

MONTEREY COUNTY

WATER RESOURCES AGENCY

ORIGINAL

Financial Consulting Services

RFP No. 10554 / November 12, 2015



24640 Jefferson Avenue
Suite 207
Murrieta, CA 92562

Phone 951 . 698 . 0985
Fax 626 . 583 . 1411

www.raftelis.com

November 10, 2015

County of Monterey
Contracts/Purchasing Office
1488 Schilling Place
Salinas, CA 93901

Subject: Proposal for Financial Consulting Services

Raftelis Financial Consultants, Inc. (RFC) is pleased to submit this proposal to provide financial consulting services for the Monterey County Water Resources Agency (Agency), which also includes an update to its assessments and water rate structure. We believe that our unique combination of knowledge, experience, resources, and local presence will ensure a value-added project that will benefit the Agency and its customers.

With the largest water and wastewater rate and financial consulting practice in California and the nation, RFC is confident in our ability to deliver a sustainable financial plan and facilitate the selection of an optimal water rate structure that is in compliance with Proposition 218 and that also meets the Agency's overall goals and objectives. We have assisted numerous agencies in California and across the United States with successfully implementing rate structures that promote conservation while achieving revenue stability. Our recent rate study clients include the Cities of Arroyo Grande, Lompoc, Santa Barbara, Santa Cruz, Sierra Madre, and Watsonville, Alameda County, Castaic Lake Water Agency, Goleta Water District, Zone 7 Water Agency, and many others.

Due to the current drought conditions throughout California and to ensure responsible water resource management, one primary objective of this study will be to develop rates that continue to emphasize and encourage efficient water use. RFC will work closely with Agency staff to develop rates that account for adequate reserve funding and to reflect the Agency's financial policies, while ensuring affordability for health and safety. RFC will create a model with the capability to conduct various scenarios to address different conservation issues such as drought, loss of water supply, and different levels of capital funding.

Another primary objective of this study will be to clearly show a nexus between the costs incurred by the Agency and the proposed rates, fees, and assessments to charge its customers. In addition to updating the Agency's financial plan and rate structure, it is equally important to present the clear, transparent story of the current drought conditions and required changes in a simple format that the public can easily understand and support. Therefore, we will thoroughly examine how any changes to the existing rate structures for water would impact Agency customers by recalculating the last 12 months of bills. Doing so will provide clear insight to Agency staff and the Board of Directors regarding who is affected and to what extent before adopting any type of new rate structure.

To assist the Agency with this project, we have assembled a Project Team with extensive experience and a reputation for quality service. I will serve as Technical Reviewer and will be responsible for providing over-

sight for the project and ensuring it meets both RFC and industry standards. I have over 16 years of industry experience serving the municipal utility industry and co-authored a new chapter on water budget rates in *Principles of Water Rates, Fees, and Charges* (M1 Manual) published by the AWWA. With a background in applied mathematics and over 13 years of experience, Habib Isaac will serve as Project Manager. He will manage the day-to-day aspects of this project to ensure it is within budget, on schedule, and effectively meets the Agency's objectives. Mr. Isaac will also lead the consulting staff in conducting analyses and preparing project deliverables. He recently spoke at the CSMFO conference regarding "Financial Strategies to Meet Utility Capital Needs" and at the last CA-NV AWWA Fall Conference. We will have the support of three skilled RFC consultants to conduct analyses and prepare deliverables for the project. In addition to our dedicated Project Team, we will have the support of RFC's full staff of more than 50 utility rate, financial, and management consultants.

RFC is excited to have the opportunity to assist the Agency with this important study. If you have any questions, please don't hesitate to contact me or our Project Manager, Habib Isaac, using the following contact information:

Sanjay Gaur, Vice President
445 S. Figueroa Street, Suite 2270, Los Angeles, CA 90071
P: 213.327.4405 / F: 626.583.1411 / E: sgaur@raftelis.com

Habib Isaac, Manager (Primary Contact Person)
24640 Jefferson Avenue, Suite 207, Murrieta, CA 92562
P: 951.595.9354 / F: 626.583.1411 / E: hisaac@raftelis.com

Sincerely,
RAFTELIS FINANCIAL CONSULTANTS, INC.



Sanjay Gaur
Vice President

RFC is a corporation and has been in existence since 1993 (founded in 1993, incorporated under our current name in 2004).

SIGNATURE PAGE

COUNTY OF MONTEREY
CONTRACTS/PURCHASING DIVISION

RFP # 10554
ISSUE DATE: OCTOBER 16, 2015



RFP TITLE: FINANCIAL CONSULTING SERVICES- WATER RESOURCE AGENCY

PROPOSALS ARE DUE IN THE OFFICE OF THE CONTRACTS/PURCHASING
OFFICER BY
3:00 P.M., LOCAL TIME, ON NOVEMBER 12, 2015

MAILING ADDRESS:
COUNTY OF MONTEREY
CONTRACTS/PURCHASING OFFICE
1488 SCHILLING PLACE
SALINAS, CA 93901

QUESTIONS ABOUT THIS RFP SHOULD BE DIRECTED TO
Gina L. Encallado, EncalladoGL@CO.MONTEREY.CA.US, (831) 796-1336

CONTRACTOR MUST INCLUDE THE FOLLOWING IN EACH PROPOSAL (1 original plus 3 copies):

☒ ALL REQUIRED CONTENT AS DEFINED PER SECTION 7.0 HEREIN

This Signature Page must be included with your submittal in order to validate your proposal.
Proposals submitted without this page will be deemed non-responsive.

☐ CHECK HERE IF YOU HAVE ANY EXCEPTIONS TO THIS SOLICITATION.

CONTRACTOR MUST COMPLETE THE FOLLOWING TO VALIDATE PROPOSAL

I hereby agree to furnish the articles and/or services stipulated in my proposal at the price quoted, subject to the instructions and conditions in the Request for Proposal package. I further attest that I am an official officer representing my firm and authorized with signatory authority to present this proposal package.

Company Name: Raftelis Financial Consultants, Inc. Date November 10, 2015

Signature: Habib Isaac Printed Name: Habib Isaac

Street Address: 24640 Jefferson Avenue, Suite 207

City: Murrieta State: CA Zip: 92562

Phone: (951) 595-9354 Fax: (626) 583-1411 Email: hisaac@raftelis.com

License No. (If applicable): N/A

License Classification (If applicable): N/A

MONTEREY COUNTY

Administrative Office
Contracts/Purchasing Division



ADDENDUM #1 RFP 10554

DATE: November 3, 2015

PROJECT: RFP 10554 Financial Consultants Water Resources Agency

SUBJECT: Written Questions and answers submitted prior to Deadline, and Twelve (12) Exhibits for supporting documentation.

A signed copy of this addendum must be submitted along with your original bid proposal package to verify receipt of this Addendum #1.

Halib Isaac

Company Representative

November 10, 2015

Date

-
1. Exactly which Benefit Assessments are covered under the RFP (anticipated for analysis; total of ten Assessments?) There are 4 Assessment Zones: 2C Salinas Valley Water Project (SVWP), Zone 2B Water Conservation Plan & CSIP/SVRP Debt Service, Zone 2Y Castroville Seawater Intrusion Project (CSIP O&M) and Zone 2Z Salinas Valley Reclamation Project (SVRP O&M). Included in Zone 2B is the collection of an annual SRDF water delivery charge of \$67.82 and annual CSIP water service charges of \$5.63. In addition, the Agency has 6 Flood Zone Assessments that were established prior to Proposition 218 requirements.
 2. For the Benefit Assessments, please provide any history of formation, 218 legal analysis, and other analyses.
Attached, please find a description of each zone and the year established, most all zones were established prior to Proposition 218 requirements. The SVWP is the only benefit assessment established by Proposition 218 vote – see attached Engineers report. In addition, I've attached Zone 2B Engineer's report that was used to determine the Water delivery charges for SRDF after the completion of the SVWP. I've also included FY 2015-

16 Board of Supervisor's resolutions for annual assessment hearings that provide additional information regarding these assessments and fees.

