

SPECIAL MEETING OF THE BOARD OF DIRECTORS

IDYLLWILD WATER DISTRICT

January 3, 2018 - 6:00 P.M.

AGENDA

CALL TO ORDER:

ROLL CALL:

PUBLIC COMMENTS:

Any person may address the Board at this time upon any subject not identified on this Agenda but within the jurisdiction of the District. Please note that for items not listed on the agenda, the Brown Act imposes limitations on what the Board may do at this time. The Board may not take action on the item at this meeting. As to matters on the Agenda, persons will be given an opportunity to address the Board when the matter is considered. If you wish to speak during public comment, please fill out a "Speaker Request Form" and give it to the Board Secretary. When the Board President calls your name, please immediately step to the podium and begin by giving your name and address for the record. Each speaker will be given four (4) minutes to address the Board.

1. **REVENUE GENERATION AND COMPLIANCE**– The Board will consider engaging a firm to evaluate the District's Revenue Generation practices and to make recommendations to insure compliance with the relevant procedural requirements.

DIRECTORS COMMENTS :

GENERAL MANAGER'S COMMENTS:

ADJOURNMENT:

To the next regular Board meeting scheduled for January 17, 2018 at 6:00 p.m., to be held at the Idyllwild Water District Boardroom, 25945 Hwy. 243, Idyllwild, CA.

Please remember during Public Comments:

- Comments should be limited to 4 minutes or less
- Comments should be directed to the Board as a whole and not directed to individual Board members.

Americans with Disabilities Act: In compliance with the ADA, if you need special assistance to participate in a District meeting or other services offered by this District, please contact the District office @ 951-659-2143 or email: admin@idyllwildwater.com. Upon request, the agenda and documents in the agenda packet can be made available in appropriate alternative formats to persons with a disability. Notification of at least 48 hours prior to the meeting or time when services are needed will assist the District staff in assuring that reasonable arrangements can be made to provide accessibility to the meeting.

Memo

To: Board of Directors

From: Interim General Manager

Date: January 3, 2018

Subject: ITEM #1 – CONSIDER ENGAGING A CONSULTANT TO REVIEW THE REVENUE GENERATION AND REGULATORY COMPLIANCE OF THE DISTRICT'S RATE STRUCTURES

Recommendation

That the Board of Directors review the attached proposals and consider engaging one of the proposers to review the District's current rate structure to insure regulatory compliance, adequacy of revenue generation and ability to convey appropriate conservation messages to the District ratepayers.

Background

To facilitate the long term financial stability of the District's two enterprises (Water and Sewer) and to assure compliance with newer regulatory requirements related to rate structures for utilities in California, staff solicited proposals (Request for Proposals attached) from three qualified firms with regional offices here in the Inland Empire: Raftelis Financial Consultants; David Taussig and Associates; and NBS Financial.

Fee proposals were also received and will be provided at the Meeting.

Attachments:

-Request for Proposals

-Proposals

IDYLLWILD WATER DISTRICT

P.O. BOX 397 • IDYLLWILD, CALIFORNIA 92549-0397 • 25945 HIGHWAY 243
PHONE (951) 659-2143 • FAX (951) 659-9990 • www.idyllwildwater.com

November 22, 2017

NBS Government Finance Group

32605 Temecula Parkway
Suite 100
Temecula, CA 92592

Attention: Kim Boehler

Subject: Revenue Generation Strategy and Compliance

Dear Ms. Boehler,

The Idyllwild Water District (District) requests a proposal from your firm to:

- 1) assist the District in developing and documenting a water rate structure that will encourage and re-enforce conservation practices developed during the most recent drought in Southern California and provide ongoing financial support for operations and the capital improvement program;
- 2) develop a financial structure for the District's Water Shortage Contingency Plan (WSCP) that will focus customer attention on Water conservation if the District needs to dramatically reduce water usage in the future; and
- 3) recommend a wastewater rate structure that will equitably generate revenue from the extremely small rate base to support operations and a capital improvement program.

Background

Idyllwild Water District is located on the western face of the San Jacinto Mountains and has 1650 water service and 590 wastewater service connections. Local water supplies are from stream diversions and fractured granite groundwater wells. The District is completely dependent on these local sources and has no access to supplemental water. Approximately 11% of the District's water enterprise accounts are commercial or institutional. In the wastewater enterprise, 30% are commercial or institutional customers. The District has two immediate Special District neighbors, Pine Cove Water District to the west and Fern Valley Water District to the east. Each of these adjacent

Districts has just over 1,000 water-only customers and has few non-residential customers.

The District bills monthly and the basic unit of water use is a cubic foot (7.48 gallons).

The District has a very large component of vacation homes (around 500) that often go months with no commodity charge. Wastewater rates are a fixed monthly charge based on potential capacity (demand).

Issues

The District's current rates and WSCP tiers are attached.

The District is seeking assistance in developing a water rate structure that could be implemented as a five-year plan, i.e., only one rate hearing. In addition to generating the revenue required to implement a capital improvement plan and satisfy the District's operational revenue requirements, the tiered rates are intended to send a strong conservation message and reinforce the behaviors that District customers developed over the course of the recent drought.

The WSCP is currently not in use due to the significant precipitation received last winter. However, the Board of Directors believe that our area is only one dry winter away from the need to apply pressure to customers to remain frugal in their water use and want a tool available to convey to customers the absolute necessity to reduce water use.

The wastewater enterprise revenue structure currently generates adequate revenue for operations and modest capital expenditures; however, the treatment plant has significantly exceeded its useful life and is in need of replacement. The District hopes that SRF grant and loan funds will be available to assist with the replacement but it is likely that additional revenue will be required. The wastewater enterprise is burdened with a very small customer base (590), one-third of which is commercial/institutional customers. Additionally, many of the single-family residential customers are vacation homes. The current revenue structure is capacity based, not use based (from a late 1990's study) and the commercial allocations are apparently based on early 1970's sewer generation tables. Idyllwild Water District would look to your firm to recommend optional courses of action that might minimize significant customer disruptions.

Request

The District would appreciate a brief letter proposal in which your firm would describe your:

- 1) understanding of our needs;
- 2) proposed scope of work;
- 3) information requirements from the District;
- 4) schedule for performing the work;
- 5) proposed team members;
- 6) references from some similar sized Districts; and
- 7) proposed fee for the effort (please submit the fee as a separate document).

In an effort to have this considered at the December, Board of Directors meeting, I would appreciate the proposals by December 13, 2017.

Please contact me if I can provide any clarification on this request.

Sincerely,



Jack Hoagland

General Manager

Idyllwild Water District

jack@idyllwildwater.com

951-704-4715

Attachments

Miscellaneous Fees July 1, 2017

Sewer Base charge	\$38.25/EDU
Sewer Capacity Fee	\$5,447.00/EDU
Sewer Installation Inspection Fee	\$200.00
Water Turn On/Off Fee	\$50.00
Door Hanger Fee (Non-payment Shut-off Notice)	\$10.00
Not Sufficient Funds (NSF)/Returned Check Fee	\$25.00
Late Payment Fee	\$15.00
Sewer Audit of EDUs (Commercial) Customer Request	\$100.00
Water Availability Letter	\$50.00
Transfer Fee	\$25.00
Sewer Availability Letter	\$50.00
Construction Water (\$500.00 deposit for hydrant meter)	\$0.10/cubic foot
Construction Hydrant Meter Relocation Fee	\$25.00

Water Facilities Connection Fee

<u>Meter Size</u>	<u>Connection Fee</u>
0.625-inch meter	\$2,782.00
0.75-inch meter	\$4,172.00
1.00-inch meter	\$6,954.00
1.50-inch meter	\$13,908.00
2.00-inch meter	\$22,253.00
3.00-inch meter	\$41,724.00
4.00-inch meter	\$69,540.00
6.00-inch meter	\$139,080.00

Water Service Installation Fee

	Actual Cost
0.625 through 1.5-inch	\$2,000.00 deposit
2.0-inch and above	\$3,000.00 deposit

**IDYLLWILD WATER DISTRICT
LISTING OF WATER METER SIZES, TIER LEVELS & RATES
AS OF July 1 ,2017**

(Commercial)

TIERED USAGE RATES			\$0.0333	\$0.0633	\$0.1000	\$0.1000				
RATE CODE	METER SIZE	Total Customers	Base Rate	1ST USAGE TIER	\$	2ND USAGE TIER	\$	3RD USAGE TIER	\$	4TH USAGE TIER
R1	5/8"	85	\$20.90	1-1000	\$33.30	1001-4000	\$189.84	4001-8000	\$399.90	8001+
R2	3/4"	21	\$31.35	1-1000	\$33.30	1001-4000	\$189.84	4001-8000	\$399.90	8001+
R3	1"	37	\$52.25	1-1000	\$33.30	1001-4000	\$189.84	4001-8000	\$399.90	8001+
R4	1 1/2"	19	\$104.50	1-1000	\$33.30	1001-4000	\$189.84	4001-8000	\$399.90	8001+
R5	2"	6	\$167.20	1-1000	\$33.30	1001-4000	\$189.84	4001-8000	\$399.90	8001+
IA	3"	1	\$313.50	1-1000	\$33.30	1001-4000	\$189.84	4001-8000	\$399.90	8001+

**IDYLLWILD WATER DISTRICT
LISTING OF WATER METER SIZES, TIER LEVELS & RATES
AS OF July 1 ,2017**

(Residential)

TIERED USAGE RATES		\$0.0000		\$0.0633		\$0.1000		\$0.1000		
RATE CODE	METER SIZE	Total Customers	Base Rate	1ST USAGE TIER	\$	2ND USAGE TIER	\$	3RD USAGE TIER	\$	4TH USAGE TIER
R1	5/8"	1,439	\$29.70	1-300	\$0.00	301-600	\$18.93	601-1500	\$89.90	1501+
R2	3/4"	11	\$40.35	1-300	\$0.00	301-600	\$18.93	601-1500	\$89.90	1501+
R3	1"	9	\$61.25	1-300	\$0.00	301-600	\$18.93	601-1500	\$89.90	1501+
R4	1 1/2"	1	\$113.50	1-300	\$0.00	301-600	\$18.93	601-1500	\$89.90	1501+

Water Shortage Contingency Plan Rates for Various Stages

	Tier 1		Tier 2		Tier 3		Tier 4	
	Usage	Rate	Usage	Rate	Usage	Rate	Usage	Rate
<u>Residential</u>								
Stage I	1-300	\$ -	301-600	\$ 0.0633	601-1500	\$ 0.1000	1501+	\$ 0.1000
Stage II	1-300	\$ -	301-600	\$ 0.0633	601-1500	\$ 0.1000	1501+	\$ 0.1500
Stage III	1-270	\$ -	271-600	\$ 0.0633	601-1500	\$ 0.1250	1501+	\$ 0.1750
Stage IV	1-210	\$ -	211-500	\$ 0.0633	501-1300	\$ 0.1750	1301+	\$ 0.2000
Stage V	1-210	\$ -	211-500	\$ 0.1000	501-1000	\$ 0.2000	1001+	\$ 0.2250
<u>Commercial</u>								
Stage I	1-1000	\$ 0.0333	1001-4000	\$ 0.0633	4001-8000	\$ 0.1000	8001+	\$ 0.1000
Stage II	1-1000	\$ 0.0333	1001-4000	\$ 0.0633	4001-8000	\$ 0.1000	8001+	\$ 0.1500
Stage III	1-1000	\$ 0.0333	1001-4000	\$ 0.0633	4001-8000	\$ 0.1250	8001+	\$ 0.1750
Stage IV	1-1000	\$ 0.0333	1001-3000	\$ 0.0633	3001-7000	\$ 0.1750	7001+	\$ 0.2000
Stage V	1-1000	\$ 0.0333	1001-3000	\$ 0.1000	3001-6000	\$ 0.2000	6001+	\$ 0.2250

IDYLLWILD WATER DISTRICT

REVENUE GENERATION STRATEGY AND COMPLIANCE

Proposal / December 22, 2017



December 22, 2017

Mr. John "Jack" Hoagland
General Manager
Idyllwild Water District
25945 Highway 243
Idyllwild, CA 92549

Subject: Proposal for Revenue Generation Strategy and Compliance

Dear Mr. Hoagland:

Raftelis Financial Consultants, Inc. (Raftelis) is pleased to submit this proposal to assist the Idyllwild Water District (District) with a study of your revenue generation strategy and compliance, including developing water and wastewater rates. We believe that our unique combination of qualifications, resources, and experience will ensure a value-added project resulting in efficient and successful implementation of forward-looking solutions that will benefit the District and its customers.

The following objectives will serve as the primary goals that will guide this study:

- Encouraging and reinforcing water conservation practices and establishing a financial structure for the Water Shortage Contingency Plan (WSCP)
- Developing a five-year water and wastewater rate structure that is fair, equitable, and compliant with Proposition 218
- Evaluating a tiered water rate structure that sends a strong conservation signal to customers
- Maintaining a financially stable utility that can support ongoing operating costs and upcoming capital improvement projects

We have assisted other resort communities, such as Mammoth Community Services District, with absentee owners, which requires special considerations to ensure revenue sufficiency. We are confident in our ability to: deliver a sustainable financial plan in line with the District's long-term objectives; analyze the cost of providing service to the District's customers; and develop an optimal rate structure for both water and wastewater utilities. Our vast experience with successfully implementing rate structures that increase overall financial sufficiency and fund capital projects despite erratic water supply conditions and stringent legal and environmental regulations will benefit the District. We have also assisted numerous agencies with State Revolving Fund loan applications and can assist the District to help minimize impacts on wastewater customers.

Raftelis is excited to have the opportunity to assist the District with this important study. If you have any questions, please do not hesitate to contact me at 626.583.1894 or spardiwala@raftelis.com.

Very truly yours,

RAFTELIS FINANCIAL CONSULTANTS, INC.

A handwritten signature in black ink, appearing to read 'Sudhir D. Pardiwala', is written over a faint, light-colored signature line.

Sudhir D. Pardiwala, PE
Executive Vice President

CONTENTS

02	Project Understanding/Approach
04	Proposed Scope of Work
09	Information Requirements from the District
11	Schedule
13	Proposed Team Members
17	References
29	Appendix: Project Team Members

PROJECT UNDERSTANDING/ APPROACH

The Idyllwild Water District (District) provides water and wastewater services to approximately 1,650 water connections and 590 wastewater connections. A large number of these connections are vacation homes that have little or no usage for parts of the year. The District's water is supplied via stream diversions and fractured granite groundwater wells, with no available outside sources of water.

The District's water utility supplies approximately 100 million gallons (MG) of water to its cus-

tomers per year over 30 miles of water lines. The District's current total well production is 525 gallons per minute (gpm). During the last drought, well production decreased to 250 gpm. This poses potential issues regarding water supply, as the decreased production is less than the District's maximum daily summer water demand of 300 gpm. The District is looking to increase the total well production to 600 gpm.

The District wishes to encourage and reinforce stronger water conservation practices.

Although California is no longer in a drought, reinforcing these practices will help alleviate potential water demand issues, especially in light of decreased well production. Increasing water conservation and well production will better protect the District from water supply and demand risks.

The wastewater utility has a small customer base, consisting of approximately 30 percent commercial or institutional customers. The wastewater treatment plant has a capacity of 0.25 MG per

day and treats approximately 36 MG of wastewater flow per year. Although wastewater rate revenue currently covers operating and capital costs, the treatment plant will need replacing. The District hopes to receive State Revolving Fund (SRF) loans and grants to help offset the capital costs of replacing the treatment plant but will likely require additional revenue from the relatively small customer base.

The District is currently seeking qualified consultants to evaluate and develop water and wastewater rates to address the needs described previously. The main goals of the study are to develop:

- A tiered water rate structure that strongly reinforces and encourages water conservation
- Five-year water rates to support operating and capital needs
- Five-year wastewater rates to support operating and capital needs, including the upcoming replacement of the treatment plant
- A financial structure for the Water Shortage Contingency Plan (WSCP) with a focus on water conservation
- Water and wastewater rates that comply with Proposition 218 and other court rulings

As part of our proposed approach, Raftelis will complete a long-term financial plan for the utility. The financial plan will review all operating and capital revenue requirements

and determine the level of revenue increases needed in the future to sustain operations, maintain fund reserves, meet debt coverage requirements, and fund capital needs. Raftelis will utilize the most up-to-date information available and examine how changes in key assumptions could alter the financial plans.

The financial plan will provide up to a 10-year outlook for the District. This will ensure that future capital needs are accounted for through steady, measured increases in rates and build-up of cash reserves as opposed to requiring drastic rate spikes. It will be equally important to review how customers will be affected and, therefore, to develop a financial plan that will meet the District's short- and long-term objectives.

Besides conducting the technical analysis to formulate cost of service-based rates that meet Proposition 218 requirements, it is equally important that the rationale for the rates is clear and simple and that rates can be easily implemented and updated. Raftelis has assisted hundreds of agencies with implementing rates, and we are well known for presenting thoughtful and concise presentations to generate discussion and consensus. Raftelis can attend meetings with members of the public and Board of Directors to present the proposed changes and rationale for the rates in an easily understandable format.

All financial analyses will be developed through the use of a sophisticated financial and rate model created by Raftelis for the District. Raftelis develops powerful, yet user-friendly rate models to allow for various financial planning and scenario analysis tasks. Our goal is to provide a model that District staff can use in subsequent years as part of its budgetary process to ensure that revenue generation is sufficient to cover revenue requirements. The model will include a dashboard, through which stakeholders can instantaneously assess the impacts of changes to assumptions. Raftelis develops the model to evaluate multiple scenarios for "what-if" analyses, such as changes in operating costs, customer usage volume, limited customer growth, etc. The model will be provided to the District as a deliverable at the end of the study.

Our proposed project approach entails several distinct, yet interrelated work efforts that will require effective coordination between District staff and the Raftelis Project Team. We will work with District staff on an ongoing basis via scheduled in-person meetings and web conferences for the orderly transfer of information and the cultivation of a strong sense of ownership amongst District staff over the final work product and results.

SCOPE OF WORK

The following tasks define our technical approach in response to the District's requested scope of services. It should be noted that while these tasks are listed consecutively, some tasks will overlap and may be conducted concurrently.

TASK 1: PROJECT INITIATION, ADMINISTRATION, AND DATA COLLECTION KICK-OFF MEETING

Raftelis believes that the execution of a productive kick-off meeting is the most effective way to begin a study of this nature. The goals for this meeting include:

- Discussing the District's preliminary pricing objectives
- Finalizing the overall goals of the study
- Establishing an appropriate schedule for the study
- Providing an opportunity for District staff to meet the Raftelis Project Team
- Reviewing the data needs for the study

Prior to the kick-off meeting, Raftelis will prepare a detailed data request list that will identify the information needed to complete the various analyses. Information that is typically required to perform a water and wastewater rate study includes, for example, recent and current

budgets, current and historical water production and billing data, and a long-term capital improvement program. Some of this information will be readily available, whereas other components may require more detailed analyses of operational data, customer billing information, and costs.

After performing a preliminary review of the initial data, the Raftelis Project Team will travel to the District for the kick-off meeting with staff to ensure that Raftelis has a thorough understanding of the District's water and wastewater systems. In addition, any other tasks, outstanding issues, or details related to the project scope, work plan, schedule, and staffing will be discussed and finalized during the kick-off meeting.

PROJECT MANAGEMENT

Consistent and competent project management is required to ensure project success and adherence to timelines and budgets. This task will involve multiple interrelated work efforts that will require

effective coordination between District staff, our Project Team, the District Board of Directors, the public, and any other stakeholder groups. Our management approach stresses transparency, communication, teamwork, objectivity, and accountability for meeting project objectives. Management responsibilities extend to general administrative duties such as client correspondence, billing, project documentation, and administration of the study control plan.

Throughout the study, the Raftelis Project Team will schedule interim status meetings or conference calls to discuss project progress and present preliminary results. Status meetings will be conducted via telephone or a web conference utilizing GoToMeeting. Web conferences will allow us to discuss issues and review the results and impacts of the project more efficiently. The Project Team will also conduct in-person meetings as outlined in the scope.

QUALITY ASSURANCE/ QUALITY CONTROL PROCESS

At the heart of Raftelis' core philosophy is our commitment to quality. The foundation of our Quality Assurance/Quality Control (QA/QC) process is based on the concept that QA/QC is a continuous process, not simply a mechanism to be incorporated at the end of an engagement. As such, in every project, Raftelis implements a systemic program of quality assurance that incorporates an independent system of checks and balances throughout the entire course of the engagement to ensure consistency, accuracy, and validity.

To ensure this level of quality control, our Technical Reviewer, Sudhir Pardiwala, PE, will be responsible for ensuring that the cost of service and rate model is functioning properly and is based on sound ratemaking principles and standard industry practice. This will be accomplished through periodic review of the issues and model through the course of the project. A well-defined QA/QC process will ensure that our work products will be of the highest quality and meet or exceed the standards that our clients have come to expect from Raftelis.

Meeting(s): *One kick-off meeting with District staff*

Deliverable(s): *Kick-off meeting agenda and minutes, data request list*

TASK 2: FINANCIAL PLAN DEVELOPMENT

After the data has been compiled, Raftelis will begin the process of developing the financial plan which will involve projecting demand for water consumption and wastewater flow and forecasting the revenue requirements. Typically, revenue requirements will be projected through an appropriate forecast period based upon historical results, the current budget, capital improvement plan (CIP), debt service, and other capital obligations.

Raftelis will project items in the District's budget such as operating and maintenance (O&M) expenses, labor, power, material, etc. The model will account for availability of water supply due to seasonal fluctuations and long-term availability and the impact of a future drought, as will be outlined in the WSCP. In addition, Raftelis will project non-rate revenues such as late fees, interest, miscellaneous fees, etc. that may be used to offset rate increases or fund the first-tier Residential commodity charge (as the District currently has in its water rate structure) that is compliant with Proposition 218.

Projecting revenue adjustments over a long planning horizon can illustrate future rate impacts and potential challenges to the District's financial position in both the short- and long-term. This will allow the District to plan expenses, reserve balances, and capital project scheduling

to smooth rate impacts while still maintaining financial stability. Ultimately, Raftelis will project how much cash needs to be collected through water and wastewater rates to meet projected revenue requirements, while minimizing sharp rate fluctuations.

Another important element of the financial plan is the development of reserves for operating, capital, rate stabilization, and emergency purposes. Raftelis will take into consideration the District's risk management policies to recommend appropriate reserve targets. Raftelis will develop a detailed forecast model that will serve as the initial module of the financial planning and rate model. Once completed, the model will serve as a comprehensive, yet flexible, planning tool that will incorporate the District's CIP, financial plan, forecasted demand projections, capital financing plan, revenue requirements, revenue projections, reserve balances, and customer impacts.

At the heart of any successful financial assessment is the model that is used to develop revenue requirements, perform financial planning, analyze scenarios, and calculate rates. Raftelis will create a customized financial planning and rate model based on a standardized approach to meet the District's needs. The dashboard, which displays key variables and results on-screen in real-time, will show the results of each scenario and facilitate discussion for quick

consensus building. This has proven to be particularly useful when making presentations to elected officials, allowing them to fully appreciate the impacts of their decisions instantly. Below is a sample model screenshot highlighting some of the optional key model features.

Meeting(s): Up to two web meetings with District staff

Deliverable(s): Draft financial planning model

TASK 3: COST OF SERVICE ANALYSIS

For the water utility, Raftelis will develop cost of service-based rates based on the District's

water consumption, peaking, and usage characteristics. The cost of service analysis will be conducted according to the industry standards set forth in *Manual M1: Principles of Water Rates, Fees and Charges* (Manual M1) published by the American Water Works Association (AWWA) (which was co-authored by Raftelis staff).

