charge. He also led seminars to inform participants of the prevailing industry standards for adhering to cost-of-service principles and navigating California's complex legal environment.

Lastly, Mr. Gaur served as the project manager to evaluate Metropolitan Water District of Southern California cost of service methodology to confirm it is consistent with industry standards, policy objectives that the Board of Directors has adopted and is being implemented as intended.

MONTEREY PENINSULA WATER MANAGEMENT DISTRICT (CA)
Mr. Gaur provided an evaluation of the conservation impact of a toilet conservation pilot program for Monterey Peninsula Water Management District using an econometric analysis that was controlled for seasonal and weather conditions. The study confirmed expected savings estimates.

MUNICIPAL WATER DISTRICT OF ORANGE COUNTY (CA)
Mr. Gaur developed an optimization model for conservation programs. The results guided the District in developing a master plan for conservation programs.

CITY OF NEWPORT BEACH (CA)
Serving as Project Manager for this study, Mr. Gaur assisted the City of Newport Beach to develop a long-range financial plan, and to evaluate and implement a conservation rate structure that adheres to cost-of-service principles and the provisions of California Proposition 218. Mr. Gaur also worked with Newport Beach staff to identify policy objectives for prospective rate design alternatives.

PACIFIC INSTITUTE (CA)
Mr. Gaur developed an audit model for water agencies which determines the amount of greenhouse gases produced by source of water and the associated energy requirement. The model has the ability

to examine different scenario options and compare them to the base case.

CITY OF PORT HUENEME (CA)

For this engagement, Mr. Gaur performed a water and solid waste study and workshop for City Council. The Council immediately adopted solid waste rate recommendations and water rates are under consideration.

SANTA CLARA VALLEY WATER DISTRICT (CA)

Mr Gaur evaluated the effect of a water softener pilot program on conservation. He also conducted billing analysis to estimate savings, using a control group to account for exogenous factors. The results confirmed engineering estimates on savings potential.

SOUTH COAST WATER DISTRICT (CA)

Mr. Gaur assisted the District in evaluating a water budget rate structure. Currently the District has a five tiered inclining rate structure. RFC developed a model that compared the usage pattern between the current rate structure and a water budget, to determine how equitable the current rate structure is, given lot size. Mr. Gaur presented the finding to the Board of Directors.

CITY OF SOUTH GATE (CA)

Mr. Gaur performed a water impact fee analysis for the city and presented results to City Council. The Council adopted the recommended water impact fee, which provides additional resources for expansion projects.

CITY OF VISTA (CA)

As Project Manager for a sewer rate and connection fee study, Mr. Gaur developed a long-range financial plan for City of Vista Sanitation and Buena Sanitation District, including financing of a $300 million capital improvement program. The project required a cost-of-service analysis and redesign of the sewer rate structure and connection fee schedule to adhere to cost-of-service principles while meeting escalating revenue requirements. Mr. Gaur fine-tuned rates to meet the City's policy goals of equity, defensibility, and minimal customer impact.

WALNUT VALLEY WATER DISTRICT (CA)

Mr. Gaur developed a water rate model for the District as well as examined indexing practices and determined appropriate rates for meter and variable charges.

YORBA LINDA WATER DISTRICT (CA)

Mr. Gaur served as the Project Manager for conducting a water rate study for Yorba Linda Water District. This study included the development of a financial plan that examined different CIP scenarios, cost of service study and development of a conservation rate structure. RFC developed a conservation rate model that evaluated an inclining tiered rate and a water budget rate structure, that can determine the associated rate structure and estimate customer impacts. Mr. Gaur will present the finding of the study to the Board and make the associated recommendation.

TOWN OF BUCKEYE (AZ)

Mr. Gaur performed an impact fee study that identified and examined possible facility types and explored different financial options for funding facility types. He also examined the benefits of zonal impact fees. Mr. Gaur educated developers in the process of assessing impact fees and the role of credits.

TOWN OF CLARKDALE (AZ)

Mr. Gaur identified and examined facility types for impact fee and discussed policy implications of impact fees.

TOWN OF GILBERT (AZ)

Mr. Gaur was engaged by the Town of Gilbert to determine the true cost of providing fire services for the town. He also examined the economic impact of potential legislation on expanding service to a county island. He served as expert witness and presented findings on behalf of the city which assisted in the Town's winning case.

PUBLICATIONS AND PRESENTATIONS

- Gaur, S., "Adelman and Morris Factor Analysis of Developing Countries," The Journal of Policy Modeling, Vol. 19, Issue 4, pp. 407-415, August 1997.

- Gaur, S., "Water Rate Setting," presented at the Annual 2006 Conference of the California Society of Municipal Finance Officers, Palm Springs, California.
- Gaur, S., "Water Rate Setting," presented at the following: California Society of Municipal Finance Officers Chapters: Central Los Angeles, Channel Counties, Imperial County, San Gabriel Valley, South Bay and Twenty – Nine Palms 2006.
- Gaur, S., "Designing Water Rate Structures," presented at a workshop for Urban Water Institute, San Jose, California. February 17, 2006.
- Gaur, S. "How Much Should Water Cost? Theoretical and Practical Approach in Developing Water Rates." Guest lecturer at University of California, Santa Barbara, Course: Water Policy, Bren School of Environmental Science and Management. November, 7, 2006.
- Gaur, S. "Designing Water Rates," All day seminar at the Center for Water Education. Hemet, California. January 12, 2007.
- Gaur, S. "Policy Objectives in Designing Water Rates", Journal of American Water Works, 99:5 May 2007 p.112- 116.
- Gaur, S. Corssmit, K. and Hotchkiss, D. "Water Rates Defining Cost of Service – Proposition 218 Implications," presented at the Association of California Water Agencies, May 7 , 2008 Spring Conference, Monterey, California.
- Gaur, S. "Moving Beyond the Public Workshop," presented at the Municipal Management Association of Southern California, July 1, 2008 Summer Conference, La Jolla, California.
- Gaur, S. "Evolution of Water Rates," presented at the Association of California Water Agencies, December 3, 2008 Fall Conference, Long Beach, California.
- Gaur, S. "Managing Drought Scenarios," presented at the Association of California Water Agencies, December 4, 2008 Fall Conference, Long Beach, California.
- Gaur, S. "Rates 101," 4 hour training course conducted at the Annual 2009 California Society of Municipal Finance Officers, San Francisco, California.
- Gaur, S. Corssmit, K., Hildebrand, M. and Hotchkiss, D. "Defining Latest Trends in Conservation Rate Design," presented at the Utility Management Conference, February 18, 2009, New Orleans, Louisiana.
- Gaur, S. "Conservation Rate Structures," presented at the International Water Efficiency Conference, April 1, 2009 Newport Beach, CA
- Gaur, S. "Developing a Water Budget Rate Structure: Eastern MWD Experience," presented at the CA/NV AWWA Section, April 9, 2009, Santa Clara, CA
- Gaur, S. "Rates and Equity Issue" presented at Managing the Crisis: Essential Tools for Urban Water Managers, sponsored by Water Education Foundation and Association of California Water Agencies, April 16, 2009 (San Francisco) and April 23, 2009 (Irvine)
- Hildebrand, M. Gaur, S. and Salt, K. "Water Conservation Made Legal: Water Budgets and California Law" Journal of American Water Works, 101:4 April 2009 p.85-89.
- Gaur, S. "Whiskey's for Drinking, Water is for Fighting: Allocating Water During a Shortage" presented at the Association of California Water Agencies, May 21, 2009 Spring Conference, Sacramento, CA.
- Gaur, S. "Policy Issues and Challenges with Water Budgets: Eastern MWD Experience" presented at American Water Works Association, Annual Conference and Exposition 09, June 15, 2009, San Diego, CA
- Gaur, S. "Economics of Desalination" presented at the Association of California Water Agencies, December 2, 2009 Fall Conference, San Diego, CA.
- Gaur, S. "Achieving Water Conservation, Revenue Stability and Equitable Rates" presented at the Annual 2010 (February 17, 2010) Conference of the California Society of Municipal Finance Officers, Los Angeles, California.
- Gaur, S. and Summers, L. "New M1 Chapter: Water Budget Rates" presented at American Water Works Association, Annual Conference

and Exposition 10, June 23, 2010, Chicago, IL

- Contributing Author to "Water Rates, Fees and the Legal Environment" 2nd Edition American Water Works Association 2010 Editor: C.(Kees) W. Corssmit
- Gaur, S. "Developing a Rate Structure that Addresses the Financial Consequences of SBx7-7" presented at the Association of California Water Agencies, December 1, 2010 Fall Conference, Indian Wells, CA
- Gaur, S "The Verdict is out on Water Budget" presented at the Utility Management Conference, February 9, 2011, Denver, CO
- Gaur, S "What in the world can we learn from California? Water budget rates successfully achieve water efficiency and revenue stability" presented at AWWA Water Conservation Symposium March 15, 2011, Orlando FL
- Gaur, S "You Can Have the Best of Both Worlds: Promoting Water Use Efficiency While Enhancing Revenue Stability" presented at Council of Water Utilities April 19, 2011 Poway, CA
- Gaur, S. "Water Budget Alternatives: How Do We Define Efficiency?" presented at the Association of California Water Agencies, May 12, 2011 Spring Conference, Sacramento, CA
- Gaur, S. "Inclining Block Rates versus Water Budget Rates: How do You Define Equity?" presented at American Water Works Association Annual Conference, June 15, 2011 Washington D.C.
- Gaur, S. "Innovative Rate Designs: Balancing Conservation Objectives with Revenue Stability" presented at the Association of California Water Agencies 2011 Regulatory Summit, August 17, 2011 Pasadena, CA
- Gaur, S. "Cutting-Edge Financial Planning Tool to Facilitate Communications" presented at the Water Environment Federation Annual Conference October 19, 2011 Los Angeles, CA

STEVE GAGNON, PE

ASSISTANT PROJECT MANAGER
Senior Consultant

PROFILE

Mr. Gagnon has 18 years of experience in financial analysis and environmental engineering. He has worked for leading engineering consultants as well as the federal government. His broad range of experience includes water and wastewater pricing studies, capacity fees and utility valuations. His financial experience includes water and wastewater rate studies for the City of Redlands, CA, Santa Fe Springs, Henderson, NV, City of Anaheim, La Habra Heights County Water District, Rowland Water District, Walnut Valley Water District, Sweetwater Authority, Helix Water District and Otay Water District. He has also performed strategic financial analysis of water sourcing alternatives and costing of ground water remediation alternatives, asset inventory and condition assessments, utility performance metrics, earned value analysis. He has also managed the construction and installation of water treatment equipment and oversaw Superfund remediation for the US Army.

RELEVANT PROJECT EXPERIENCE

HELIX WATER DISTRICT (CA)

Mr. Gagnon created an economic model to add life-line and a water waster tier to the Helix Water District's (District) three-tier rate structure. In addition, budget-based water rates were created for all irrigation accounts. The District is transitioning slowly to budget-based rates due to staffing limitations. In 2010 they will implement budget-based rates for all commercial accounts.

Mr. Gagnon also performed all of the economic modeling in the preparation of the District's first Capacity Fee Study. The capacity fee was designed to collect a buy-in portion based on replacement costs of the District's current water system and the incremental cost of adding a new water supply, the El Monte Valley Ground Water Recharge project.

WESTERN MUNICIPAL WATER DISTRICT (CA)

Mr. Gagnon prepared a long-range financial plan to help ensure the Western Municipal Water District's (District) financial health. Based on the District's five-year CIP, inflationary water rate adjustments, and reserve policies, the plan showed that a debt issue was needed to execute the CIP and maintain adequate reserves.

TECHNICAL SPECIALTIES

- Utility cost of service and rate structure studies
- Conservation rate studies
- Economic feasibility studies
- Wastewater rate studies
- Capital recovery/Capacity fee studies
- Survey research of water and wastewater utility characteristics and rates

PROFESSIONAL HISTORY

- Raftelis Financial Consultants, Inc.: Senior Consultant (2014-present)
- APTwater, Inc. (Now Ultura): Project Manager (2011-2014)
- PBS&J (Now ATKINS): Project Manager – Utility Finance (2005-2011)
- Earth Tech (now AECOM): Senior Project Manager (2004-2005)
- Malcolm Pirnie, Inc. (now ARCADIS): Consultant (2002-2003)
- National Parks Conservation Association – Business Plan Initiative: Business Plan Consultant (2000)
- U.S. Army Corps of Engineers – New England Division: Project Manager (1995-1999)
- Geophex, Limited: Graduate Research Assistant (1994)

EDUCATION

- Master of Business Administration - University of Southern California (2001)
- Master of Science in Environmental Engineering - University of Massachusetts (1995)
- Bachelor of Science in Civil Engineering - University of Massachusetts (1994)

PROFESSIONAL MEMBERSHIPS

- American Water Works Association

SWEETWATER AUTHORITY (CA)
Mr. Gagnon is evaluating rates, including drought rates, for the Sweetwater Authority in light of recent legal concerns over their current rate structure. The evaluation includes a cost of service study to clearly demonstrate the nexus between the rate for each single family tier and the associated costs to serve that tier. The study started by soliciting input from Board members regarding their water pricing objectives so that rates could be designed accordingly.