3. In reference to "water rate structures" in RFP Phase 1, what level of analysis is required for this? A full water rate study? We would like an analysis performed on the water rates that that were developed for Zone 2C (SVWP) , Zones 2B, 2Y (CSIP O&M) and 2Z (SVRP O&M). As we move forward with projects that expand CSIP and SVWP, our constituents would like an analysis performed on these existing Zones before moving forward with any future projects that may require a Proposition 218 process that may overlap the existing Zones 2C, 2B, 2Y, and 2Z.
4. Are any other revenues anticipated for analysis?
We would like an analysis performed on the Fees collected for Water Service (utilized for CSIP O&M) and Water delivery (utilized to cover SRDF expenditures) both projects within Zone 2B which are also a part of the SVWP. The Agency is currently collecting revenue while the SRDF is not operating (the operation of SRDF reduces CSIP O&M costs by minimizing the use of wells). However, the Agency is unable to transfer these revenues to CSIP project costs due to fund accounting rules. These revenues streams were set up prior to the establishment of Proposition 218 in 1996 and were contractually agreed upon between the Agency and Agricultural Water Users.
5. Under each phase, there are five meetings. Do we assume fifteen total on-site meetings then, or can was the intention that there is overlap for total of five stakeholder meetings? Could we assume probably two on-site staff meetings as well?
We can prioritize and overlap meetings based on your analysis. We would like to begin with analysis of the SVWP Zone 2C and Zone 2B, CSIP O&M Zone 2Y and SVRP O&M 2Z.
6. For Pricing, is a range acceptable, given the breadth of this project?
Yes, a range is acceptable and we can dwell down from there on priority of Agency needs.

CONTENTS

1	SECTION 2: PROPOSED SCOPE-OF-WORK
13	SECTION 3: PROJECT EXPERIENCE & REFERENCES
27	SECTION 4: PRICING
29	SECTION 5: EXCEPTIONS
31	SECTION 6: APPENDIX: PROJECT TEAM RESUMES

EXECUTIVE SUMMARY

The RFC Team's work approach is based on our understanding of the Agency's project objectives as presented in its Request for Proposals (RFP) and upon our extensive experience in providing utility rate and cost of service consulting services. The proposed scope of work reflects our experience with developing water utility financial plans, updating assessments and water rates, as well as ensuring full cost recovery. RFC has completed numerous cost of service rate studies for many other utilities in California and across the country, as well as developing drought rates as a result of the current drought conditions. Our scope is tailored to address the specific objectives and concerns as identified in the Agency's RFP, and includes elements that RFC believes are essential for a successful project. Based on our review of the RFP, the primary objective of this study is to conduct a cost of service analysis and prepare a five-year financial plan study in conjunction with a review of the Agency's current assessments and water rate structure that:

- Generates adequate revenues to keep the Agency financially sound
- Reflects the cost of service for delivering water to different customer groups / zones
- Considers various rate alternatives that will complement the strategic goals of the Agency
- Is fair and defensible
- Provides a structurally balanced budget matching ongoing expenditures and revenues by individual fund rendering a sustainable budget
- Provides adequate reserves that are consistent with industry standards while meeting the Agency's specific requirements of revenue and rate stability
- Encourages water conservation through efficient usage
- Is easy to understand and implement
- Conforms to legal requirements such as California Constitution Articles XIII, C and D (Proposition 218), Proposition 26, and Senate Bill X7-7 (SBx7-7)



PROJECT UNDERSTANDING AND APPROACH

The Monterey County Water Resources Agency (Agency) formerly known as the Monterey County Flood Control and Water Conservation District provides control of flood and storm waters, conservation of such waters through storage and percolation, control of groundwater extraction, protection of water quality, reclamation of water, exchange of water, and the construction and operation of hydro-electric power facilities. The Agency's service area covers all of Monterey County, including the Salinas Valley Groundwater Basin. Monterey County has a population of 415,057 based on the 2010 Census. An estimated 95% of all water used in Monterey County is derived from groundwater wells. Groundwater is currently the source of nearly all agricultural and municipal water demands in the Salinas Valley and,

as of 2013, agricultural use represents approximately 91% of all water used in the Basin. In addition to groundwater, other sources of water for agricultural production include surface water diverted from the Arroyo Seco, recycled municipal waste water supplied by the Monterey County Water Recycling Projects, and surface water diverted from the Salinas River north of Marina as part of the Salinas Valley Water Project. Since 1991, Salinas Valley growers have submitted Agricultural Water Conservation Plans to the Agency. The Agency's ordinance 3886 requires that all cities and urban water purveyors within Zones 2, 2A, or 2B file plans with the Agency not later than February 15 of each year. The Agency's 2015 Urban Water Conservation Plan seeks to develop rate structures and other pricing mechanisms to

maximize water conservation. As of 2013, nearly 50% of the Agency's urban water demand is from the City of Salinas. The Agency has adopted water standby and availability charges for Zone 2 and Zone 2A. The Agency has Water Delivery Charges for Zone 2B, which pay for the Castroville Seawater Intrusion Project and the Salinas Valley Wastewater Reclamation Project. The annual levy of the charges is based on the quantity of project water delivered to each project water customer in Zone 2B. Zone 2C is the benefit zone for Salinas Valley Water Project. The Agency has 26 funds to cover all of the Agency's administration, operations, maintenance, and debt service activities.

There has been increased scrutiny on utility rates and, in particular, compliance with Proposition 218. As a result, a primary objective of this study will be to clearly establish a nexus between the costs incurred by the Agency and the proposed rates, assessments, and fees charged to its customers. We craft our analysis and reports to be easily understood and to promote transparency, which provides additional support from for its community or customers. With any change to the existing rate structure, building an understanding of the new rate structure among customers will be a crucial component to the study to generate customer buy-in. We will also be cognizant of the Agency's existing rate structures as we provide guidance to the Agency's goal of developing a proposed rate structure to encourage more efficient water use for a sustainable water supply, while generating sufficient annual revenue to meet the Agency's financial obligations.

With 13 years of experience, Mr. Habib Isaac, Manager of our Murrieta Office, will serve as Project Manager. Mr. Isaac will serve as the day-to-day contact to the Agency and be present at all in-person meetings. In addition, Mr. Sanjay Gaur, Vice President, will serve as the project's Technical Reviewer. Mr. Gaur is considered to be one of the leading conservation/water budget rate experts in the industry. He has over 16 years of experience serving the municipal utility industry and co-authored a new chapter on water budget rates in the *Manual M1 Principles of Water*

Rates, Fees, and Charges published by the AWWA. The Project Team has extensive experience conducting water rate studies for agencies throughout California, including the Cities of Arroyo Grande, Lompoc, Santa Barbara, Santa Cruz, and Watsonville, Goleta Water District, Phelan Piñon Hills Community Services District, Castaic Lake Water Agency, East Valley Water District, El Toro Water District, Mojave Water Agency, Castaic Lake Water Agency, Zone 7 Water Agency, and many others.

Our proposed project approach entails several distinct, yet interrelated work efforts that will require effective coordination between Agency staff and the RFC Project Team. Our management approach stresses communication, teamwork, objectivity, transparency, and accountability for meeting project objectives. We believe in a no-surprises approach which provides the client with status updates of the project at all times. Our approach includes regular communication and detailed documentation to ensure transparency and thoroughness of the project. RFC will work with Agency staff on an ongoing basis via scheduled in-person meetings and web conferences for the orderly transfer of information and to cultivate a strong sense of ownership among Agency staff over the final work product. For web meetings, RFC uses GoToMeeting, which allows clients to see in real-time the results of various analyses on their computer screens, thus providing an efficient and effective method of communication.