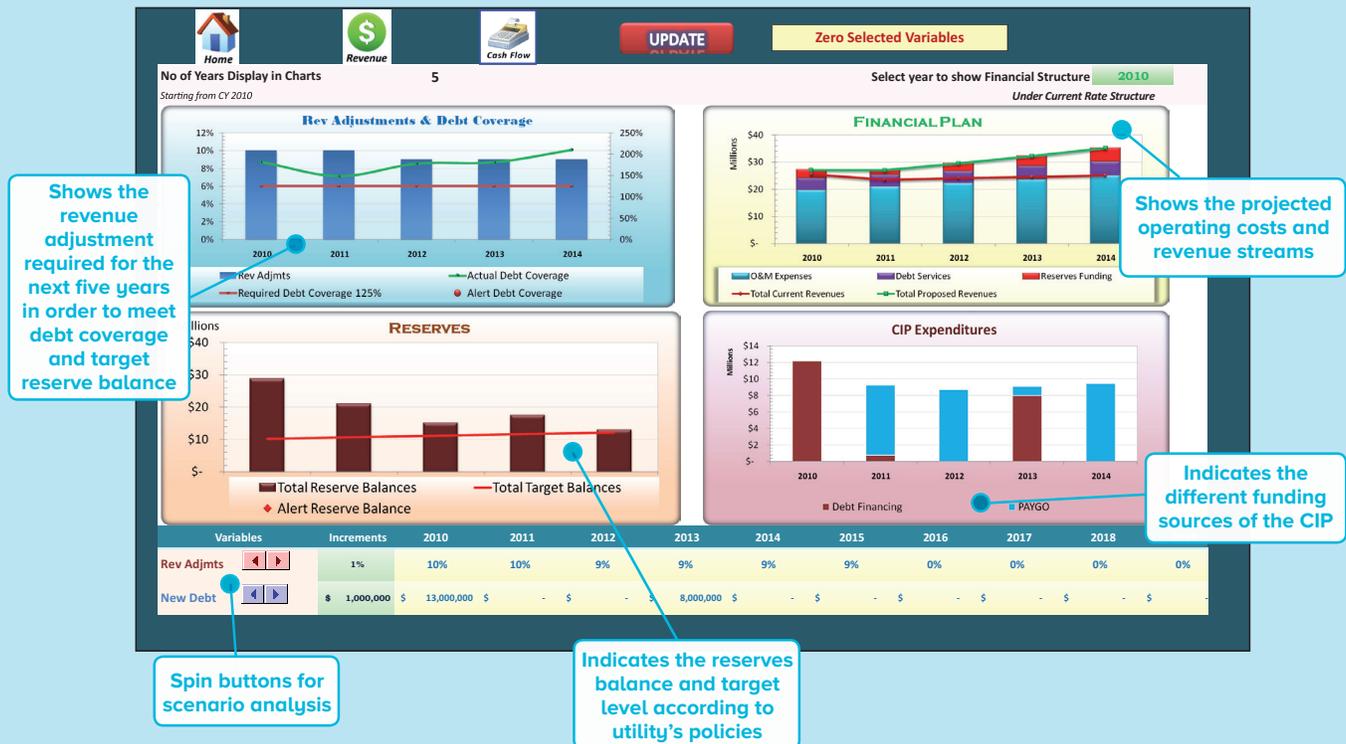
Raftelis will determine the peaking characteristics for each customer class based on the analysis performed in the prior tasks of the project. Raftelis will then estimate the relative responsibility of each customer class for each of the functional cost elements. This allocation will be based on billing

summary data, other locally available data which may be applicable, and Raftelis' experience with other utilities exhibiting similar usage characteristics and patterns. It will provide the basis for equitable cost allocations to each customer class.

Raftelis will then functionalize the costs into main functions, such as supply, transmission and distribution, storage, customer service, etc. The costs will then be allocated to cost categories such as water supply, water system costs to meet average daily demand, extra capacity costs to meet maximum hour or day demand, customer service,

SAMPLE MODEL DASHBOARD

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



and meter capacity to determine the unit cost for each of the cost categories.

The final step will involve allocating the costs associated with the functional components to the various customer classifications based on the relative responsibility of each classification for service provided. Costs will be allocated based on the determination of units of services for each customer classification and the application of unit costs of service to the respective units.

For the wastewater utility, Raftelis will use the methodology set forth by the Water Environment Federation (WEF) in *Manual of Practice No. 27, Financing and Charges for Wastewater Systems* (which was co-authored by Sudhir Pardiwala and other Raftelis staff). Cost allocations among user classes for the wastewater enterprise will be based on the flow and wastewater strength of each class. The strength of each class will be determined by the biochemical oxygen demand and suspended solids of its wastewater effluent.

The end goal of this task is to distribute the cost components to the customer classes based on the cost responsibility of each. Costs will be allocated based on units of service demanded by each class. This will result in the total cost to serve each customer class and will be used as the basis to develop rates.

Throughout the cost allocation process, Raftelis will comply with the District's policy considerations, procedures, and guidelines applicable to water and wastewater charges and ensure that the proposed rates are consistent with industry standards.

Meeting(s): None

Deliverable(s): None

TASK 4: RATES CALCULATION AND CUSTOMER IMPACT ANALYSIS

After evaluating the existing cost allocation base and assessing the impact of any proposed adjustments, Raftelis will develop water and wastewater rates based on the results of the cost of service analysis. Raftelis will work within broad industry guidelines to meet the rate-setting and pricing objectives of the District.

The District's current water rate structure consists of the fixed monthly service charge based on meter size and a tiered commodity rate by cubic feet (cf) of water for Residential and Commercial customers. The first tier for Residential has no commodity charge. The WSCP follows the same structure, with variances in the commodity charge to account for drought conditions.

The District will likely maintain its tiered water rate structure, yet will need to show the nexus between the cost to serve water in each tier to comply with the San Juan Capistrano court ruling.

Raftelis will calculate and show the nexus between costs and tiered rates by tabulating the tiered rates to show each cost component such as water supply costs, delivery costs, peaking costs, conservation costs, etc. This rate calculation will communicate to customers the cost drivers behind the rate for each tier. Raftelis will analyze the customer usage characteristics to develop a tiered water rate structure that sends a strong conservation signal to the District's customers.

In addition to calculating rates for current conditions, Raftelis will prepare water rates for the WSCP based on five levels of water shortages, as defined by the District. Raftelis will determine the amount of revenue required to be recovered from rates in each stage of water shortage.

For the wastewater utility, the District currently has a capacity-based fixed charge for all customers. Raftelis will develop wastewater rates that support the District's ongoing and upcoming operational and capital expenses, including the replacement of the wastewater treatment plant using debt or SRF loans. To ensure financial stability, especially with many of the District's customers being vacation homes that have sporadic usage, Raftelis will maintain the current capacity-based rate structure.

Raftelis will then determine the potential financial impacts on customers that may result from

the proposed water and wastewater rates. Rate adjustments stem from a change in revenue requirements or a change in the rate structure. The total rate adjustment can sometimes cause “rate shock” to customers.

As such, Raftelis will determine the potential fiscal impact on customers that results from the proposed rate structures as opposed to a revenue requirement increase. The customer impact analysis will include a series of tables and figures that show projected rate impacts by customer class at various levels of usage (if

applicable). The customer impact illustration displayed below shows 64 percent (46 + 18 percent) of the customers will see no more than a \$2 increase in their bill.

Meeting(s): Up to two web meetings with District staff

Deliverable(s): Draft water and wastewater rates and customer impact analysis

TASK 5: REPORT PREPARATION

The process for developing the proposed water and wastewater rates will be described in a draft report. This draft report will

include an executive summary highlighting the key issues and decisions, an overview of the financial plan and cost of service analysis, and proposed rates resulting from the study. The report will serve as an administrative record for the study and will clearly outline the rationale and logic behind each of the methodologies used to develop the rates.

Comments from District staff will be incorporated into the final report. The report will lead the reader through the methodology used to arrive at proposed water and wastewater rates that are equitable, are reflective of the District’s policies and values, and are driven by the revenue requirements. The report’s ability to explain the rate development process in a clear and understandable manner will promote financial transparency, heighten legal defensibility, and uphold the District’s strong reputation with its customer base.

Meeting(s): Up to one (1) web meeting with District staff

Deliverable(s): Draft and final reports

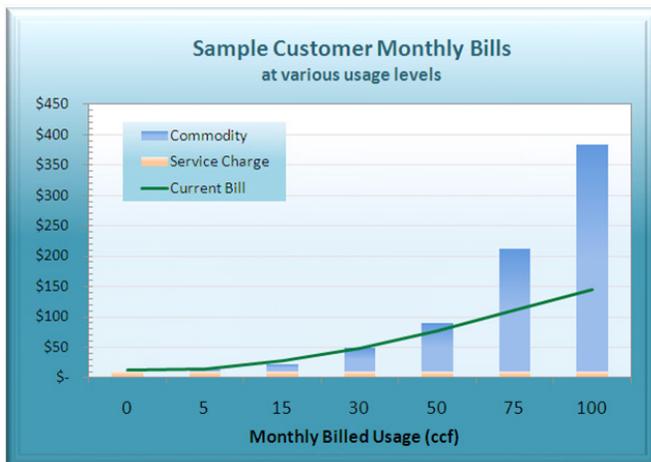
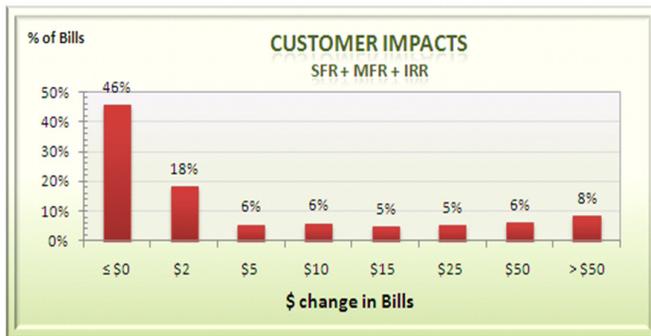
TASK 6: BOARD MEETINGS

Raftelis will be available to attend two meetings with the District’s Board of Directors. Raftelis can present the results of the study in a clear and concise manner and prepare presentation materials if requested.

Meeting(s): Two meetings with District Board of Directors

Deliverable(s): Presentation materials

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



INFORMATION REQUIREMENTS FROM THE DISTRICT

The following is a preliminary list of data requirements for this study. Whenever possible, we would appreciate it if the District is able to provide the financial and usage data in electronic format (preferably in Microsoft Excel or Access). We anticipate that this initial list will encompass the majority of the information necessary to conduct the study, however, if during our analysis we determine that additional data is required, we will notify the District at that time.

The preliminary list of data requirements includes:

1. Financial Information for each enterprise (water and wastewater)
 - > Detailed operating budget for fiscal year (FY) 2018 and estimated actuals for FY 2017 (revenues and expenses)
 - > Long-term Capital Improvement Plan (CIP) including funding sources, separated by CIP that is growth related versus replacement and refurbishment (R&R)
 - > Debt service payment schedules (principal and interest) and the appropriate section of the Official Statements that describes the calculation associated with coverage ratio for all existing debts. For any proposed debt, please provide any proposed debt schedule the District may have. However, the financial model that will be developed will have the ability to calculate proposed debt service.
 - > Estimated beginning balances of each enterprise's unrestricted and restricted reserves for FY 2018 (e.g. operating, capital, rate stabilization, etc.)
 - > Adopted financial policies, if any
2. Detailed Water Account and Monthly Consumption Data: Identifies each individual customer account and provides an accounting of water consumption by each account over a 12-month period (FY 2017: July 2016 to June 2017 and partial FY 2018: July 2017 to September 2017). The data will include one record per account per billing period for those months that the account received a bill in wide-format (each row represents one customer account – items a through f below should be in columns).
 - > Unique account number – It is important that there be no duplicates.
 - > Meter size – For compound meters with multiple dials, the meter size should be identified in the same manner as that used to determine the monthly meter charge.
 - > Customer type – Either residential, commercial, hydrant, etc. If needed, provide a separate table to explain the coding.
 - > Number of dwelling units served by the meter – For multi-family residential customers, if available. If there are multiple meters, the number of dwelling units should account for these situations.
 - > Billed consumption – This is the consumption occurring in the billing period for the account. The units should be consistent with the units used to create the bill (i.e., rounded appropriately, etc.) For compound meters, the consumption on all relevant dials should be summed to create this value.

- 3. Account and Usage Information
 - > Customer growth projections (consumption and accounts)
 - > Water account and usage summary
 - In aggregate, summary of water usage by tier and by customer class for FY 2017. The summary should follow the rate structure classification of customer classes and tiers.
 - Independent from the individual account detail requested above, please provide a summary report reflecting number of water accounts by customer classes and meter sizes for FY 2017.
 - > Wastewater account and consumption information
 - Number of wastewater accounts and consumption data by the customer classes listed in existing rate structure for FY 2017.

- 4. Other Information
 - > Wastewater flow information
 - Total wastewater flow for FY 2017
 - BOD and TSS influents for FY 2017
 - Inflows & Infiltration estimates
 - > Water supply information by source for FY 2017 and FY 2018 and projections for the study period, if available
 - Quantity available in acre feet (AF)
 - Unit cost in \$/AF
 - > Estimated system water loss (as a percentage)
 - > Water asset list
 - Listing of assets summarized by functionality such as source of supply, transmission, distribution, pump & conveyance, treatment, billing and customer service, etc.
 - Assets list should include the original cost, useful life, date put in service
 - > Wastewater asset list
 - Listing of assets of the wastewater enterprise summarized by functionality such as collection, transmission, disposal, treatment, billing and customer service, etc.
 - Assets list should include the original cost, useful life, date put in service

SCHEDULE

Raftelis will complete the scope of services within the timeframe shown in the schedule below. The proposed schedule assumes a notice-to-proceed by January 2018 and that Raftelis will receive the necessary data in a timely manner and be able to schedule meetings as necessary. Rates will be finalized by May 2018 with Board meetings and public hearing to follow for implementation in June 2018.

TASKS		2018					
		January	February	March	April	May	June
1	Project Initiation, Administration, and Data Collection	 <i>Deliverable(s): Kick-off meeting agenda and minutes, data request list</i>					
2	Financial Plan Development	 <i>Deliverable(s): Draft financial planning model</i>					
3	Cost of Service Analysis	 <i>Deliverable(s): Draft cost of service analysis</i>					
4	Rates Calculation and Customer Impact Analysis	 <i>Deliverable(s): Draft water and wastewater rates and customer impact analysis</i>					
5	Report Preparation	 <i>Deliverable(s): Draft and final reports</i>					
6	Board Meetings	 <i>Deliverable(s): Presentation materials</i>					



Kick-off Meeting



Delivery of Draft/Final Reports



In-Person Meeting / Workshop



Web meeting



LEADING THE INDUSTRY

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

AWWA

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

WEF

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

EPA

- Member of Environmental Financial Advisory Board



WE WROTE THE BOOK

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

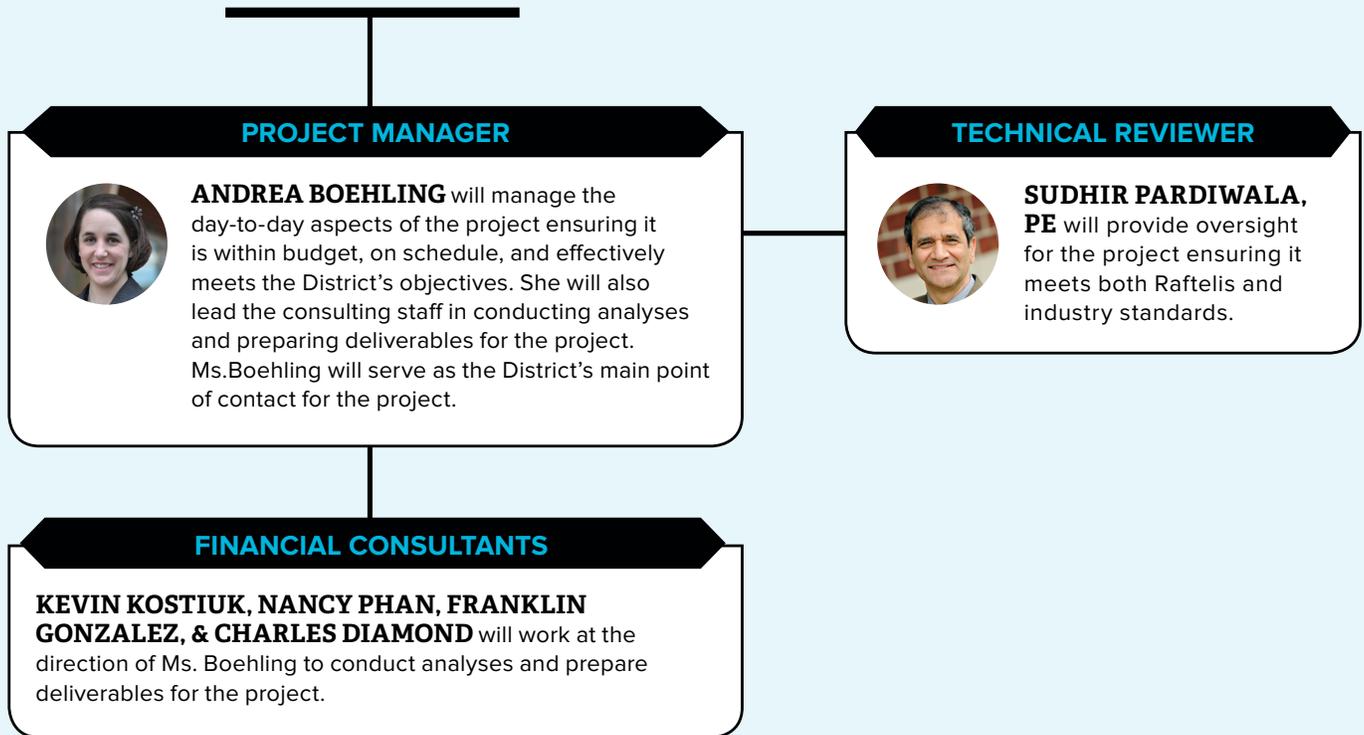
- *AWWA's Manual M1, Principles of Water Rates, Fees and Charges*
- *AWWA's Water Rates, Fees, and the Legal Environment, 2nd Edition*
- *AWWA's Manual M29, Water Utility Capital Financing*
- *AWWA's Financial Management for Water Utilities: Principles of Finance, Accounting, and Management Controls*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

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

PROPOSED TEAM MEMBERS

For this project, we have included senior-level personnel to provide experienced leadership for the project, with support from talented consultant staff. Raftelis places a high priority on being responsive to our clients and, therefore, actively manages each consultant’s project schedule to ensure appropriate availability for addressing client needs. In addition to our dedicated Project Team, the District will have the support of Raftelis’s full staff of more than 70 consultants for this project. Below, we have included an organizational chart showing the structure of our Project Team and roles for each Team member. On the following pages, we have included brief profiles for each of our team along with detailed resumes in the Appendix.

IDYLLWILD WATER DISTRICT





ANDREA BOEHLING

PROJECT MANAGER
Senior Consultant

EXPERIENCE: 11 years

CAREER HIGHLIGHTS: Financial/rate consulting experience with Galt, Livermore, Los Alamos Water District, Rincon Del Diablo Water District, Temescal Valley Water District, & Western Municipal Water District

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 11 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.

Ms. Boehling is an active member of the Water Environment Federation (WEF) and coauthored a chapter entitled, “Recycled Water Rates” for the Fourth Edition of the industry guidebook, *Water and Wastewater Finance and Pricing: The changing Landscape*. She has been a member of the Programming Committee for the Young Professionals Summit in conjunction with the Annual AWWA/WEF Utility Management Conference for several years.



SUDHIR PARDIWALA, PE

TECHNICAL REVIEWER
Executive Vice President

EXPERIENCE: 40 years

CAREER HIGHLIGHTS

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

EDUCATION

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

Mr. Pardiwala has 40 years of experience in financial studies and engineering. He has extensive expertise in water and wastewater utility financial and revenue planning, valuation and assessment engineering. He has conducted numerous water, stormwater, reclaimed water and wastewater rate studies involving conservation, drought management, risk analysis, as well as system development fee studies, and has developed computerized models for these financial evaluations. Mr. Pardiwala has assisted public agencies in reviewing and obtaining alternate sources of funding for capital improvements, including low interest state and federal loans and grants. He has assisted several utilities with State Revolving Fund and Water Reclamation Bond loans. Mr. Pardiwala authored the chapter on reclaimed water rates in the *Manual of Practice, Financing and Charges for Wastewater Systems*, published by the Water Environment Federation (WEF) and presented papers at various conferences. He also authored a chapter entitled, “Recycled Water Rates,” for the Fourth Edition of the industry guidebook, *Water and Wastewater Finance and Pricing: The Changing Landscape*. He was vice-chairman of the CA-NV AWWA Business Management Division and Chairman of the Financial Management Committee.



KEVIN KOSTIUK

FINANCIAL CONSULTANT

Senior Consultant

EXPERIENCE: 10 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. Mr. Kostiuk is an active member of the American Water Works Association (AWWA) Young Professionals and the Young Professionals Summit Committees in conjunction with the AWWA Utility Management Conference (UMC). He authored an article on potable reuse in Journal AWWA discussing the treatment, financing structures, and pricing of treated water at advanced purification treatment plants. Most recently Mr. Kostiuk coauthored an article on proactive financial planning in times of drought for California Society of Municipal Finance Officers (CSMFO) Magazine.



NANCY PHAN

FINANCIAL CONSULTANT

Associate Consultant

EXPERIENCE: 2 years

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

EDUCATION

- BA – University of California, Irvine

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



MSRB REGISTERED
**MUNICIPAL
ADVISOR**

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



**FRANKLIN
GONZALEZ**
FINANCIAL CONSULTANT
Associate Consultant

Mr. Gonzalez has a background in environmental engineering, specially, in water and wastewater engineering, and air quality treatment. His primary expertise includes economic and financial modeling and statistical analysis.

EXPERIENCE: 1 year

CAREER HIGHLIGHTS:

- Financial/rate consulting experience with Sierra Madre, Atwater, & Yuima

EDUCATION

- BS – University of California, Riverside



**CHARLES
DIAMOND**
FINANCIAL CONSULTANT
Associate Consultant

Mr. Diamond has a background in environmental economics and water resources management. His expertise lies in financial modeling and data analysis. He joined Raftelis initially in 2017 as an Associate Consultant upon receiving a Master's degree from UC Santa Barbara's Bren School of Environmental Science & Management in June 2017. Mr. Diamond has developed financial models and conducted analyses of energy use for UC Santa Barbara's Facilities Management department as a graduate student.

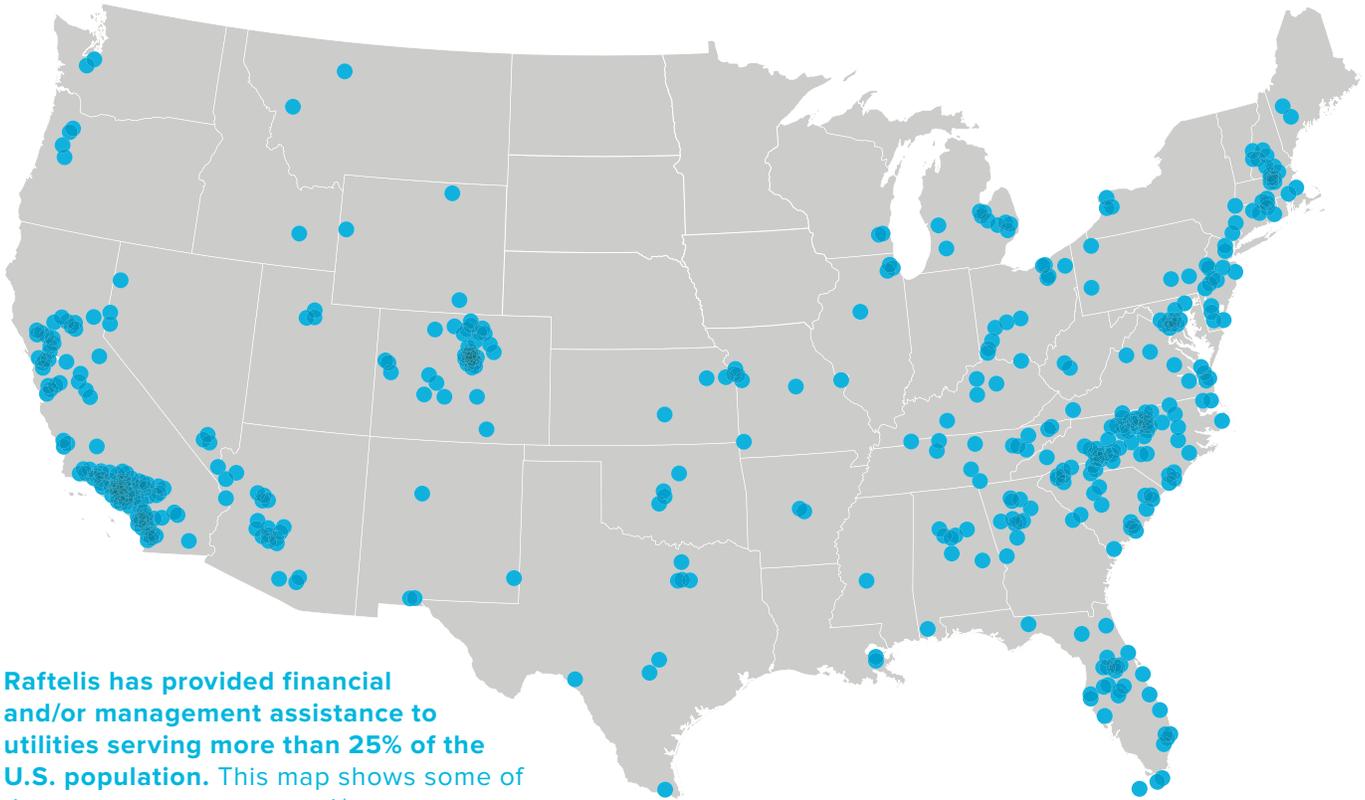
EXPERIENCE: 4 months

CAREER HIGHLIGHTS:

- Financial/rate consulting experience with Brendwood & La Cañada Irrigation District

EDUCATION

- MS – UC Santa Barbara
- BS – UC Berkeley



Raftelis 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 Raftelis staff have provided financial/management consulting.