LA HABRA HEIGHTS COUNTY WATER DISTRICT (CA)
Mr. Gagnon assisted with the update in water user rates, capacity charges, and long-range financial plan for the La Habra Heights County Water District (District). The 2001 study set the District's user rates for five years and expired in 2005. The District had recently completed an updated Water Master Plan and wished to incorporate the new cost of replacement capital facilities for the next ten years into their long-range financial plan and user rates.

CITY OF HENDERSON (NV)
Mr. Gagnon is creating water and wastewater rate and financial planning models for the City as well as updating their water and sewer system development charges. The models will be used over the next 5 to 10 years not only to calculate water and wastewater rates but also to create yearly financial statements.

CITY OF REDLANDS (CA)
Mr. Gagnon updated the City's water and wastewater rates and development impact fees. The rate study process included workshops with the City's Utility Advisory Committee in which he presented the basics of rate setting and the financial environment of the utilities. The interactive workshops solicited input from committee members and staff regarding revenue adjustments and rates.

RAINBOW MUNICIPAL WATER DISTRICT (CA)
Mr. Gagnon created water conservation based sewer rates to complement the Rainbow Municipal Water District's (District) conservation based water rate structure. These rates will be based on the actual water usage of each customer within the District. In addition, appropriate sewage strengths will be incorporated into the District's sewer user rates.

COUNTY OF SAN DIEGO (CA)
Mr. Gagnon prepared integrated financial models for a landmark study for the County of San Diego. The study will not only be updating the sewer user, capacity, and annexation fees for the nine dependent sewer districts but will also include the economic analysis of creating one "super sanitation district". Long-range financial plans will be prepared for all of the districts as well as the super district including 10 years of operational and capital costs.

TOWN OF QUARTZSITE (AZ)
Mr. Gagnon performed a third party rate review of a recently completed water and wastewater rate study for the Town of Quartzsite (Town). The Town is concerned with insuring that their winter RV population is paying their fair share of the water and sewer expenses.

TOWN OF PARKER (AZ)
Mr. Gagnon updated the Town of Parker's (Town) water rates. One of the Town's main concerns was the fairness and equity of water system cost distribution given the Town's large population of Native Americans who do not pay sales or utility taxes yet benefit from Town parks and other Town amenities. He also helped the Town establish operating and capital reserves.

WALNUT VALLEY WATER DISTRICT (CA)
Mr. Gagnon performed the Walnut Valley Water District's (District) first professional rate study which included updating the rate structure. Mr. Gagnon created a three-tier residential rate structure to help decrease discretionary consumption and ensure the District avoids or reduces water purchase surcharges from the Metropolitan Water District. He presented his findings to District staff and the District's Board of Directors.

FALLBROOK PUBLIC UTILITY DISTRICT (CA)
With water shortages looming in Southern Califor-

nia, this progressive water and sewer district asked for help creating water conservation-based sewer rates to complement their conservation based water structure. Mr. Gagnon created rates based on the actual water usage of each customer within the Fallbrook Public Utility District (District). In addition, appropriate sewage strengths were incorporated into the District's sewer user rates.

OTAY WATER DISTRICT (CA)

The Otay Water District (District) performs an update to their capacity and annexation fees every five years. In this update they changed their capacity fee from an incremental fee based on future costs to a combined fee structure using replacement costs less depreciation. They are also revised their annexation fee to recover taxes and availability charges paid by existing users who are currently inside the District's boundaries. In addition they added a new water supply fee to recover the expansion costs of their water system. This is a new fee that addresses the issue of new development bringing their own water supply or pay for offsets.

Mr. Gagnon was also the lead economist on a fast track study to assist the District in adding further conservation incentives into their potable and reclaimed water user rates. Specifically he added rate blocks into their non-residential and landscaping user rate structures based on specific base extra capacity cost allocations per user class. In addition, he assisted the District in the preparation of a drought/shortage rate structure that overlays their new conservation rate structure. This drought rate structure is based on the guidelines provided by the Metropolitan Water District of Southern California and the San Diego County Water Authority.

ROWLAND WATER DISTRICT (CA)

Mr. Gagnon updated the Rowland Water District's (District) water rates for the second time. The District had several concerns for the most recent study which included a large debt issue for a recycled water system as well as staff increases and wholesale water rate increases. The model helped the district size its debt issue by performing a rate sensitivity analysis to the size of the debt issue.

OLIVENHAIN MUNICIPAL WATER DISTRICT (CA)

Mr. Gagnon created a drought rate model to help the Olivenhain Municipal Water District (District) develop a drought rate ordinance. The model calculated commodity rate adjustments for four drought stages. It allowed for customer voluntary cutbacks in consumption as well as cutbacks due to higher water prices using the price elasticity of water. The model will help ensure the District maintains adequate revenue in times of drought.

Mr. Gagnon helped the District update their wastewater rates and developed a customized model for its unique rate structure. The District's residential rates are a flat charge per Equivalent Dwelling Unit (EDU) and the commercial rate structure includes a service charge per EDU and a variable rate based on measured water consumption.

Mr. Gagnon also prepared valuation calculations for the system capacity required for update of water and wastewater connection and annexation fees for the District. The analysis showed that the District would benefit by changing capacity fee calculation methodologies from a growth method to a combined method, thereby imposing less restrictions on the use of capacity fee revenue.

Mr. Gagnon modeled the long-term cost of several different water sources for the District. Options included purchasing treated water, expanding their water treatment plant and purchasing untreated water from the Metropolitan Water District or partnering with other local agencies to desalinate ocean water. The model contained many variable inputs to allow "what-if" scenario analysis. Although purchasing treated water was the least costly option, the authority favored plant expansion due to other benefits such as reliability of water supply.

CITY OF POWAY (CA)

Mr. Gagnon completely rebuilt the City of Poway's water and wastewater rate models to reflect the latest rate setting practices.

CITY OF ANAHEIM (CA)

Mr. Gagnon prepared a commercial and residential wastewater rate study for the City of Anaheim (City). The proposed rate structure was based on water consumption to replace the antiquated structure based on the number of toilets. Proper water use and wastewater return to sewer analysis is required to ensure proper revenue generation for the City.

CITY OF CORONADO (CA)

Mr. Gagnon is helping restructure the City of Coronado's wastewater rates from a flat parcel-based fee for residential users to one with a consumption-based charge and a fixed charge.

CITY OF LEMON GROVE (CA)

Mr. Gagnon helped update the commercial and residential wastewater rates for the City of Lemon Grove. The rate structure included 20 different user classes for residential, commercial, and institutional customers.

JULIAN AND PINE VALLEY SANITATION DISTRICTS (CA)

Mr. Gagnon updated the wastewater rates and connection fees for both sanitation districts. The wastewater fees had not been updated for several years in one district and over 15 years in the other necessitating large rate increases. He developed a few different scenarios which included postponing CIP projects or lowering reserve balances, to ease ratepayers into higher rates.

SAN ANTONIO WATER SYSTEM (TX)

Mr. Gagnon prepared a sewer impact fee economic model and study for the City of San Antonio. This included a valuation of the system's facilities using several asset based approaches. Ultimately the total net book value without depreciation was selected as the basis for the valuation of the System's assets. In addition an equity residual model was prepared that included the allocation of the present value of past and future debt service payments. The study also analyzed a number of impact fee structures to determine the most fair and equitable fee.

CITY OF LA HABRA (CA)

Mr. Gagnon helped prepare the City of La Habra's (City) first professional sewer user rate study. This study followed industry standards and an EPA approved rate structure. The City plans to create a formal enterprise fund for their sewer utility to properly finance their sewer operations and maintenance. He developed the long-range financial plan modeled year-end cash reserves to ensure execution of the City's $21 million capital improvement program and to fund operations and maintenance.

CITY OF WEBSTER (TX)

Mr. Gagnon is constructing a stormwater model for the City of Webster (City). The rates are based on the impervious surface of each parcel. The City plans using water meters to bill customers.

CITY OF NORMAN (OK)

Mr. Gagnon is constructing a stormwater rate model for the City of Norman. The model is constructed in several different ways to allow the city council to choose from alternative rate structures, including the contentious issue of whether or not Oklahoma University, which owns large parcels of impervious surface area, will support the stormwater utility.

BOXELDER COUNTY (CO)

Mr. Gagnon assisted Boxelder County (County) in the determination of how they will finance their required stormwater improvements. They plan to create a stormwater utility through diverse funding sources including impact and user fees, a community financing district, and grants and loans. The goal of this study was to identify and size a system of improvements which will achieve the greatest defined economic benefit (both local and regional) per dollar of cost, based on the 100-year floodplain extents.

CITY OF FULLERTON (CA)

Mr. Gagnon conducted a field audit to determine appropriate return to sewer flows as well as fats, oils and greases surcharge rates for the top 50 industrial water customers in the City of Fullerton.

OTHER RELEVANT PROJECT EXPERIENCE

- Blue Plains Wastewater Treatment Plant (DC) - Valuation Study
- Confidential Fortune 500 Aerospace Corporation (CA) - Strategic Remediation Financial Planning and Analysis
- Earth Tech (CA) - Operation Excellence Plan
- Keweenaw National Historical Park, National Park Service (MI) - Business Plan
- Marine Corps Base Camp Pendleton (CA) - Utility Privatization
- Metro Wastewater Joint Powers Authority (CA) - Valuation of Treatment Capacity
- City of Pico Rivera (CA) - Valuation of Groundwater Pumping Rights
- U.S. Army Sudbury Annex Superfund Site (MA) - Base Realignment and Closure

HABIB ISAAC

TECHNICAL ADVISOR
Manager

PROFILE

Mr. Isaac has extensive experience in financial and utility rate modeling and has been serving public agencies as a lead consultant for more than 13 years. With a background in applied mathematics and computer programming, Mr. Isaac has developed a number of financial models and has recently incorporated sophisticated macros into his models to create a user-friendly interface that can save and store scenarios "on-the-fly" for comparative analysis. Mr. Isaac is also well-versed with the cost of service principles and special benefit provisions of Proposition 218. In addition, he has also provided consulting services for conducting fiscal impact analyses for agencies in determining the impact generated by new development on services, and has prepared cash flow pro formas for securing bond issues, including mello-roos bonds, revenue bonds, and a number of refunding.

Mr. Isaac has assisted clients in the preparation and presentation of public awareness and information programs related to municipal projects ranging from utility rate studies to agency-wide taxes, and feasibility studies. He has developed procedures and supervised the preparation of extensive computer models for utility rate studies. Such experience generally relates to performing budget analyses, customer and usage analyses, development of revenue requirements, and cost of service allocations related to the implementation of rate structures designed to promote conservation while accounting for revenue sufficiency and price elasticity. As a mathematician, Mr. Isaac understands the sensitivity between competing variables that are commonly present in utility rate studies, such as, cost based tiers and economic price signaling.

RELEVANT PROJECT EXPERIENCE

EAST VALLEY WATER DISTRICT (CA)

Mr. Isaac served as Project Manager to the East Valley Water District (District) and assisted the District with changing their rate structure from a basic uniform rate to tiered budget-based rates that accounted for household size and actual irrigable area of each account through the use of GIS. From inception, the District desired to adjust from the current uniform rate structure to one that complimented their long-term strategic goals of ensuring water efficiency and assisting with water management. Given the District's uniform rate structure, Mr. Isaac lead a detailed cost of service analysis to establish a sound nexus for determining appropriate tiered breakpoints per account as well as unit costs by tier. The model analyzed usage at the account level and provided water allotments to each

TECHNICAL SPECIALTIES

- Utility cost of service
- Rate structure studies
- Financial planning studies
- Bond feasibility pro formas
- Connection fees
- Cost Allocation Studies
- User Fees

PROFESSIONAL HISTORY

- Raftelis Financial Consultants, Inc.: Manager (2014-present); Senior Consultant (2013)
- MuniFinancial: (2004-2013)
- David Taussig & Associates: (2003-2004)

EDUCATION

- Bachelor of Science in Applied Mathematics with Emphasis in Computation Science - San Diego State University (2002)

for "indoor needs" and "outdoor needs."

The adopted rates, resulting from the comprehensive cost of service analysis, unbundled rate components to convey the true cost of various service components and to continue to equitably pass on the cost of water services to users. The Board adopted the water budget rate structure on March 25, 2015. The findings and recommendations resulting from the Study were summarized and documented in the Study Report.

HELIX WATER DISTRICT (CA)

Mr. Isaac is currently completing a comprehensive Cost of Service Water Rate Study for the Helix Water District (the District). The District provides water service to approximately 55,000 customer accounts, serving a population of approximately 270,000 residents in San Diego County.