As stated in the *M1 Manual* (which was co-authored by our technical reviewer, Sanjay Gaur), the AWWA Rates and Charges Subcommittee also believes that "the costs of water rates and charges should be recovered from classes of customers in proportion to the cost of serving those customers." To develop water rates that comply with Proposition 218 and industry standards while meeting other emerging goals and objectives of the utility, there are three major steps:

1. FINANCIAL PLAN DEVELOPMENT

The rate-making process starts with the determination of future revenue requirements to sufficiently fund the utility's operation and maintenance (O&M),

capital replacement and refurbishment (R&R), capital improvement and perpetuation of the system and to ensure preservation of the utility's financial integrity. The basic revenue requirements of a utility include O&M expenses, debt service payments, contributions to specified reserves and the cost of capital expenditures that are not debt financed. Major capital projects are typically financed with a combination of long-term debt and equity (or cash from reserves). As such, the Agency's most recent completed Master Plans will be folded into the financial plan to fully fund its capital needs throughout the planning horizon. Two key aspects of the financial plan consist of the determination of the appropriate coverage ratio of debt financed capital projects and the required revenue adjustments to ensure financial sufficiency for its operational and capital needs while meeting other emerging goals of the utility, such as water conservation. For most utilities, including the Agency, the total revenue requirements are met from rate revenues and fees. Non-operating revenues, if any, provide offsets to total revenue requirements from rates.

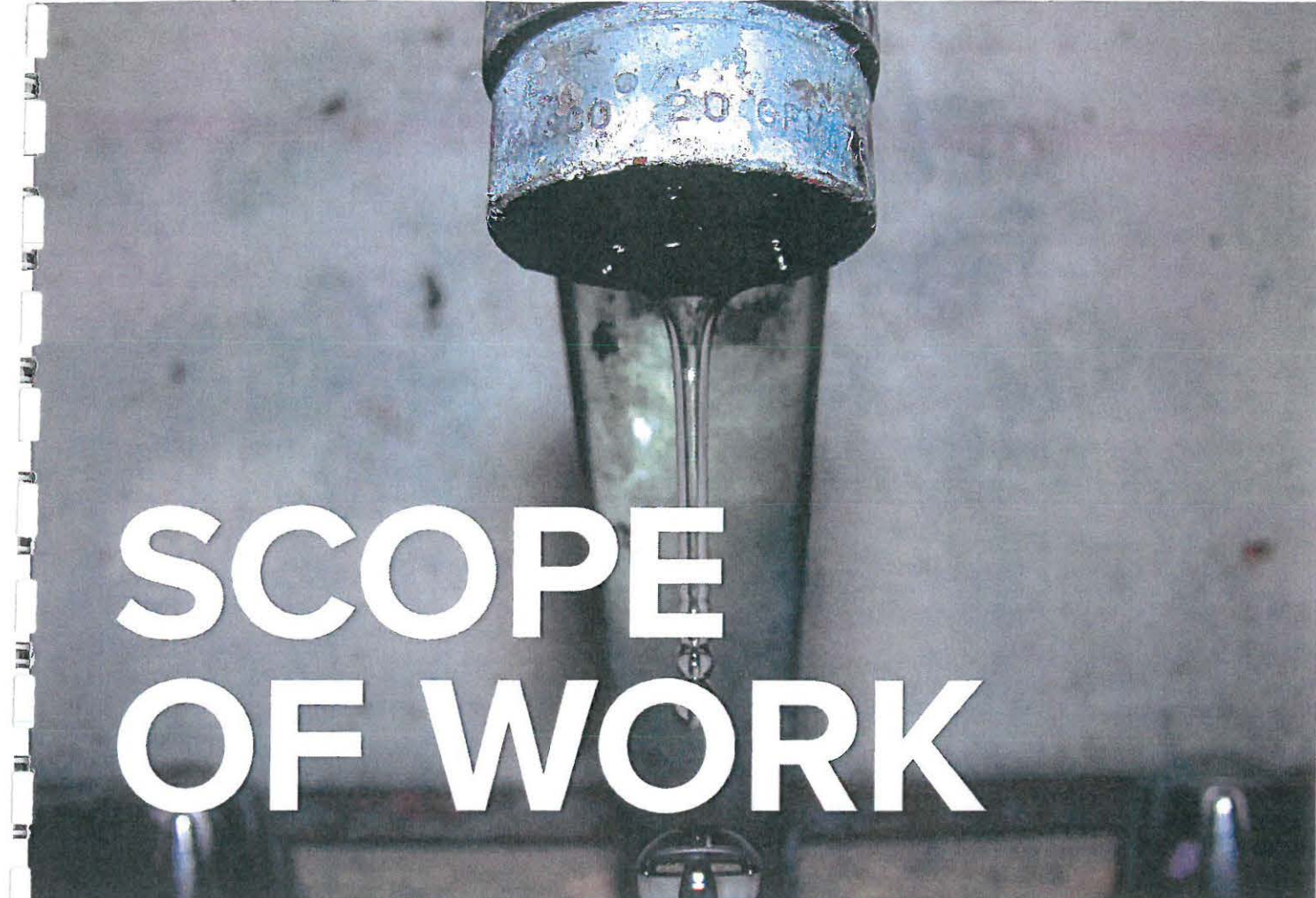
2. COST OF SERVICE ANALYSIS

The annual costs of providing water services, determined in the financial plan development, should be allocated among the customers commensurate with their service requirements. In this step, costs are identified and allocated to functional cost components and distributed to respective customer classes according to the industry standards provided in the *M1 Manual* published by AWWA. RFC will ensure that the rates are cost justified using the updated Master Plans and meet the requirements of Proposition 218.

3. 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, revenue sufficiency and stability, drought conditions, and ensure ease of implementation. RFC considers rate development as a public information tool in communicating these Agency objectives to customers. In this step, RFC will work within the legal framework and industry standards

to design appropriate rates to resolve the Agency's current issues and achieve the newly defined objectives of ensuring a sustainable water supply. A customized rate model will be developed to assess the customer impacts of different rate alternatives to facilitate informed decision making. The results are summarized in both easy-to-understand graphical format and technical tabular format to ease communications with elected officials about the financial consequences of the rate alternatives.



SCOPE OF WORK

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

TASK 1 – PROJECT MANAGEMENT, INITIATION, AND POLICY WORKSHOP

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

When responding to RFPs, RFC first determines whether or not we have sufficient staff availabil-

ity during the requested project schedule before submitting a proposal for consideration. We are very conscientious in delivering the highest quality of work in the industry, which requires us to be very selective with our staff utilization and total work capacity. Therefore, through our internal due diligence, we can affirm that our Project Team will not change during the course of this engagement and that we have sufficient

staff availability to meet the deadlines outlined in the RFP.

Our project management approach stresses communication, teamwork, objectivity, and accountability for meeting project objectives and includes general administrative duties, including client correspondence, billing, project documentation, and administration of the study control plan. This task provides

PROJECT TASKS

1

PROJECT MANAGEMENT,
INITIATION, AND POLICY
WORKSHOP

2

FINANCIAL PLAN
DEVELOPMENT

3

COST OF SERVICE
ANALYSIS

4

UTILITY RATE MODEL
DEVELOPMENT

5

FINAL REPORT
PREPARATION AND
BOARD OF DIRECTORS
WORKSHOP

THIS TASK PROVIDES FOR **CONSISTENT AND COMPETENT PROJECT MANAGEMENT TO ENSURE THAT ALL DEADLINES AND OBJECTIVES ARE MET IN A TIMELY AND EFFICIENT MANNER.**

for consistent and competent project management to ensure that all deadlines and objectives are met in a timely and efficient manner, as requested under Section IV within the RFP.

The quality assurance / quality control (QA/QC) process ensures that all work performed by RFC on this project will be accurate and of the highest quality. The QA/QC process begins at the outset of the project when the RFC consulting team is assembled with 2 layers of review, including the Project Manager and Technical Reviewer. The Technical Reviewer's primary responsibility is to review the work effort for consistency, accuracy, and validity and ensure that the cost of service and rate model (Model) is functioning properly and is based on sound rate-making principles and standard industry practice and that the report produced is comprehensive, consistent with the results, and meets the high quality standards of RFC. The QA/QC responsibility is accomplished through periodic reviews of the Model throughout the course of its development. We also have highly experienced and competent staff which will ensure validity, accuracy and consistency of the study.