REFERENCES

Raftelis has focused on financial and management consulting for water, wastewater, and stormwater utilities since the firm's founding in 1993, and our staff consists of some of the most experienced consultants in the industry. Raftelis staff have provided financial, rate, management, and/or operational consulting services to more than 500 utilities in the U.S., including some of the largest and most complex water, wastewater, and stormwater utilities in the U.S. and California. In the past year alone, Raftelis worked on more than 400 financial, rate, and management, and operational consulting projects for over 300 water, wastewater, and/or stormwater utilities in 36 states, the District of Columbia, Canada, and Puerto Rico.

On the following pages we have provided matrices that shows experience with engagements similar to the services requested in both California and nationwide.

CLIENT	CALIFORNIA EXPERIENCE											
	This table lists the California utilities that Raftelis has assisted over the past five years on financial, rate, and/or management consulting projects.											
	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		●		●		●	●	●				
Anaheim, City of				●		●	●	●				
Arroyo Grande, City of				●		●	●	●				
Atwater, City of				●	●	●		●				
Bakersfield, City of		●		●		●		●				
Benicia, City of									●			
Beverly Hills, City of		●		●		●	●	●	●		●	
Borrego Water District			●	●		●						
Brea, City of				●		●		●				
Brentwood (CA), City of				●		●	●	●				
CAL FIRE/San Luis Obispo								●				
Calleguas Municipal Water District		●		●		●	●	●				
Camarillo, City of		●		●		●		●	●			
Carlsbad Municipal Water District		●		●		●	●	●				
Casitas Municipal Water District				●		●		●				
Castaic Lake Water Agency			●	●		●	●	●	●			
Central Basin Municipal Water District		●		●			●	●				
Central Contra Costa Sanitary District				●		●		●				
Channel Islands Beach Community Services District				●		●		●				
Chino Hills, City of				●		●		●				
Chino, City of				●		●		●				
Chowchilla, City of				●		●	●	●				
Corona, City of						●			●			
County of San Diego				●				●		●		
Crescenta Valley Water District				●		●		●				
Cucamonga Valley Water District				●								
Del Mar Union School District		●										
Delta Diablo Sanitation District											●	
East Bay Municipal Utilities District				●				●				
East Orange County Water District				●		●		●				
East Valley Water District				●		●	●	●				
Eastern Municipal Water District				●								
El Toro Water District				●		●		●				
Elk Grove Water District	●			●		●	●	●	●			
Elsinore Valley Municipal Water District				●		●		●	●			
Escondido, City of		●		●		●	●	●	●			
Galt, City of		●		●		●		●	●			
Glendora, City of						●						
Goleta Water District				●		●	●	●				
Goleta West Sanitary District			●	●		●	●	●	●			
Helix Water District				●		●		●				
Henderson, City of				●		●		●	●			
Hollister, City of				●		●		●	●			
Holtville, City of				●				●				
Huntington Beach, City of				●		●	●	●				
Imperial County				●		●		●				

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
Inland Empire Utilities Agency				●								
Irvine Unified School District		●										
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				●		●		●				
Livermore, City of				●		●		●	●			
Long Beach City of	●	●		●		●		●				
Los Alamos Community Services District		●		●		●		●	●			
Los Angeles Department of Water and Power						●		●				
Los Angeles, City of Bureau of Sanitation					●							
Madera, City of		●		●								
Mammoth Community Water District				●		●		●				
Marin Municipal Water District					●							
Merced, City of				●		●		●	●			
Mesa Water District				●								
Metropolitan Water District of Southern California			●									
Modesto Irrigation District						●		●				
Mojave Water Company				●		●	●					
Monterey County Water Resources Agency				●		●		●				
Monterey, City of		●		●		●	●					
Moulton Niguel Water District									●			
Municipal Water District of Orange County					●			●				
Napa Sanitation District				●		●		●				
Ojai Valley Sanitary District				●		●		●				
Olivenhain Municipal Water District				●		●	●					
Ontario Municipal Utilities Company								●				
Ontario, City of				●		●	●	●				
Orange, City of				●		●		●				
Palo Alto, City of				●		●	●	●				
Phelan Pinon Hills Community Services District	●			●		●		●	●			
Placer County Water Agency					●			●				
Pleasant Hill Recreation & Park District				●				●				
Rainbow Municipal Water District				●		●	●	●				
Ramona Municipal Water District				●		●		●				
Rancho California Water District						●	●	●	●			
Redlands, City of				●		●	●					
Rincon del Diablo Municipal Water District				●		●		●				
Riverside Public Utilities				●		●	●	●	●			
Roseville, City of		●		●					●			
Sacramento Regional County Sanitation District						●						
Sacramento, City of				●		●		●				
Salton Community Services 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
San Bernardino Valley Municipal Water District						●						
San Bernardino, County of				●		●		●	●			
San Clemente, City of				●		●	●	●				
San Diego, City of Public Utilities Department		●	●	●		●	●	●	●			
San Dieguito Water District		●										
San Elijo Joint Powers Authority				●	●	●	●	●	●			
San Gabriel County Water District				●		●		●				
San Gabriel, City of				●		●		●				
San Jose, City of								●				
San Juan Capistrano, City of				●		●	●	●	●			
Santa Ana, City of								●				
Santa Barbara, City of				●		●	●	●	●			
Santa Clara Valley Water District			●	●	●							
Santa Clarita Water District		●		●		●	●	●	●			
Santa Cruz, City of				●		●	●	●				
Santa Fe Irrigation District				●		●	●	●	●			
Santa Fe Springs, City of				●		●		●				
Santa Margarita Water District				●		●	●	●				
Santa Rosa, City Attorney's Office									●			
Scotts Valley Water District		●		●		●	●	●	●			
Shafter, City of				●		●		●				
Shasta Lake, City of				●		●	●	●				
Sierra Madre, City of	●			●		●		●				
Signal Hill, City of				●		●		●				
Simi Valley, City of				●		●	●	●	●			
South Mesa Water Company				●		●	●	●				
South Pasadena, City of				●		●		●				
South San Francisco, City of				●				●				
Sunnyslope County Water District				●		●	●	●	●			
Sweetwater Authority				●		●		●				
Temescal Valley Water District				●		●		●	●			
Thousand Oaks, City of				●		●	●	●	●			
Torrance, City of				●		●		●				
Trabuco Canyon Water District				●		●		●				
Triunfo Sanitation District				●		●		●				
Tustin, City of				●		●		●				
Union Sanitary District				●		●	●	●	●			
Ventura Regional Sanitation District				●		●		●				
Ventura, City of	●	●	●	●	●	●	●	●	●			
Vista, City of				●		●			●			
Walnut Valley Water District				●		●		●				
Watsonville, City of	●			●		●	●	●				
West Basin Municipal Water District				●		●	●	●				
Western Municipal Water District				●		●		●	●			
Yorba Linda Water District				●		●		●				
Zone 7 Water Agency				●		●		●				

NATIONAL EXPERIENCE

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

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

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

On the following pages, we have provided detailed descriptions of projects that we have worked on that are similar in scope to the District's project. We have included contact information for each of these clients and encourage you to contact them to better understand our capabilities and the quality of service that we provide.



RANCHO CALIFORNIA WATER DISTRICT

CLIENT REFERENCE

Jeff Armstrong
Chief Financial Officer
42135 Winchester Road
P.O. Box 9017
Temecula, CA 92589-9017
P: 951.296.6928
E: armstrongj@ranchowater.com

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

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

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

In December 2009, the District engaged Raftelis to conduct a New Water Demand Offset Fee Study. The New Water Demand Offset Program is a

form of funding of conservation measures that will help to create sustainable, zero water footprint development. New developments will pay fees called New Water Demand Offset Fees to create potable water savings in the existing system to support water demand generated by new developments. Water savings can be achieved by converting irrigation accounts to recycled water or installing high-efficiency retrofits to replace inefficient fixtures for existing accounts in the District. Implementation of the New Water Demand Offset Program is a key component to support sustainable new development without generating additional net demand on the existing system. Raftelis researched water savings and costs for each conservation program/fixture at various agencies, calculated the estimated water demand of new accounts using water budget, and built a model to calculate the individualized water demand offset fees based on the characteristics of the new development, such as lot size and landscape area. The Study was completed and the results were presented to the Board in the same month.

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

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



RAINBOW MUNICIPAL WATER DISTRICT

CLIENT REFERENCE

Tom Kennedy
General Manager
Rainbow Municipal
Water District
3707 Old Highway 395
Fallbrook, CA 92028
P: 760.728.1178
E: tkennedy@rainbowmwd.com

In 2014, the Rainbow Municipal Water District (District) engaged Raftelis to review and evaluate the District's existing water rate structure. The Study included determining the relationship between the fixed and variable components of the revenues and expenses, examining the justification for the existing fixed and variable rates for the different user classes, reviewing the risk to the District from reduced water sales, and evaluating the financial position of the District.

In early 2015, Raftelis assisted the District with updating the revenue requirements based on the most recent financial information. As part of the Study, Raftelis assisted with projecting revenues from rates, determining reserve balances, estimating year-end expenses, and identifying and implementing efficiencies in regards to the District's complicated internal financial spreadsheets.

Following the budgetary support, Raftelis was engaged to perform a comprehensive water rate and financial plan update. The Study involved developing a long-term financial plan, consumption analysis, cost of service analysis, and rate structure development. The rate structure included a fixed monthly operations and maintenance charge, a fixed pass-through charge to recover the costs imposed by the San Diego County Water Authority, commodity rates (including special agriculture rates, tiered residential rates, and uniform non-residential rates), and pumping charges to account for the significant costs to pump water to higher elevations. In addition, Raftelis worked with the District to develop drought rates for various stages of drought. The rates would go into effect only during Board-Declared water shortages. Raftelis presented the results of the Study to the Finance Committee and to the Board of Directors and the rates were adopted.

In 2016, Raftelis was engaged by the District to perform a financial plan update. Raftelis updated the financial plan to account for changes in the rate structure and new financial information. Raftelis worked closely with District staff to determine the new pass-through rates and provided on-site training.

In 2017 Raftelis assisted the District with a review of their capacity fees. Following the capacity fee review, Raftelis was engaged to perform an updated water and wastewater cost of service study to account for lower than anticipated water sales and to align to capacity fee and rate studies. The water and wastewater rate studies are expected to conclude in early 2018.



MAMMOTH COMMUNITY WATER DISTRICT

CLIENT REFERENCE

Jeffrey Beatty
Finance Manager
Mammoth Community Water
District
PO Box 597
Mammoth Lakes, CA 93546
P: 760.934.2596 ext 239
E: jbeatty@mcwd.dst.ca.us

Mammoth is a winter tourist destination for Californians. This small resort community, with a permanent population of more than 8,000 and peak transient visitor population of 35,000, is located on the eastern slope of the Sierra Nevada at an elevation of approximately 8,000 feet above sea level. The Town is surrounded by lands administered by the Inyo National Forest, and the economy is primarily based on recreation and tourism, with a majority of the visitation coming during the winter ski season. There are a large number of cabins and condominiums in town that are occupied intermittently during the year. This results in high peaks and also poses a challenge in terms of adequately financing the operations of the utilities.

Raftelis was selected in a competitive process to assist the Mammoth Community Water District (District) with its water and sewer rates. Raftelis met with the staff to identify their pricing objectives and priorities. Raftelis conducted several workshops with Board members and displayed rate model dashboard presentations to review alternatives and impacts on customers. We developed water rates to incentivize conservation and wastewater rates to ensure adequate cost recovery. To increase revenue stability and ensure adequate collection of service charges from vacation properties, we designed rates to recover the fixed costs through fixed charges. Properties outside the District were charged based on the cost of providing service to those customers and were set at a rate higher the inside-City rate. The rates were successfully implemented In July 2012.



TEMESCAL VALLEY WATER DISTRICT

CLIENT REFERENCE

Jeff Pape

General Manager

22646 Temescal Canyon Road

Temescal Valley, CA 92883

P: 951.677.6323

E: jeffp@temescalvwd.com

In early 2016, the Temescal Valley Water District (District) engaged Raftelis to conduct a comprehensive Water, Recycled Water, and Wastewater rate study (Study). The Study included a comprehensive review of the District's financial plan, usage trends, accounts, customer types, capital improvement plan, and reserves to establish equitable rates that provide sufficient revenue over the study period. The major objectives of the study included the following:

- Develop financial plans for the water, recycled water, and wastewater enterprises to ensure financial sufficiency, meet operation and maintenance costs, and ensure sufficient funding for capital replacement and refurbishment needs
- Develop sound and sufficient reserve fund targets
- Review current rate structures and recommend adjustments where necessary

Raftelis worked closely with the District to model the District's revenue requirements, including adequate reserve funding to ensure the long-term health of the utility systems. Raftelis developed a 10-year financial plan model to assess the risks of water supply variance, capital spending plans, and various levels of reserve funding. Raftelis presented the Model to the Finance Committee and District Board at various working sessions to show the District's financial health under each scenario. Raftelis then performed a cost of service analysis to review the equity of the rates and existing rate structures and made recommendations to modify the rate structures to meet the goals and objectives of the District.

As part of the Study, Raftelis developed the Temescal Valley Water District Rate 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 the operations, CIP, and the financial plans, and discussed and explained the cost of service analysis and methodologies used to develop the final rates.

In addition to the Rate Study, the District also engaged Raftelis to evaluate and update the Water, Recycled Water, and Wastewater Capacity fees and to ensure compliance with regulatory and industry standards. Raftelis obtained and reviewed the latest planning documents and worked closely with District staff to assess the growth in new users, the

TEMESCAL VALLEY WATER DISTRICT (CONTINUED)

related demands expected to be placed on each utility, and to determine the capital improvements that will benefit future customers versus existing customers. During the course of the study, Raftelis evaluated the various approaches and made recommendations as to the most equitable method(s) to be used for each of the enterprises. The calculation of the final fees depended on fixed assets, planned capital improvements, capital financing assumptions, system capacities, and the level of service or demand required to serve new customers.

Raftelis presented the results of both studies to the Board of Directors, and the public hearing was held in end of January.

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.: Senior Consultant (2017-present); Consultant (2014-2016)
- » 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

PROJECT MANAGER

Senior Consultant

PROFILE

Mrs. Boehling has a strong background in mathematics and accounting and has been serving public agencies for over 11 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. Mrs. 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**TEMESCAL VALLEY WATER DISTRICT (CA)**

In early 2016, the Temescal Valley Water District (District) engaged Raftelis to conduct a comprehensive water, recycled water, and wastewater rate study. The main objectives of the study were to ensure financial sufficiency, meet operation and maintenance costs, and to ensure funding for both capital and reserves. Ms. Boehling served as Lead Consultant and was responsible for gathering and analyzing data, creating each enterprise's financial plan and rate model, developing several rate scenarios, presenting results to the Finance Committee and Board of Directors, and drafting the detailed report highlighting the decisions made and the explaining the calculation of the final rates. As part of the study, Raftelis evaluated interfund loans from one enterprise to another with varying repayment terms, modeled various rate structures, and explored seasonal rates for the recycled enterprise. The Public Hearing was held in late January and the proposed rates were adopted.

CITY OF GALT (CA)

In early 2015, the City of Galt (City) hired Raftelis to conduct a comprehensive cost of service analysis and water rate study. The City was in the process of metering all customers and had previously had a flat rate for all unmetered customers. The main goal of the study was to establish a uniform commodity rate and fixed monthly charge for all customers that would generate the same level of revenue as their existing rate structure. Ms. Boehling served as Lead Consultant and was responsible for developing the financial plan and rate model capable of evaluating

several scenarios. Ms. Boehling gathered all necessary data, developed the financial plan, created a model capable of adjusting the expected water demand, worked closely with City staff to project expected water sales, documented the results of the study, performed customer impacts, and assisted with presentations to the City. The proposed rates were adopted on March 14, 2016.

In early 2017, Ms. Boehling began working on a comprehensive wastewater rate study for the City. The goal of the project was to evaluate several cost allocation and rate structures to ensure compliance with Proposition 218. Ms. Boehling served as Lead Consultant and managed the consulting staff in conducting analysis and preparing project deliverables. The study was completed and proposed rates adopted in November of 2017.

RAINBOW MUNICIPAL WATER DISTRICT (CA)

Ms. Boehling served as Lead Consultant for Rainbow Municipal Water District's (District) comprehensive cost of service based water rate study. The study involved developing a long-term financial plan, consumption analysis cost of service analysis, and rate structure development. The rate structure included many components such as a fixed monthly operations and maintenance charge, a fixed pass-through charge to recover the costs imposed by the San Diego County Water Authority, commodity rates (including special agriculture rates, tiered commodity rates for single-family residential customers, uniform rates for non-single family residential customers), and pumping charges to account for the costs to pump water to higher elevations. Ms. Boehling was responsible for data collections, model development, collaboration with the client, presentations to the Finance Committee and Board, model training, and drafting the report.

CITY OF SANTA CRUZ (CA)

The City of Santa Cruz Water Department (City) currently provides water service to a population of approximately 93,000. The City is faced with increasing operation and maintenance costs, a significant projected capital program over the next 10

years, and volatile water sales due to the drought. Raftelis is currently working on a series of projects for the City to help ensure financial sustainability of the City's water system. Ms. Boehling served as Lead Consultant on the City's comprehensive water rate study. She worked at the direction of the Project Manager to assist the City in evaluating various rate structures including water budget rates. She developed a dynamic model capable of instantly changing the recovery mechanisms and assisted the City as they evaluated 6 different rate scenarios. The rate structure includes an analysis to determine the allocation to inside customers versus outside customers, allocations by class, and tier. In addition, she worked with the City to develop a separate Infrastructure Reinvestment Charge to help finance the significant repairs and replacements. She was responsible for all data collections, consumption analysis, model development, customer impacts, presentations, and drafted the report following the final rate selection. Rates were approved and adopted on August 23, 2016.

WESTERN MUNICIPAL WATER DISTRICT (CA)

Raftelis has been assisting Western Municipal Water District (District) with several projects spanning many years. Most recently, Ms. Boehling served as Lead Consultant on the development of comprehensive water budget rate structure for each of the District's retail service areas. Ms. Boehling created presentations and helped facilitate discussions on the policy options associated with the development of water budget rates. Based on these policy options, Ms. Boehling developed a flexible rate model that could easily analyze different methodologies of allocating water sources to different customer classes, different allocation factors for indoor and outdoor water use, determined price ratios for the corresponding tiers, and developed the corresponding rates and customer impacts. Ms. Boehling worked closely with the Project Manager and District Staff to evaluate scenarios and refine the rate structure.

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. Raftelis 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.

HELIX WATER DISTRICT (CA)

The Helix Water District (District) hired Raftelis 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 and helped ensure the Proposition 218 noticing requirements were met. Rates for a five-year period were adopted in October of 2015.

Raftelis was hired to perform annual updates of the financial plan. Ms. Boehling worked closely with the District and Project Manager to complete the annual updates. She added enhancements to the model to assist the District in evaluating whether or not the District needs to implement the full rate increase as adopted in 2015 or whether a lower rate adjustment would be sufficient.

EAST VALLEY WATER DISTRICT (CA)

Ms. Boehling assisted with a 10-year financial plan and water rate study for the East Valley Water District. Raftelis designed a water budget rate structure which ensured revenue stability, financial sufficiency, and provided appropriate price signals for different supply costs, peaking costs, and conservation program funding for the District. Ms. Boehling worked in support of the project manager to develop a water budget rate model developed that allowed the District to quickly view the impacts of alternative rates and budgets to assist policy makers in making well-informed decisions in a timely manner. She was responsible documenting the study results and drafting the study report.

CAPACITY FEE STUDIES / WATER DEMAND OFFSET STUDIES

TEMESCAL VALLEY WATER DISTRICT (CA)

In 2016, Raftelis was engaged by the Temescal Valley Water District (District) to conduct a water, recycled water, and wastewater capacity fee study. Ms. Boehling served as Lead Consultant on this project and worked closely with District staff to group each asset by enterprise and then further classify each asset by category (such as pumping, treatment, meters, transmission, etc.). Assets that were shared were allocated appropriately to each enterprise. The water capacity fees were updated using a hybrid approach where the buy-in component considered the value of existing water assets, a portion of the recycled storage assets, and the existing demand, and the incremental component considered the growth-related capital projects and the incremental capacity. The recycled capacity fees utilized the buy-in approach and the wastewater capacity fees were updated using the hybrid approach. Ms. Boehling created a dynamic model capable of making on-the-fly adjustments and evaluating different methodologies. She was also responsible for drafting the capacity fee report and presenting results to the Finance Committee and the Board of Directors.

CITY OF SANTA CRUZ (CA)

In 2015, Raftelis was engaged by the City to conduct

a Water Demand Offset Fee Study to evaluate the feasibility of implementing a Water Demand Offset Fee for the City. Raftelis also evaluated the City's System Development Charges (capacity fees) to ensure new customers, or existing customers requiring larger meters, pay an equitable share when connection to the system. Ms. Boehling served as Lead Consultant for both of these studies. The capacity fees were last updated in 2004 and had not been adjusted to account for changes in the system or costs associated with inflation. The fees were updated using the equity buy-in method and considered the value of the water assets, reserve balances, outstanding debt, and current capacity/demand of the system.

CITY OF VISTA / BUENA SANITARY DISTRICT (CA)

In 2105, Raftelis was retained by the City of Vista (City) to complete a wastewater capacity fee study for both the City and Buena Sanitary District (District). Ms. Boehling served as the Lead Consultant on the project and developed capacity fees based on the equity buy-in approach. Several factors were considered during the development of the fees, including but not limited to, assets which were valued using the replacement cost less depreciation method, the investment by the City/District in the EWA treatment plant, current reserves, outstanding debt obligations, and current demand or capacity of the system. Ms. Boehling was responsible for data collection, model development, leading staff discussions, and writing the study report.

RANCHO CALIFORNIA WATER DISTRICT (CA)

Ms. Boehling assisted Rancho California Water District (District) in evaluating 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 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, installing high efficiency retrofits to replace insufficient fixtures for existing accounts

in the District, converting high water use landscaping to California native landscaping, or even the conversion of agriculture crops. Ms. Boehling was responsible for creating a flexible model that was capable of evaluating several different options and measures and assisted in the presentation of the fees to the Finance Committee.

WESTERN MUNICIPAL WATER DISTRICT (CA)

In 2014, the District engaged Raftelis to update the capacity fees for its retail water, wastewater, and recycled water services. Ms. Boehling updated and refined the capacity fee model to incorporate the most current information including the most recent Master Plans for each of the District's service areas. The updated model evaluated different policy options and examined various methodologies. Based on the framework established through close collaboration with District staff, Ms. Boehling updated the capacity fees.

COST ALLOCATION PLANS AND USER FEE STUDIES

HELIX WATER DISTRICT (CA)

Ms. Boehling recently completed a thorough review and update of the District's miscellaneous fees. She calculated fully burdened hourly rates and used them in conjunction with time estimates to determine the "true" cost of providing various services to District customers. The full or "true" cost was used to update the District's various miscellaneous fees.