More than 10 years had passed since the District's last adopted "Cost-of-Service" study. Given the length of time since the last adopted comprehensive rate study, one specific project challenge was determining the best rate structure for the District to implement moving forward. As such, Mr. Isaac conducted a pricing objective workshop with the Board to explore rate alternatives that would best fit the District's goals and objectives. Based on the results from the pricing objectives workshop, RFC was able to develop a rate structure that met the District's needs and was fully compliant with Proposition 218. In addition, Mr. Isaac recommended that the District incorporate a pass-through component for any potential rate increases implemented by the District's wholesale water supplier and update the current rate structure as follows: 1) maintain a 3-tiered rate structure for Domestic accounts, with slight modifications to the Tier 1 and Tier 2 allotments, 2) adjust Irrigation rates from a 3-tiered budget-based rate structure to a 2-tiered budget based rate structure. The District had previously defined efficient use for each account by providing a unique water allotment each month; therefore, Tier 1 would reflect the amount of water needed (within their water budget) and Tier 2 would signal when an account went over their water budget.

Over the course of this 12-month project, Mr. Isaac presented at 10 public meetings and the Public Hearing is scheduled for October 7th 2015.

RINCON DEL DIABLO WATER DISTRICT (CA)

In 2014, the Rincon del Diablo Water District (District) contracted with RFC to conduct a Water Cost of Service and Rate Study to develop a financial plan as well as design water rates for the District for the next five years. The District is located approximately 25 miles north of the City of San Diego and serves a population of approximately 30,000 customers.

Like many water agencies in California, the District was faced with challenges related to the reduction in water usage as a result of conservation, the slow economy, increasing water supply costs, and the recent Executive Order by Governor Brown to reduce water consumption by 25% Statewide. The District was operating in an environment where operational costs and external costs associated with imported water from continue to increase and the reinvestment of funds to its infrastructure is required as outlined within the District's updated Master Plan.

Mr. Isaac served as Project Manager and presented RFC's findings and recommendations at all public meetings. Mr. Isaac recommended that the District adjust revenue by 5% for each of the next five years and incorporate a pass-through provision for increased costs incurred from the San Diego County Water Authority (SDCWA).

In addition, Mr. Isaac recommended certain adjustments to the District's reserve targets. Adjustments included increasing the Operating Reserve to 90 days of operating expenses and adjusting the Rate Stabilization Reserve Target to 10% of purchased water costs.

Mr. Isaac also provided recommendations to the rate structure to ensure compliance with the cost of service principles of Proposition 218. Residential rates were adjusted from a 5-tiered rate structure to

a 3-tiered inclining rate structure that can be clearly supported by cost incurred. Non-Residential (Commercial/Industrial and Medical Care Facilities) rates were adjusted from a 3-tiered rate structure to a uniform rate structure as Non-Residential commercial uses and related water needs can vary drastically between accounts. Finally, RFC recommended changing the Agricultural and Irrigation rate structure from a 5-tiered budget based rate structure to a 2-tiered budget based rate structure.

The Rate Study and all recommendations were approved at a Public Hearing held on June 9, 2015.

ZONE 7 WATER AGENCY (CA)

In July, 2015, RFC was selected to conduct a comprehensive Cost of Service Wholesale Rate Study for the Zone 7 Water Agency (the Agency) and Mr. Isaac served as Project Manager for this engagement. Given the recent state-wide emphasis for retail water agencies to meet conserve mandates of the Governor's Executive Order, the Agency experienced a significant reduction in water sales when compared to the previous Fiscal Year. These cutbacks also affect the Agency's revenue stability as nearly 100% of the Agency's revenue is recovered through variable rates and fixed revenue recovery is negligible, even though a majority of the Agency's costs are fixed. As a result, the Agency has seen a $5M reduction in expected sales or 15% revenue loss. Given the severity of the financial impact, Mr. Isaac completed the cost of service rate study over an aggressive timeline and RFC presented rates in September 2015.

After reviewing the Agency's current financials and revenue requirements over a 5-year planning period, RFC developed the following recommendations to meet the Agency's critical short-term needs: 1) recover lost revenue due to a reduction in sales through a Temporary Conservation Surcharge, 2) the Temporary Conservation Surcharge would be in place while revenue adjustments of 10% are made to permanently replace revenue generated by the Temporary Conservation Surcharge, 3) Fund capital through a combination of Pay-As-You-Go (PAYGO) (cash on hand) and Debt financing, and 4) Build up reserves to meet minimum target level over the three year planning period.

Mr. Isaac also reviewed the current rate structure and recommended the following adjustments to the current rate structure: 1) adjust the current 100% variable rate structure and to one that includes both fixed and variable, with approximately 35% of required revenue generated through fixed charges. Given that the Agency is a wholesaler, fixed charged would be based on historical water sales for allocating the 35% of revenue recovery to each retailer.

The Public Hearing is scheduled for October 21, 2015.

CITY OF ARROYO GRANDE (CA)

Mr. Isaac is currently serving as lead rate consultant on a comprehensive cost of service analysis and financial plan for the City of Arroyo Grande. The City currently has ground water and a supplemental water supply from the Lopez Dam that is debt financed. As part of the cost of service analysis and tiered-rate structure, costs were built up based on water supply costs, delivery costs, and peaking to substantiate why each tier has a different rate per unit of water. Doing so provided a clear understanding on the costs incurred by the city's utility and provided a nexus in compliance with Proposition 218. The project is almost complete and is proceeding with the Proposition 218 noticing.

CITY OF SIERRA MADRE (CA)

Mr. Isaac recently completed a long-term financial plan update for the City of Sierra Madre's water and sewer enterprises. The project also included a rate redesign of the City's water rate structure to promote water conservation while meeting the City's Water Utility's financial needs. The Public Hearing concluded on January 28th 2014 and new rates will go into effect in March, 2014. The new proposed rate structure moves from a three-tiered water rate to a four-tiered water rate structure that includes a new Tier 1 allotment to reward customers that are very efficient with their water usage. In recent times, the City has experienced a significant reduction to their

available groundwater and the new rate design will now account for additional costs incurred from the inclusion of supplemental water from MWD. As a result, the City long-term financial plan has been updated and a comprehensive water consumption analysis has been completed to ensure revenue sufficiency in the near-term as well as the long-term.

ELK GROVE WATER DISTRICT (CA)

In 2013, Mr. Isaac served as Principal-in-Charge and assisted the District with a very extensive and thorough redesign and public outreach campaign for its water rates. The District's previous study was conducted in 2007 and was expedited because the District was not in compliance with its existing bond covenants. The results of the study recommended revenue adjustments from Fiscal Year 2007-08 through 2011-12 of 32%, 20%, 15%, 3%, and 3%, respectively. The District was able to reduce the third year from a 15% revenue adjustment down to 12% and deferred the last two years of 3% revenue adjustments.

Given the circumstances from the last rate study, the District wasn't completely aware how their current rates were developed and wished to take a more measured approach to the 2013 Water Rate Study. As such, the study included meetings with District staff, a Citizens' Advisory Committee, Finance Committee, and the District Board. Mr. Isaac presented the cost of service analysis and rate redesign through multiple meetings that dissected each item into discrete components. Separate meetings were held to discuss the following components: 1) the District's fiscal policies, 2) District objectives, 3) establishment of new reserve funds, 4) fire protection services, 5) cost of service analysis, 6) customer classes, 7) refinancing of existing debt, 8) consumption forecast, and 9) customer impact analysis. The ultimate objective of the District was to mitigate rate increases while accounting for future obligations of the District, such as escalating debt service payments.

The Proposition 218 Notices were mailed in May 2013 and all of the material discussed and presented over the course of the last 9 months is on the District's website at http://www.egws.org/2013waterratestudy.html. District staff and Board members clearly understand the basis for the proposed new rates and are comfortable with the new rate structure.

In addition, Mr. Isaac is continuing to provide services to the District through annual updates for Fiscal Year 2014 through Fiscal Year 2018.

ENCINA WASTEWATER AUTHORITY (CA)

Mr. Isaac assisted the Encina Wastewater Authority (EWA) with the Asset Allocation for the Phase V Expansion Project of their Wastewater Treatment Plant (2013). The update adjusted initial cost estimates using actual figures based on: existing facilities and the most recently completed CAFR; project costs based on actual amounts paid according to EWA financial records; and, actual Engineering News Record, Los Angeles (ENRLA) at the defined mid-point of construction. The analysis accounted for the specific discharge characteristics of the EWA's member agencies as well as total capacity necessary to serve each member, which includes: City of Vista, City of Carlsbad, Buena Sanitation District, Vallecitos Water District, Leucadia Wastewater District, and City of Encinitas. The analyses determined the updated amount of any debits or credits to each EWA Member Agency and established EWA Member Agency Ownership percentages for completed capital improvements.

PHELAN PINON HILLS COMMUNITY SERVICES DISTRICT (CA)

Mr. Isaac served as lead rate consultant on a recently completed comprehensive cost of service analysis and financial plan for the Phelan Pinion Hills Community Services District (CSD). The study accounted for the CSD's policy objectives and achieves a strong financial outlook in future years. As the CSD was undertaking a study of this type for the first time since becoming an independent local agency, Mr. Isaac's primary objective was to develop a robust and custom-designed financial rate model that would clearly reveal the current financial health of the Water Enterprise Fund and provide a sound financial plan reflecting a continued strong financial outlook.

To ensure stable short- and long-term financial stability, historical and future financial information was collected and analyzed, including water operations, planned capital improvement projects, existing debt obligations, and the acquisition of additional water rights. As this was the CSD's first independent financial and rate analysis, Mr. Isaac collaborated closely with CSD staff to prepare and tailor a comprehensive financial model that focused on District policies and fiscal objectives. Mr. Isaac assisted with not only ensuring a healthy financial outlook for the utility in future years, he also took this opportunity to provide a thorough understanding to District Board Members on rate-setting principles and best management practices.

Mr. Isaac is continuing to work with the District on annual updates for Fiscal Year 2014 through Fiscal Year 2018.

CITY OF COVINA (CA)

Mr. Isaac served as lead consultant in a redsign of the City's water rate strcuture. The new rate strcuture incorporated a three-tiered water rate design that secured a stable revenue stream while promoting efficient use of water. One of the City's primary goals was to restructure the existing water rates to reach a 20% reduction in water consumption by calendar year 2020.

CITY OF DANIA BEACH (FL)

Mr. Isaac conducted a a comprehensive review and financial plan update for the City's water and wastewater utilities and restrcutured the rates to reflect a cost of service methodology. Mr. Issac also served as lead consultant in restrcuting the City's method of assessment for its stormwater and fire assessments. Due to his breadth of knowledge for each service discipline identified in this engagement, Mr. Isaac operated as principle-in-charge for the entire project. Each Enterprise Fund involved the creation of a detailed financial plan to account for current and future operations; maintenance and facilities; and the development and implementation of new fee, rate, and assessment structures.Through Mr. Isaac's review, the existing rate structure demonstrated that current utility rate revenues were not sufficient to fund operating and maintenance costs, as well as necessary capital improvements. The updated rate analysis established distinct customer classes for each utlity that distributed the full cost of services to the customer base, in proportion to service demands placed on utility systems.

PUBLICATIONS

- "Cryptography with Cycling Chaos," Physics Letter A, V 303; Pages 345-351(2002)

OTHER RELEVANT PROJECT EXPERIENCE

- City of Arroyo Grande (CA) - Cost of Service Analysis and Financial Plan
- City of Coachella (CA) - Water Rate Study
- City of Covina (CA) - Water Rate Structure Redesign
- City of Dania Beach (FL) - Water and Wastewater Financial Plan Update
- Town of Danville (CA) - Cost Allocation Plan
- City of Delano (CA) – Water, Wastewater, Refuse, and Street Sweeping Rate Study
- Elk Grove Water District (CA) - Water Rate Redesign and Public Outreach
- Encina Wastewater Authority (CA) - Asset Allocation for the Phase V Expansion Project of the Wastewater Treatment Plant
- City of Irvine (CA) - Cost Allocation Plan and UF
- City of La Mirada (CA) - Cost Allocation Plan and UF
- City of Lompoc (CA) – Water and Wastewater Rate Study
- City of Modesto (CA) - Cost Allocation Plan
- City of Pacifica (CA) - Cost Allocation Plan and UF
- Phelan Pinon Hills Community Services District (CA) - Cost of Service Analysis and Financial Plan
- City of San Fernando (CA) - Water and Wastewater Rate Study
- City of Sierra Madre (CA) - Financial Plan Update
- City of Tulare (CA) - Water Rate Study and Cost Allocation Plan

TECHNICAL SPECIALTIES

- Utility cost of service
- Rate structure studies
- Financial plan studies
- Economic feasibility studies
- Conservation rate studies
- Water budget rate studies

PROFESSIONAL HISTORY

- Raftelis Financial Consultants, Inc.: Senior Consultant (2008-present)
- Avery Dennison: Research Chemist (2004-2008)

EDUCATION

- Master of Business Administration in Finance - California State University, Los Angeles (2007)
- Bachelor of Science in Chemical Engineering - University of California, Berkeley (2003)

KHANH PHAN

STAFF CONSULTANT
Senior Consultant

PROFILE

Ms. Phan has served as Lead Consultant or Deputy Project Manager on numerous water and wastewater studies including rate, cost of service, reserve policy, financial planning, connection fee, conservation rate, and water budget rate studies. Her specific experience includes projects for the following utilities in California: Alameda County Water District, El Toro Water District, Elsinore Valley Municipal Water District, Mesa Consolidated Water District, Mojave Water Agency, Western Municipal Water District, Yorba Linda Water District, and the Cities of Camarillo, Glendora, Huntington Beach, Riverside, San Clemente, and Santa Cruz. She possesses strong analytical and management skills acquired from her background, education, and experience. Ms. Phan has advanced computer skills and is an excellent modeler. Ms. Phan also co-authored a chapter entitled, "Understanding Conservation and Efficiency Rate Structures," for the Fourth Edition of the industry guidebook, *Water and Wastewater Finance and Pricing: The Changing Landscape*.