TASK 1.2 – PROJECT KICK-OFF MEETING, INITIATION AND DATA COLLECTION

The in-person kick-off meeting provides a solid foundation for the project and ensures that project participants are in mutual agreement as to the project's approach, work plan, schedule, and the Agency's priorities. As part of the meeting, RFC will review and discuss the Agency's current assessments and water rates, identify any new customer classes that may be considered as part of update, work with staff to identify and prioritize pricing objectives, develop a framework for the proposed new rate structure, and evaluate the various policy options available for meeting the Agency's goals and objectives.

A detailed data request list will be submitted to the Agency prior to the meeting so that all appropriate data in the required format can be forwarded to RFC. Upon receiving the items requested in the data request, the Project Team will conduct a thorough review of the information provided by the Agency. It is important for the Project Team to get an understanding of the nature of both the revenue streams and the revenue requirements over

the study period, especially for non-recurring expenditures or volatile revenue requirements. In addition, RFC will review the Agency's current structure of financial funds and reserves and develop recommendations for appropriate reserve levels that are consistent with industry standards as well as the Agency's risk management practices to maintain financial solvency.

This task also includes ongoing project management. Management responsibilities include general administrative duties such as client correspondence, billing, project documentation, and administration of the study control plan.

Meetings: One (1) kick-off meeting with Agency staff to discuss overall priorities, objectives, framework, and schedule

Deliverables: Data request list, presentation materials, and meeting minutes

TASK 2 – FINANCIAL PLAN DEVELOPMENT

TASK 2.1 – FINANCIAL PLAN MODEL DEVELOPMENT

The objective of this task is to project the Agency's revenue requirements for the study period for the water utility. This major task requires an assessment of revenues based on the current water rates, assessments, and fee schedules, an estimation of future revenue requirements, the Agency's ability to meet projected revenue requirements, and the determination of the level of rev-

enue adjustments and additional financing requirements.

This task will include the projections of budget items, such as annual costs related to sources of water supply, labor, power, materials, capital expenditures, plant investment, operating and maintenance (O&M) expenses, reserve contributions, depreciation, and debt service using assumptions based on different economic factors and growth trends.

RFC will develop a forecast of the water utility's revenue requirements over the planning horizon. This will include an estimate of revenues based on current rates, usage characteristics, and other non-operating revenues. Revenue requirements will be projected over the rate-setting period based on historical results, the current budget, various funding levels for the Agency's capital improvement plans (CIP), existing debt service, other obligations, and current economic trends. Rates, debt, grants, government subsidies, or infrastructure bank loans will be provided as options for capital cost financing. Projecting revenue adjustments over a long planning horizon can illustrate future rate impacts and potential challenges to the Agency's financial situation; especially under current drought conditions and Mandatory Conservation. This will allow the Agency to make adjustments to expenses, reserve balances or capital project scheduling to smooth rate impacts and to maintain financial stabil-

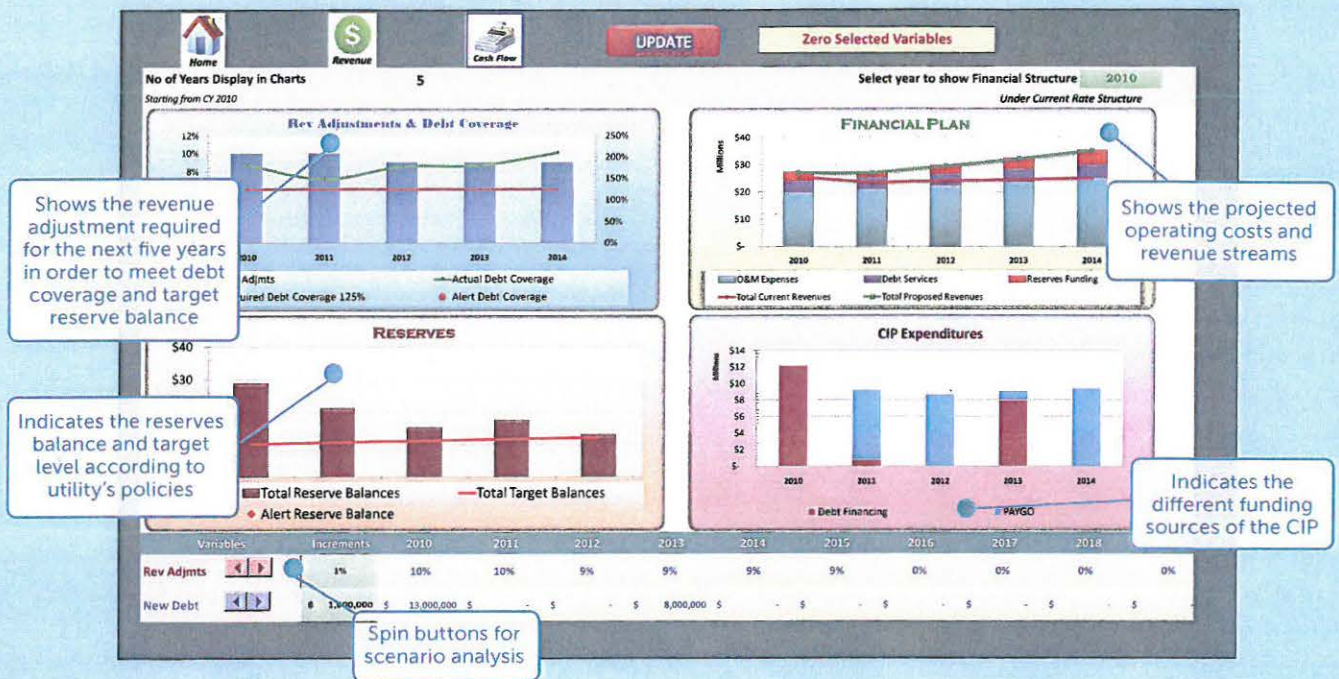
ity. RFC's review of the Agency budget currently indicates the Agency's revenue requirements exceed its sources of revenue, so this will be an important tool.

Although the RFP requests a 5-year financial and rate planning period, RFC believes it will be more prudent to develop a 10-year cash flow analysis that correlates to the Agency's 10-year CIP to determine revenue adjustments needed to meet projected revenue requirements for the 10-year planning period, while minimizing sharp rate fluctuations. The cash flow worksheet incorporates revenues generated from different sources, expenses needed to maintain the water system, any transfers in and out of the water enterprise fund, and any coverage necessary to meet current and proposed debt service requirements. RFC will also review reserve policies to recommend appropriate reserve balances (operating, capital, rate stabilization, etc.) that are consistent with industry standards as well as the Agency's risk management practices. In addition, RFC will develop a Fund Balance Module as part of the Financial Plan Model to summarize the budget and actual results for the study period.

The financial plans will be presented in an easy-to-understand format on an interactive Dashboard which shows the impacts of various assumptions so that decisions regarding revenue adjustments, capital financing

SAMPLE MODEL DASHBOARD

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



through pay-go or debt, and reserve balances can all be made quickly and efficiently. A snapshot of the sample Dashboard is shown above.

Several features of the Model's Dashboard include the ability to show or indicate:

1. Required revenue adjustments for the next 10 years in order to meet debt coverage, scheduled capital projects, and fund reserves
2. Reserve balances and target

levels (days' cash, reserve fund levels, and debt service coverage)

3. Projected operating costs and revenue streams
4. Cost break down for calculated rates
5. Different funding sources of CIP , PAYGO, or debt financed, including debt capacity of the Agency
6. Spin buttons (dynamic selection options) for scenario analyses

As adjustments are made to different variables and assumptions, it is important that the Model has the capability to save adjustments as separate scenarios for Agency staff and elected officials to discuss alternatives to determine the most appropriate financial plan and rate design. As such, RFC has developed a scenario manager which allows multiple distinct scenarios to be saved and revisited for a comparative analysis between different financial plans and rate options.