OTHER RELEVANT PROJECTS

- Galt Wastewater and Capacity Fee Study
- Livermore Water and Wastewater Study
- Ramona Water Rate, Capacity Fee, and User Fee Study
- Atwater Water, Wastewater, and Capacity Fee Study
- Elsinore Valley Capacity Fee Study
- Imperial County – Water & Wastewater
- Sierra Madre – Water and Wastewater Study
- Santa Cruz – Recycled Feasibility Study
- Imperial County – Water and Wastewater Study

TECHNICAL SPECIALTIES

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

PROFESSIONAL HISTORY

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

EDUCATION

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

PROFESSIONAL REGISTRATIONS

- » Registered Professional Engineer: CA (Chemical (1981) and Civil (1988))
- » Series 50 Municipal Advisor

PROFESSIONAL MEMBERSHIPS

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

SUDHIR PARDIWALA, PE

TECHNICAL REVIEWER

Executive Vice President

PROFILE

Mr. Pardiwala has 40 years of experience in financial studies and engineering. He has extensive expertise in water and wastewater utility financial and revenue planning, valuation and assessment engineering. He has conducted numerous water, storm water, reclaimed water and wastewater rate studies involving conservation, drought management, risk analysis, as well as system development fee studies, and has developed computerized models for these financial evaluations. Mr. Pardiwala has assisted public agencies in reviewing and obtaining alternate sources of funding for capital improvements, including low interest state and federal loans and grants. He has assisted several utilities with State Revolving Fund and Water Reclamation Bond loans. Mr. Pardiwala authored the chapter on reclaimed water rates in the *Manual of Practice, Financing and Charges for Wastewater Systems*, published by the Water Environment Federation (WEF) and presented papers at various conferences. He also authored a chapter entitled, "Recycled Water Rates," for the Fourth Edition of the industry guidebook, *Water and Wastewater Finance and Pricing: The Changing Landscape*. He was vice-chairman of the CA-NV AWWA Business Management Division and Chairman of the Financial Management Committee.

RELEVANT PROJECT EXPERIENCE

CITY OF SAN DIEGO (CA)

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

CITY OF BEVERLY HILLS (CA)

Mr. Pardiwala served as Project Manager for Raftelis' engagement with the City of Beverly Hills (City) water and wastewater rate studies.

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

CITY OF SANTA BARBARA (CA)

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

CITY OF REDLANDS (CA)

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

reclaimed water and potable water. He helped them find grants for the reclaimed water project and water treatment plant upgrade. He has been assisting the City biennially with their water, wastewater and recycled water rates.

SANTA FE IRRIGATION DISTRICT (CA)

Mr. Pardiwala has been Project Manager for the water rate studies for Santa Fe Irrigation District for over ten years. The District has one of the largest per capita water use rates in the State due to its large lots, many of which have orchards and other agriculture requiring irrigation. Mr. Pardiwala worked with District Staff to establish water cost of service based rates which included a complete restructuring of the fixed charges passing through their fixed wholesale costs. The consumption rates were based on the differential water costs, peaking characteristics and conservation costs of each class.

CITY OF PALO ALTO (CA)

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

CITY OF ONTARIO (CA)

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

Raftelis designed tiered water rates, recycled rates and wastewater rates considering IEUA rates. Solid waste rates were designed to recover costs. Raftelis provided the City with a model that is used for

planning purposes by the City. The City has engaged Raftelis multiple times to update these rates, optimize water sources to minimize costs.

OLIVENHAIN MUNICIPAL WATER DISTRICT (CA)

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

CITY OF SACRAMENTO (CA)

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

fiscal needs of the City's wastewater utility in the context of the City's overall policy objectives and were designed for simplicity of administration, cost effective implementation and ease of communication to customers.

CITY OF VENTURA (CA)

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

GOLETA WEST SANITARY DISTRICT (CA)

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

CLARK COUNTY WATER RECLAMATION DISTRICT (NV)

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

CITY AND COUNTY OF SAN FRANCISCO (CA)

The City conducts water, wastewater and stormwater studies every five years to ensure that charges are consistent with cost of service and conforms with the City's Propositions. Mr. Pardiwala served as Project Manager for two cycles of rate studies for the City. The City has a combined wastewater and stormwater system and costs for stormwater are integrated with wastewater. The City was engaging in a multi-billion dollar capital improvement program that would have significant impact on rates. The City has unique microclimates and Raftelis analyzed the water usage characteristics of single family and multi-family users to develop a rate structure that would provide incentives for conservation. Raftelis evaluated incentives to encourage low

impact development, reviewed stormwater practices to provide credits for best management practices to reduce stormwater generation. Raftelis performed an overhead cost allocation study consistent with federal requirements of OMB Circular A-87 to assign costs appropriately to different departments in order to obtain federal reimbursement for projects that are eligible for federal assistance.

NAPA SANITATION DISTRICT (CA)

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

CITY OF HENDERSON (NV)

Mr. Pardiwala served as Project Manager for the engagement with the City of Henderson (City). In Phase I, Raftelis assisted the City in conducting a water and wastewater financial assessment. Raftelis developed a financial vision which will ultimately shape the utilities for the next ten years. As part of our conceptual design process, Raftelis recommended several alternative rate philosophies to be evaluated as part of Phase II. The Model was also developed to evaluate certain rate philosophies and user charge structure modifications focused on improving the equitable recovery of costs from different user classes, legal defensibility of the rates and

system development charges, revenue predictability, and conservation incentives. Raftelis developed an allocation or budget for different meter sizes to ensure that the tiered rates set up would fairly collect revenues from customers. Raftelis updated the City's financial plan by participating in the City's rate implementation process. This included presentations of final findings and recommendations to City Council and the Citizen's Advisory Committee.

CITY OF NORTH LAS VEGAS (NV)

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

CITY OF PORTLAND (OR)

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

The City's existing retail rate structure consisted of an increasing 3-tier rate structure for all customers with fixed tiers for single family customers and tiers based on the average usage in the preceding 12-month period for the remaining customers. The current retail rates applied to all classes and did not take into

account peaking which factors can vary significantly from class to class. Raftelis developed alternative rate structure options for retail customers and explore the creation of more classes to increase equity and fairness and encourage conservation. Alternative rate structures included uniform volume rates, seasonal rates, increasing and "V" or "U" shaped block rates, and a range of individualized block rates with cutoffs based on average account usage, seasonal usage, or customer characteristics. Raftelis provided the City with the computer model and provided training and a manual in the user of the model.

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

CITY OF TACOMA (WA)

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

Mr. Pardiwala also provided financial planning models to the City's water utility, which included user-

friendly features and benchmarking tools to maximize improvements in operations and management.

CITY OF LOS ANGELES (CA)

Mr. Pardiwala was Project Manager on studies to develop rates and rate models for solid waste and wastewater utilities. The City wanted to have a planning tool in-house to evaluate what if scenarios, impacts and determine rates for various customers. The model incorporated many user friendly features to assist the City update rates and prepare financial plans on an annual basis. Solid waste rates included non-residential customers based on size of containers and frequency of collection. Wastewater rates to the 27 subscribing agencies discharging to the City's wastewater treatment facilities were also determined. This involved complex calculations and allocations to wastewater loadings, conveyance distance, etc. Connection or impact fees were also included in the model. User training, model documentation, regular updates and ongoing service were also included in this project.

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

CITY OF PASADENA (CA)

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

OTHER RELEVANT PROJECT EXPERIENCE

- City of Anaheim (CA) – Water Rate Study
- City of Atwater (CA) - Water and Wastewater Rate Study

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

Valuation Study

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

TECHNICAL SPECIALTIES

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

PROFESSIONAL HISTORY

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

EDUCATION

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

KEVIN KOSTIUK

FINANCIAL CONSULTANT

Senior 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. Mr. Kostiuk is an active member of the American Water Works Association (AWWA) Young Professionals and the Young Professionals Summit Committees in conjunction with the AWWA Utility Management Conference (UMC). He authored an article on potable reuse in Journal AWWA discussing the treatment, financing structures, and pricing of treated water at advanced purification treatment plants. Most recently Mr. Kostiuk coauthored an article on proactive financial planning in times of drought for California Society of Municipal Finance Officers (CSMFO) Magazine.

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.

CITY OF REDLANDS (CA)

Mr. Kostiuk updated prior financial plans developed by Raftelis 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.

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 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, Raftelis 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 CAMARILLO (CA)

Raftelis has provided rate consulting services to the City for the past seven years with Mr. Kostiuk serving as lead analyst the past three years. In the current rate cycle Mr. Kostiuk serves as Project Manager. The City adopts rates on a two year cycle and the current Study includes rebuilding long term financial plan models, revising the wastewater rate structure, and performing a cost of service analysis for the sewer utility. As of July 2017 Mr. Kostiuk has made presentations to the City Manager and the City's Utility Committee in anticipation of City Council Study sessions in the fall. Mr. Kostiuk successfully presented rates to City Council in December 2016 and will do so again in November 2017.

CITY OF TUSTIN (CA)

Raftelis contracted with the City of Tustin to develop a five-year financial plan and evaluate a budget-based rate structure for its customers. Mr. Kostiuk worked extensively with City staff, Raftelis' data services team, and outside consultants of the City to develop the water budget allocation and rate model for the City's approximately 14,000 customer accounts. As part of the model build, data from GIS consultants had to be organized and validated for each of the City customers' parcels. Raftelis' data services team worked internally to ensure matches between assessor's data and GIS data for integration to the water budget model. As of July 2017 the project is ongoing. Rates and customer impacts have been presented to City staff and a public outreach campaign is being devised in anticipation of a council workshop in the fall.

PLACER COUNTY WATER AGENCY (CA)

In 2015 Placer County Water Agency (PCWA) contracted with Raftelis to evaluate its water system. PCWA provides retail and wholesale water service to treated water and raw water users throughout

western Placer County. In Phase I of the project Mr. Kostiuk evaluated the current system's four service zones and numerous service classes and customer classes. Raftelis then provided recommendations to consolidate and simplify the water system organization and structure. In Phase II Raftelis performed a cost allocation study between the four proposed classes of service to identify the cost of providing service to these distinct users. Phase III consisted of performing cost of service analyses for PCWA treated retail service, treated wholesale service, and retail and resale raw water service. Entering its third year, the Study will be completed in October 2017 with new organization, rate structures, and associated rates implemented January 1, 2018.

MAMMOTH COMMUNITY WATER DISTRICT (CA)

Raftelis provided the District with a 10 year financial plan model for both the water and wastewater enterprises, as well as performing a cost of service analysis for the water enterprise. The district carries out operating and capital activities that are indirectly assigned to the two enterprises. Mr. Kostiuk worked with District staff to carry out a cost allocation study to distribute administrative costs appropriately. Raftelis recommended changes to the water rate structure as part of the Study to simplify the rates and make them more legally defensible.

The study took place at the height of the statewide drought and as part of the project Mr. Kostiuk developed drought rates for the District to implement in times of mandatory conservation or water supply shortage. Being an agency with a large seasonal population Raftelis worked with staff to determine the most appropriate and effective means of charging the drought rates. Mr. Kostiuk designed drought rates for each stage of the District's water conservation plan, effective on the meter-based fixed charge of a customer's bill. This ensured that every connection in the water system shared in the burden caused by the drought, irrespective of water use. Raftelis also evaluated existing capacity fees for both enterprises. This task is ongoing. The water rates, wastewater rates, and drought rates were adopted and implemented January 2016.

BORREGO WATER DISTRICT (CA)

Raftelis contracted with the District to evaluate the impact of county growth projections as well as the Sustainable Groundwater Management Act (SGMA) of 2014. Mr. Kostiuk utilized the existing financial plan model, water supply analyses provided by other District consultants, and assumptions on land acquisitions to determine the effect of SGMA on long term water rates. The Borrego Groundwater Basin is critically over drafted and users will need to decrease water production significantly to achieve sustainable yield by 2040. This will require the District to reduce per capita water use and acquire production credits within the basin by fallowing agricultural land. Mr. Kostiuk estimated water rates in each year through 2040 incorporating assumptions on groundwater production, market values of land in the basin, debt financing, and source alternatives.

Raftelis and Mr. Kostiuk are currently engaged with the District and the County of San Diego to assess the costs of implementing the Groundwater Sustainability Agency (GSA) as part of SGMA, identify baseline allocations for basin users, and calculate fees and penalties for extraction

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
- Crescenta Valley Water District (CA) – Water Supply Analysis
- East Valley Water District (CA) - Water Rate Study
- Elsinore Valley Municipal Water District – Drought Surcharge Study
- City of Henderson – Water and Wastewater Rate Study
- Lower Cape Fear Water Quality Trading Program – The Nature Conservancy (NC) - Water Quality Improvement Study
- Mammoth Community Water District – Water and Wastewater Rate Study and Connection Fee Study
- Placer County Water Authority – Water System Evaluation
- City of Raleigh Public Utilities Department - American Rivers (NC) - Water Supply Study
- City of Redlands – Water and Wastewater Rate Study
- City of Riverside (CA) – Elevation Fee Study
- City of Simi Valley – Wastewater Rate Study

TECHNICAL SPECIALTIES

- » Data analysis
- » Financial modeling
- » Utility rate studies

PROFESSIONAL HISTORY

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

EDUCATION

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

NANCY PHAN

FINANCIAL CONSULTANT

Associate Consultant

PROFILE

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

RELEVANT PROJECT EXPERIENCE – WATER AND WASTEWATER

CONTRA COSTA WATER DISTRICT (CA)

Ms. Phan served as the consultant for Contra Costa Water District's water rate study. The study involved developing a new rate structure for the District's treated and untreated water systems. The project involved a complete restructuring of the District's treated and untreated water rates to sustain operational and capital needs, enhance equity and fairness amongst the different customer classes, and minimize customer impacts to the extent possible. The water rates were calculated according to cost of service principles and are compliant with Proposition 218.

COUNTY OF VENTURA (CA)

Ms. Phan assisted the County of Ventura in developing water rates for four different districts in the County's service area. The rate study included unique issues related to serving agricultural customers. The proposed rate structure modified the current structure to provide for greater simplicity and ease of implementation. Ms. Phan developed the four financial models and wrote their corresponding reports to explain the process. She also wrote a model manual for the County to update and use the model in the future and assisted in developing bill calculators for each of the districts.

LA HABRA HEIGHTS COUNTY WATER DISTRICT (CA)

Ms. Phan developed water rates for the La Habra Heights County Water District. She projected the District's ten-year financial plan, analyzed the costs of the system, and allocated those costs to determine the proposed water rates. In addition, she developed a capital financing plan for the District to help plan for its large capital obligations during the study period. A formal reserve policy was recommended for this study. The resulting water rates were based on cost of service principles and minimized customer impacts.

ZONE 7 WATER AGENCY (CA)

Ms. Phan served as the consultant for the Zone 7 Water Agency's wholesale water rate study update. The update included projecting a long-range financial plan, developing a cost of service analysis, and determining fair

and equitable rates for the Agency's direct and retail customers. The Agency was experiencing revenue shortages due to low water usage, and to enhance revenue stability, she assisted in developing a modified rate structure that is both beneficial and fair to the Agency and its customers.

CITY OF SOUTH PASADENA (CA)

Ms. Phan developed a long-range financial plan, cost of service analysis, and rates for the City of South Pasadena's water and wastewater enterprises. The costs to serve each system were analyzed and distributed to their respective customer classes. For the water system, the Water Master charges, leased water costs, and purchased water costs were projected for the study period. The cost of service based rates maintain the same rate structure to minimize customer impacts.

CITY OF ESCONDIDO (CA)

Ms. Phan assisted the City of Escondido with developing water and wastewater rates. The rate study included determining a long-term financial plan, analyzing and distributing the City's costs to each customer class, and determining rates that are fair and equitable for both systems. The study also involved determining pass-through rates for Metropolitan Water District and San Diego County Water Authority costs. The proposed rates are compliant with Proposition 218 and maintain the City's financial sufficiency in light of changing water supply conditions.

SELMA-KINGSBURG-FOWLER COUNTY SANITATION DISTRICT (CA)

Ms. Phan served as the consultant for the Selma-Kingsburg-Fowler County Sanitation District's wastewater rate study. The District operates the treatment facilities and oversees the collection systems owned by the Cities of Selma, Kingsburg and Fowler. The study involved developing wastewater rates for the District and individual fixed charges to fund each of the three cities' replacement and refurbishment capital projects. The proposed rates are based on cost of service principles, are compliant with Proposition 218, and maintain the financial sufficiency of the District and its three member Cities.

CITY OF LA HABRA (CA)

Ms. Phan assisted the City of La Habra in developing wastewater rates and connection fees. The rate study involved an update of the current rate structure to enhance fairness and equity for the City's wastewater customers. She developed four rate structure scenarios to best meet the City's objectives. The revenue requirements, which includes operating and capital expenses, were allocated to each customer class using wastewater flow, which is more defensible for a collection only system. The resulting rates are compliant with Proposition 218, are fair and easy to understand for the City's customers, and recover sufficient revenue for the system's operations.

RAINBOW MUNICIPAL WATER DISTRICT (CA)

Ms. Phan served as the consultant for the Rainbow Municipal Water District's wastewater system. She developed four rate structure options for wastewater rates to be simple for customers to understand and better align with cost of service principles. The study involved projecting the District's long-range financial plan, which included large capital expense obligations. Ms. Phan analyzed funding scenarios for these projects and their effects on the District's wastewater rates. The cost of service based rates allow the District to fund its operating costs and necessary capital projects.

ADDITIONAL PROJECT EXPERIENCE

- City of Monterey Park (CA)
- County of Kauai, Department of Water (HI)
- City of Port Hueneme (CA)
- City of Torrance (CA)
- Antelope Valley East Kern Water Agency (CA)
- Ontario Municipal Utilities Company (CA)
- City of Chino (CA)
- Temescal Valley Water District (CA)
- City of Benicia (CA)
- City of San Gabriel (CA)
- City of Pomona (CA)
- Vallejo Flood and Wastewater District (CA)

STORMWATER AND OTHER

CITY OF SAN JOSE (CA)

Ms. Phan assisted in developing a funding gap analysis for the City of San Jose's stormwater program. The City is facing high capital costs for its own system and to comply with the Baykeeper Consent Decree. The study involved developing a 20-year financial plan that outlines the upcoming operating, capital, and regulatory costs for the City. She helped assess a number of funding mechanisms to allow the City to meet its capital and operational obligations, which was determined in the funding gap analysis.

CITY OF RICHMOND (VA)

Ms. Phan served as a consultant on a stormwater rate study for the City of Richmond. She analyzed the City's current rate structure and billing to help determine a revised rate structure for the stormwater program. The proposed rate structure increased fairness in revenue recovery amongst the different customer classes, while maintaining minimal customer impacts and financial sufficiency for the program.

CITY OF TACOMA, ENVIRONMENTAL SERVICES DEPARTMENT (WA)

Ms. Phan assisted the City of Tacoma's Environmental Services Department on a wastewater, surface water, and solid waste study. She helped document the wastewater, surface water, and solid waste rates that were developed in a prior portion of the study into an administrative record, or report, that sheds light on the processes and rationale that were used to develop those rates. The administrative record promotes financial transparency and heightens legal defensibility.

CITY OF SHAFTER (CA)

Ms. Phan developed solid waste rates for the City of Shafter. The study involved developing a ten-year financial plan for the City, projecting budgeted revenues and expenses, and financing potential capital project costs to determine the necessary revenue adjustments to maintain the program's financial sufficiency.

ADDITIONAL PROJECT EXPERIENCE

- City of Boston (MA)
- Lower Paxton Township (PA)
- Santa Fe Irrigation District (CA)
- Goleta West Sanitary District (CA)
- Triunfo Sanitation District (CA)

TECHNICAL SPECIALTIES

- » Financial modeling
- » Cost of analysis and cost allocation plan modeling
- » Cost of Service – Utility Studies
- » Data analysis
- » Capacity Fees Studies

PROFESSIONAL HISTORY

- » Raftelis Financial Consultants, Inc.: Associate Consultant (2017-present)
- » United States Department of Agriculture, Riverside Soil Salinity Lab: Physical Science Technician (2016-2017)

EDUCATION

- » Bachelor of Science in Environmental Engineering – University of California, Riverside (2016)

FRANKLIN GONZALEZ

FINANCIAL CONSULTANT

Associate Consultant

PROFILE

Mr. Gonzalez has a background in environmental engineering, specially, in water and wastewater engineering, and air quality treatment. His primary expertise includes economic and financial modeling and statistical analysis.

RELEVANT PROFESSIONAL EXPERIENCE

CITY OF SIERRA MADRE (CA)

In 2017, the City of Sierra Madre (City) engaged Raftelis to conduct a Comprehensive Water and Wastewater Cost of Service Study (Study) for the City's utilities over the next five years. The City provides water which serves approximately 3,900 customer accounts and conveys wastewater generated by approximately 4,500 units. The City has an adjudicated right to extract 1,740 AF/yr. However, since the groundwater level is currently below 500' MSL (meters above sea level), the adjudicated rights are reduced to 980 AF/yr. Furthermore, the difference between demand and allowable extraction is made up by spreading imported water and allowing it to reach the groundwater table. As the lead analyst, Mr. Gonzalez was able to construct the financial plan for both utilities and develop each utility's cost of service. For the water utility, tiered rates were developed for single-family customers based on available groundwater allotment, imported water demand, and groundwater recharge. Uniform rates were developed for multi-family and non-residential customers in a similar structure as the single-family tiered rates. Mr. Gonzalez is currently drafting a comprehensive water and wastewater report detailing the financial plans and recommendations for the City.

CITY OF ATWATER (CA)

The City of Atwater (Atwater or City) contracted with Raftelis Financial Consultants, Inc. (RFC) to conduct a Water and Sewer Cost of Service and Rate Study (Study) to develop financial plans for each utility enterprise as well as design corresponding water and sewer rates for the Study Period spanning FYE 2018 through FYE 2022. Located approximately eight miles northwest of Merced, CA in Merced County, the City was incorporated in 1922. It provides water service to approximately 7,600 customers and wastewater services to approximately 8,500 units. It maintains and operates the collection system and sewer treatment plant. As the lead analyst, Mr. Gonzalez responsibilities include updating the financial plans for both water and wastewater utility, develop both utilities' cost of service analysis, and rate designs. Furthermore, in August 2017, Mr. Gonzalez, along with several City staff, was able

to assist the City of Atwater in contributing data to the Official Statement for the Refunding of 2010 and 2011 Wastewater Bonds.

CITY OF GALT (CA)

In early 2017, the City of Galt began working on a comprehensive wastewater rate study for the City. The goal of the project was to evaluate several cost allocation and rate structures to ensure compliance with Proposition 218. The Study was led by Andrea Boehling, who served as the Lead Consultant for the Study. Mr. Gonzalez was primarily responsible for conducting a rate survey of neighboring agencies to compare wastewater rates and capacity fees.

YUIMA MUNICIPAL WATER DISTRICT (CA)

In 2017, Yuima Municipal Water District contacted Raftelis to update a comprehensive water rate study for the District. The District serves six mutual water companies in addition to encompassing two community service districts: The Rincon Ranch Road Community Services District and the Pauma Valley Community Services District. The District serves a total of 354 accounts, providing interruptible and uninterruptible service to agricultural, residential, and commercial customers in the Pauma Valley. The District is divided into two service areas: General District service area and Improvement District "A" (IDA). Mr. Gonzalez was responsible for updating the financial plans for both the General and IDA service areas, and drafted a comprehensive water report that highlighted Raftelis' recommended rates for the next five fiscal years.

IMPERIAL COUNTY

GATEWAY SERVICE AREA (CA)

In 2017, the Imperial County Gateway Service Area contacted Raftelis to conduct a comprehensive water and wastewater rate study for the Service Area. In 1997, the Imperial County Local Agency Formation Commission (LAFCO) approved the formation of a new County Service Area known as the Gateway County Service Area (CSA), and designated the Imperial County Board of Supervisors as the conducting authority. The CSA provides water and wastewater services at the Gateway of the Americas Specific Plan

Area (SPA) located at the eastern border crossing on the Imperial Valley. The Service Area is approximately a 1,775-acre industrial commercial area adjacent to the border with Mexico and 6 miles east of the City of Calexico. As the lead analyst, Mr. Gonzalez's current responsibilities consist of updating budget information for both water and wastewater utilities, and analyzing consumption and flow data for each respective enterprise.