RELEVANT PROJECT EXPERIENCE

EL TORO WATER DISTRICT (CA)

In 2009, RFC completed a comprehensive cost of service study for El Toro Water District (District). Ms. Phan is responsible for developing a rate model to examine new water and sewer rates for the District to reflect the increased water cost from Metropolitan Water District of Orange County and the increased operating costs for the District's water and sewer systems. The model analyzes projected revenues, budgeted O&M costs, cost of service, the District's financial plan and customer impacts as a result of proposed rate increases.

In 2010, Ms. Phan completed the water budget rate study scheduled to be implemented on July 1st, 2010. This involves integrating the District's account data with the assessor's parcel data and ultimately determining the parcel area and landscape area of each parcel to be used in water budget rate design and in the implementation of the new rate structure. Ms. Phan is responsible for developing a water budget rate model to evaluate policy options, to assess the associated customer impacts. A variance form for individual water budget adjustments is also provided to the District as an implementation assistance tool.

The District has engaged RFC annually to assist in its water and wastewater rate updates. In addition, the District also commissioned RFC to

evaluate the financial impacts of the Recycled Water expansion in May 2012. Ms. Phan developed an advanced, user-friendly Financial Plan Model with easy to understand graphics to communicate the financial impacts and the sensitivity analyses of the expansion on the Water and Sewer Enterprises. The Report was submitted to the District in July 2012.

To address the recent severe and ongoing drought in California, the District engaged RFC in a Drought Rate Study to determine the indoor and outdoor drought factor adjustments necessary to encourage conservation among its residential and irrigation customers and penalty rates for commercial customers to achieve the required reductions in consumption under increasing levels of drought. As part of the Study, RFC conducted financial impact analyses on revenues, expenditures, net revenues for each drought stage if 1) customers continue to consume at normal (non-drought) levels or 2) customers reduce consumption by the amount required. As lead analyst, Ms. Phan developed interactive excel Model to conduct financial impact analyses for each of the projected drought stages.

RANCHO CALIFORNIA WATER DISTRICT (CA)

In 2009, RFC conducted a Water Budget Rate Study for the Rancho California Water District (District). As a Lead Consultant, Ms. Phan assisted the District as they established an equitable and defensible water budget structure for residential and irrigation customers for both Rancho and Santa Rosa Divisions. She performed thorough analyses on different methodologies of allocating water sources to different customer classes and determining landscape area caps for residential accounts and on usage, revenue and customer impacts associated with proposed water budget rates. She assisted the District in preparation of a presentation of the study results to District Board in order to facilitate their informed policy decision process.

In December 2009, RFC assisted the District in conducting New Water Demand Offset Fee Study as part of the connection fees assessed to new connections added to the District's water system. Due to recent regulatory drought in California, the District declared Stage 3 – Water Warning – under the District's Water Shortage Contingency Plan. The New Water Demand Offset Program is a form of funding conservation measures that will help to create sustainable, zero water footprint new development. In addition to the conventional capital facility fees, the new developments will also pay fees called New Water Demand Offset Fees to fund the conservation and recycled program in order to generate potable water savings in the existing system to support new water demand generated by new developments. Ms. Phan assisted the District in calculating the New Water Demand Offset Program Cost and the New Water Demand Offset Fees and documenting the nexus between the fees and the program cost to ensure the compliance with the requirements specified in California Government Code Section 66000-66008 or AB 1600.

The District's current water capital facilities financing program estimates $323 million to be spent by the end of 2030. Due to the significant amount of capital spending expected, in November 2011, the District commissioned RFC to evaluate its existing capacity fee methodology and update the fee to ensure that new customers pay an equitable share when joining the District's system. Ms. Phan, a lead consultant, developed the Capacity Fees Model to calculate proposed capacity fees based on the updated asset values and adjusted Capital Improvement Plan values (from the 2005 Water Facilities Master Plan Update), which will benefit future development, and estimated incremental demand. Utilizing the methodologies used in the 2011 Water Budget Update Study, RFC estimated the yearly demand for a residential user with a ¾-in meter (or 1 equivalent dwelling unit, EDU) for both divisions. Meter equivalence ratios based on AWWA hydraulic capacities (AWWA M6) are used to project water demand estimates for customers of varying meter sizes. The results were summarized in the Water Capacity Fee Study Report and presented to the Board in March 2012.

In 2012 and 2014, the District again engaged RFC

to update the Water Budget Rate Models to address arising issues and challenges. For the past several years, due to hotter climate, the efficient outdoor water sales exceeded projected sales, and the District had experience inadequate cost recovery for marginal water supply costs. In the 2014 Study, RFC updated the Water Budget Rate Model to fine tune the water allocation factors and the allocation of water supply to projected sales in tiers to address better align available water supply and water demand in tiers and to reduce the risk exposure of purchasing more expensive water for Tiers 1 and 2 sales.

WESTERN MUNICIPAL WATER DISTRICT (CA)

RFC has been assisting Western Municipal Water District (District) with several projects including the development of a water budget rate structure for its retail customers, the development of a long-term financial plan for each cost center with¬in the District, a review and analysis of the annual water rate update, and a water budget web calculator to be used as a public outreach tool. As a Lead Consultant, Ms. Phan consulted the District in the development of an equitable and defensible water budget structure for retail customers for their two cost centers – Riverside Treated Service and Murrieta Treated Service. She performed thorough analyses on usage, revenue and customer impacts associated with proposed water budget rates.

In 2010, RFC assisted the District in its annual water rate update study to ensure revenue sufficiency to recover the increasing costs of imported water and to en¬hance revenue stability by designing a rate structure that will reduce the District's dependency on property tax to fund its operations. As Lead Consultant, Ms. Phan thoroughly analyzed the customer impacts of different proposed rates and levels of property tax dependency. The proposed rates were approved by District Board in May 2010.

In order to better financially manage all 14 enterprises, the District needed a compre¬hensive, yet user-friendly financial plan model which can be used to facilitate com¬munications between staff and the District's Board of Directors about the financial implications of different financial policies and capital projects. In 2011, as a lead consultant, Ms. Phan developed a customized 30-year Financial Plan Model (Model) with the ability to conduct scenario analyses. The interactive dashboard of the Model displays the Long-Term Financial Plan of the 14 enterprises in graphical format. A CIP manager was de¬veloped to save a customized CIP scenario to be used for financial implication evaluations. The built-in scenario manager enabled the Model users to save, load, and compare the results of different assumptions, inputs and CIP scenarios. Cus¬tomized financial reports in preset printed format can be generated at individual enterprise level and at aggregate level for the whole District. The District has engaged RFC several times after the completion of the Model for technical support and model enhancements to accommodate for arising issues.

In 2012, the District engaged RFC to develop the connection fees for its retail water, wastewater, and recycled water services. The District updated its Master Plans for Retail Water in Riverside service area, Riverside Recycled Water, and for Wastewater in 2009, but has not incorporated them into the current connection fees. In addition, the District currently does not assess connection fees for recycled water and desired to develop one to recover the capital cost to support the associated growth. Ms. Phan developed the connection fees Model to evaluate different policy options related to allocations of tertiary recycled water treatment values to potable, wastewater, and recycled water and to calculate the connection fees for retail water, wastewater, and recycled water based on the framework established through close collaboration with District staff.

CITY OF SAN JUAN CAPISTRANO (CA)

In 2013, the City of San Juan Capistrano (City) was challenged by its ratepayers regarding a tiered rate structure developed by the City's previous rate consultants. The plaintiffs were concerned that the previous rate structure did not meet the cost of service test per the requirements of Proposition 218. The courts determined that the administrative

records were not sufficient to establish a clear nexus for the rates.

The City selected RFC to assist with resolving this matter. One factor in the City's decision for selecting RFC was the rigorous nature of our approach for defensible rate structures as compared to many practitioners in the industry. In the case of the City and other agencies, a common practice has been to base tier prices on multipliers. This leaves agencies exposed to courts opining that their multiplier approach violates the "arbitrary and capricious" provision of Proposition 218.

In resolving the City's matter, RFC implemented its approach for satisfying a clear nexus for the rates; there needs to be a clear justification of the tiers and pricing. RFC achieved this nexus by developing rate components, which were used to justify the various tiers for the proposed rate structure. RFC's work withstood the rigorous scrutiny of several City Council meetings, including a multi-hour discussion confirming the defensibility of RFC's cost-of-service approach. As the lead consultant and modeler, Ms. Phan developed the multi-year financial plan model to facilitate the discussion about long-term financial planning for the Water, Recycled Water (RW), and Wastewater (WW) Enterprises to ensure financial sufficiency and sustainability. Ms. Phan also developed the Rate Models for Water, RW, and WW including the cost of service analysis and cost justifications for the tiered rates along with the customer impact analyses to assist the City's elected official to make informed decisions about the rates. In addition, she prepared the supporting documents used during City Council meetings and workshops along with the most comprehensive Rate Study Report to establish the clear nexus for the rates, as required by Proposition 218 and the 2013 court decisions. The Report highlighted the major issues and decisions made during the course of the study; provided an overview of the operations, CIP, and the financial plan; and discussed and explained the cost of service analysis and methodology used to develop the final rates. The explanation of the methodology found within the Report demonstrates that the rates are equitable, reflect the City's policies and values, and are driven by the City's revenue requirements. The rates were approved and adopted in 2014.

CITY OF GLENDORA (CA)

In 2012, to promote water efficiency within its service area, the City of Glendora (City) commissioned RFC to evaluate the benefits of water budget rates and conduct the Water Budget Rate Study to develop the water budget tiered rates for its single family residential customers. As lead consultant, Ms Phan developed a custom-built Water Budget Rate Model to evaluate different water budget policy options associating with weather data and landscape area definitions. In addition, the City's account data and the Assessor's parcel data were integrated to retrieve the lot size and other parcel data relevant to be used to determine the landscape areas for single family residential parcel. The Model also included the Rate Module to calculate the resulting water rates for both water budget and non-water budget customers based on the revenue requirements determined by the City's budget and cost of service analyses. The Water Budget Allocation Model was presented to the Water Commission in October 2012 along with the results from the billing system assessments and cost and benefits analyses of water budget rate implementation. The Water Budget Rate Model was presented to the Water Commission in the summer of 2013.

YORBA LINDA WATER DISTRICT (CA)

Starting 2010, RFC is currently assisting Yorba Linda Water District in conducting the cost of service and conservation rate study for the water enterprise. This study involves development of the long-term financial plan, evaluation of different conservation rate structures, including inclining tiered and water budget tiered rate structures, review and design of new defensible and equitable rate structure that enhances revenue stability, ensures financial sufficiency and promotes conservation and water use efficiency. Ms. Phan is responsible for developing the financial plan and water budget rate models to evaluate policy options, to assess the associated customer impacts. The District has requested RFC assistance in its rate updates since the initial

engagement and as deputy project manager, Ms. Phan was the key personnel assisting the District.

ALAMEDA COUNTY WATER DISTRICT (CA)

In early 2012, Alameda County Water District (District) commissioned RFC to conduct a financial plan study including developing a 25-year Financial Plan Model (Model) to assess risk of fluctuations in water supply demand, capital improvement plan scenarios, and to evaluate the potential financial impacts. As Lead Consultant, Ms. Phan developed the customized Model which featured a scenario analysis tool and a user-friendly dashboard. This Model was instrumental in effectively communicating the financial impacts to stakeholders. RFC presented the Model to the District Board to show the District's financial health under various scenarios related to water supply, water sales, and expenditures.