TASK 2.2 – FINANCIAL PLAN REVIEW WITH AGENCY STAFF AND STAKEHOLDER GROUPS

RFC will conduct a series of conference calls / webinars with Agency staff to develop different financial plan scenarios. The goal of these conference calls is to identify the key issues and scenarios that will be used to develop proposed rates and assessments. We have found it is best to provide the Agency with two or three viable financial plan options that reach the overall goals and objectives over the planning horizon in slightly different paths. RFC will describe the differences between the proposed scenarios with Agency staff and discuss the benefits and challenges associated with each financial plan scenario and rate alternative. The ultimate goal of this task is to develop a final recommendation of the financial plan for the Agency during the study period and receive input on possible rate structures to be evaluated as part of Task 3 and 4. RFC will meet with the stakeholder groups and discuss the financial plan and proposed scenarios to obtain their input.

Meeting(s)/Conference(s): Two (2) webinars with the Agency staff and two (2) meetings with stakeholder groups

Deliverable(s): Financial Plan Model in Microsoft Excel 2013, presentation materials, and meeting minutes from the workshop

PROJECTING REVENUE ADJUSTMENTS OVER A LONG PLANNING HORIZON CAN ILLUSTRATE FUTURE RATE IMPACTS AND POTENTIAL CHALLENGES TO THE AGENCY'S FINANCIAL SITUATION; ESPECIALLY UNDER CURRENT DROUGHT CONDITIONS AND MANDATORY CONSERVATION.

TASK 3 – COST OF SERVICE ANALYSIS

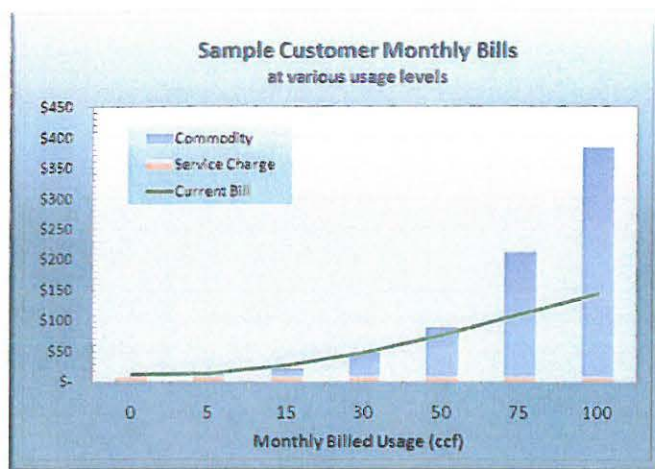
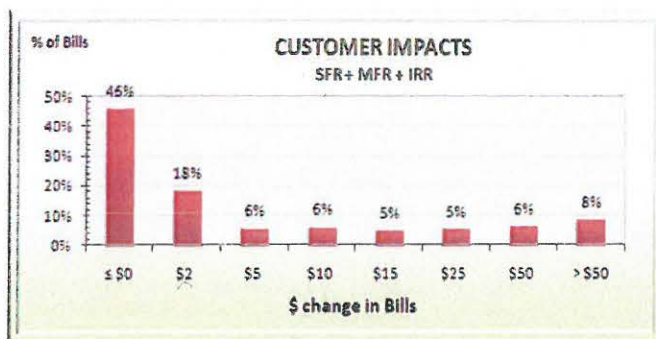
The cost of service study will be performed based on industry standards and methodologies approved by the American Water Works Association (AWWA) in *Manual M1*. Mr. Isaac and Mr. Gaur will collectively ensure that the cost of service allocations focus on service functions, appropriately allocate the cost of service (revenue requirements) to the service functions, determine how those services are used by each customer class, and develop the cost allocation components of the models. Cost allocations among customer classes will likely 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.

Based on the revenue requirements identified in Task 2, the cost of service will be allocated to the various cost components

including, water supply costs, capacity-related costs, commodity costs, customer costs, and other direct and indirect costs consistent with industry standards. The purpose of this task is to allocate the costs associated with the various costs components to the various customer classes on the basis of the relative responsibility of each. Costs will be allocated based on the determination of units of service for each customer class and the application of unit costs of service to the respective units. The result is the total cost responsibility required of each customer class in order to maintain the financial stability of the Agency's water enterprise.

Throughout the cost allocation process, RFC will comply with the Agency's policy considerations and procedures, as well as current federal, state, and local rules and regulations such as Proposition 218. Although not a law firm, RFC is very familiar with Proposition 218 require-

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



ments and its implications on water rates and assessments. Our Project Team has extensive experience with Proposition 218 and has conducted conference sessions on the matter.

Meeting(s)/Conference(s): Two (2) web-meetings with Agency staff

Deliverable(s): Cost of service analysis

TASK 4 – UTILITY RATE MODEL DEVELOPMENT

TASK 4.1 – CALCULATE UTILITY RATES

RFC will develop the Water Rate Model with the flexibility to compare the current rate structure with the proposed new rate structure and with at least two alternative rate structures that were previously discussed through workshops with Agency staff. The models will also have the capability to examine different options to enhance revenue stability while balancing competing objectives such as affordability for essential needs and signalling conservation.

To help communicate with customers about the drivers behind any potential rate increases and the rationale behind the proposed rates, the water rates will have several cost components including water supply costs, the Agency's system costs (delivery costs), and peak costs of capital.

Utilizing the Model, RFC will determine the rates required for each Zone to collect the required revenues. RFC will also build-in the capability to conduct various scenario analyses to address different conservation issues such as drought, loss of water supply, and different levels of capital funding. The Dashboard, which displays key variables and results on-screen in real-time, will facilitate discussion for quick consensus building. This has proven to be particularly useful when making presentations to elected officials (e.g. Board of Directors), allowing them to fully appreciate the impacts of their decisions instantly.

TASK 4.2 – PERFORM CUSTOMER IMPACT ANALYSIS

Besides required revenue adjustments, changes to the rate structure itself could also cause "rate shock" to certain customer group or zone. As such, RFC will also determine the potential financial impact on customers that may result from the proposed rate structure.

The Model will include a series of tables and figures that show projected rate impacts on different types of groups of customers/zones. The customer impact illustration displayed above shows that 64 percent (46% + 18%) of the customers will see no more than a \$2 increase in their bill.

Meeting(s)/Conference(s): Two (2) webinars with Agency staff and three (3) meetings with Stakeholders groups to review proposed water and assessments and customer impacts.

Deliverable(s): Draft Water Rate Model and Assessments Model in Microsoft Excel 2013 showing cal-

RFC WILL ALSO BUILD-IN THE CAPABILITY FOR THE MODEL TO CONDUCT VARIOUS **SCENARIO ANALYSES** TO ADDRESS DIFFERENT CONSERVATION ISSUES SUCH AS DROUGHT, LOSS OF WATER SUPPLY, AND DIFFERENT LEVELS OF CAPITAL FUNDING.

culated proposed rates, assessments and customer impact analyses

TASK 5 – FINAL REPORT PREPARATION AND BOARD OF DIRECTORS WORKSHOP

TASK 5.1 – DRAFT REPORT PREPARATION

Recent court case decisions have emphasized the importance of a thorough administrative record and defensible methodology of the final rates and assessments for service. As a means to ensure that the study includes a thorough administrative record, the Study Report will include an exhibit listing all rate design assumptions and methodologies used to develop the rates. The discussion on rate structure selection will be presented as a comprehensive section on the rate design assumptions and methodologies used to develop the rate calculations. The process for developing the proposed rates will be described in a Draft Report. This Draft Report will include an executive summary

highlighting the major issues and decisions and an overview of operations, CIP, the financial plans, and the final rates resulting from the study. Five copies of the Draft Report along with an electronic version of the report will be submitted to the Agency. Comments from Agency staff will be incorporated into the report as appropriate, and the Model will be refined to reflect appropriate issues or concerns raised by stakeholders. The report will be submitted to the Agency and will include appropriate supporting data from the Model to address the requirements of Proposition 218.

TASK 5.2 – FINAL REPORT & BOARD OF DIRECTORS PRESENTATION

RFC will present final results and the reports to the Board of Directors in workshop format. The presentation materials used in the workshop will be provided to Agency staff for review prior to the workshop. The final presentation materials will be available to the General Manager for approval

and be distributed to the Board of Directors prior to the workshop. Comments from the Board of Directors will be incorporated into the Final Report. The Final Report will be submitted to the Agency to address the Proposition 218 requirements. Five copies of the Final Report along with an electronic version of the report will be submitted to the Agency and will include appropriate supporting data from the Model.