CITY OF LEMOORE (USDA)

Mr. Gonzalez participated in surveying specific crop fields to determine the levels of salinity and other trace elements that potentially affect crop production. Using a global positioning system tracker (GPS) and Genomics Electro-Magnetic instrument (EM38-DD), he was able to determine soil salinity levels for multiple fields and excavate soil samples which were analyzed in the laboratory. By using specific and time-sensitive procedures, Mr. Gonzalez was able to determine actual readings from the soil samples and create visual maps of these readings using ARC-GIS computer programming, capable of analyzing geographical information of the sampled fields to determine salinity trends and protocol to alleviate future salinity conflicts.

TECHNICAL SPECIALTIES

- » Utility Financial Analysis
- » Data Collection and Analysis
- » Statistical Analysis

PROFESSIONAL HISTORY

- » Raftelis Financial Consultants, Inc.: Associate Consultant (2017-present)
- » UC Santa Barbara Department of Economics: Teaching Assistant (2017)
- » UC Santa Barbara Earth Research Institute: Graduate Student Assistant (2015-2017)

EDUCATION

- » Master of Environmental Science & Management – UC Santa Barbara (2017)
- » Bachelor of Science in Environmental Economics & Policy – UC Berkeley (2013)

CHARLES DIAMOND

FINANCIAL CONSULTANT

Associate Consultant

PROFILE

Mr. Diamond has a background in environmental economics and water resources management. His expertise lies in financial modeling and data analysis. He joined Raftelis initially in 2017 as an associate consultant upon receiving a master's degree from UC Santa Barbara's Bren School of Environmental Science & Management in June 2017. Mr. Diamond has developed financial models and conducted analyses of energy use for UC Santa Barbara's Facilities Management department as a graduate student.

RELEVANT PROJECT EXPERIENCE

CITY OF BRENTWOOD (CA)

The City of Brentwood engaged Raftelis to conduct a water and wastewater rate study. In 2017, Raftelis helped the City evaluate the current water and wastewater utilities' cost of service and adjusted rates accordingly. Recently Mr. Diamond updated a financial plan model and performed a cost of service analysis for the City's wastewater utility. Mr. Diamond assisted with the update of existing rates as well as the development of a proposed alternative rate structure and rates.

LA CAÑADA IRRIGATION DISTRICT (CA)

La Cañada Irrigation District engaged Raftelis to conduct a water rate study. Since the last rate study was performed in 2008, Raftelis helped the District evaluate the cost of service and adjusted rates accordingly. In 2017, Mr. Diamond developed a financial plan model for the District to support the financial plan development for fiscal years 2018 to 2027. Mr. Diamond also recently performed a cost of service analysis to assist with the update of the District's rates.

UC SANTA BARBARA (CA) 2016 - 2017

Mr. Diamond aided the Facilities Management department at UC Santa Barbara by creating a financial model to evaluate potential cost savings from energy efficiency projects as part of a client-based master's group thesis project at the Bren School of Environmental Science & Management. Cost analyses of multiple energy procurement options were also conducted.

December 22, 2017

Mr. Jack Hoagland
General Manager
Idyllwild Water District
25945 Highway 243
PO Box 397
Idyllwild, California 92549-0397

RE: Proposal: REVENUE GENERATION STRATEGY AND COMPLIANCE

Dear Mr. Hoagland,

DAVID TAUSSIG & ASSOCIATES, INC. ("DTA") is pleased to submit this electronic copy of our Proposal describing our firm, and explaining our qualifications for providing revenue generation strategy and compliance services.

Since its establishment in 1985, DTA has completed consulting assignments for more than 2,500 clients in ten states. During this period, the firm has been involved in the formation of more than 1,500 public finance districts, with total bond authorizations exceeding \$60 billion. Our financing programs have utilized a variety of public financing mechanisms such as Assessment Districts ("ADs"), Community Facilities Districts ("CFDs"), Certificates of Participation, Tax Allocation Bonds, Sewer and Water Revenue Bonds, Marks-Roos Bond Pools, Landscaping and Lighting Districts ("LLDs"), Integrated Financing Districts, and various types of fee programs.

DTA has assembled a project team for the Idyllwild Water District with the breadth of experience and knowledge needed to provide consulting services in a professional and timely manner. Andrea Roess, Managing Director, would be the Principal-in-Charge and have the City's primary account responsibility. Ms. Roess would be assisted by Nathan Perez Esq, a Managing Director and In-House Legal Counsel at DTA, Steve Runk, P.E., Vice President of Engineering Services at DTA, and Nehal Thumar, a Vice President at DTA, as well as other support staff. Brief resumes for each of our team members are included in Section 5 of this proposal.

In addition, DTA is a registered Municipal Advisor with the SEC (MSRB No. 867-01160).

If you have any questions regarding this Proposal, please feel free to call me at 800-969-4382. We look forward to having the opportunity to work with you on this engagement.

Best regards,



Andrea Roess, Managing Director

IDYLLWILD WATER DISTRICT

PROPOSAL FOR REVENUE GENERATION AND COMPLIANCE

Proposal Deadline

December 22, 2017

Prepared by

DAVID TAUSSIG & ASSOCIATES, INC.
CONTACT: ANDREA ROESS
5000 Birch Street, Suite 6000
Newport Beach, CA. 92660
(800) 969-4382

Public Finance
Public Private Partnerships
Urban Economics

Newport Beach
San Jose
Riverside
San Francisco
Dallas

**CONSULTING SERVICES TO PROVIDE
REVENUE GENERATION STRATEGY AND COMPLIANCE
SERVICE**



DECEMBER 22, 2017

Prepared for
IDYLLWILD WATER DISTRICT
25945 Highway 243
PO Box 397
Idyllwild, California 92549-0397

Prepared by
DAVID TAUSSIG & ASSOCIATES, INC.
5000 Birch Street, Suite 6000
Newport Beach, California 92660
(800) 969-4382

TABLE OF CONTENTS

<i>Section</i>	<i>Page</i>
1. UNDERSTANDING DISTRICT NEEDS.....	1
2. PROPOSED SCOPE OF WORK.....	3
3. DISTRICT TO PROVIDE	6
4. WORK SCHEDULE.....	7
5. PROPOSED TEAM MEMBERS	8
6. REFERENCES.....	12
7. PROPOSED FEE (SEPARATE DOCUMENT).....	16

SECTION 1. UNDERSTANDING IDYLLWILD WATER DISTRICT'S NEEDS

DAVID TAUSSIG & ASSOCIATES, INC. ("DTA") is pleased to submit this proposal to the Idyllwild Water District ("District") to provide consulting services to:

1. Assist the District in developing and documenting a water rate structure that will encourage and re-enforce conservation practices developed during the most recent drought in Southern California and provide ongoing financial support for operations and the capital improvement program;
2. Develop a financial structure for the District's Water Shortage Contingency Plan (WSCP) that will focus customer attention on Water conservation if the District needs to dramatically reduce water usage in the future; and
3. Recommend a wastewater rate structure that will equitably generate revenue from the extremely small rate base to support operations and a capital improvement program.

QUALIFICATIONS

For your information, DTA is a public finance and urban economics consulting firm specializing in infrastructure and public services finance. Our firm is based in Newport Beach, Riverside, San Diego, San Jose and San Francisco California.

DTA acts as consultant to both public and private sector clients involved in land development. DTA's consulting services include:

-) Water/Sewer Rate and Fee Studies
-) Public Financing Plans and Strategies
-) Proposition 218 and AB 1600 Compliance Studies
-) Development Impact Fee Justification Studies
-) CFD Formation and Reimbursement Engineering Services
-) Assessment Engineering and Special Tax Consulting
-) Fiscal and Economic Impact Analyses
-) Redevelopment Finance
-) Economic Development and Revitalization Studies
-) Real Estate Economics

Since its establishment in 1985, DTA has completed consulting assignments pertaining to the financing and public infrastructure and services for more than 2,000 clients in ten states. During this period, the firm has been involved in the formation of more than 2,500 public finance districts, with total bond authorizations exceeding \$50 billion.

DTA has provided public finance consulting services to virtually every major City and urban County in the State. Our City clients are too numerous to list individually, but include the Cities of Anaheim, Fresno, Long Beach, Los Angeles, Sacramento, San Diego, San Francisco and San Jose. Our County clients have included the Counties of Alameda, Contra Costa, Fresno, Imperial, Los Angeles, Madera, Marin, Orange, Placer, Riverside, Sacramento, San Bernardino, San Diego, San Francisco, Santa Barbara, Shasta, Sutter, Stanislaus and Yuba. DTA's current/recent water district clients include Elsinore Valley Municipal Water District, Borrego Water District, Eastern Municipal Water District, Santa Ana Watershed Project Authority, Seaside County Sanitation District, West Valley Water

District, Rancho California Water District, San Geronio Pass Water Agency, Santa Margarita Water District, Western Municipal Water District, and other smaller water districts located throughout the State of California. Lastly, DTA has done similar work for numerous special districts including CSDs, Fire Protection Districts, and School Districts.

All DTA rate studies and fee studies, as well as our assessment district formation work, include a benefit cost analysis and determination of nexus between the facilities financed and the financing mechanism. DTA has prepared dozens of rate and fee justification studies and analyses involving rates and fees for a variety of public improvements, including transportation, water, sewer and flood control facilities, fire and police stations, parks, libraries and other types of infrastructure. DTA also has considerable experience providing analyses of public agency recurring costs and revenues through the preparation of fiscal impact reports.

Clear assessment methodologies and apportionments, audit trails, community outreach, and well-documented balloting and voting are still a priority. To this end, DTA coordinates closely with its in-house General Counsel on these matters, and looks forward to extending this service to our clients.

DTA has an enviable reputation for producing high quality work in a quick and efficient manner to correspond with even the most aggressive financing schedule. DTA's strength is built upon the experience of its professional staff, which currently consists of more than 60 employees. Our senior management team personnel all have fifteen plus years of hands-on industry experience. All DTA professional staff has extensive experience in computer-based analysis and modeling, which is a key component of the firm's consulting services. We place great emphasis on quantitative skills and simply outwork the competition. Our staff prides itself on its accuracy, responsiveness, and ability to meet our clients' highest expectations.

In addition, DTA is a registered Municipal Advisor with the SEC (MSRB No. 867-01160). Key team members for this engagement would be myself, our in-house counsel, Nate Perez, and Nehal Thumar, all of whom are municipal advisor representatives. As a firm that focuses solely on public finance, our conflict "checks" and procedures capture the whole of our business activities - we will not have an affiliate, parent, or subsidiary company making decisions that implicate the integrity of the City of Beaumont or its CFD Program. Relatedly, our firm has a strict policy on Political Contributions (MSRB Rule G-37) and because of this, our marketing efforts in Riverside County never conflict with our ability to provide unbiased, expert advice. We encourage you to discuss these legal and risk management matters with our firm's General Counsel, as we believe DTA is truly in a unique position to provide the District full-service consulting.

Resumes of DTA professional staff available for this engagement are included in Section 5.

SECTION 2. PROPOSED SCOPE OF WORK

Our proposed Scope of Work is shown below.

TASK NO. 1 – ANALYSIS OF COST OF SERVICE

DTA shall analyze all of the Client's water and wastewater expenses. This includes reviewing Revenue/Expense reports for the previous year and reviewing operation budgets for the current year. DTA will work with Client staff to project costs identified below and adjust, as appropriate, for applicable factors such as changes in water demand, conservation incentives, changes in wholesale water costs, etc.

-) Current and future cost of providing water in accordance with established and anticipated standards and regulations (i.e., water banking, other Client administration cost increases, etc.)
-) Current and future cost of providing wastewater treatment in accordance with established and anticipated standards and regulations
-) Projected demands
-) Availability of supply
-) Conservation practices
-) Recycled water
-) Age and condition of system and the need to fund long-term capital improvement/replacements
-) Improvements funded by other funding sources, such as development impact fees
-) Impact of current and future environmental regulations
-) Existing and/or future bond debt
-) Pay-As-You-Go capital improvements
-) O&M expenses
-) Capital/operating reserves
-) Other financing needs

TASK NO. 2 – EVALUATE CURRENT REVENUE SOURCES

This task entails reviewing the Client's current water and wastewater rate structure and assessing its appropriateness. This task consists of two subtasks.

Subtask 3.1 – Review Current Client's Rate Structure

DTA shall review and summarize the Client's current water and wastewater rate structure and shall determine whether the existing rates and rate structure are sufficient to fund current and estimated future costs identified in Task 2.

Subtask 3.2 – Explore Potential Alternatives

DTA shall review potential alternative rate structures to determine if a new rate structure would be beneficial to Client. The six major types of water rate structures include: (i) Flat fee, (ii) Declining-block rate, (iii) Inclining-block rate, (iv) Uniform rate, (v) Seasonal rate, and (vi) Budget/individualized.

TASK NO. 3 – RECOMMEND RATE STRUCTURE

This task entails selection of the appropriate methodology discussed in Task No. 2 and calculation of water and wastewater rates based upon the chosen methodology and revenue requirements

determined in Task No. 1. This task consists of two subtasks. DTA will recommend rate structures based on the following factors:

- a. Current and future cost of providing services in accordance with established and anticipated standards and regulations
- b. Projected demands of growing community
- c. Age and condition of the treatment plant and projected replacements for infrastructure based on the Agency's ten-year CIP
- d. Funding requirements for all current and long-term liabilities and debt obligations
- e. Impact of current and future wastewater regulations
- f. Equitably distribute costs to residential, commercial, and industrial users
- g. Provide a methodology for annual inflationary adjustments in compliance with Proposition 218
- h. Cash flow and working capital
- i. Projected revenues, operating expenses, and other funding source requirements; with an understanding of the Agency's historical trends
- j. Other impacts as identified

TASK NO. 4 PROVIDE FIVE-YEAR FORECAST

DTA staff shall provide a five year forecast of revenues, operation and maintenance expenses, and capital improvement costs, identify a five-year rate structure to ensure that adequate revenues will be meet reserve policy levels, bond debt coverage requirements, and capital funding.

DTA shall also develop a financial structure for the District's Water Shortage Contingency Plan that will focus on customer attention on Water conservation if the Districts needs to dramatically reduce water usage in the future.

TASK NO. 5 PREPARE DRAFT AND FINAL REPORT

DTA staff will prepare a draft and final report, supplied in both hard copy and electronic format, which include the following items:

- a. A brief description of the Agency
- b. Service area description, including population served
- c. The source of supply as appropriate and projections on future growth and statement of consultant regarding sufficiency to meet demand.
- d. A brief description of the capital improvement program. Including State and Federal regulatory requirements, a five (5) year summary of proposed capital expenditures and a statement regarding reasonableness of those estimates; and a ten-year projection.
- e. The revenue and expense projections for the Agency and each cost center
- f. The rate comparison of existing revenues to meet the required needs of the utility and discussion of any recommended rates and inflationary increases necessary to the future needs of each utility.

TASK NO. 6 – ATTEND MEETINGS

This task entails attendance at a total of four meetings for both Water and Wastewater Rate Studies. This will include one meeting with Client staff and/or the stakeholders, two with the District Board, and one for the public hearing. The first two meetings will be working meetings with Client staff and the District Board, the second meeting will include a presentation to the District Board, and the final meeting will be for the public hearing to adopt the rate study.

SECTION 3. DISTRICT TO PROVIDE

Districts staff's role in the preparation of the work to be performed shall relate to (i) the procurement of specific types of data, as listed below, (ii) development of all budget information, (iii) review of all documents produced by DTA, and (iv) assistance in working with the Board of Directors and outside stakeholders.

DTA requests that the following information be provided by the District at no charge and in a timely manner such that the project does not extend beyond six (6) months from the date of authorization to proceed:

1. Copy of Idyllwild Water District's most recent water and wastewater rate studies
2. Demographics information
3. General revenue sources (i.e., property taxes, water rates)
4. Other revenue sources (i.e., grants, interest earnings)
5. Current operating budget
6. O&M budget projections
7. Debt service requirements
8. Audited financial statements
9. Any negotiated contract rates
10. Any economic development rates
11. Any standby rates

SECTION 4. WORK SCHEDULE

DTA has an enviable reputation for producing high quality work in a quick and efficient manner to correspond with even the most aggressive project schedule. DTA's clients also receive high levels of personal attention from senior staff, with the Managing Director or Vice President always available to meet with public agency staff and other groups.

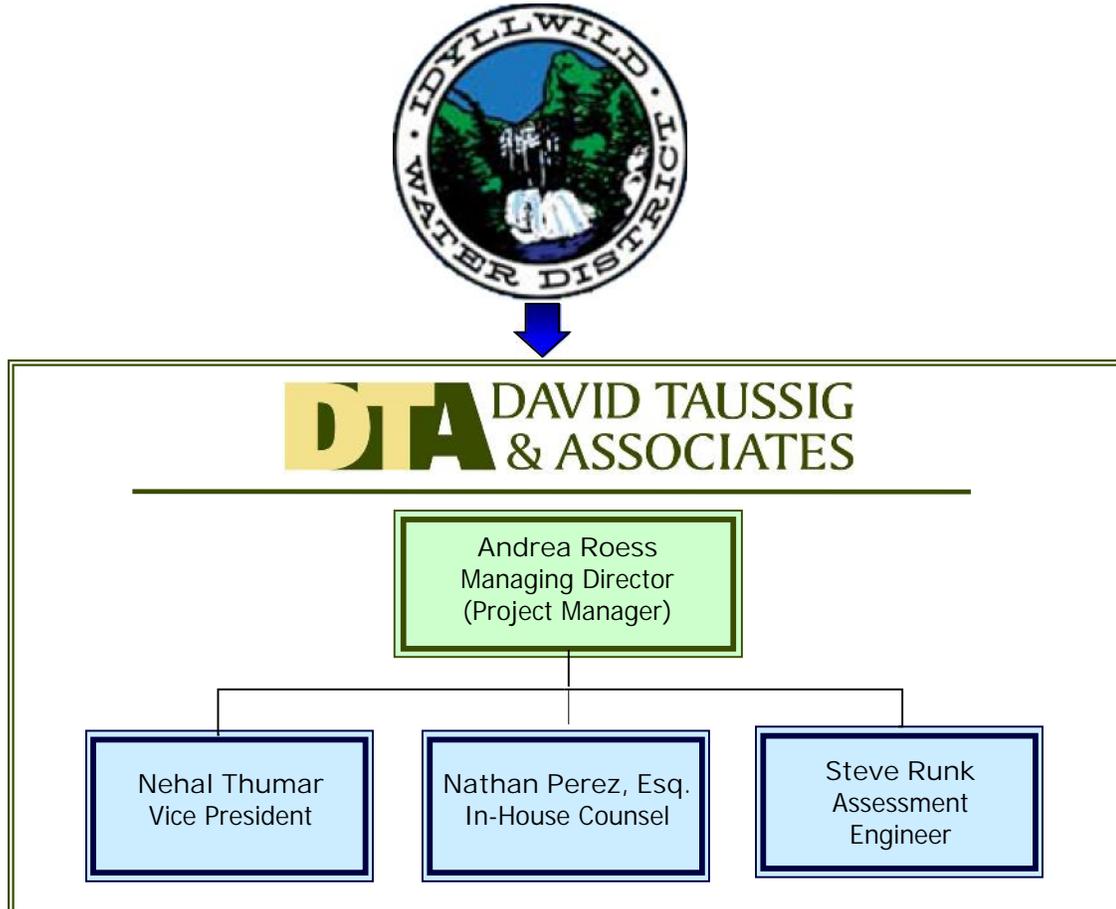
The schedule below details our expected timing for each of the tasks described in our Approach. Please note that this schedule is only an estimate and will change depending on actual timing of the District and data received from the District and outside sources, as needed.

Task	January 2018	February 2018	March 2018	April 2018	May 2018	June 2018
Water Rate Study						
1 Analysis of Cost of Service						
2 Evaluate Current Revenue Sources						
3 Recommend Rate Structures						
4 Provide Five-Year Forecast						
5 Prepare Draft and Final Report						
6 Present Information						

Note: Schedule may vary slightly

SECTION 5. PROPOSED TEAM MEMBERS

DTA has assigned personnel to this project that bring experience and technical expertise to each unique element of study. Our team organization is illustrated below. Also, there will be no subcontractors used for this engagement.



We have assembled a project team for Idyllwild Water District with the breadth of experience needed to assist the District on this engagement in a professional and timely manner. Ms. Roess will serve as Principal-in-Charge of DTA's project team and will handle primary account responsibilities for this engagement. Ms. Roess will attend meetings as necessary and supervise all project staff.

Andrea Roess will be responsible for the ongoing execution and completion of our work plan, matching the project team's work and deliverables with the District's needs and goals. Ms. Roess will be actively involved in the study and fully conversant in our progress, findings, and recommendations. Ms. Roess will also manage the work of our team, leading data collection efforts, directing the development of our technical model, provide senior-level analysis, review progress and work products with the District staff, present findings to the District leaders, and finalize study documentation. Ms. Roess will be assisted in these tasks by Mr. Runk, Mr. Thumar, and other support staff.

Resumes for each team member are included on next pages. Client references are shown in the following section.

■ ANDREA ROESS

MANAGING DIRECTOR

PROFESSIONAL EXPERIENCE

Ms. Roess has a background in finance and public policy analysis. Since joining DTA in 1992, Ms. Roess has participated in all aspects of the formation and implementation of special finance districts to fund infrastructure and services. She has managed the formation of more than 300 land-secured financing districts, including several PACE programs. She also has expertise in the preparation of rate and fee studies, fiscal consultant reports, and fiscal impact reports. In addition, Ms. Roess established and manages DTA's water and sewer practice and is a leader in the development of PACE Programs.

Ms. Roess has utilized her computer skills to develop numerous state-of-the-art computer models that evaluate cash flows related to funding infrastructure and public services. This ability has enabled her to develop sophisticated bond structuring concepts for Community Facilities Districts and Assessment Districts, as well as complex fiscal impact and fee impact models. She has also prepared hundreds of Rates and Methods of Apportionment for CFDs, and been involved in the development of escrow release formulas and bond pool financing structures. In addition, Ms. Roess has experience in the preparation of public facilities financing plans, water/sewer revenue bond analyses and tax increment analyses. She is also the project manager in charge of the annual special tax administration for more than 120 financing districts throughout California, Hawaii, and Nevada.

Ms. Roess is the chair of the Orange County/Inland Empire regional leadership team for the Association of Women in Water, Energy, and Environment (AWWEE) and has participated on numerous panels and workshops related to public financing including a presentation called "Strategies and Innovations in Financing Local Stormwater and Dry Weather Runoff Costs" presented to the Senate Natural Resources & Water Committee in February, 2015.

Ms. Roess holds an M.B.A. degree with a concentration in finance from San Francisco State University, and a B.A. in psychology/public policy analysis from Pomona College.

**TECHNICAL EXPERTISE**

- Special Districts Formation
- Special Districts Annual Administration
- Fiscal Impact Analyses
- Financial Modeling
- Rate and Fee Studies

CREDENTIALS

- MBA, San Francisco State University, Finance
- BA, Pomona College, Psychology/Public Policy Analysis
- Municipal Advisor Representative - Passed Series 50 Exam in 2017

CONTACT

5000 Birch Street, Ste. 6000
Newport Beach, CA 92660
Phone: (800) 969-4382
Fax: (949) 480-0034
E-Mail:
andrea@taussig.com

■ STEPHEN RUNK, P.E.

VICE PRESIDENT, ENGINEERING SERVICES (State License Number C23473 – California Registered Civil Engineer)

PROFESSIONAL EXPERIENCE

Steve has more than 30 years of experience in the design and construction management of major civil engineering projects, including roadways, bridges, sewer and water improvements, and flood control facilities, as well as grading for public works projects and the construction of commercial and industrial buildings. Mr. Runk's specific responsibilities have included design, quality control, specifications, estimates, construction bid packages, construction coordination and construction management, cost analysis and control, scheduling, manpower forecasting, staffing and marketing. He has also assisted public agencies and developers in the procurement of funding from Caltrans and other federal and state agencies.

Mr. Runk has a proven track record of meeting schedules and adhering to budgets. Since joining DTA in 2000, he has worked with local agencies to resolve community issues and to negotiate scope changes with contractors to ensure the timely and satisfactory completion of construction projects. He has also acted as project manager for the establishment of Assessment Districts and the preparation of numerous AB 1600 Development Fee Justification Studies. Mr. Runk specializes in preparing assessment apportionment formulas and fee studies for roads and storm drains, as well as water and wastewater facilities.