In the same year, the District retained RFC to conduct the financial impact analysis of the outcomes of the union negotiation. As Deputy Project Manager, Ms. Phan worked closely with District staff to develop the Union Negotiation Module (Module) to be used in the Union Negotiations. In early January 2013, the Module was used to assess the financial impacts on the District of the union negotiated contracts for labor and benefits. Ms. Phan also enhanced the Model with additional features including a scenario manager, which enabled users to save and compare various scenarios within the Financial Plan Module and Rate Module to determine the new rates and customer impacts resulting from the cost of service analyses and the financial plan.

Since 2012, the District has annually retained RFC for support on updating the financial plan and other financial and rate analyses. Ms. Phan has been the Lead Consultant on various engagement with the District.

In late 2014, the District again retained RFC to conduct the long-term financial plan and cost of service analysis to develop rates that: would maintain financial sufficiency; are consistent with the District's policies; comply with general cost of service principles; and are in compliance with Proposition 218 requirements. During the course of the study, the financial plan model (FPM) considered many different drought scenarios and different financial outcomes. The scenarios included normal non-drought conditions, mild drought conditions ending in one year (2015 drought only), medium drought conditions ending after two years (medium), and severe drought conditions spanning three years (extended dry period). In addition, as part of the Study, RFC evaluated and presented two options of bi-monthly fixed service charges to the Board of Directors during the December 2014 Public Workshop. One of the goals when developing a fixed charge is to better align fixed revenues with fixed costs and align commodity revenues with variable costs. The drought surcharge, which was developed in the drought rate study and adopted in July of 2014, will continue to mitigate the effects of reduced demand until the provisions of the Drought Surcharge Sunset criterion are met. As Lead Consultant, Ms. Phan developed an interactive Rate Model to conduct various water rate scenarios and evaluate the associated customer impacts for each of the rate alternatives to assist the District in making informed decisions.

CITY OF CAMARILLO (CA)

In 2011, City of Camarillo (City) engaged RFC to conduct a comprehensive water and wastewater rate study to independently assess and evaluate existing water and wastewater rates for compliance with industry standards and California regulations, and to develop a financial plan to ensure financial sufficiency while minimizing rate impacts to the greatest degree possible. Ms Phan was responsible to develop the Water and Wastewater Rate Models with Dashboard functionality for scenario analyses for alternative capital financing and to facilitate communication and decision makings with City Council. The Study included a comprehensive review of the water and wastewater enterprises' revenue requirements, a review of the City's user classification and usage patterns, a cost of service analysis, the development of water and wastewater connection fees, the designing of water and wastewater rates

and the analysis of customer impacts along with a rate survey of neighboring agencies. The City had significant capital improvement projects scheduled in the immediate future (FY 2012 to FY 2014); to smooth out customer impacts while sufficiently maintaining the utility's systems, RFC developed water and wastewater financial plan Models to evaluate different CIP scenarios, financing options and associated financial impacts. RFC recommended water and wastewater rate schedules for a two-year period effective January 2012 and 2013, which was approved by the City Council in November 2011.

Since 2012, the City commissioned RFC to conduct the annual rate update study to assess the financial health of the Water and Wastewater Enterprises after its rate adoption in January 2012. Ms. Phan updated the Water and Wastewater Financial Plan Models with new key financial information, including operating and capital budgets. The results were communicated annually with the City Council.

CITY OF SANTA CRUZ (CA)

City of Santa Cruz Water Department (Department) is currently providing water services to population of approximately 60,000. Increasing operation and maintenance costs along with projected intensive capital program in the next ten years and volatile water sales in recent years has driven the Department to develop financial policies to mitigate potential risks and to establish sound financial management practices, and conduct a long-range financial plan to ensure financial sufficiency and sustainability of the Department's water system. In 2012, the Department commissioned RFC to develop the Financial Plan Model as a tool to access the financial implications of different financial policies. As lead consultant, Ms Phan was responsible for developing the custom-built Financial Plan Model and prepared a White Paper summarizing the recommended financial policies for the Department.

EAST ORANGE COUNTY WATER DISTRICT (CA)

Since 2011, East Orange County Water District (District) engaged RFC in several studies including water budget analysis and cost of service analysis for its retail water services. To convey the concept of water efficiency use, the District asked RFC to develop a Water Budget Model to evaluate different policy options associated with setting the efficiency benchmark for residential water use within the District's retail service areas. In the same year, the District requested RFC's assistance in conducting cost of service analysis and developing a Rate Model to be updated annually by District staff to calculate new rates. In 2015, the District engaged RFC in a water rate study for its wholesale and retail services. The study involved the development of a long-term financial plan and cost of service based rates for the wholesale and retail services, along with the nexus Report to support the proposed rates. Ms. Phan was the lead analyst and modeler in all engagements with the District.

OTHER RELEVANT PROJECT EXPERIENCES

- City of Corona (CA) - Water Financial Plan and Water Budget Rate Study
- City of Glendora (CA) – Water Budget Rate Study
- City of Huntington Beach (CA) – Water Budget Rate Study
- City of Ontario (CA) - Water, Wastewater and Solid Waste Rate Study
- City of Riverside (CA) – Water Capital Facility Fees
- City of San Clemente (CA) – Water, Wastewater and Recycled Water Financial Plan Study and Rate Update
- City of San Juan Capistrano (CA) - Water, Recycled Water and Wastewater Rate Study
- City of Santa Cruz (CA) – Financial Policy and Financial Plan Study and annual Rate Update
- City of Signal Hill (CA) – Financial Plan Study and Water Lease Market Analysis
- City of Thousand Oaks (CA) – Water and Wastewater Financial Plan and Rate Study
- Elsinore Valley Municipal Water District (CA) – Financial Plan Study, Water and Recycled Water Rate Study
- Goleta West Sanitary District (CA) – Reserve Policy Study and Financial Plan Study
- Jurupa Community Services District (CA) –

Water Rate Study, Financial Plan and Water Budget Rate Study

- Las Virgenes Municipal Water District (CA) - Water, Recycled Water and Wastewater Rate Study
- Mesa Water District (CA) – Financial Plan Study and Updates
- Metropolitan Water District of Southern California (CA) - Cost of Service Study and Rate Study Training Session
- Mojave Water Agency (CA) – Financial Plan Study and Updates
- Olivenhain Municipal Water District (CA) – Wastewater Financial Plan
- San Gabriel County Water District (CA) - Water Rate Study
- Santa Margarita Water District (CA) - Water, Recycled Water and Wastewater Rate Study
- South Coast Water District (CA) – Water Budget Feasibility Study
- Trabuco Canyon Water District (CA) - Water, Recycled Water and Wastewater Rate Study

TECHNICAL SPECIALTIES

- Utility cost of service and rate structure studies
- Financial planning studies
- State revolving fund assistance

PROFESSIONAL HISTORY

- Raftelis Financial Consultants, Inc.: Senior Consultant (2009-present); Staff Consultant (2007-2009)
- Merati Economic Group: Economics Analyst (2006-2007)

EDUCATION

- Master of Business Administration - California State University, Los Angeles (2007)
- Bachelor of Science, Business Administration – California State University, Los Angeles (2006)

HANNAH PHAN

STAFF CONSULTANT
Senior Consultant

PROFILE

Ms. Phan has over 10 years of consulting experience in financial planning and cost of service studies. She has served as a lead consultant on numerous water, wastewater, and recycled water rate studies, cost of service studies, connection fee studies, and valuation studies. Her specific experience includes projects for the Cities of San Diego, Ventura, Palo Alto, Santa Barbara, Santa Monica, Anaheim, Ontario, Escondido, Redlands, and Banning, Napa Sanitary District, Central Contra Costa Sanitary District, East Bay Municipal Utility District, Goleta West Sanitary District, and Carpinteria Sanitary District, and the City of North Las Vegas, Nevada and Tacoma Environmental Services Department in Washington. Ms. Phan has an MBA and is an experienced modeler with strong analytical skills.

RELEVANT PROJECT EXPERIENCE

CITY OF BEVERLY HILLS (CA)

The City of Beverly Hills (City) engaged RFC to develop a rate and financial planning model that would be used to review customer classes, evaluate alternative rate structures and to provide more detailed forecasts to assist in the preparation of updating rates in future years.

The City's water rate structure consisted of a three-tiered increasing block water rate structure with no differentiation among customer types. RFC modeled numerous alternative rate structures and reviewed customer and revenue impacts before recommending that the City modify its current three tiered rate structure to include a fourth tier that targets large irrigation usage. The City's wastewater rates were restructured to more equitably recover the costs of servicing the different customer classes to conform to EPA regulations. RFC continues to provide updates to the City so that the enterprise funds can continue to be financially stable. Ms. Phan assisted in conducting the pricing objectives to determine the objectives most important to the City's stakeholders and developed the water and wastewater rate models to determine the appropriate rates and rate structure for the City's utility services.

CITY OF ANAHEIM (CA)

The City of Anaheim (City) engaged RFC to conduct a water cost of service rate study. To address the financial objectives of the City and identify a water rate structure that is fair and equitable while sufficiently recover the costs of providing water service, RFC developed a water rate and financial planning model to calculate and forecast cost justified water

rates appropriate to recover the operating and capital costs of the wastewater enterprise over a 20-year planning period.

EAST BAY MUNICIPAL UTILITY DISTRICT (CA)

Ms. Phan served as Lead Consultant for a comprehensive wastewater cost of service study for East Bay Municipal Utility District (District). The last comprehensive cost of service study was done in 2000 for the wastewater treatment charges. As part of the study, RFC thoroughly examined the District's cost structure, analyzed wastewater flow and customers data, and evaluated alternative rate structures to develop an equitable rate structure that meets Proposition 218 requirements and the District's goals and objectives. While the proposed treatment rates retain the current rate structure, which includes a fixed monthly service and strength charge and a variable flow charge with a cap at 10 hundred cubic feet (hcf) per dwelling unit per month for residential customers, and a fixed monthly service charge and a variable flow charge per hcf based on customer classification for apartment buildings and non-residential customers, the individual rates are realigned to reflect the cost of service. The District's current rate structure also includes a fixed annual charge per dwelling units (up to five dwelling units) for single- and multi-family customers and per parcel for non-residential customers for wet weather facilities. This rate structure was developed in late 1980s. RFC and District staff evaluated various alternatives for the wet weather facilities charge to ensure equity amongst customer classes. The proposed wet weather facilities charge will be based on the average parcel size for each customer class, which has a stronger cost of service basis than the current rate structure.

CASTAIC LAKE WATER AGENCY (CA)

Ms. Phan served as lead analyst for a financial plan wholesale water rate study for the Agency. As part of the project, RFC developed a comprehensive financial plan that evaluated various financial alternatives to minimize financial risks to the Agency. The Agency received a significant portion of its revenue stream from property tax, which it used to fund capital improvement projects and costs related to its Buena Vista/ Rosedale Rio Bravo (BV/ RRB) water supply. The current wholesale water rate only recovered operating costs of the system. The Agency was concerned that property tax revenue would significantly decrease in the future, which would severely impact its operations and require significant rate increases. Thus, RFC analyzed several alternatives to gradually fund more of the BV/ RRB costs from the wholesale water rate so that it wouldn't be as dependent on property tax revenues. RFC also reviewed and evaluated numerous alternative wholesale water rate structures to enhance revenue stability and promote conjunctive water use in the Santa Clarita Valley among the four purveyors within the system. Since the current wholesale water rate was 100% variable, one of the objectives of the Agency was to enhance revenue stability by incorporating a fixed charge in its wholesale rate structure to ensure recovery of a portion of its fixed costs. RFC presented four rate structure alternatives to the Board, and the Agency implemented a fixed and variable rate structure in which the fixed costs were recovered based on each purveyor's previous three-year average of total water demand.

CENTRAL CONTRA COSTA SANITARY DISTRICT (CA)

Ms. Phan served as Lead Consultant for a comprehensive wastewater cost of service study for Central Contra Costa Sanitary District (District). As part of the study, RFC thoroughly examined the District's customer classification, cost structure, analyzed wastewater flow and strength data, and evaluated alternative rate structures to develop an equitable rate structure that meets Proposition 218 requirements and the District's goals and objectives. The District's Board of Directors was engaged throughout the study process via workshop presentations. Several changes were recommended to the District's rate structure to enhance equity to customers. Additionally, RFC reviewed recycled water rates and developed a wholesale rate for sales to the local water district. Ms. Phan developed the financial plan and cost of service model for the District that allowed the District to quickly review scenarios and evaluate alternatives in

workshop settings. This tool proved invaluable when presenting the results in a graphical format to the District Board of Directors because it enabled them to easily see the impacts of different policy decisions on wastewater rates and customer impacts in real-time. As a results, the Board unanimously adopted the proposed wastewater rates for the next two fiscal years, effective July 1st of 2015 and 2016.