Meetings: One (1) on-site workshop with Board of Directors

Deliverables: Presentation materials for the workshop, Draft & Final Reports

KEY STAFF PERSONS

Our Project Team consists of some of the most knowledgeable and skilled rate and financial consulting professionals in the water and wastewater utility industry. For this project, we have included some of our most senior-level personnel to provide experienced leadership for the project, with support from talented consulting staff. This organizational chart shows the structure of our Project Team and their roles on the Agency's project. On the following pages, we've included profiles summarizing each Team member's qualifications and experience in the industry. Full resumes are included in the appendix.

MONTEREY COUNTY WATER RESOURCES AGENCY

PROJECT MANAGER



HABIB ISAAC will ensure that the project stays on schedule, is within budget, and effectively meets the Agency's objectives. He will also lead the consulting staff in conducting analyses and preparing deliverables for the project. Mr. Isaac will serve as the Agency's main point of contact for the project.

TECHNICAL REVIEWER



SANJAY GAUR will provide oversight for the project ensuring it is completed in a timely manner and meets both RFC and industry standards.

STAFF CONSULTANTS



GREGG TOBLER, ANDREA BOEHLING, AND KEVIN KOSTIUK will work at the direction of Mr. Isaac to conduct analyses and prepare deliverables for the project.



LEADING THE INDUSTRY

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

HABIB ISAAC

PROJECT MANAGER

(Manager)

EXPERIENCE: 13 years

CAREER HIGHLIGHTS: Financial/rate consulting experience with East Vally WD, Zone 7 Water Agency, Helix WD, Inland Empire Utilities Agency, Phelan Pinon Hills CSD, & Ricon Del Diablo MWD

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 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.

SANJAY GAUR

TECHNICAL REVIEWER

(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, Yorba Linda 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 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.

GREGG TOBLER

STAFF CONSULTANT
(Senior Consultant)

EXPERIENCE: 18 years

CAREER HIGHLIGHTS: Financial/
rate consulting experience with Arvin,
Coachella, Delano, & Westminster

EDUCATION

- BS - Northern Illinois University
- AS - Kishwaukee College

Mr. Tobler serves as a Senior Consultant at RFC and has 18 years of industry experience. His experience has focused on water and wastewater rate analysis, and his responsibilities include supporting project managers and conducting fiscal analyses for numerous types of public finance studies.

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
(Consultant)

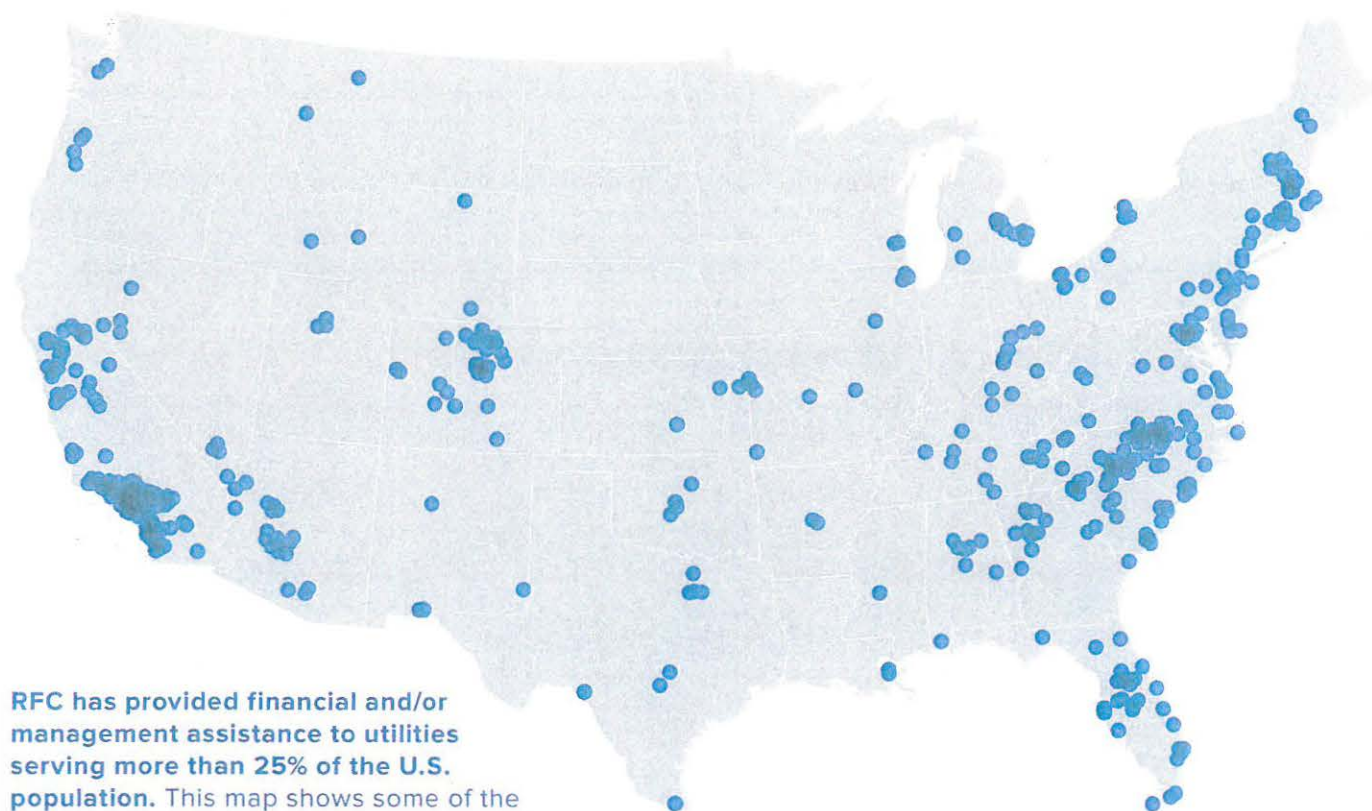
EXPERIENCE: 2 years

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

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.



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 & REFERENCES

RFC has focused on financial 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 has provided financial/rate assistance to hundreds of water, wastewater, and stormwater utilities across the U.S. In the past year alone, RFC worked on more than 300 financial, rate, 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 DEVELOPMENT	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 DEVELOPMENT	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				•		•		•				

On the following pages, we have provided detailed descriptions of several projects that we have worked on that are similar in scope to the Agency'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.



ZONE 7 WATER AGENCY

SERVICES PROVIDED

- > Cost of service wholesale rate study
- > Financial planning

CLIENT REFERENCE

Osborn Solitei
Assistant General Manager
– Finance
P: 925.454.5052
E: osolitei@zone7water.com

In July, 2015, RFC was selected to conduct a comprehensive Cost of Service Wholesale Rate Study for the Zone 7 Water Agency (the Agency). 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, RFC completed the cost of service rate study over an aggressive timeline and 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 from 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 and Mr. Gaur also reviewed the current rate structure and consumption data 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 WATSONVILLE

SERVICES PROVIDED

- > Financial planning for water, wastewater, and solid waste
- > Cost of service study

CLIENT REFERENCE

Steve Palmisano
Director of Public Works
P: 831.768.3100
E: steve.palmisano@cityofwatsonville.org

RFC was engaged to develop 10-year financial plans for the City of Watsonville's (City) water, wastewater, and solid waste enterprise funds. The goal was to develop a financial plan model that could be used as a financial planning tool to determine the necessary rate adjustments and bond issuances for maintaining operations as well as handling several large capital projects. For example: the City has to build several chromium 6 treatment plants in order to remain in compliance with state mandated water quality levels. RFC helped the City create a financial plan to fund these expenditures with a combination of rate increases and debt issuances. This model included three dashboards (one for each enterprise), that can be used as a policy tool and show how changes to the financial plan affect each enterprise fund as the changes are made.

Additionally, this model was used to develop new rates for all three enterprises for the next five years. These rates were based on cost of service principals. The City of Watsonville adopted these rates at a public hearing on September 8, 2015.