Prior to joining David Taussig & Associates, Mr. Runk, as Senior Construction Manager for Holmes & Narver, Inc., successfully completed the construction of SR-41 Freeway in Fresno County, which was the County's first Measure "C" sales tax funded freeway. Prior to this project, Mr. Runk successfully completed SR-71 Freeway in Chino/Chino Hills, Calif. This \$98 million project was the first Measure "M" sales tax funded project for the San Bernardino Association of Governments. Mr. Runk's responsibilities on both of these projects included contract management, quality control, public relations, cash flow analysis, project closeout and compliance with Federal and State funding requirements.

Previously, Mr. Runk held positions with various public and private engineering entities in which he delivered projects requiring a wide variety of engineering expertise. He holds a B.S. in Engineering from the University of California at Los Angeles and a M.S. in Civil Engineering from California State University at Long Beach. Mr. Runk is a registered Civil Engineer in the States of California and Washington.

**TECHNICAL EXPERTISE**

- Assessment Engineering
- Design & Construction Management
- Quality Control
- Specifications Estimates
- Construction Bid Packages
- Rate and Fee Studies

CREDENTIALS

- MS Civil Engineering, Cal State Long Beach, 1983
- BS, University of California Los Angeles, Engineering, 1970

CONTACT

5000 Birch Street, Ste. 6000
Newport Beach, CA 92660
Phone: (800) 969-4382
Fax: (949) 480-0034
E-Mail: steverunk@cox.net

■ NATHAN PEREZ, ESQ.**IN-HOUSE COUNSEL****PROFESSIONAL EXPERIENCE**

Mr. Perez has a background in law, economics, business administration, and statistical analysis. Since joining DTA, Mr. Perez has been involved in all aspects of the formation and implementation of numerous Mello-Roos Community Facilities Districts located throughout California, with responsibilities related to the development of tax spread proforma analyses and the preparation of rate and method of apportionments, various Public Reports, and overlapping debt analyses.

Mr. Perez also has significant expertise in the preparation of development impact fee studies, routinely working in the role of Project Manager for both new studies and updates. This includes considerable work related to the preparation of facilities needs lists and the apportionment of infrastructure and services costs to a variety of land uses based on benefit criteria. He has also specialized in the apportionment of costs and the setting of service levels for the construction and maintenance of law enforcement and fire protection facilities, open space acquisition, parkland, transportation facilities, drainage facilities, government services facilities, community centers, and library facilities. Furthermore, he has also completed nearly 60 fiscal impact reports and 45 economic development analyses for a variety of residential, commercial, and mixed-use developments throughout California.

Finally, his experience as an attorney has allowed Mr. Perez to effectively and efficiently evaluate dozens of state and Federal legal, regulatory, and administrative frameworks related to public finance and infrastructure development.

Prior to joining DTA, Mr. Perez worked for the Boston office of an international law firm, where he advised sponsors, managers, and investors on the tax aspects of fund formation and investment. Mr. Perez is admitted to the bar in both Massachusetts and California. Mr. Perez received his law degree from Harvard Law School, and his B.A. in Economics and History, with highest distinction, from the University of North Carolina at Chapel Hill.

Mr. Perez is an active member of the Urban Land Institute, the California Bar Association, and the Hispanic National Bar Association.

**TECHNICAL EXPERTISE**

- CFD/AD Formation
- CFD/AD Annual Administration
- Fiscal Impact Analyses
- Financial Modeling
- Rate and Fee Studies

CREDENTIALS

- Law Degree, Harvard Law
- BA, University of North Carolina, Economics/History
- Municipal Advisor Representative - Passed Series 50 Exam in 2017

CONTACT

5000 Birch Street, Ste. 6000
Newport Beach, CA 92660
Phone: (800) 969-4382
Fax: (949) 480-0034
E-Mail:
nperez@taussig.com

NEHAL THUMARVICE PRESIDENT | nthumar@taussig.com**PROFESSIONAL EXPERIENCE**

Mr. Thumar has a background in economics and finance. Since joining DTA in 2000, Mr. Thumar has been involved in all aspects of formation and implementation of numerous Mello-Roos Community Facilities Districts located throughout California. Mr. Thumar's responsibilities related to these CFDs have included the preparation of tax spread proforma analyses, as well as the preparation of rate and method of apportionments, Public Reports, and overlapping debt analyses. In addition, he has managed the annual administration of over twenty-five CFDs in Southern California, and has prepared due diligence, tax projections and disclosure reports related to land-secured bond issuances for numerous clients in California, Nevada, and Arizona. Mr. Thumar has also prepared consultant reports and tax increment models for numerous redevelopment areas located within the City of San Diego as well as fiscal impact reports for various public agency clients. Mr. Thumar has also worked on the preparation of development impact fee justification studies. His work during the impact fee justification and apportionment analysis process has included the preparation of capital improvement and public facilities needs lists, fee model development, report writing, data collection, interfacing with staff, and key stakeholders.

**TECHNICAL EXPERTISE**

- Special Districts Formation
- Special Districts Annual Administration
- Rate and Fee Studies
- Fiscal Impact Analyses
- Financial Modeling

CREDENTIALS

- MBA, USC, Finance
- BS, USC, Economics
- Municipal Advisor Representative - Passed Series 50 Exam in 2017

CONTACT

5000 Birch Street, Ste. 6000
Newport Beach, CA 92660
Phone: (800) 969-4382
Fax: (949) 480-0034
E-Mail:
nthumar@taussig.com

SECTION 6. REFERENCES

Listed below are four examples and references of DTA's recent work preparing financing plans and rate studies for public agencies in California. We encourage you to contact our references to learn firsthand how well our staff meet the needs of our clients.

CITY OF PACIFIC GROVE (SEWER RATE STUDY)



Pacific Grove Sewage Treatment Plant

CONTACT INFORMATION

■ City of Pacific Grove

Mr. Daniel Gho
Public Works Superintendent
(831) 648-5722
300 Forest Avenue
Pacific Grove, CA 93950

SERVICE DESCRIPTION

In 2015, DTA submitted to the City a final 10-year Sewer Collection System Financial Plan and Rate Study. This financial plan and rate study provides the background, cost of service analysis, and methodology to support the recommended rate structure. The recommended rate structure was designed to accomplish the following objectives:

- ✓ Generates revenues to fund annual sewer collection system operating costs, debt service, capital costs and reserve requirements; and
- ✓ Is equitable to all users, consistent with City policies, and compliant with all relevant laws.

As part of our study, DTA evaluated expected costs of service including (i) operation and maintenance of the sewer collection system, (ii) capital replacement, (iii) reserve requirements, and (iv) sewer loan debt service. In addition, DTA prepared various sewer rate alternatives at the City's request (i.e., various sewer escalation rates, level rates, timing of facilities costs, etc).

In early May 2015, the City Council approved staff to initiate the Proposition 218 process (noticing, public hearing) in order to adopt the proposed rates. As part of this process, DTA coordinated with MRWPCA to obtain data related to sewer connections and sewer flow.

Years of Service Provided

2014 to 2015

SAN GORGONIO PASS WATER AGENCY, CA – SAN
GORGONIO, CA

CONTACT INFORMATION



California Aqueduct, Beaumont, CA

■ San Gorgonio Pass Water Agency

Mr. Jeff Davis
(951) 845-2577
General Manager

1210 Beaumont Avenue
Beaumont, CA 92223

PROJECT DESCRIPTION

DTA is currently assisting the San Gorgonio Pass Water Agency (“SGPWA”) in all aspects of their financing program. We have been retained on an “on-call” basis with SGPWA to perform various analyses, models, and studies.

DTA completed a water rate study in 2009 for the San Gorgonio Pass Water Agency (the “Agency”) that included new reserves for water acquisition and rate stabilization. DTA also developed a financing model that demonstrates the Agency’s ability to sell Certificates of Participation (“COPs”) to fund the acquisition of water rights and construction of a new pipeline. In creating the model, DTA analyzed various revenue sources such as ad valorem taxes, commodity rates, and connection fees, which could be pledged to repayment of the COPs. The model was designed to allow for easy manipulation of variables to enable the Agency to see the impact of changing rate, cost, absorption, and other assumptions. DTA also prepared a water capacity fee study which was approved in 2011 and prepared an updated study which was approved in 2015.

Years of Service Provided

2008 to current

BORREGO WATER DISTRICT – BORREGO SPRINGS, CA

Wastewater Treatment Facility, Borrego Springs, CA

CONTACT INFORMATION

■ Borrego Water District

Ms. Kim Pitman
(760) 767-5806
PO Box 1870
Borrego Springs, CA 92004

SERVICE DESCRIPTION

DTA has served as the special tax consultant to the District since 1995. DTA currently assists the District with the annual administration of CFD No. 2007-1 and four other fixed charges, including (i) a water availability standby charge, (ii) a water, sewer, flood control charge for the area known as ID No. 1, (iii) a pest control standby charge, and (iv) a water standby charge for the area known as ID No. 3.

For fiscal year 2017-18, DTA enrolled over \$746,000 in taxes for the District's special taxes, charges and direct charges on the County tax roll.

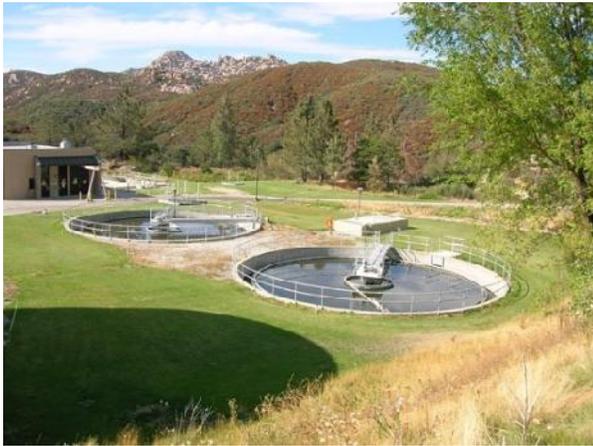
DTA assisted with the formation and the sale of bonds for Borrego Water District CFD No. 95-1 which was subsequently restructured in 2007 as CFD No. 2007-1. DTA assisted in the sale of bonds for CFD No. 2007-1 which refunded the prior bonds issued by CFD No. 95-1. CFD No. 2007-1 includes a majority of the property that was in CFD No. 95-1 and is anticipated to contain 802 residential units and 349 acres of golf course property at buildout. In 2017, DTA assisted with an additional restructuring of the CFD which resulted in a new CFD called CFD No. 2017-1. The existing CFD No. 2007-1 also still remains in place.

In addition, in 2013, DTA prepared an audit of the District's annual Standby charge. DTA reviewed the District's records to determine the validity of the process used to establish and calculate the fixed charges.

Years of Service Provided

1995 to current

LAKE ARROWHEAD COMMUNITY SERVICES DISTRICT – LAKE ARROWHEAD, CA



Grass Valley Sewer Plant, Lake Arrowhead, CA

CONTACT INFORMATION

- Lake Arrowhead Community Services District

Ms. Jessica Brown
Lake Arrowhead Community Services District
(909) 336-7108
P.O. Box 700
Lake Arrowhead, CA 92352

SERVICE DESCRIPTION

In 2009, DTA was hired to administer the District's annual sewer charge and delinquent sewer charge for residential-only customers. Each year, in our role as administrator, we enroll the annual charges with the County and we assist the District with the preparation of public notices and reports as set forth in California Government Code Sections 6066 and 61115(b). All notices and procedures are in strict compliance with Proposition 218 requirements.

For fiscal year 2017-18, DTA enrolled over \$1.4 million in taxes on over 2,300 parcels located within the District.

Years of Service Provided

2009 to current

SECTION 7. FEE SCHEDULE

The Fee Schedule will be submitted as a separate document.



32605 Temecula Parkway, Suite 100
Temecula, CA 92592
Toll free: 800.676.7516
www.nbsgov.com

December 22, 2017

ELECTRONIC-ONLY SUBMITTAL

Jack Hoagland
General Manager
Idyllwild Water District
25945 Highway 243
Idyllwild, CA 92549

RE: Proposal for Revenue Generation Strategy and Compliance

Dear Mr. Hoagland,

Thank you for providing us the opportunity to submit this proposal to prepare a Revenue Generation Strategy and Compliance study for the Idyllwild Water District (District). We are excited about the possibility of working with you and your team, and understand that the District needs a robust review and examination of your utility rates to ensure compliance with Proposition 218 and recent litigation. The team we have dedicated for this effort has the precise experience and savviness required. As examples of this, we have provided references within our proposal for a number of similar projects for agencies such as Cabazon Water District, Arvin Community Services District and Rowland Water District.

While our references can speak to the quality of our work, we understand that the District faces a number of unique challenges including a relatively new Board of Directors, a limited source of supply, an aging wastewater treatment plant and a diverse customer base including a high-use customer and a large number of vacation homes. We pride ourselves on our customer service and focus tailoring our approach to meet the specific needs of the Idyllwild Water District.

Please note that we have separately attached resumes for our project team members (Attachment A) and our proposed fee (Attachment B) for this engagement.

Please contact me at 800.676.7516 or via email at kboehler@nbsgov.com if you have any questions or concerns. We would genuinely like to work on this project and help the District move forward.

Sincerely,

A handwritten signature in black ink that reads "Kim Boehler". The signature is written in a cursive, flowing style.

Kim Boehler
Director

TABLE OF CONTENTS

Cover Letter.....	Previous Page
Project Understanding	1
Proposed Scope of Work.....	2
Information Requirements from the District	11
Proposed Project Schedule	13
Project Team	14
References	17
Proposed Fee.....	20

PROJECT UNDERSTANDING

Idyllwild Water District is facing several fundamental challenges, such as improving source of supply reliability without being able to connect to any external conveyance systems for its water utility and the need to replace its wastewater treatment plant. To meet these challenges, NBS understands the District is embarking on this study to develop water and wastewater rates that provide:

- **Financial Stability** – Given that 30% of the District’s water customers are vacation homes, we understand the need to develop rate structures that will provide month-to-month and year-to-year revenue stability. A key objective in this study will be to thoroughly evaluate the financial needs of the District and develop rates that appropriately balance fixed and variable charges to ensure revenue meets expenses, regardless of consumption.
- **Capital Improvement Project Funding** – Ensuring sufficient revenue for water supply related capital projects, and replacement of the wastewater treatment plant is an important aspect of this study. NBS will evaluate the District’s capital improvement program for each utility and develop well-conceived funding approaches for these important needs. This may include balancing various sources of funding such as cash reserves, incoming rate revenue, grant and/or loan funding.
- **Conservation Signaling** – Given the District’s limited water supply and recent drought conditions, the ability to encourage and re-enforce the need to conserve water is a key objective for this study. NBS understands the District’s sensitivity to recent water rate litigation. We will develop a study approach specifically tailored to the District that follows basic industry standards and reflects the fundamental cost-of-service principles that are embodied in the American Water Works Association (AWWA) Principles of Water Rates, Fees, and Charges. We will develop a conservation rate structure that will allow the District to continue encouraging conservation, in a legally defensible manner.

If selected for this project, our focus will be to work cooperatively with the District to develop rates for the water and wastewater utilities that are well suited to its needs, and are practical and implementable. Throughout every step of the process, we will strive to provide clear reasoning and simple answers to your questions and concerns.

Our approach will ensure that the study will result in water and wastewater rates that meet each utility’s long-range financial needs, are easy to understand and administer, and can be confidently defended from both a technical and legal perspective. Our goal is that any given Director, if stopped in the supermarket, will feel comfortable explaining the whys and hows of any new rate structure that is developed in this study.

PROPOSED SCOPE OF WORK

NBS' approach and task plan for completing the scope of services identified in the District's RFP is presented in this section of our proposal. We will be prepared to make adjustments during the course of the study to reflect the direction of District staff and stakeholders as the study progresses. NBS will provide the leadership necessary to guide you through the various options, key concerns, and explaining the issues involved. The primary study components are shown in Figure 1, followed by a detailed scope of work.

FIGURE 1. RATE STUDY COMPONENTS



TASK 1. KICKOFF MEETING AND DATA COLLECTION

NBS will hold a kick-off meeting with District staff to review and discuss the overall study objectives, methodology, and to confirm a mutual understanding of how the study will be conducted. For each of the two utilities (water and wastewater), we will also review the District's current policies to identify specific issues needing attention. For example, policies related to financial metrics such as: target reserve fund balances, minimum coverage ratios, and sufficiency of funding for capital improvement costs. Evaluating these policies prior to proceeding with the study helps accomplish the District's overall goals and objectives for the project. Task deliverables include:

- Data request provided to District staff prior to the kick-off meeting
- Review of initial data provided
- Kick-off meeting with District staff
- Preliminary project schedule with milestones, and estimated date for financial planning workshop

The data the District will need to provide (for each system) includes:

- ✓ Annual operating and maintenance budgets
- ✓ Breakdown of annual rate revenue collected from each system and each customer class
- ✓ Current cash reserve balances
- ✓ Capital improvement plans
- ✓ Customer data such as number of accounts, EDU's and meter size (where applicable) by customer class

TASK 2. FINANCIAL PLAN

For both water and wastewater, NBS will prepare a financial plan that evaluates the District’s sources and uses of funds, including: annual rate revenue, operating and maintenance expenditures, reserve funds, and capital improvement, repair, and replacement costs. The following elements are anticipated in this analysis:

- 1. Projected Revenues and Expenditures** – Using a cash-basis reflecting the District’s system of accounts, NBS will prepare a 20-year projection of revenues, expected grants or loans, expenses, and increases in rate revenue needed for each system to meet all obligations. This will provide the District with a financial planning tool, to plan for future rate increases and maintain appropriate reserve fund levels.
- 2. Evaluate Reserve Fund Sufficiency** – NBS will evaluate the sufficiency of existing reserve funds, target year-end fund balances, reserve policies, and related issues such as meeting debt service coverage ratios and other rate covenants that are specific to the District. We will provide recommended reserve fund target balances that are tailored to the District’s specific needs and develop a phased-in approach to funding reserves that minimizes the impacts on ratepayers.
- 3. Review Capital Improvement Funding** – NBS will incorporate the District’s capital improvement plans, and evaluate the timing, costs, and available reserves that can be used to fund various projects. We will work with District staff to develop a well-conceived approach to funding these capital needs, which will likely include using existing cash reserves, incoming rate revenue and outside financing, if needed.

Figures 2, 3, and 4 are examples of the types of charts and tables we use to summarize these results for each system. (The District’s chart of accounts will serve as the basis for the actual analysis and tables).

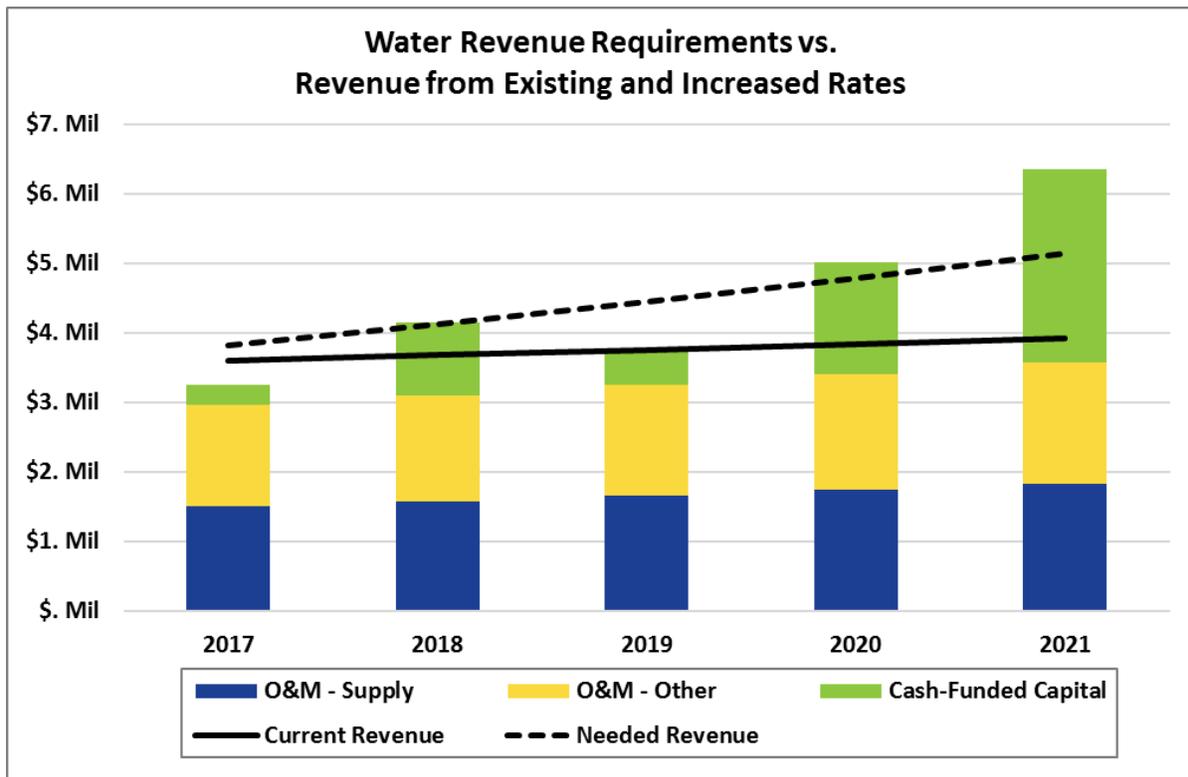
FIGURE 2. SUMMARY OF FIVE-YEAR FINANCIAL PLAN

Financial Plan Summary	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20	FY 2020/21
Sources of Water Funds					
Rate Revenue Under Prevailing Rates	\$3,500,000	\$3,570,000	\$3,641,400	\$3,714,228	\$3,788,513
Non-Rate Revenues	75,000	82,500	90,750	99,825	109,808
Interest Earnings	24,823	24,527	21,877	16,497	15,605
Total Sources of Funds	\$3,599,823	\$3,677,027	\$3,754,027	\$3,830,550	\$3,913,925
Uses of Water Funds					
Operating Expenses:					
Water Supply	\$1,500,000	\$1,575,000	\$1,653,750	\$1,736,438	\$1,823,259
Transmission and Distribution	1,000,000	1,050,000	1,102,500	1,157,625	1,215,506
Administration	105,000	109,200	113,568	118,111	122,835
Utility Billing	173,000	179,920	187,117	194,601	202,386
Engineering	175,000	182,000	189,280	196,851	204,725
Subtotal: Operating Expenses	\$2,953,000	\$3,096,120	\$3,246,215	\$3,403,626	\$3,568,712
Rate-Funded Capital Expenses	250,000	350,000	500,000	600,000	650,000
Total Use of Funds	\$3,203,000	\$3,446,120	\$3,746,215	\$4,003,626	\$4,218,712
Additional Revenue from Rate Increases	210,000	436,800	681,492	945,235	1,229,260
Surplus (Deficiency) after Rate Increase	\$606,823	\$667,707	\$689,304	\$772,159	\$924,473
Projected Annual Rate Revenue Increase	6.00%	6.00%	6.00%	6.00%	6.00%

FIGURE 3. SUMMARY OF FIVE-YEAR RESERVE PROJECTION

Reserve Fund Balances and Recommended Reserve Targets	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20	FY 2020/21
Operating Reserve					
Ending Balance	\$1,982,000	\$1,850,000	\$1,775,000	\$1,740,000	\$1,700,000
<i>Recommended Minimum Target</i>	<i>1,477,000</i>	<i>1,548,000</i>	<i>1,623,000</i>	<i>1,702,000</i>	<i>1,784,000</i>
Capital Rehabilitation & Replacement Reserve					
Ending Balance	\$7,397,161	\$7,397,161	\$6,397,874	\$4,266,338	\$3,934,789
<i>Recommended Minimum Target</i>	<i>2,000,000</i>	<i>2,250,000</i>	<i>2,500,000</i>	<i>2,750,000</i>	<i>3,000,000</i>
Debt Reserve					
Ending Balance	\$550,000	\$563,750	\$577,844	\$592,290	\$607,097
<i>Recommended Minimum Target</i>	<i>555,000</i>	<i>555,000</i>	<i>555,000</i>	<i>555,000</i>	<i>555,000</i>
Total Ending Balance	\$9,929,161	\$9,810,911	\$8,750,718	\$6,598,628	\$6,241,886
<i>Total Recommended Minimum Target</i>	<i>\$4,032,000</i>	<i>\$4,353,000</i>	<i>\$4,678,000</i>	<i>\$5,007,000</i>	<i>\$5,339,000</i>

FIGURE 4. SUMMARY OF REVENUE REQUIREMENTS AND CURRENT VS. NEEDED REVENUE



In this task, NBS will evaluate various methods of funding capital project expenditures, including the amount and source of funds, and the level of expenditures. Figures 5 and 6 provide examples of how this evaluation will be developed and presented in reports and in public workshops and presentations to the Board of Directors.