NAPA SANITATION DISTRICT (CA)

Ms. Phan served as lead analyst for a recycled water rate study for the Napa Sanitation District (District). The District was required to restrict summer discharge of its wastewater into the river. The District made improvements to its treatment plant to produce recycled water and then provided incentives to customers to use the recycled water. The agreement with customers was ending in two years, but the District wanted to enlarge the recycled water facilities and enroll new customers into the recycled water program. The District also wanted to review the improvements and determine the impact of the new recycled water rates. RFC developed a financial and rate model that considered the new customers and revised rates and the impact of providing discounted rates on wastewater customers. The District held a meeting with the recycled water users and obtained input on issues of concern to them. RFC provided support to the District and evaluated the results of the conducted surveys to define the rates.

CITY OF SANTA BARBARA (CA)

Ms. Phan has been assisting the City of Santa Barbara (City) with their water and wastewater financial plans and cost of service rates studies involving rates for different customer classes including agriculture, outside City, tiered residential, commercial etc. Ms. Phan has also been assisting the City with drought rates to address the water shortage conditions during the drought. Wastewater rates were developed for various funding sources including grants and SRF loans.

CITY OF SOUTH PASADENA (CA)

Ms. Phan assisted the City in conducting a financial plan and rate study for its water and wastewater enterprises as the lead analyst. The City had expressed some concerns about financial stability and anticipated significant capital expenses associated with water and sewer line replacement in the upcoming years, as well as necessary improvements to meet state regulations. As a part of the financial plan development process, RFC evaluated the City's existing accounts and consumption patterns as well as its existing rate structure to evaluate and project revenues. These revenues were compared to existing and projected revenue requirements, including operating and capital expenses as well as existing debt service obligations. The results of the study included a financial plan dashboard which allowed the City to evaluate various financial plan scenarios, including the necessary levels of revenue adjustments required and capital funding options available in order to meet its required coverage ratios and target reserve balances.

TACOMA ENVIRONMENTAL SERVICES (WA)

RFC is currently conducting a comprehensive wastewater, surface water, and solid waste financial plan and cost of service study for Tacoma Environmental Services (Tacoma). A key objective of the project is to provide Tacoma with a financial model that can be linked with the SAP system so that future annual updates can be automatic. The model also has the ability to conduct sensitivity analyses on several different issues, such as debt refinancing, varying levels of increases in assessments costs, etc. The study also included a long-range financial plan to ensure financial stability for all three utilities. Ms. Phan served as the lead consultant on this project, responsible for building the rate models, preparing presentations, and conducting sensitivity analyses.

CITY OF VENTURA (CA)

RFC completed a water, wastewater, and recycled water cost of service and rate study for the City of Ventura (City). The City had not updated its rate structure in 20 years. Additionally, the City was under a cease and desist order that required the City to carry out improvements estimated at more than $55 million, and which the City wanted to start funding to mitigate impacts. The study included a

comprehensive review of the City's revenue requirements and allocation methodology, review of the City's user classification, usage patterns, a cost of service analysis, and rate design for City users. RFC developed long-range fi¬nancial plans so that the water and wastewater utilities could be financially stable and save costs in the long run. We also assisted the City with developing different water and wastewater rate alternatives with various scenarios as well as calculating outside-city rates. Ms. Phan served as the lead consultant for this project, responsible for building the rate models, preparing the scenarios and conducting economic analyses of the alternative scenarios.

CITY OF PALO ALTO (CA)

The City of Palo Alto (City) engaged RFC to conduct a water cost of service and rate study. The study included a comprehensive review of the City's revenue requirements and allocation methodology, review of the City's user classification, usage patterns, a cost of service analysis, and rate design for City users. The study also included a review of the peaking characteristics of different customer classes, an analysis of the master-metered MFR customers, and a review of separate charge for higher elevations customers. RFC conducted the study with input from the Utilities Advisory Commission made up of City residents. Ms. Phan assisted in conducting the cost of service analysis and customer impacts.

CITY OF SAN DIEGO (CA)

RFC assisted the City of San Diego (City) in conducting a water, wastewater, and recycled water rate study to evaluate the costs of providing utility services and the rates to charge customers. The study included a comprehensive review of the City's revenue requirements and allocation methodology, review of the City's user classification, an analysis of cost-of-service and rate design for City users. The rate structure was modified to provide a more equitable sharing of costs consistent with regulatory requirements. The recycled water rate study involved evaluation of various scenarios involving capital projects with increased sales, cost sharing between water and wastewater, phasing in rates, repayment of past costs incurred by water to fund the recycled water program. Ms. Phan assisted in building the rate models, preparing the scenarios and conducting economic analyses of the alternative scenarios.

OLIVENHAIN MUNICIPAL WATER DISTRICT (CA)

Ms. Phan assisted the Olivenhain Municipal Water District (District) in conducting a water financial plan study and a recycled water rate study to determine the recycled water rates charged to customers. The water financial planning model was developed to assist the District in evaluating different financing alternatives to minimize rate impacts and ensure financial stability. The water model was effectively used in Board meetings and presentations to evaluate the impacts of various scenarios. The recycled water rate study was conducted to determine the recycled water rates charged to customers given that the District obtains recycled water from four different sources: the City of San Diego, Vallecitos Water District, Rancho Santa Fe Community Services District, and the 4S Regional Recycled Water System. The existing agreements defined the costs of different sources of recycled water to the District. To address all of those issues and concerns, RFC developed a recycled water financial and rate model to determine the costs of providing service and the required revenue to be collected from customers. In addition, the model is built to evaluate when the District is able to take over the 4S Regional Recycled Water System, as stated in the agreement with the developer.

GOLETA WEST SANITARY DISTRICT (CA)

The Goleta West Sanitary District (District) was evaluating several alternatives regarding constructing their own wastewater treatment plant and expanding the current facility at Goleta Sanitary District, where the District has been sending their wastewater for treatment. RFC built a financial planning model for the District to find the most economically effective option. Furthermore, the District engaged RFC in conducting a miscellaneous fee study to evaluate the current fee structures to better represent the cost of service. Ms. Phan assisted in conducting economic analyses of the alternatives and develop-

ing the miscellaneous fee model for the District.

OTHER RELEVANT PROJECT EXPERIENCE

- City of Banning (CA) – Water, Wastewater, and Recycled Water Rate and Connection Fees Study
- Beaumont-Cherry Valley Water District (CA) – Water Rate Study
- Carpinteria Sanitary District (CA) – Wastewater Rate Study
- Clark County Water Reclamation District (NV) – Sewer Cost of Service Study
- City of Escondido (CA) – Water and Wastewater Rate and Fees and Connection Fees Study, and Water Budget Study
- Jurupa Community Services District (CA) – Water and Wastewater Rate Study
- City of North Las Vegas (NV) – Water and Wastewater Rate Studies
- City of Ontario (CA) – Water, Wastewater, and Solid Waste Rate Studies
- City of Redlands (CA) – Water, Wastewater and Connection Fees Cost of Service Study
- City of Santa Monica (CA) – Wastewater Cost of Service Study
- Tacoma Water Department (WA) – Water Financial Plan Study

KEVIN KOSTIUK

STAFF CONSULTANT
Senior Consultant

TECHNICAL SPECIALTIES

- Data analysis
- Environmental Policy Analysis
- Strategic Planning

PROFESSIONAL HISTORY

- Raftelis Financial Consultants, Inc.: Senior Consultant (2016-present) Consultant (2014-2015)
- Turner New Zealand, Inc.: Director of Operations (2009-2012); Accounting Manager (2007-2009)
- Lesley, Thomas, Schwarz & Postma, Inc.: Staff Accountant (2007)

EDUCATION

- Master of Environmental Management – Duke University (2014)
- Bachelor of Arts in Business-Economics and History – University of California, Santa Barbara (2006)

PROFILE

Mr. Kostiuk has a background in economics and accounting and possesses extensive analytical skills. His expertise lies in financial accounting, analysis of water supply reservoir operations and management, environmental policy, and water quality trading programs; as well as United States Army Corps of Engineers (USACE) water supply and flood control policy.

RELEVANT PROFESSIONAL EXPERIENCE

EAST VALLEY WATER DISTRICT (CA)

Mr. Kostiuk assisted the District with design and implementation of budget-based water rates for their 23,000 accounts including residential, commercial and irrigation customers. The study included creation of a long-term financial plan and full cost of service study for the water enterprise.

Mr. Kostiuk worked closely with the District's finance, IT, and, billing departments in the early stages to analyze customer account level data including monthly use, irrigable landscape area, customer class, assessor parcel number (APN), etc. for construction of indoor and outdoor allocations, or budgets. The rate structure that the Board adopted allows for the most precise, scientific and equitable design of rate structures, tailored specifically to an individual account.

CRESCENTA VALLEY WATER DISTRICT (CA)

Mr. Kostiuk performed an economic analysis for the Crescenta Valley Water District (District) to determine the feasibility of offsetting imported water supply with the production of local groundwater. Mr. Kostiuk created a customized model for the District to use under different scenarios of capital requirements, lease options, and contract lengths. As part of the study, he reviewed the District's prior consultant's work, determined internal rate of returns, calculated the net present value of district savings, and determined the cost at which the District should lease water rights for groundwater production.

CITY OF RIVERSIDE (CA)

Mr. Kostiuk completed a study for the City of Riverside (City) to determine the value of an elevation fee credit for present and future customers in a special district. The project required calculation of asset replacement values for infrastructure serving the special district, spe-

cific to booster capacity, and within the context of a historical assessment. The findings from the study will be used to defend the City's move to assess its elevation fee schedule.

CITY OF REDLANDS (CA)

Mr. Kostiuk updated prior financial plans developed by RFC for the City for their water and sewer enterprises. The update included building in more flexibility to the model for ease of use and for future updates, as well as, making the model dashboards more user friendly.

Additional work included updating the City's Storm Drain Impact Fee and miscellaneous fee for NPDES inspections as part of the MS4 permit requirement. The storm drain fee had not been reevaluated in 20 years. Additionally, the City had recently completed a Storm drain Master Plan which called for $83 million in improvements to system deficiencies. Mr. Kostiuk developed a methodology to retain the existing impact fee structure while updating the fee paid by different land use classes.

The state-wide drought in California has entered its fourth year and the Governor's office has called for a mandatory 25% reduction for all water service agencies in the state. The City's target is to reduce residential consumption by 35%. Mr. Kostiuk is currently assisting the City in design and implementation of drought penalties to achieve 35% reduction and to recover lost revenue from reduced water sales.

GOLETA WATER DISTRICT (CA)

Mr. Kostiuk completed a full water cost of service study for the District which included design of inclining tiered rates for their single-family residential class, as well as agricultural rates for two classes. Complexities in customer classes' access to District water supplies, interruptibility during times of drought, and benefit (or lack thereof) from treatment made the analysis unique and challenging. The study included development of a long term financial plan model, rate model and corresponding bill impacts.

To achieve the District's demand reduction targets as outlined in their Drought Management Plan, the District wished to explore drought rates/drought surcharges to curb demand. Ultimately, Mr. Kostiuk developed three options of revenue neutral drought surcharges for the Board's consideration. These various options ranged from targeted surcharges on an inter and intra-class basis, to a surcharge applied to non-drought commodity rates, to a uniform commodity surcharge irrespective of customer class or use. The proposed rates and drought surcharges were adopted and implemented July 1, 2015.

CITY OF HENDERSON (NV)

Mr. Kostiuk developed a financial plan for the City's sewer enterprise and conducted a cost of service analysis. The project created a combined model for the water and sewer enterprises which incorporated finance department reporting tools. The combined model allows the utility (water and sewer) to be viewed as a one, with impacts and reporting available to the user.

CITY OF SIMI VALLEY (CA)

The City had last raised sewer rates in fiscal year 2008-2009 and was facing a backlog of sewer system improvements and repair and replacement. Mr. Kostiuk updated the existing sewer financial plan with recent data, as well as, updated the cost of service analysis. As part of the study, tier definitions were changed for non-residential customers to reduce the base charge on small users without impacting revenue recovery. Working with City staff, and with presentations to City management, RFC assisted in getting Council authorization for proposition 218 notices of a rate increase to the City's customers.

The increases are anticipated to be adopted and implemented July 1, 2015, and the revenue increase will allow the City to commence the public works department's capital improvement schedule while maintaining reserve funds at target levels.

CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT- AMERICAN RIVERS (NC)

Mr. Kostiuk served as project leader for a study

of alternatives to meet Raleigh's long term water supply shortfall. The project examined four options in extending the life of the existing federal reservoir, thereby postponing capital expenditures on a new raw water supply. Results were delivered to city staff, their consultants and USACE in June, 2014.

LOWER CAPE FEAR WATER QUALITY TRADING PROGRAM – THE NATURE CONSERVANCY (NC)

To reduce nutrient loading and decrease utility costs, the Nature Conservancy proposed a Water-Fund to improve water quality through improved agricultural practices on private landholdings in the watershed. Mr. Kostiuk was in charge of researching comparable programs and providing options for a financial mechanism and governance approach between various stakeholders in the region including utilities, agriculture, environmental organizations and community groups.