CITY OF SANTA CRUZ

SERVICES PROVIDED

- > Financial policies study
- > Financial plan study
- > Water demand offset study
- > System development charge study
- > Revenue calculator
- > Cost of service based water rate study

CLIENT REFERENCE

Rosemary Menard
Water Director
P: 831.420.5205
E: rmenard@cityofsantacruz.com

The City of Santa Cruz (City) Water Department provides water service to a population of approximately 93,000. The City relies entirely on local sources for the community's water supply which is currently susceptible to water supply instability. Similar to many other cities and utilities in California, the City's water department is faced with several challenges including aging infrastructure and the resulting intensive capital improvement costs, drought and its subsequent impacts, increasing operations and maintenance costs, and volatile water sales. These obstacles in recent years has driven the City to develop financial policies to help 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 City's water system.

RFC is currently working on a series of projects for the City of Santa Cruz to help ensure the financial sustainability of the City's water system. The City engaged RFC to conduct a Water Demand Offset Fee Study to evaluate the feasibility of implementing a Water Demand Offset Fee for the City. Water Demand Offset Fees are a form of funding of conservation measures which are used to offset the demand generated by new developments. Water savings can be achieved in many different ways, such as installing high-efficiency retrofits to replace inefficient fixtures, removing turf, or converting irrigation accounts to recycled water. RFC used the water conservation measures savings and costs from the Water Conservation Master Plan to calculate the proposed Water Demand Offset Fee. RFC presented the results of the study to the Water Commission and assisted the City with evaluating the fees and policy decision of whether or not to implement such a fee.

RFC also evaluated the City's system development charges to ensure new customers, or existing customers requiring larger meters, pay an equitable share when connecting to the system. The City's system development charges had not been updated since 2004, did not account for any changes that occurred to the system, and were under charging new customers. RFC calculated the proposed system development charges using the equity buy-in approach. RFC presented the proposed system development charges to the Water Commission in December or 2014. The results of the study were summarized in the Systems Development Charge Report and will be presented to the City Council for implementation in July of 2015.

CITY OF SANTA CRUZ (CONTINUED)

Recently, the City has been under a Stage 3 water shortage due the continued drought. In October 2014, the City implemented drought cost recovery fees effective for the following two years. Under mandatory curtailment and rationing customers use less water and therefor the Water Department earns less revenue. The City engaged RFC to develop a revenue calculator to examine the effects on the City's revenue from various levels of water usage. This tool helps the City understand the financial impacts caused by the rationing and helps project the expected revenues from the drought cost recovery fees.

Additionally, RFC is currently working with the City to design an appropriate, Proposition 218 compliant, water rate structure. RFC conducted a pricing objective workshop with the Water Commission and City Council to prioritize rate-setting objectives. RFC analyzed and set forth the pros and cons for a number of rate structures and discussed these with City Staff, the Water Commission, and the City Council. Based on the input and direction provided by key staff, the Water Commission, and the City Council, RFC will present a framework for the rate structure best suited for the City and will perform a cost of service based rate design. The rate design is expected to be completed in October of 2015.

In 2012, the City commissioned RFC to develop a Financial Plan Model as a tool to assess the financial implications of different financial policies. RFC evaluated the risks associated with water supply variances, various capital spending plans, etc. RFC presented the Model to the Water Commission to illustrate the Water Enterprise's financial health under various scenarios related to financial policies. The Model was delivered to City staff along with a training session to demonstrate all key aspects of the Model. RFC also provided a user manual to assist City staff with use of the Model in the future.



ALAMEDA COUNTY WATER DISTRICT

SERVICES PROVIDED

- > Water conservation rate study

CLIENT REFERENCE

Michael Yee
Financial Services Manager
P: 510.668.4253
E: michael.yee@acwd.com

In 2011, the Alameda County Water District (District) engaged RFC to conduct a water conservation rate study. They had recently seen a significant reduction in demand, which caused a decrease in revenue. The District was interested in developing a conservation rate structure that would assist them in meeting the regulatory requirements of SBx7-7, promote efficiency, and create revenue stability. The District's existing rate structure consisted of a fixed service charge and uniform commodity rates for all customer classes. RFC examined and evaluated inclining tiered rate structures and water budget-based rate structures. Each potential rate structure had numerous variations associated with them. Factors examined included: historical vs. real-time weather factors for designing the tier widths for budget-based rates and inclining tiered rates; different methodologies for determining residential landscape areas which were used to determine outdoor water budgets; indoor and outdoor drought factors; and gallons per capita per day for each residential household member.

In early 2012, the District commissioned RFC to develop a 25-year Financial Plan Model (Model) to assess risks of water supply variance and capital spending plans, and evaluate the associated potential financial impacts. 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. RFC worked closely with District staff to develop the Union Negotiation Module which was used to demonstrate the financial impacts of the negotiated labor and benefits contracts on the District.

Since 2012, the District has retained RFC annually for support on updating the Financial Plan and other financial and rate analyses. In 2014, the District engaged RFC to conduct a drought rate study to evaluate the financial impacts of the severe and ongoing drought and to develop a drought rate schedule to help mitigate the financial impacts. The Drought Study Report, which summarized the methodology and results of the Study, was submitted to the District and adopted by the District Board in April 2014.

In late 2014, the District once again retained RFC to conduct a 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

ALAMEDA COUNTY WATER DISTRICT (CONTINUED)

Proposition 218 requirements. During the course of the Study, the financial plan model (FPM) considered numerous drought scenarios and different financial outcomes. The scenarios covered included normal no-drought conditions, a mild drought ending in one year (2015 drought only), a medium drought ending after two years (medium), and a severe drought spanning three years (extended dry period). In addition, as part of the Study, RFC evaluated and presented two bi-monthly fixed service charge options 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 charge revenues with fixed cost and to 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 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, 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 District's policies and values, and are driven by the District's revenue requirements. The Final Report was submitted to the District in March 2015 for the Public Hearing in April 2015. Rates are expected to be adopted on May 1, 2015.

ATTACHMENT A - PRICING

Phase I – Review of Agency Benefit Assessments	\$ <u>34,520</u>
Phase II – Consider Capital Costs & Develop Financing Options	\$ <u>25,200</u>
Phase III – Results of Phase I and II	\$ <u>32,140</u>
Additional recommendations	\$ <u>18,500</u>

CONTRACTOR may submit additional pages and further breakdown for pricing.

COST

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 **\$110,360** including related expenses. 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	Task Descriptions	Web Meetings	In-Person Meetings	Hours Requirements				Total Fees & Expenses
				HI	SC	SG	Total	
HOURLY RATES				\$220	\$190	\$270		
1	Project Management and Initiation		1	12	10		22	\$5,860
2	Finanical Plan Development	2	2	42	84		126	\$28,660
3	Cost of Service Analysis	2		40	80		120	\$25,200
4	Utility Rate Model Development	2	3	44	88	4	136	\$32,140
5	Final Report Preparation and Board of Directors Workshop	1		36	40	4	80	\$18,500
TOTAL ESTIMATED MEETINGS / HOURS		6	7	174	302	8	484	
PROFESSIONAL FEES				\$38,280	\$57,380		\$95,660	
HI - Habib Isaac - Project Manager SC - Andrea Boehling; Kevin Kostiuik; Gregg Tobler - Analytical Support SG - Sanjay Gaur - Technical Reviewer				Total Fees				\$95,660
				Total Expenses				\$14,700
				TOTAL FEES & EXPENSES				\$110,360

HI - Habib Isaac - Project Manager

SC - Andrea Boehling; Kevin Kostluk; Gregg Tobler - Analytical Support

SG - Sanjay Gaur - Technical Reviewer

EXCEPTIONS

We have no exceptions to this solicitation.

APP END IX: PROJECT TEAM RESUMES

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)

HABIB ISAAC

PROJECT MANAGER 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

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.

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 complemented 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 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.