FIGURE 5. EXAMPLE OF CAPITAL PROJECT FUNDING OPTION EVALUATION

Capital Funding Options	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20	FY 2020/21
Option 1 - High Priority Projects					
Amount of Capital Funding Provided	\$5,400,000	\$6,300,000	\$7,800,000	\$7,500,000	\$8,400,000
Annual Rate Increases Needed	6.0%	6.0%	6.0%	6.0%	6.0%
Option 2 - High and Medium Priority Projects					
Amount of Capital Funding Provided	\$7,200,000	\$8,400,000	\$10,400,000	\$10,000,000	\$11,200,000
Annual Rate Increases Needed	8.5%	8.5%	8.5%	8.5%	8.5%
Option 3 - High, Medium and Low Priority Projects					
Amount of Capital Funding Provided	\$9,000,000	\$10,500,000	\$13,000,000	\$12,500,000	\$14,000,000
Annual Rate Increases Needed	11.0%	11.0%	11.0%	11.0%	11.0%

FIGURE 6. EXAMPLE OF CAPITAL PROJECT FUNDING PLAN

Capital Funding Summary	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20	FY 2020/21
Funding Sources					
Grants	\$200,000	\$0	\$0	\$0	\$0
Use of Capacity Fee Reserves	0	2,500,000	950,000	1,000,000	500,000
Use of New Bond Proceeds	4,900,000	2,746,000	6,350,000	4,900,713	5,118,464
Use of Capital R&R Reserve	50,000	704,000	0	999,287	2,131,536
Rate Revenue	250,000	350,000	500,000	600,000	650,000
Total Sources of Capital Funds	\$5,400,000	\$6,300,000	\$7,800,000	\$7,500,000	\$8,400,000
Capital Project Expenditures					
Transmission and Distribution	\$4,250,000	\$4,915,750	\$6,305,813	\$5,895,136	\$6,683,666
Pumping	1,025,000	1,250,000	1,350,000	1,450,000	1,550,000
Vehicles	75,000	80,250	85,868	91,878	98,310
Other	50,000	54,000	58,320	62,986	68,024
Total Capital Expenditures	\$5,400,000	\$6,300,000	\$7,800,000	\$7,500,000	\$8,400,000
Capital Funding Surplus (Deficiency)	\$0	\$0	\$0	\$0	\$0

TASK 3. COST OF SERVICE ANALYSIS

In this task, for each system, we will determine the cost of providing service to each customer class within that system. This analysis provides a critical component necessary for establishing a defensible administrative record for cost-based rates. Task deliverables include cost-of-service summary tables for each system, which will be incorporated into the rate design task.

Equitably Allocating Costs – The revenue requirements will be equitably allocated to individual customer classes based on well-accepted methodologies. We will review existing customer classes and analyze their consumption/use characteristics to determine if any changes are advisable. The main components of the cost-of-service analysis are:

- 1. Functionalization/Classification of Expenses** – Functionalizing the expenses means arranging costs into basic categories, such as source of supply, treatment, transmission, and distribution, as well as administrative and overhead costs. Once the costs have been functionalized, they are then classified into their various cost components, such as fixed capacity, variable (commodity), or customer-related costs.

2. **Determination of Customer Classes** – Customers are ideally grouped into classes so that they have similar water use and sewer strength characteristics. In the end, each customer class is assigned unique rates, so the grouping must balance equity with the District’s desired rate complexity. Special customers (in this case Idyllwild Arts Academy which represents 20% of water, 30% of sewer use) are generally separated as their own customer class.
3. **Allocation of Costs to Customer Classes** – Expenses are then allocated to individual customer classes based on allocation factors specific to each cost classification, producing fixed and variable revenue requirements for each customer class. These allocations will identify the rate revenue that will be collected from each customer class and used in the actual rate calculations.

TASK 4. RATE DESIGN

NBS will work with District staff to review the current rate structure and develop alternatives for consideration. New rate alternatives will ensure that rates for each system meets the District’s broader rate design goals such as revenue stability and conservation incentive. We will plan to provide up to three rate structure alternatives for each system, all of which will comply with legal requirements, and in particular Proposition 218, for the District to consider. An evaluation of the pros and cons of each rate structure alternative will be included. All rate design alternatives will be based upon the Financial Plan decisions and will support the operations, maintenance, capital improvements and debt service payments approved by the Board.

“The best way to promote financial stability is to collect fixed costs through fixed charges.”

Develop Rate Design Recommendations – Rates will be developed based on the cost of service analysis and we will include a discussion of the relative merits (pros and cons) of the current rate structure compared to the new alternatives. Evaluating the amount of revenue collected from fixed vs. volumetric charges will be an essential component of this process. We will also consider any implications of the recently passed Senate Bill 814 requiring urban water retailers to comply with requirements to discourage excessive water use.

Criteria for Recommending a Rate Design – When evaluating rate design, revenue sufficiency and financial resiliency are critical considerations. NBS’ general approach is to avoid significant *under-collection* of rate revenue – which is the worst-case scenario from a financial perspective. Other criteria for evaluating rate structures include:

- How revenue collected from fixed vs. volumetric rates impacts revenue stability
- How decreased water usage would affect each rate alternative
- How summer peaking patterns are reflected in water rate design
- How meter sizes and hydraulic capacity factors are used in calculating fixed charges
- If tiered rates are appropriate, the number of tiers that can be supported by a defensible cost basis, and to what customer classes tiered rates should apply
- The cost-basis for the amount of revenue collected within each tier
- Impacts on customer monthly bills and in particular the difference between on primary residence and second-home customers.
- How consumption penalties can be used to achieve conservation goals when used in conjunction with cost-based tiered rates.

The rate structure alternative selected will ultimately provide the basis for comparing monthly customer bills under both the current and new rate structure. However, all rate structures will be “revenue neutral” because they will all collect the same amount of revenue, both in total and within each customer class.

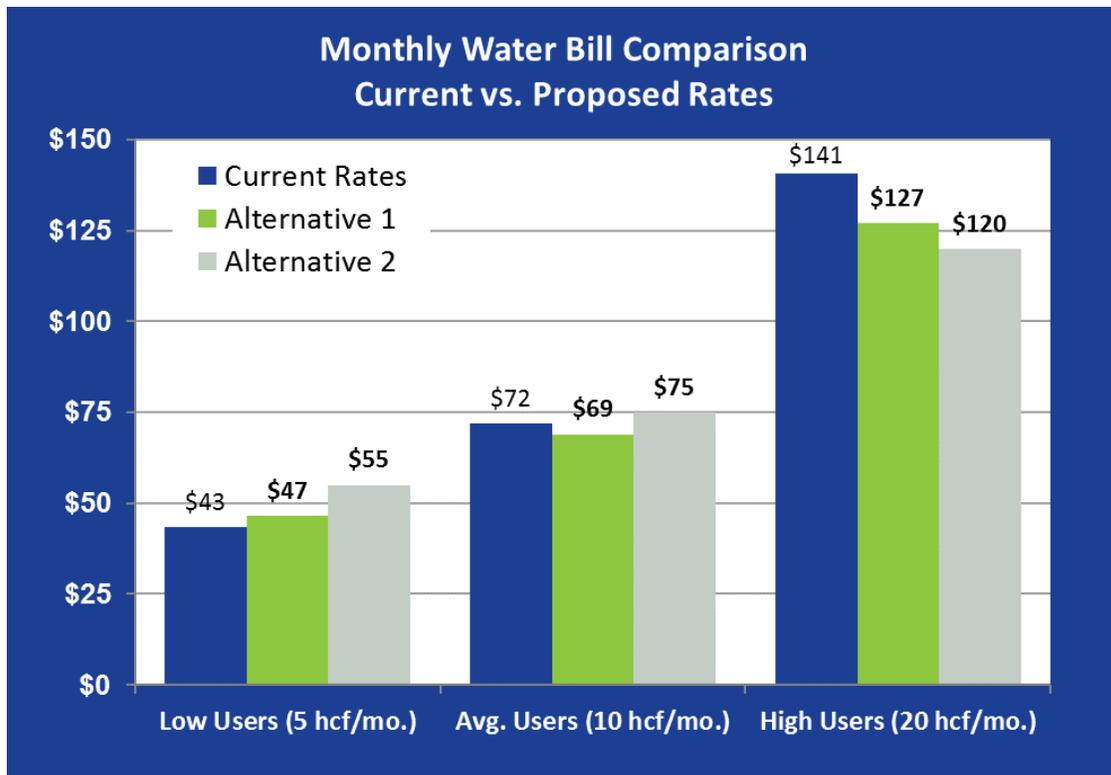
Calculate Fixed and Volumetric Charges – Ideally, fixed charges should be used to cover fixed costs; however, due to the emphasis on conservation, this is rarely the case. As a result, many agencies have struggled with revenue stability during times of uncertain demands. Fixed charges will reflect the number of accounts, equivalent meters, and size of meters. In contrast, volumetric rates should cover variable costs and should be allocated in proportion to consumption. Determining the best combination of fixed and variable charges is also influenced by other factors, such as revenue stability, conservation, ease of understanding, and ease of administration. NBS will strive for an appropriate balance between fixed and variable charges.

In order to compare various financial plan alternatives, we will prepare annual or monthly rate tables and bill comparisons (depending on the District’s preference) for various customer classes, to illustrate how the rate adjustments will affect customer bills, as illustrated in Figures 7 and 8. These tables and charts will be used in the report, and in workshops and presentations.

FIGURE 7. SAMPLE CURRENT AND PROPOSED RATE TABLE

Financial Plan Option	Current Rate (\$/EDU)	Proposed Rates (\$/EDU)				
		FY 2018/19	FY 2019/20	FY 2020/21	FY 2021/22	FY 2022/23
Alternative #1	\$343.68	\$360.86	\$378.91	\$397.85	\$417.75	\$438.63
Alternative #2	\$343.68	\$367.74	\$393.48	\$421.02	\$450.49	\$482.03
Alternative #3	\$343.68	\$378.05	\$415.85	\$457.44	\$503.18	\$553.50

FIGURE 8. SAMPLE BILL COMPARISON



TASK 5. CONSERVATION RATE ANALYSIS

To address the sensitivity of the interaction between water conservation and the rate structure alternatives, NBS will prepare adjustments to rates (in the form of volumetric surcharges) for various levels of conservation. We note that conservation rates consider future levels of drought or, alternatively, water shortage scenarios. Drought surcharges are an additional charge to offset revenue reductions associated with reduced water sales. Such rates can also be used to encourage conservation and/or ensure revenue stability during more severe drought stages.

This task will develop a rate structure to ensure that the District can successfully accommodate reductions in water sales from a financial perspective. NBS will work with District staff to develop rates that consider and reflect specific conservation issues (supply costs, changes in the costs of energy, chemicals, etc.). Ideally, drought rates (or surcharges) would coincide with an existing water shortage contingency plan or “drought plan” where the District that identifies conservation measures at various stages desired conservation.

Figure 9 shows an example of the resulting volumetric rates for each drought (water-shortage) level that we prepared for a recent client.

FIGURE 9. EXAMPLE OF DROUGHT-STAGE VOLUMETRIC RATES

Conservation Goal	Water Consumption (hcf/yr.)	Baseline Rev. Req't from Volumetric Charges	Cost Reduction Due to Conservation	Target Rev. Req't from Volumetric Charges	Uniform Commodity Rates (\$/hcf)	Drought Surcharge (\$/hcf)
0%	11,473,591	\$ 18,013,538	\$ -	\$ 18,013,538	\$1.57	\$0.00
10%	10,326,232	\$ 18,013,538	\$ (829,195)	\$ 17,184,343	\$1.66	\$0.09
20%	9,178,873	\$ 18,013,538	\$ (1,658,390)	\$ 16,355,148	\$1.78	\$0.21
30%	8,031,514	\$ 18,013,538	\$ (2,487,585)	\$ 15,525,953	\$1.93	\$0.36
40%	6,884,155	\$ 18,013,538	\$ (3,316,780)	\$ 14,696,758	\$2.13	\$0.56
50%	5,736,796	\$ 18,013,538	\$ (4,145,975)	\$ 13,867,563	\$2.42	\$0.85
60%	4,589,436	\$ 18,013,538	\$ (4,975,170)	\$ 13,038,368	\$2.84	\$1.27

TASK 6. PREPARE STUDY REPORT

NBS will prepare draft and final reports for review by District staff that include our final recommendations for the financial plan, cost of service analysis and rate design, for each system. Sufficient information will be provided in the report for staff, the Board, and the public to review and understand the study.

The final report will include documentation of the financial plans, capital funding summaries and reserve fund projections for the next five years, although the financial models will cover a 20-year period. An executive summary and introduction will present the purpose of the report and results of the study. Tables, graphs, and charts will be used as appropriate, but the emphasis will be on providing a clear, concise, and understandable report that will provide the District with a thorough administrative record that addresses:

- Findings and recommendations

- Overall study methodology, with reference to the AWWA M1 Manual, Prop 218, and related industry standards, as needed to support the analysis and study recommendations
- Five-year financial plan, including a revenue and expense projection, reserve fund projection and capital funding summary for the water and wastewater systems
- Propose rates for a five-year period
- Customer bill comparisons
- Supporting justification (calculation tables that the general public could understand)
- Appropriate figures and tables summarizing key aspects and results of the study

We will provide an electronic copy of the draft report in Microsoft Word format, for the District’s review and comment. Once we have received the District’s comments, we will incorporate those comments into a final report, and provide an electronic copy of the final report in PDF and Microsoft Word formats.

TASK 7. MEETINGS AND PRESENTATIONS

We will include sufficient time to meet with District staff and the Board of Directors to not only facilitate study progress, but to ensure staff and Board members understand the assumptions, methodology, and outcomes of the financial plan, cost of service analysis and rate design.

7.1 Progress Meetings with District Staff – In addition to the kick-off meeting, we will attend two (2) onsite progress meetings with District staff to review initial work products and gain input from staff on the direction of the study. We also expect to have regular phone conversations with District staff to discuss how the study is proceeding, solicit input, and prior to the workshop and Board presentation to review and discuss the study’s initial results and work products.

7.2 Board Presentations – We will attend two (2) Board meetings to present the updated Financial Plan, Cost of Service Results and Rate Options to the Board of Directors.

We will prepare all presentation material required for the Board of Directors meetings, to support the new rate and fee adoption process.

Please note: if it is determined during the course of this study that additional workshops or presentations are needed, NBS can certainly provide that service on an as-needed basis.

***“Elected officials
and customers will
not accept rates
that they do not
understand.”***

TASK 8. REGIONAL BILL COMPARISONS (OPTIONAL)

NBS will compare current and proposed water rates to seven other neighboring communities in the local area to see how the District’s rates compare to other regional water and wastewater collection providers. The results of this comparison will be presented in the rate study report and presentations, and will provide staff and the Board with a basis to compare the cost of delivering water service to customers in the region.

TASK 9. ELECTRONIC RATE MODELS (OPTIONAL)

NBS will develop MS-Excel based financial planning models, for use by District staff once the study is complete. The model will be custom-built to the District’s specific needs and will have the functionality to update revenue and expenses, prepare what-if scenarios, and determine annually if the proposed rate increase is needed, or if it can be modified or delayed. The model will have a dashboard where assumptions

can be modified and will flow through to the rate alternative results. In addition, the model will address pass-through costs (if applicable), adjust inflation factors and other variables, and graphically display charts and figures to communicate outcomes and recommendations. We will review the model with staff during the development of the rate study to make sure it meets your requirements and preferences.

One (1) training session will be provided with the District's Project Manager at the conclusion of the study. The goal of this session will be to review all tabs in the model and to provide sufficient information for the District to accept the model and have the ability to update it going forward.

Please note: NBS' models are not "proprietary" – that is, we do not create "black-box" models that are difficult to understand and follow. We believe that simplicity and transparency are essential.

INFORMATION REQUIREMENTS FROM THE DISTRICT

Financial / Administrative Data

- 1) FY'15-16 (actuals) through '17-18 **operations and maintenance (O&M) budgets** which show line item detail for revenues and expenditures for:
 - a) Water Services
 - b) Sewer Services
- 2) The District's Comprehensive Annual Financial Report (**CAFR**) or Financial Statements for Fiscal Year 2015/16 and FY 2016/17, if available (draft is sufficient if only that is available).
- 3) **Capital improvement plan** (CIP) including project descriptions and costs by year resulting from recent master plans and/or capital planning efforts.
- 4) **Cash balances** in all water and sewer related funds/reserves for the beginning of FY'17-18. (A Trial Balance report often fulfills this request.)
- 5) **Repayment schedules** for all outstanding bonds and loans (i.e., periodic principal and interest payments due during the remaining term of any outstanding loans or bonds to which the utilities are obligated).
- 6) **Grant/bond/loan documents** for all outstanding grants, bonds and loans – specifically the Official Statement sections that describe the project description, rate covenants, coverage ratio calculation, indenture, rate covenants, additional bonds tests, and definitions.
- 7) **Projected growth rates** for O&M costs (e.g., customer growth, PERS, general inflation, labor cost inflation, purchased water, chemicals, energy, etc.) if available. Otherwise, we will work with staff to develop relevant O&M growth rates.
- 8) **Current water and sewer rates**; please include specific rate schedules for each customer type within each utility category, if applicable.
- 9) Copy of **previous water and sewer rate studies**.
- 10) Any **other information or circumstances** which could impact the costs of water supply, treatment, transmission and distribution of water to customers, collection and treatment of wastewater from customers.

Customer Billing Data

- 11) Two to three years of the **utilities' customer billing information** for water and sewer (separately) in MS Excel or Access database, or similar format. At a minimum, the customer information should include the following for each customer account:
 - a) Account or customer number
 - b) Customer type (e.g., single/multi-family, commercial, industrial)
 - c) For commercial and industrial customers, customer details
 - d) Meter size (for water if applicable)
 - e) Date of meter read (for water) & billing date (for sewer)
 - f) Quantity billed (water consumption, or units billed)
 - g) Dollar amount billed (fixed and volumetric)

- 12) Please describe how **adjustments are handled**. For example, how are misreads or billing adjustments made? Does your billing system open a new account for renters, or continue with the same account number (i.e., are the records likely to have duplicate accounts included)?

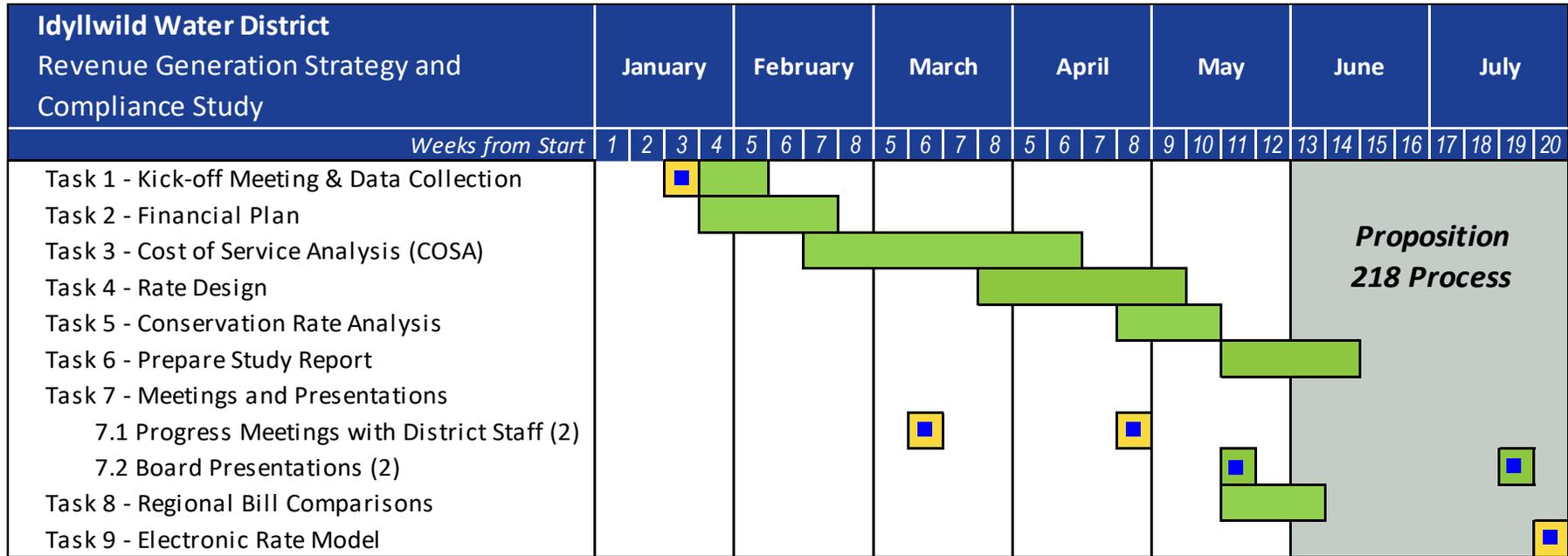
System Operations, Design & Planning Data

- 13) **Total annual water system production** - including estimated system losses, peak monthly production, by source of supply (if available).
- 14) For the past two to three years, history of **monthly effluent** managed at the wastewater treatment plant, along with monthly loadings in pounds per month (BOD and TSS).
- 15) Any **special service agreements and/or contracts** with utility customers or providers – public and private – pertaining to rates and charges.
- 16) If available, a copy of District **policies, ordinances, and resolutions** related to rates, rate structures, reserve management, and capital improvement financing and any related rate studies.
- 17) Copy of **Water and Sewer System Master Plans**, (if available).

PROPOSED PROJECT SCHEDULE

The following is an overview of our proposed project schedule. We will discuss a detailed schedule at the kick-off meeting, along with the expected timing for individual tasks. *Note: This page is intentionally formatted differently to improve legibility of the table contents.*

PROJECT SCHEDULE FOR IDYLLWILD WATER DISTRICT

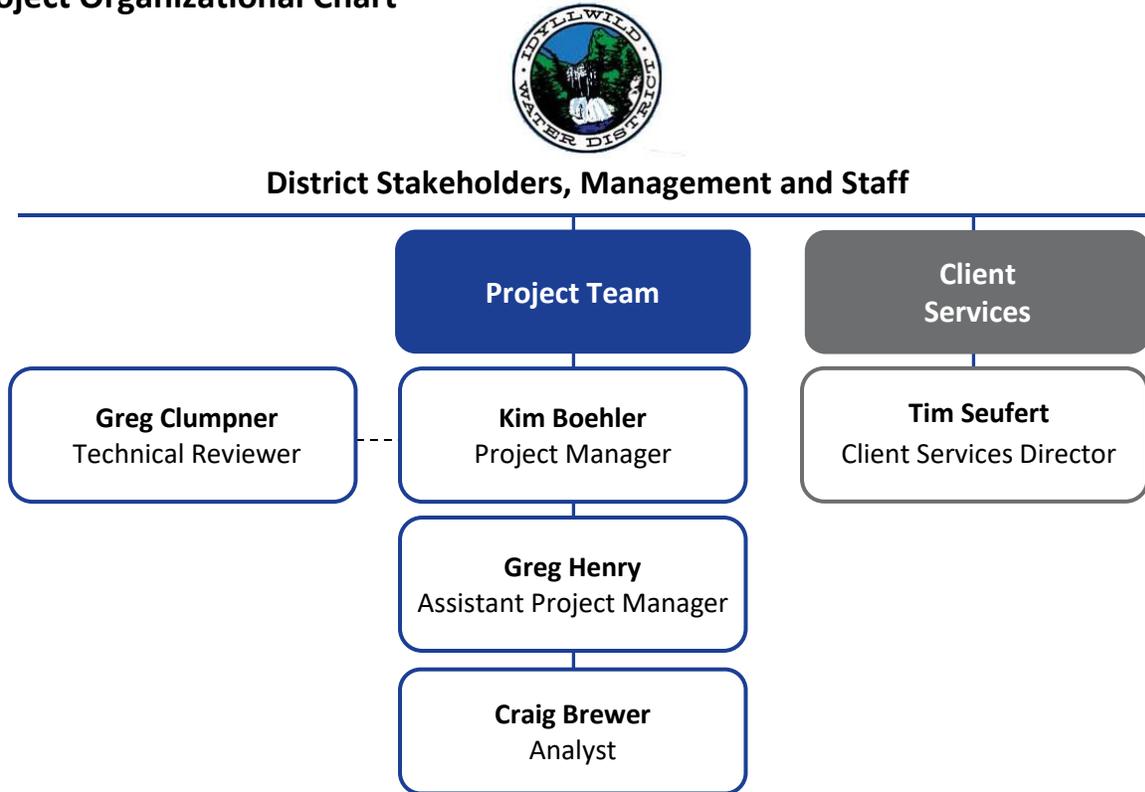


**Proposition
218 Process**

- Active task work
- Staff Meeting (estimated, to be scheduled as needed)
- Board Presentation (estimated, to be scheduled as needed)

PROJECT TEAM

Project Organizational Chart



Key Personnel

NBS' staff of 40 professionals have extensive experience in the fields of finance, management, engineering, and local governance. We work with our clients as partners by developing an intricate knowledge of their needs and responding with strategic and timely solutions.