OTHER RELEVANT PROJECT EXPERIENCE

- City of Camarillo – Water and Wastewater Rate Study; Drought Rate Study
- Elsinore Valley Municipal Water District – Drought Surcharge Study
- Mammoth Community Water District – Water and Wastewater Rate Study and Connection Fee Study
- Placer County Water Authority – Water System Evaluation

ANDREA BOEHLING

STAFF CONSULTANT
Consultant

PROFILE

Ms. Boehling has a strong background in mathematics and accounting and has been serving public agencies for over 8 years. She possesses extensive analytical and modeling skills which she has used to perform various financial analysis such as cost of service user fee studies, utility rate studies, fiscal impact analysis, special district formations, cost allocation plan modeling, etc. Ms. Boehling is well-versed with the cost of service principles and special benefit provisions of Proposition 218. In addition, with over 6 years of experience in the auditing field, she is very familiar with monitoring and evaluating compliance with regulations, performing data analysis, and performing data integrity testing.

RELEVANT PROFESSIONAL EXPERIENCE

HELIX WATER DISTRICT (CA)

The Helix Water District (District) hired RFC to conduct a comprehensive cost of service analysis and financial plan update. The last cost of service study was conducted back in 1988 and needed to be updated to be in compliance with Government Code Section 54999.7(c). Ms. Boehling's responsibilities included supporting project managers and conducting fiscal analysis, data compilation, and modeling. Various rate structures, components, and objectives were evaluated and cost of service based rates were developed. The study incorporated a pass-through component to clearly identify and account for San Diego County Water Authority costs which are outside of the District's control. Ms. Boehling assisted with the preparation of the study report which is currently under review. Once the report has been finalized and the Proposition 218 noticing requirements met, it is anticipated that rates will be adopted.

RINCON DEL DIABLO WATER DISTRICT (CA)

Like many water agencies in California, Rincon del Diablo Water District (District) was faced with challenges related to the reduction in water usage as a result of conservation, the slow economy, increasing water supply costs, and the recent Executive Order by Governor Brown to reduce water consumption by 25% statewide. RFC was hired to conduct a comprehensive cost of service water rate study and develop a financial plan to help achieve a strong financial outlook in future years. Ms. Boehling served as staff consultant and assisted with data collection, financial plan analysis, model development, rate design, and drafted the study report. The study incorporated a pass-through component to allow the District to pass on increased imported water costs to their customers

TECHNICAL SPECIALTIES

- Cost of Service – User Fee & Utility Studies
- Cost analysis and cost allocation plan modeling
- Proposition 218
- Special District Formation
- Special tax and assessment modeling
- Financial planning and feasibility studies
- Compliance auditing
- Data analysis

PROFESSIONAL HISTORY

- Raftelis Financial Consultants, Inc.: Consultant (2014-present)
- Willdan Financial Services: Financial Analyst II (2012-2014)
- State of Tennessee: Legislative Information Systems Auditor II (2006-2012)

EDUCATION

- Bachelor of Science in Business Administration with a major in Accounting – University of Alabama in Huntsville (2005)
- Studied Computer Engineering, DeVry University (2000-2002)

without having to undergo the rate adjustment process. In addition, the study adjusted target reserves and modified the rate structure for each customer class to ensure Proposition 218 compliance and financial sufficiency.

ELK GROVE WATER DISTRICT (CA)

Ms. Boehling assisted with a water rate and connection fee study for the District. Duties included collecting and analyzing data, including water revenue requirements; allocating costs of service to cost components, and distributing costs to customer classes. Ms. Boehling also helped to identify existing development, future growth, and facility standards; determine facility needs and costs; and perform a fee calculation analysis. She also completed the database analysis and procedural tasks necessary to comply with Proposition 218 noticing requirements.

CITY OF TULARE (CA)

The City was depleting reserves in recent years and needed to conduct a comprehensive review of their rates to ensure revenue sufficiency, and that cost of service principles were utilized to achieve equity across customers. Ms. Boehling assisted in implementing a rate structure that achieved City and Board of Public Utilities (BPU) objectives and which effectively and clearly communicated key proposed structure components. Responsibilities also included assistance in the development of the budget and revenue requirements in the model, the completion of the report, and Proposition 218 database analysis, noticing, and compliance requirements.

CITY OF SOLEDAD (CA)

Since 1996, the City had undergone tremendous changes; but had not updated its water rates. Ms. Boehling assisted with the development of a financial rate model that provides a clear picture of the utilities' financial situation, and demonstrates the results of various scenarios. She also helped to collect and analyze appropriate data related to water operations, planned capital improvement projects, population, and/or development projections; existing debt obligations; and ongoing maintenance and repair operations. She also completed the database analysis and procedural tasks necessary to comply with Proposition 218 noticing requirements.

OTHER RELEVANT PROJECT EXPERIENCE

- City of Cerritos (CA) – Community Facilities District No. 2013-1 Formation
- Crescent City (CA) – Proposition 218 Database Analysis and Noticing Requirements
- City of Delano (CA) – Proposition 218 Database Analysis and Noticing Requirements
- City of Hayward CA) – Cost Allocation Plan and User Fee Study
- Town of Los Altos Hills (CA) – Cost Allocation Plan and User Fee Study
- City of Madera (CA) – Community Facilities District Formation
- McKinleyville Community Services District (CA) – Proposition 218 Database Analysis and Noticing Requirements
- City of Menifee (CA) – Community Facilities District No. 2014-01 (Town Center) Formation
- City of Oviedo (FL) – Utility Rate Comparison and presentation
- Phelan Pinon Hills Community Services District (CA) – Proposition 218 Database Analysis and Noticing Requirements
- City of Pittsburg (CA) – Cost Allocation Plan and User Fee Study
- City of Placentia (CA) – City-wide Community Facilities District No. 2014-01 (Public Services) Formation and Fiscal Analysis
- City of Red Bluff (CA) – Full Cost Allocation Plan
- Sacramento Metro Fire District (CA) – Fire Assessment Study
- County of San Diego (CA) – Community Facilities District Formation and Acquisition Auditing
- City of Thousand Oaks (CA) – Cost Allocation Plan
- City of Tustin (CA) – Community Facilities District Formation

TECHNICAL SPECIALTIES

- Financial modeling
- Organizational staffing
- Utility rate studies

PROFESSIONAL HISTORY

- Raftelis Financial Consultants, Inc.: Consultant (2014-present)
- City of Thousand Oaks, Public Works Analyst (2010-2014);
- Acting Assistant to the City Manager (Jan 2014 – May 2014)

EDUCATION

- Master of Public Administration – Cornell University (2010)
- Bachelor of Science in Applied Economics & Management – Cornell University (2009)

AKBAR ALIKHAN

STAFF CONSULTANT
Consultant

PROFILE

Mr. Alikhan has a background in economics, public policy and community outreach with a keen emphasis on public speaking and writing for non-technical audiences. His expertise lies in the areas of financial modeling, public works operations, and benchmarking.

RELEVANT PROFESSIONAL EXPERIENCE

CITY OF THOUSAND OAKS (CA)

Early 2016, Mr. Alikhan completed the Financial Plan for the City of Thousand Oaks' water and wastewater enterprises, in addition to a cost of service study for the water enterprise. In consideration of the City's mandatory 28% water usage cutback from the State, the model made heavy use of water demand factors which allowed staff to adjust usage for each year of the Study period independently. The demand factors also allowed staff to evaluate different water usage rebound scenarios (the rate at which customers would begin using more water after the drought), in order to more accurately predict the City's revenue requirement during the drought and post-drought period. The cost of service study resulted in a revised tier structure and defensible rates.

MUNICIPAL WATER DISTRICT OF ORANGE COUNTY (CA)

In fall 2015, the District retained RFC to develop a new rate structure for how the District assigned costs to its 28 member agencies. One of the primary drivers for this Study is the District's expiring contract with its member agencies and the need to implement a rate structure that promotes fairness for all member agencies, while providing revenue stability for the District. Mr. Alikhan developed the model that allowed District staff to evaluate different allocation scenarios on the fly, showing the current costs assignment methodology versus the proposed methodology, and the +/- between them. The model was used to present various scenarios to the member agencies for selection of the optimal allocation methodology.

CHANNEL ISLANDS BEACH COMMUNITY SERVICES DISTRICT (CA)

In fall 2015, the District retained RFC to complete a financial plan and cost of service study for both its water and sewer enterprises. The District was in the midst of an across-the-board rate increase, but decided to forego the increase and hire RFC to complete the study in light of the decision in San Juan Capistrano. Due to the State's drought conditions, the District was facing reduced groundwater allocations and further conservation

was unlikely due its already-low per capita usage. Mr. Alikhan was the lead analyst for both the water and sewer portions of the study. The study resulted in cost-of-service based rates, revised tier structure for both single family and multi-family residential customers, and a fixed/variable rate structure design for all sewer customers. The new rates met the District's two main goals of being legally defensible and maintaining high fixed revenues.

TRIUNFO SANITATION DISTRICT (CA)

As the financial consultant for both the recycled water and wastewater enterprises, Mr. Alikhan developed updated models that had initially been created by RFC in 2009. The updated recycled water model better aligned seasonal purchase and resale prices of recycled water from the District's regional wholesaler. The District was also considering the acquisition of a recycled water pipeline that was owned by its wholesale water provider. Mr. Alikhan incorporated into the model a pipeline acquisition scenario that allowed District staff to see the effects of various acquisition costs and loan terms, including the revenue adjustment necessary to finance the acquisition.

CITY OF SIGNAL HILL (CA)

In June 2015, Mr. Alikhan completed the Financial Plan update for the City of Signal Hill's water enterprise. The Financial Plan projected the City's revenue requirements for the upcoming years, taking into consideration its sizable capital infrastructure needs and changing water supply mix. The revenue requirements determined from the Financial Plan will be used to develop water rates in the City's upcoming rate study that will be performed by RFC.

YORBA LINDA WATER DISTRICT (CA)

In summer 2015, Mr. Alikhan developed the District's sewer enterprise model that included a subset of newly annexed customers. The District had recently annexed new customers from the City of Yorba Linda, some of which were billed on the County's annual tax roll. The District sought to include the newly annexed customers into its existing monthly billing system midway through the fiscal year. Furthermore, RFC made a recommendation to use a uniform volumetric rate for the District's commercial sewer customers, who previously were on two separate rate schedules. The model incorporated these changes to the rate structure to determine the District's revenue requirement for the Study period.

CITY OF VISTA / BUENA SANITATION DISTRICT (CA)

In summer 2014, Mr. Alikhan performed the wastewater rate study update for the City of Vista Wastewater & Buena Sanitation District. Although both are administered by the same governing body, the entities are two distinct enterprises. The model required the inclusion of the City's multiple State Revolving Fund loans for ongoing projects and other sources of debt for larger scale capital replacement projects.

CENTRAL CONTRA COSTA SANITARY DISTRICT (CA)

In June 2014, the District retained RFC to perform a Wastewater Rate Study and Organizational Staffing Needs Assessment Study. Mr. Alikhan served as the consultant assigned to the Staffing Needs Assessment component of the engagement. Throughout the study, Mr. Alikhan was involved in over 50 individual and group interviews with District staff, conducted and reported results of an employee survey, and worked with the General Manager and Executive Team to develop a staffing roadmap for the District's future needs. The project was completed in February 2015.

NAPA SANITATION DISTRICT (CA)

In October of 2014, the District commissioned RFC to develop a Staffing Master Plan. The goals of the Plan were to determine the appropriate level of future staffing needs, define the skillset required of future District personnel, and support succession planning efforts and prepare for the retirement of key personnel. Throughout the data gathering process, Mr. Alikhan assisted with 20 individual and group interviews with District staff. The project included an analysis of staff eligible for retirement and overtime hours by division, both of which were used to help shape RFC's recommendations to the District. The

six-month project was completed in February 2015.

OTHER RELEVANT PROJECT EXPERIENCE

- Alameda County Water District – 2015 Water Rate Study
- El Toro Water District – 2015 Water District Water, Sewer, and Recycled Water Cost of Service Study
- Elsinore Valley Municipal Water District – 2015 Water and Recycled Water Rate Study
- Santa Margarita Water District – 2014 Water, Recycled Water, and Wastewater Rate Study

RELEVANT PROFESSIONAL EXPERIENCE

CITY OF THOUSAND OAKS:
PUBLIC WORKS ANALYST (2010-2014)

During his tenure at the City of Thousand Oaks, Mr. Alikhan served as the primary analyst for the Public Works Director. His core duties included management of the City's Landscaping & Lighting Assessment District No. 79-2, developing feasibility models for energy efficiency projects, and supervision of all staff reports for Public Works activities. Mr. Alikhan also served as the Assistant to the City Manager during the first half of 2014, with leadership roles in such events as the Amgen Tour of California.