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/2013waterrates-tudy.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 Pinon 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 redesign of the City's water rate structure. The new rate structure 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 comprehensive review and financial plan update for the City's water and wastewater utilities and restructured the rates to reflect a cost of service methodology. Mr. Isaac also served as lead consultant in restructuring 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 utility 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 Coachella (CA) - Water Rate Study
- Town of Danville (CA) - Cost Allocation Plan
- City of Delano (CA) - Water, Wastewater, Refuse, and Street Sweeping Rate Study
- 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
- City of Tulare (CA) - Water Rate Study and Cost Allocation Plan

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

TECHNICAL REVIEWER

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

ALAMEDA COUNTY WATER DISTRICT (CA)

Alameda County Water District (District) currently has a uniform rate structure and is interested in developing a con-

servation 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.

CITY OF WATSONVILLE (CA)

Mr. Gaur served as the Project Manager for the development of 10-year Financial Plans for the City of Watsonville's (City) water, wastewater and solid waste enterprise funds. The goal was to develop a financial plan model that could be used as a financial planning tool to determine the necessary rate adjustments and bond issuances for maintaining operations as well as handling several large capital projects. For example: the City has to build several chromium 6 treatment plants in order to remain in compliance with state mandated water quality levels. RFC helped the City create a financial plan to fund these expenditures with a combination of rate increases and debt issuances. This model included three dashboards (one for each enterprise), that can be used as a policy tool and show how changes to the financial plan affect each enterprise fund as the changes are made.

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.

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 were 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.

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.

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.

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 incorporated 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 requires 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 findings 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.

TECHNICAL SPECIALTIES

- » Utility rate compliance
- » Utility rate studies
- » Cost allocation plans
- » Development impact fee studies
- » Fiscal analysis
- » Arbitrage rebate
- » Municipal disclosure

PROFESSIONAL HISTORY

- » Raftelis Financial Consultants, Inc.: Senior Consultant (2013-present)
- » Muni Financial Services, Inc.: Senior Project Analyst (2011-2013); Senior Analyst (2006-2011); Analyst I & II (2001-2006)
- » Nicolas-Applegate Capital Management: Analyst (1998-2001)
- » AMCORE Investment Group, N.A.: Trust Account Coordinator (1996-1998)

EDUCATION

- » Bachelor of Science in Finance - Northern Illinois University
- » Associate of Science in Accounting - Kishwaukee College

PROFESSIONAL MEMBERSHIPS

- » American Water Works Association

GREGG TOBLER

STAFF CONSULTANT

Senior Consultant

PROFILE

Mr. Tobler serves as a Senior Consultant at RFC and has 18 years of industry experience. His experience has focused on water and wastewater rate analysis, and his responsibilities include supporting project managers and conducting fiscal analyses for numerous types of public finance studies.

RELEVANT PROFESSIONAL EXPERIENCE

CITY OF SIERRA MADRE (CA)

Mr. Tobler served as lead analyst in the development of a custom-designed financial plan and rate model. Mr. Tobler developed a comprehensive revenue requirement analysis and 10-yr financial plan for both the water and sewer utility enterprises. As part of the project, Mr. Tobler analyzed consumption records, revenue requirements, debt service obligations, and assisted with establishing sound financial reserves.

CITY OF COACHELLA (CA)

Mr. Tobler led model and rate development and facilitated multiple stakeholder presentations in preparation of the City's water utility rates. He generated multiple alternative rate structures for the City in preparation of updating their water utility rates. Due to growth in operation and maintenance and capital improvement expenditures, the City's water rates were outdated and not generating sufficient revenue needed to operate, maintain and enhance the system.

CITY OF DELANO (CA)

The City of Delano sought a consultant to develop a comprehensive revenue requirement analysis and financial plan for four district utility enterprises, including Water, Sewer, Solid Waste, and Street Cleaning. All four utility rate studies are moving forward concurrently and will conclude with a Public Hearing in early April. As part of this project, Mr. Tobler has led model and rate development and assisted the City with public workshop presentations. He generated multiple alternative rate structures for the City in preparation of updating their water utility rates. The City's financials for each utility are less than desirable and the proposed rates developed will enable the City to achieve a strong financial outlook through a five year plan.

CITY OF WESTMINSTER (CA)

Mr. Tobler led model and rate development for the City's rate study.

The objectives of this analysis were to develop a tiered rate structure for the more than 21,000 customers that: 1) generates sufficient revenues to meet operating and capital expenses associated with water in response to the rising cost of purchased water from Metropolitan Water District; 2) is technically defensible and equitable across the six customer classes; and 3) is developed within spreadsheet models that are user-friendly and can be easily updated by City staff in the future.

CITY OF SEAL BEACH (CA)

The City's water rates were outdated and not generating sufficient revenue needed to operate, maintain and enhance the system. Mr. Tobler and the City worked closely with Leisure World, a residential senior community, to redesign the water structure from a commercial rate to a residential rate structure to more accurately reflect the type of customer and demand they placed on the water utility. Leisure World was pleased with the results and endorsed the adoption of the new water rates. Mr. Tobler was Task Manager for the model and rate development, and participated in critical stakeholder presentations.

CITY OF ARVIN (CA)

Mr. Tobler served as senior consultant and assisted the City in preparing the State Water Resources Control Board loan application. Mr. Tobler led model and rate development for the City's rate and connection fee study. His calculated sewer rates (which also included operation and maintenance costs) and connection fees provided sufficient revenue to cover the repayment of a State Revolving Fund loan that was secured by the City to finance construction costs.

CITY OF LOMPOC (CA)

Mr. Tobler served as lead analyst in the development of a custom-designed financial rate model that provided the City with a 10-yr financial plan. Mr. Tobler developed a comprehensive revenue requirement analysis and financial plan for both the water and sewer utility enterprises. As part of this project, Mr. Tobler analyzed consumption records, revenue requirements, debt service obligations, and assisted with establishing sound financial reserves.

CITY OF TULARE (CA)

Mr. Tobler led model and rate development for the City's water rate study. The objectives of this analysis were to develop a tiered rate structure: 1) generates sufficient revenues to meet operating and capital expenses associated with water; 2) is technically defensible and equitable across all customer classes; and 3) is developed within spreadsheet models that are user-friendly and can be easily updated by City staff.

CITY OF SAN FERNANDO (CA)

Mr. Tobler led model and rate development and facilitated multiple stakeholder presentations in preparation of the City's water and sewer utility rates. He generated multiple alternative rate structures for the City in preparation of updating their water utility rates. Due to growth in operation and maintenance and capital improvement expenditures, the City's water rates were outdated and not generating sufficient revenue needed to operate, maintain and enhance the system.

OTHER RELEVANT PROJECT EXPERIENCE

- City of Avenal (CA) – Water and Sewer Rate Study
- Carlsbad Municipal Water District – Recycled Water Rate Study
- City of Covina (CA) – Water Rate Study
- City of Dania Beach (FL) – Water and Sewer Rate Study
- Elk Grove Water District (CA) – Water Rate Study
- Elsinore Water District (CA) – Water Rate Study
- Elsinore Valley Municipal Water District – Water and Wastewater Connection Fee Study
- Helix Water District (CA) – Water Rate Study
- City of Madera (CA) – Water and Sewer Rate Study
- Phelan Piñon Hills CSD (CA) – Water Rate Study
- Ramona Municipal Water District – Water Rate Study
- Rincon del Diablo Municipal Water District (CA) – Water Rate Study
- City of Rivera Beach (FL) – Water and Sewer Rate Study
- Walnut Valley Water District (CA) – Water Rate Study

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)

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

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.

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 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.

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 Soledad (CA) – Water Rate Study
- City of Thousand Oaks (CA) – Cost Allocation Plan
- City of Tulare (CA) – Water Rate Study
- City of Tustin (CA) – Community Facilities District Formation

TECHNICAL SPECIALTIES

- » Data analysis
- » Environmental Policy Analysis
- » Strategic Planning

PROFESSIONAL HISTORY

- » Raftelis Financial Consultants, Inc.: Consultant (2014-present)
- » 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; History – University of California, Santa Barbara (2006)

KEVIN KOSTIUK

STAFF CONSULTANT Consultant

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

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, specific 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.

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.

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 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.

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