The following is a brief overview of the NBS consulting team proposed to manage and complete the work noted for this engagement. With the exception of Greg Clumpner, who is located in Davis, CA, the project personnel are all located in our Southern California office in Temecula within close proximity to the District.

KIM BOEHLER, PROJECT MANAGER

Project Role and Responsibilities: Kim Boehler will direct the work efforts of the project team and will work closely with the District's project manager to discuss and review the overall approach, development of the financial plan, rate alternatives, and creative solutions to consider. She will design and direct analytical efforts of the project team, provide senior-level technical analysis and review, and monitor the schedule and delivery of work products to the District's satisfaction.

Work Experience: Kim is a project manager who brings over 11 years of experience at NBS, in all three of our major consulting practice areas. She has a comprehensive understanding of agency funding needs through her work in special financing district administration, overhead cost allocation analysis, user fee studies and utility financial management. For the past eight years, Kim's work has focused exclusively on

financial planning, cost-of-service analyses and rate design for water and wastewater utilities in California. She leads project teams on water and wastewater rate and capacity fee studies for our public agency clients. Kim has completed over 100 utility rate and fee studies, and often speaks at public workshops, industry conferences and educational seminars on related issues.

GREG CLUMPNER, TECHNICAL REVIEWER

Role and Responsibilities: Greg Clumpner will provide senior-level technical review as needed on this project and assist the project team in developing the best solutions that will fit the District's unique characteristics and issues.

Work Experience: As the director of NBS' Utility Rate Study Practice, Greg's 35-year professional career has focused on cost-of-service rate studies for municipal water, sewer, recycled water and solid waste agencies. He regularly makes technical presentations at industry conferences and client workshops. Greg's practice includes management-consulting assignments related to utility operations, system valuations, and feasibility studies. He has completed over 300 similar studies during his career.

GREG HENRY, ASSISTANT PROJECT MANAGER

Role and Responsibilities: Under the direction of Kim Boehler, Greg Henry will take a key role in the day-to-day management of the technical and administrative aspects of the project by overseeing the data analysis, development of the financial models, cost-of-service analyses, and rate alternatives. He will be a day-to-day contact for the District throughout this study. Greg will be fully conversant in all findings and will be present for all progress meetings and onsite for presentations to the District Board.

Work Experience: Greg offers six years of experience in financial analyses, budgeting, drought planning, rate analyses and information technology. He spent three years of this time working directly with a California municipality, focused on enterprise fund management and has extensive experience with financial and statistical analyses and modeling. He serves as the primary consultant on project teams completing water and sewer utility rate studies and capacity fee analyses for cities and special districts in California. Greg takes a key role in the development of financial models, establishing multi-year financial plans, performing cost-of-service analysis and rate design for utility rate studies. He also makes presentations to City Councils, Boards and other stakeholder groups to present study outcomes and gain input.

CRAIG BREWER, UTILITY RATE ANALYST

Role and Responsibilities: Under the direction of the project manager, Craig Brewer will support the project team in performing large scale data analysis and validation, data input and will also help develop the financial plans. As needed, he will facilitate data collection and reminders for District staff in order to move projects forward on the agreed upon timeline for completion.

Work Experience: Craig has a Bachelor's of Science degree in Applied Mathematics and offers over two years of experience working directly with cities and special districts in California on financial analyses, large scale data analysis and database management.

TIM SEUFERT, CLIENT SERVICES DIRECTOR

Roles and Responsibilities: Tim Seufert will be responsible for obligating NBS to all commitments, schedule, and pricing for the project. He will ensure that the District’s fundamental objectives are being met at all times. He is not proposed to record any time or expense against the project budget, but rather included as an active representative of our corporate commitment to the highest level of service.

Work Experience: Tim Seufert has two decades of local government experience with revenue tools in California. He also has a decade of corporate financial experience, and has been involved with projects from their inception and feasibility stage to their completion. Mr. Seufert has been a presenter at training seminars and an author on local government finance issues including the California League of Cities, the California Special Districts Association, California Society of Municipal Finance Officers, and other forums.

Full resumes for the project team are included in separate “Attachment A: Project Team Resumes”.

REFERENCES

Below is a sampling of projects and references similar in scope and magnitude to the District's study.

CABAZON WATER DISTRICT COMPREHENSIVE WATER RATE STUDY

Project Dates: 2016 – 2017; New Rates Adopted April 2017



Contact Information

Calvin Louie
General Manager
P: 951.849.4442
E: CLouie@cabazonwater.org

NBS Staff: Greg Henry and
Kim Boehler

NBS recently completed a Water Rate Study for Cabazon Water District. At the start of this project, the District was running at an operating loss with limited reserves, and was not meeting its required debt coverage ratio. As a result, the project had an accelerated timeline. The District has groundwater as its only source of supply, and currently no external recharging capabilities. Therefore, conservation is a primary concern.

Key objectives of this study included developing a defensible tiered rate structure, developing rates that would provide the District with greater revenue stability, and addressing the constraints related to rate adjustments for a large contract customer.

In addition, NBS was able to add value in communicating the need for a rate adjustment to the Board of Directors and to the public in several workshops. District staff was expecting significant community pushback on any proposed rate increases, and clear communication, helped diffuse the potential conflict. The District successfully adopted new water rates in April 2017.



“The entire rate study could not have been much smoother. Mr. Henry and Ms. Boehler were exemplary in regards to arranging everything under a strict timeline, and were always readily available when a question should arise. With their work, we could not be happier, and we look forward to working with them again in the future.”

Elizabeth Lemus, Administration Manager, Cabazon Water District

ARVIN COMMUNITY SERVICES DISTRICT

WATER RATE STUDY

Project Dates: 2015 – 2017, New Rates Adopted January 2017



Contact Information

Raul Barraza, Jr.
General Manager
P: 661-854-2127
E: rbarraza@arvincsd.com

NBS Staff: Greg Henry and
Kim Boehler

NBS recently completed a Water Rate Study for Arvin Community Services District. The District's sole source of supply is groundwater and when NBS began the study, many of the existing wells were contaminated with naturally occurring arsenic. The primary issue addressed in this study was developing a five-year rate plan that would support repayment of an SRF loan that was planned to fund the capital costs the District was incurring for arsenic mitigation. The District was considering four different alternatives for arsenic mitigation and NBS assisted the District in evaluating the alternatives and developing a phased-in approach to funding the District's needs.

NBS also shepherded the project through agency staff turnover, providing stability in the project team, which helped maintain momentum throughout the process.

In addition, the community is primarily Spanish-speaking and NBS worked with District staff to develop public notices in both English and Spanish (District staff provided translation) to help ensure the community was well informed. The District successfully adopted new water rates in January 2017.



"You made everything easy to understand, especially being new to the industry. Thanks for all your hard work."

Raul Barraza, General Manager, Arvin Community Services District

ROWLAND WATER DISTRICT
WATER AND RECYCLED WATER RATE AND CAPACITY FEE STUDY
Project Dates: 2016 – 2017



Contact Information

Sean Henry
Finance Officer
P: 562.697.1726
E: shenry@rowlandwater.com

NBS Staff: Kim Boehler and
Greg Henry

NBS recently completed a Water and Recycled Water Rate and Capacity Fee Study for Rowland Water District. When the study began, the District was projecting an operating loss and was not expected to meet its required debt coverage ratio without a rate increase. A key objective in this study was to develop potable water rates that collect a greater percentage of revenue from fixed charges to ensure long-term revenue stability for the District. Other objectives included developing cost-based tiered volumetric rates, drought rates to coincide with the District's Water Shortage Contingency, surcharges for customers in various elevations zones and new water capacity fees.

For the recycled water system, the main objectives were to develop a method for allocating costs in the District's budget to the potable and recycled water systems and to establish a financial plan that achieves the District's goal to have recycled water customers bear a greater percentage of their costs. NBS supported District staff in a Board workshop to obtain approval to move forward with the Proposition 218 process and at the public hearing to adopt new rates.

"In my sixteen years as a Finance Officer, I have worked on numerous rate studies. We found that working with Kim Boehler and her team at NBS to be a great experience. They provide tremendous knowledge and experience in helping you develop water rates and fees that are in line with your objective. I would recommend NBS to any other agency."



SEAN HENRY
finance officer

WATER AND RECYCLED WATER RATE AND CAPACITY FEE STUDY | APRIL 2017

PROPOSED FEE

As requested in the RFP, the proposed fee has been included as a separate document; please see “Attachment B: Proposed Fee”.

ATTACHMENT A: PROJECT TEAM RESUMES

Full resumes for our proposed project team follow.

RESUME HIGHLIGHTS

- 10+ years of experience
- Over 90 cities, counties, and special districts served
- Specialist in financial, rate and cost analysis for municipal water and sewer utilities
- American Water Works Association (AWWA), Member

EDUCATION

- Bachelor of Science, Business Administration and concentration in Finance, California State University, San Bernardino

SPEAKING ENGAGEMENTS

- “How Conservation, the Drought and Legal Issues Are Changing the Landscape for Rate Setting in California,” American Water Works Association Water Education Seminar, August 2016
- “Conservation, the Drought and Social Justice,” California Water Environment Association Annual Conference, April 2016
- “Brown Lawns and the Changing Landscape of California Water Rates: Next Steps?” AWWA CA-NV Section Spring Conference, March 2016
- “Water and Sewer Rates: from Defensibility to Tailor Made Rate Design,” CSDA Annual Conference, September 2015
- “Basic Rate Making Principles and Key Issues Affecting Rates in California,” American Water Works Association Water Education Seminar, August 2015
- “Recycled Water Pricing Methodologies”, CWEA, May 2014 (co-presented with Greg Clumpner)
- “Drought Impacts and Recycled Water Pricing” and “Water and Sewer Rate Studies and Key Issues Affecting Rates in California,” American Water Works Association Water Education Seminar, August 2014
- “Water and Sewer Rate Studies and Key Issues Affecting Rates in California,” American Water Works Association Water Education Seminar, August 2013
- “Financial Viability and the “New Normal” - The Unique Challenges of California Sewer Agencies” and “Maintaining Financial Viability in the Face of the “Perfect Storm” – Meeting the Challenges in California Today,” CWEA, April 2012

“In my sixteen years as a Finance Officer, I have worked on numerous rate studies. We found that working with Kim Boehler and her team at NBS to be a great experience. They provide tremendous knowledge and experience in helping you develop water rates and fees that are in line with your objective. I would recommend NBS to any other agency.”

ROWLAND WATER DISTRICT
SEAN HENRY, FINANCE OFFICER
Water and Recycled Water Rate and Capacity Fee Study, April 2017

BIOGRAPHY

Kim Boehler is a project manager who brings over 10 years of experience at NBS, in all three of our major consulting practice areas. She has a comprehensive understanding of agency funding needs through her work in special financing district administration, overhead cost allocation analysis, user fee studies and utility financial management. For the past eight years, her work has focused exclusively on financial planning, cost-of-service analyses and rate design for water and wastewater utilities in California. Kim leads project teams on water and wastewater rate and capacity fee studies for our public agency clients. She has completed over 100 utility rate and fee studies, and often speaks at public workshops, industry conferences and educational seminars on related issues.

RELEVANT PROJECT EXPERIENCE

- Arvin Community Services District, Water Rate Study
- City of Arvin, Sewer Rate Study
- Avila Beach Community Services District, Water and Sewer Rate and Connection Fee Study
- Azusa Light and Water, Water Rate Study
- Bellflower Mutual Water Company, Water Rate Study
- Calaveras County Water District, Water and Sewer Rate Study
- Citrus Heights Water District, Water Rate Study
- City of Colton Water Rate and Connection Fee Study
- City of Colton and Grand Terrace Sewer Rate Study
- Cucamonga Valley Water District, Water and Recycled Water Connection Fee Study
- Cucamonga Valley Water District, Water Rate Study
- Culver City, Sewer Rate Study
- Desert Water Agency, Water, Sewer and Recycled Water Rate Study
- Desert Water Agency, Water Rate Analysis to Address Tribal/Non-Tribal Rates
- Dixon-Solano Water Authority, Water Rate Study
- East Valley Water District, Water and Sewer Financial Plans
- City of Fort Bragg, Water, Sewer and Storm Drain Rate Study
- City of Greenfield, Water and Sewer Utility Revenue Requirement Analysis
- Hidden Valley Lakes Community Services District, Water and Sewer Rate Study
- City of Livermore, Water Rate and Connection Fee Study
- City of Los Altos, Storm Drain Master Plan Financing Analysis
- City of Morgan Hill, Water and Sewer Rate Study
- City of Pasadena, Water Rate Study
- City of Redding, Water, Sewer and Solid Waste Rate Study and Connection Fee Analysis
- Rural North Vacaville Water District, Water Rate Study
- City of San Carlos, Sewer Revenue Requirement Analysis
- City of Santa Paula, Water and Sewer Rate Study
- San Mateo County, Sewer Rate Study
- City of Sausalito, Sewer Rate Study City of Solvang, Water and Sewer Rate and Connection Fee Study
- City of Seal Beach, Water and Sewer Rate Study
- City of Stanton, Sewer Rate Study
- Suisun-Solano Water Authority, Water Rate Study
- Sussex County, Delaware, Water, Sewer Rate and Capacity Fee Study and Oversizing Credit Analysis
- City of Taft, Sewer and Solid Waste Rate Study
- City of Thousand Oaks, Water and Sewer Rate Study
- Twenty-nine Palms Water District, Water Rate Study
- City of Vallejo, Water Rate and Connection Fee Study
- Victorville Water District, Water Rate Study
- City of Waterford, Water and Sewer Rate and Connection Fee Study
- West County Sewer District, Sewer Rate and Connection Fee Study

RESUME HIGHLIGHTS

- 30 years of experience in financial and economic analyses
- Consulting practice focuses on municipal water, sewer, and recycled water utilities
- Completion of over 200 rate studies to date

EDUCATION

- M.S., Agricultural/Managerial Economics, U.C. Davis, 1983
- B.S., Environmental Planning, UC. Davis, 1977

PROFESSIONAL AFFILIATIONS

- Vice-Chair, City of Davis Utility Rate Advisory Committee
- Former Chairman, City of Davis Planning Commission
- Past President, Sacramento Economics Roundtable
- Association of California Water Agencies (ACWA), Member
- American Water Works Association (AWWA), Member

“You have done a great job on this project, especially with the challenges we faced. I would be happy to serve as a client reference whenever needed in the future. Please have any of your prospective clients call me.”

EL DORADO IRRIGATION DISTRICT
JIM ABERCROMBIE
GENERAL MANAGER

[Greg Clumpner served as the Project Manager in completing a Cost-of-service Study of Water, Sewer, and Recycled Water Rates for the District]

RECENT SPEAKING ENGAGEMENTS

- “Cadillac Desert or Ford Pinto Desert? An Update on Water Finances in California” – CSMFO, Spring Conference, March 1, 2016
- “Fiscal Health vs. Pricing for Conservation” – ACWA Fall Conf., Indian Wells, CA, Dec. 2015
- “What’s in Your Rates? Drought? Recycled Water? Social Justice?” – AWWA/ACE 2015 National Conference, Anaheim, CA, June 2015
- “The California Drought – What’s in Your Rates?” – CSMFO 2015 Annual Conf.
- “Water Rates: Fairness, Equity and ‘Social Justice’?”, NBS Primer, 2014
- “The ‘Perfect Storm’ or the ‘New Normal’? Meeting the Challenges of Maintaining Financial Viability”, Utility Management Conference, Miami, February 2012
- The New Financial Reality, ACWA Spring Conference, Sacramento 2011

BIOGRAPHY

Greg Clumpner’s 35-year professional career has focused on financial, economic, and cost-of-service rate analyses for municipal water, sewer, recycled water and solid waste agencies. He regularly presents technical papers at industry conferences and client workshops. His practice has increasingly focused on management consulting related to municipal utility operations and capital improvements.

- **Utility Cost-of-Service Rate Studies:** Greg has prepared more than 200 multi-year financial plans, cost-of-service analysis, and rate design studies as well as conservation-oriented water rates, funding analysis for water, sewer, and solid waste utilities. These rate studies have primarily been for California clients, although he has also completed projects in Malaysia, Sri Lanka, Egypt, and Mexico.
- **Management Consulting & Strategic Planning:** His management consulting and strategic planning experience includes system operations, financial analyses, and long-term funding strategies for municipal agencies. Greg also has an extensive background in system valuations of capital facilities and systems, facility acquisitions, and municipal versus private operations.

- **Project Financing/Bond Feasibility Studies:** His financing/bond feasibility study experience includes successfully preparing bond feasibility reports resulting in the issuance of more than \$500 million in revenue bonds to finance the acquisition or construction of municipal facilities.

SAMPLE OF RELEVANT PROJECTS

City of Redding, CA – Water, Sewer, and Solid Waste Rate and Impact Fee Study. NBS completed an extensive and highly visible cost-of-service study of water, sewer, and solid waste rates and system capacity charges in 2013 that addressed City policies and overall objectives in developing rate structure alternatives. A key part of this study was working with a City Council-appointed Citizens Advisory Group that reviewed rate alternatives and provided recommendations to the Council. Key tasks included preparing financial/rate setting policies, financial plans, projecting net revenue requirements, cost-of-service analyses, and alternative rate designs. NBS updated this study in 2016. *Client project manager: Brian Crane, Public Works Director. Phone: 530.245.7155 bcrane@ci.redding.ca.us.*

El Dorado Irrigation District, Placerville, CA – Water, Sewer, and Recycled Water Cost-of-Service and Rate Design Study. Greg conducted an extensive and high-visibility cost-of-service study of water, sewer, and recycled water rates, including working with a 10-person cost-of-service study committee and regular updates with the district board. Key tasks include reviewing existing and recommending changes to financial/rate setting policies, alternative rate design methodologies, and recommended water, sewer, and recycled water rates. *Client project manager: Jim Abercrombie, EID General Manager. Phone: 530-642-4055. jmabercrombie@eid.org*

Pajaro Sunny Mesa CSD, CA – Water Rate and Capacity Fee Study. This rate study incorporated direction from the PSMCSD staff and the District’s Board, and included a financial plan, a cost-of-service rate analysis, and evaluated various rate design alternatives for the District’s review. Recommendations were collaboratively developed by District staff, the Board, and NBS. As a part of the NBS project team, DeLoach & Associates, Inc., prepared an Organizational Staffing and Classification Analysis. Rate study results incorporated recommended staffing adjustments and classification plans as directed by the District’s Board. *Client contact: Don Rosa, General Manager. Phone: 831.722.1389. donrosa@pajarosunnymesa.com*

Valley of the Moon Water District, Sonoma, CA – Water Rate Study. This comprehensive rate study evaluated the District’s rate structure along with zonal elevation charges. Water consumption data and billing records provided the basis for developing rate and cost allocation alternatives, with the intent of improving revenue stability. *Client contact: Dan Muelrath, General Manager. Phone: 916.725.6873.*

Desert Water Agency, Palm Springs, CA – Water Rate Analysis to Address Tribal/Non-Tribal Rates. In 2012, when the District was preparing for a new budget cycle, NBS reviewed the District’s internal update to the utility rate model, to ensure that the rate model was generating accurate outcomes and that the Water utility was on track to implement the planned rate increases for the next two years. In 2013, NBS started a specialized rate study to determine water rates for Tribal and Non-Tribal lands under a new Federal law restricting local agency charges to Tribal lands and residents. *Client contact: Martin Krieger, Finance Director. Phone: 760.323.4971. martin@dwa.org*

City of Santa Paula, CA – Water and Sewer Rate Study and Workshops. NBS is currently preparing water and sewer rate studies for Santa Paula and conducting community workshops intended to solicit community input for the rate design addressed in the cost-of-service rate studies. Key aspects of this study are high costs for sewer treatment services provided by a PERC Water-operated treatment plant and high raw water costs, which have increased by over 300 percent in the last 5 years. Redesigning both water and sewer rate structures is also a key objective. *Client project manager: Sandy Easley, Finance Director. Phone: 805.525.4478, ext. 204. SEasley@spcity.org*

RESUME HIGHLIGHTS

- Six years of experience and knowledge of financial and economic analysis
- Over three years of hands-on work experience in a local agency setting, within water and sewer enterprise and general funds
- Extensive experience with analysis software, databases and spreadsheet programs

“... [Greg] made everything easy to understand...”

Arvin Community Service District
Raul Barraza, Jr.
General Manger

EDUCATION

- Master of Science, Mathematics, University of Houston
- Bachelor of Arts, Mathematics, Mississippi State University

BIOGRAPHY

As a Rate Consultant at NBS in our Utility Rate Practice, Greg Henry has extensive experience with financial and statistical analyses and modeling. His technical skills are essential to the work we perform. This includes long term financial forecasting, net present value modeling for capital projects and budget analysis. Greg is an expert in manipulating utility billing software to extract and prepare data for utility rate studies. He is utilized in particular for analyzing and manipulating large and complex data sets extracted from client information systems, operating and capital budgets.

In addition to his technical skills, Greg’s background as math professor honed his ability to dissect and present complex information. He has been an asset to the project team on similar studies, where he has been able to present complex technical information in an easy to understand format for elected officials and the general public.

RELEVANT PROJECT EXPERIENCE

- Arvin Community Services District, Water Rate Study
- City of Azusa Light and Water Department, Water Rate Study
- Cabazon Water District, Water Rate Study
- City of Colton, Water Rate and Connection Fee Study
- City of Colton and Grand Terrace, Sewer Connection Fee Study
- City of Davis Sewer, Rate Study
- Montecito Water District, Water Rate Study
- City of Morgan Hill, Water and Sewer Rate Study
- Mountain House Community Services District, Water and Sewer Rate Study
- Napa Sanitation District, Sewer Rate Study
- City of Pasadena, Water Rate Study
- Rowland Water District, Water Rate Study
- Victorville Water District, Water Rate Study

RESUME HIGHLIGHTS

- Two years of municipal finance consulting experience
- Extensive experience in large-scale data analysis, database management, and financial analysis

EDUCATION

- Bachelor of Science in Applied Mathematics, University of California, San Diego

BIOGRAPHY

Craig Brewer is an Analyst at NBS in our Utility Rate Practice. He offers two years of experience in financial analyses, special financing district administration, tax roll submittal and performing various parcel and financial audits for public agency clients.

Craig provides support to project teams completing water and sewer utility rate studies, for cities and special districts in California. He performs various financial analyses, data management, and utility customer data analysis for utility rate and capacity fee studies. Craig's technical expertise is essential to the work performed by NBS.

RECENT PROJECT EXPERIENCE

- City of Beaumont, Sewer Rate Study
- Cabazon Water District, Water Capacity Fee Study
- City of Colton, Water and Sewer Capacity Fee Study
- City of McFarland, Water and Sewer Rate Study
- City of Monrovia, Water and Sewer Rate and Capacity Fee Study
- County of San Luis Obispo, Wastewater Capacity Fee Study
- City of Santa Paula, Water and Sewer Rate Study
- West County Wastewater District, Sewer Rate and Capacity Fee Study

OTHER RELEVANT CONSULTING EXPERIENCE

- Fiscal Consultant Reporting for Redevelopment Agencies to support repayment of bonds; includes analysis of Tax Rate Areas (TRAs), land use class make-up, top ten taxpayers, historical assessed valuation, historical appraisal changes and projection tax increment tables
- Tax Rate Area and Boundary Audits using ArcGIS and secured property tax roll data
- Successor Agency Recognized Obligation Payments Schedule (ROPS) Audits
- Prepared annual tax roll submittals for various Community Facilities Districts and Assessment Districts following the Rate and Method of Apportionment