PUBLICATIONS/LECTURES

- Alikhan, Akbar. "Rate-setting for the New Normal: Two Case Studies in Ventura County". American Public Works Association – Ventura County. Camarillo, CA: March 2016
- Gaur, Alikhan, Crea. "Developing Drought Rates: Why Agencies Should Prepare for a Not-So-Rainy Day." American Water Works Journal January 2016: 42-49. Print.
- Alikhan, Akbar and Gallagher, Ryan. "Tools to Motivate Your Millennials". American Public Works Association Annual Congress. Chicago, IL: August 2013

TECHNICAL SPECIALTIES

- Financial Modeling

PROFESSIONAL HISTORY

- Raftelis Financial Consultants, Inc.: Consultant (2016 – present); Associate Consultant (2014 – 2015)

EDUCATION

- Master of Environmental Management – Duke University (2014)
- Bachelor of Arts in Asian Studies (Chinese) and Peace, War, and Defense – University of North Carolina, Chapel Hill (2011)

VICTOR SMITH

STAFF CONSULTANT
Consultant

PROFILE

Mr. Smith is a Consultant with a Masters in Envinronmental Management. He has worked on several rate studies including studies for the Cities of Brea, Watsonville, Redlands, Chino Hills, and Calleguas MWD. In addition to his expertise in financial modeling, Mr. Smith has a background in environmental and energy economics.

RELEVANT PROFESSIONAL EXPERIENCE

CITY OF BEVERLY HILLS (CA)

The City of Beverly Hills engaged RFC to develop a financial model to calculate connection fees for new developments and redevelopment. As the financial consultant, Mr. Smith developed a model that combined data from several sources and calculated appropriate connection fees based on the "buy-in" methodology.

CITY OF REDLANDS (CA)

The City of Redlands engaged RFC to develop a water and wastewater financial plan model. As an associate consultant, Mr. Smith developed the City's Water and Wastewater Development Impact Fees.

CITY OF CHINO HILLS (CA)

The City of Chino Hills engaged RFC to develop a financial plan model to accompany an asset management study from GHD. As the project's lead financial consultant, Mr. Smith developed a 100 year financial model based on analysis of the City's current finances including water acquisition costs, capital and asset management costs, and water sales revenues.

CITY OF BREA (CA)

The City of Brea engaged RFC to develop a financial plan model for a water rate study. Mr. Smith built a 5-year financial model of the City's water enterprise. Mr. Smith used this model to develop a financial plan and cost of service analysis for the water enterprise, as well as drought rates to help the City meet its revenue requirements following a 24% reduction in sales. This model will be used by the City to develop future rate increases.

CITY OF WATSONVILLE (CA)

The City Watsonville engaged RFC to develop a water, wastewater and solid waste financial plan model. The City was facing a variety of challenges, including a slate of Chromium 6 related capital expenditures.

Mr. Smith built a 5-year financial model of the City's three utility enterprises that took into account these anticipated difficulties. Mr. Smith used this model to develop a financial plan and perform a cost of service analysis and developed tiered water rates for residential customers and uniform rates for non-residential and agricultural customers.

TECHNICAL SPECIALTIES

- Environmental economic and policy analysis
- Data collection and analysis
- Financial modeling

PROFESSIONAL HISTORY

- Raftelis Financial Consultants, Inc.: Consultant (2015-present)
- CSI Capital Management, Inc.: Tax Clerk (2007-2011)
- Origins Natural Resources, Inc.: Assistant Manager (2006-2008)
- RWR Homes, Inc.: Land Acquisitions Coordinator (2004-2006)

EDUCATION

- Master of Environmental Management – Duke University (2015)
- Bachelor of Arts in Business Economics and German Studies – University of California, Santa Barbara (2003)

CORRINE SCHRALL

STAFF CONSULTANT
Consultant

PROFILE

Ms. Schrall has a background in economics and policy. At Duke University, she focused on water resource issues, specifically exploring the challenges California faces. Her expertise lies in complex data analysis, project management, and environmental policy.

RELEVANT PROFESSIONAL EXPERIENCE

EL TORO WATER DISTRICT (CA)

The District has worked with RFC for several years and wanted to updat its financial plan and rates for its water, recycled water, and sewer services in addition to its demand offset fee. Ms. Schrall surveyed neighboring water agencies to provide the District information on size and type of assessments local agencies have implemented. In addition, she updated the financial plan and rate analysis for all three services.

ALAMEDA COUNTY WATER DISTRICT (CA)

The District was evaluating its late fee assessment methodology. Ms. Schrall conducted an analysis of five separate late fee cost allocation methods. This allowed the District to examine the best course of action in addressing its late payments that balanced fair assessment of late fees while adequately encouraging timely payment.

CITY OF ATWATER (CA)

Ms. Schrall conducted the sewer rate analysis for the City of Atwater and assisted with the water rate analysis. The City is in the process of converting to metered water service. Both the water and sewer analyses needed to account for this mix of metered and unmetered customers. In addition, the City provides contracted service to three large customers, which needed to be incorporated into the study. The analysis resulted in a condensed sewer rate structure, simplifying the management of rate revenue.

BORREGO WATER DISTRICT (CA)

The District needed assistance in preparing its groundwater sustainability plan. Ms. Schrall evaluated the allocation of groundwater costs across three consumer types. She examined them under three different methodologies. She then developed a user-friendly model in order to allow the District to fully assess the costs and benefits associated with each of the options the District was considering. The District was able to evaluate their groundwater cost allocations to fairly balance them

across the consumer types and determine which methodology best fit the unique characteristics of the District.

CASTAIC LAKE WATER AGENCY (CA)

Ms. Schrall assisted in the review process for the 2014 Facility Capacity Fee Study. This included conducting research and assessing the conclusions of the model.

CITY OF CAMARILLO (CA)

Ms. Schrall assisted in the preparation of the 2015 water, wastewater, and recycled water rate study report for the City of Camarillo. In this report, she provided an analysis of the rate structures and the reasoning for them.

LA HABRA HEIGHTS COUNTY WATER DISTRICT (CA)

RFC conducted a water rate study for the District in 2012, and the District wanted to update its financial plan and resulting rates. The financial plan projected the District's revenue requirements, incorporating the variations of costs associated with its different water supplies in addition to the different revenue streams that the District has. The update provided the District with recommended revenue adjustments for the next five years so they could adjust their rates accordingly and meet the District's projected revenue requirements.

LOS ALAMOS COMMUNITY SERVICES DISTRICT (CA)

The District commissioned RFC to develop financial plans and cost of service studies for the District's water and wastewater services as well as a capacity fee study for both enterprises. Ms. Schrall developed two separate cost of service models for the District. As a result of the financial analysis, RFC condensed the District's customer classes for both services to improve ease of management and ensure equitability in assessment of rates. In addition, she incorporated a flexible CIP analysis so the client could review different scenarios as they project future needs through build-out.

CITY OF ORANGE (CA)

Ms. Schrall conducted the cost of service study for the City's sanitation services and is currently preparing the analysis for the City's water service. In conducting the analysis for the sanitation system, she assessed the cash flows of the different services the system provides. Ms. Schrall prepared multiple rate structure options for each service to enable the District to determine which structures best served the needs of these services and fairly and equitably distributed costs across customer classes.

PLACER COUNTY WATER AUTHORITY (CA)

The Authority engaged RFC to conduct a cost of service study. The District encompasses several zones with multiple water sources and varied topography requiring different pumping demands. In addition, the District covers a diverse customer base, from large and small scale agriculture to suburban development. The complexity of the system results in large data sets with several interconnected components. Ms. Schrall has analyzed and condensed these large data sets for implementation in the client's developing water cost of service model.

SAN ELIJO JOINT POWERS AUTHORITY (CA)

The Authority originally contracted with RFC to conduct a reclaimed water rate study in 2014. Ms. Schrall developed an updated model for the Authority to integrate new changes to the Authority's financial plan, with changes to the contracted rates with customers.

CITY OF TUSTIN (CA)

The City of Tustin was considering exercising its option to purchase water from two wells Irvine Ranch Water District was returning to production. The City wanted to understand if the option would be an appropriate addition to the City's water supply from both economic and water supply stability perspectives. Ms. Schrall conducted the analysis, examining the costs and benefits of the option in comparison to the City's current supplies. This analysis also projected the expected increase in costs associated with this option in comparison to other supplies.

RELEVANT PROFESSIONAL EXPERIENCE

CSI CAPITAL MANAGEMENT, INC.: TAX CLERK 2007-2011

As tax clerk for CSI Capital Management, Ms. Schrall oversaw the accurate preparation of complex Federal, state, and city tax returns for a clientele of 300 high profile, high wealth individuals. She ensured the timely submittal of multiple personal, entity, and foundation tax returns for each client. Additionally, she responded to Federal and state tax audits and notices for clients with complicated tax liabilities due to multiple income streams, entities, and taxing jurisdictions. This required thorough analysis to substantiate line items and successfully defend client liabilities. Furthermore, Ms. Schrall managed the tax portion of 250 professional athlete clients' pay. She worked with teams across the NBA, WNBA, NFL, and MLB to ensure all bonuses and salary payments included the correct withholding for each client's tax liability.

RWR HOMES, INC.: LAND ACQUISITIONS COORDINATOR 2004-2006

Ms. Schrall managed the due diligence and contract execution processes for all land purchases. She reviewed all due diligence documents for project evaluation. In addition, she directly interfaced with government entities and consultants to bring communities through entitlement.

TECHNICAL SPECIALTIES

- Data analysis
- Financial modeling
- Utility rate studies

PROFESSIONAL HISTORY

- Raftelis Financial Consultants, Inc.: Consultant (2016-present)
- Microsoft Corporation – Partner Account Specialist (2015-2016)

EDUCATION

- Bachelor of Arts in Business Economics – University of California, Irvine (2015)

NANCY PHAN

STAFF CONSULTANT
Associate Consultant

PROFILE

Ms. Phan has a background in business economics with a focus on data analysis, writing, and communications. Her expertise in working with large data sets brings efficiency and refinement to her financial modeling, and her emphasis on writing establishes a clear and concise communication style.

RELEVANT PROJECT EXPERIENCE

ONTARIO MUNICIPAL UTILITIES COMPANY (CA)

Ms. Phan serves as the associate consultant for the Utilities' potable water enterprise. She is developing water rates to meet the stringent cost of service requirements. The drought has significantly impacted the water supply and sales and the state has mandated water reductions. The drought situation has proved very challenging for water utilities to provide service, meeting state requirements, providing adequate revenues and minimizing impacts to customers.

CITY OF BENICIA (CA)

Ms. Phan is determining connection fees for the water and wastewater utilities for the City. The current fees were developed several years ago need to be updated to take into account the current economic and growth situation. Fees will be determined using equity and capacity buy-in method along with incremental buy-in based on the availability of capacity in different components of the system and the capital improvements needed to meet new demand.

GOLETA WEST SANITATION DISTRICT (CA)

Ms. Phan assisted with a study to determine various fees including annexation, capacity fees, industrial permit fees, plan check and inspection fees, permit fees, and frontage fees.

COUNTY OF KAUAI, DEPARTMENT OF WATER (HI)

Ms. Phan is currently serving as associate consultant for the County's water enterprise. She is assisting in developing a financial plan and a utility rate study for the County according to cost of service principles. By reviewing the County's current revenue requirements, which include the Capital Improvement Plan, existing and proposed debt service, and other financial policies and goals, she will be able to assist in forecasting a long-term financial plan for the County with equitable and defensible water rates.

MAGU DIAGNE, PE

STAFF CONSULTANT
Consultant

PROFILE

Mr. Diagne is a California Licensed Professional Mechanical Engineer with eight years of experience as a construction engineering consultant. He has a background in financial modeling and data analysis.

RELEVANT PROFESSIONAL EXPERIENCE

As a Financial Analyst Intern at Simpson and Simpson Management Consulting, Inc. he developed business plans to finance energy efficiency upgrades for existing commercial buildings. His analysis included financial planning, risk management, and life cycle cost analysis.

While in graduate school at Pepperdine, Mr. Diagne provided consulting services for a fin-tech startup named CompHawk. He developed a pitch deck with the CEO for investor presentations and identified target clients and end users within the Mergers & Acquisitions industry.

Prior to returning to graduate school, Mr. Diagne worked as a construction engineering consultant in the Los Angeles area. He presented recommendations in technical reports and PowerPoint presentations to municipalities, insurance carriers, developers, general contractors and architects.

TECHNICAL SPECIALTIES

- Financial modeling
- Data collection and analysis

PROFESSIONAL HISTORY

- Raftelis Financial Consultants, Inc.: Consultant (2016-present)
- Simpson and Simpson Management Consulting, Inc.: Financial Analyst Intern (2016)
- CompHawk: Financial Analyst Intern (2015)
- Simpson Gumpertz and Heger, Inc.: Senior Engineer (2006 – 2014)

EDUCATION

- Master of Science in Applied Finance – Pepperdine University (2015)
- Master of Science in Mechanical Engineering – University of California, Riverside (2006)
- Bachelor of Science in Mechanical Engineering – University of California, Berkeley (2003)

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