Borrego Water District
AGENDA
Special Meeting of the
Board of Directors
March 15, 2011
9:00 A.M.
806 Palm Canyon Drive
Borrego Springs, CA 92004

I. OPENING PROCEDURES

A. Call to Order
B. Pledge of Allegiance
C. Roll Call
D. Comments from Directors and Requests for Future Agenda Items
E. Comments from the Public and Requests for Future Agenda Items (comments will be limited to 3 minutes)

II. CURRENT BUSINESS MATTERS

A. Discussion with Jim Bennet and possible action regarding San Diego Countyõs Groundwater Mitigation requirements for new development.

B. Motion to establish an executive committee comprised of Beth Hart, Lee Estep, and Jerry Rolwing to meet with the owners of the Cocopah Nurseries to discuss the Cocopah option expiring May 29, 2011

C. Motion to establish an executive committee comprised of Marshal Brecht, Eleanor Shimeall, and Jerry Rolwing to meet with Jack Cameron to discuss the Districtõs lease agreement with Cameron Brothers.

D. Authorization for president to sign Wildermuth Environmental, Inc. (WEI) Engagement Agreement. This project, chosen advisor, and budget has already been approved by board. No additional budget needs to be authorized. (page 2-18)

E. Authorization for president to sign Raftelis Financial Consultants (RFC) Engagement Agreement. This project, chosen advisor, and budget has already been approved by board. No additional budget needs to be authorized. (page 19-47)

F. Discussion and possible action to retain Dr. Brian Brady (former General Manager of the Imperial Irrigation District) to provide an independent review of District staffing and O&M budget. No additional budget needs to be authorized. (page 48-51)

G. Discussion and possible action for a no-cost extension to USGS study due date. (page 52-55)

H. Discussion and possible action regarding recommendations from ad-hoc Strategic Planning Committee for March 30th Town Hall planning. (page 56-60)

I. Consideration and possible appointment of BWD Board Director as the JPIA designated director.

III. CLOSED SESSION

A. Discussion regarding advice from legal counsel regarding the Viking Ranch purchase agreement subject to Gov. Code section 54956.9 (b) and (c) and for the purpose of giving direction to the District's negotiators under Gov. Code section 54956.8 related to the real property known as the Viking Ranch with negotiators Lee Estep, Beth Hart, and Jerry Rolwing for the District in preparation for negotiating with Lance Lundberg from the Viking Ranch.

IV. CLOSING PROCEDURE

A. Adjournment: The next Regular Meeting of the Board of Directors is scheduled for March 23, 2011.

WILDERMUTH™
ENVIRONMENTAL INC.

February 11, 2011

Borrego Water District
806 Palm Canyon Drive
PO Box 1870
Borrego Springs, CA92004

Sent by email to:
Diana Del Bono
diana@borregowd.org

Subject: ***Proposal in Response to Request for Quotation (RFQ) for Advice to the Borrego Water District, Dated February 1, 2011***

To whom it may concern:

Wildermuth Environmental Inc. (WEI), in conjunction with Lagerlof, Senecal, Gosney & Kruse LLP, and J. Andrew Schlange, is pleased to submit this proposal in response to the above referenced RFQ.

Introduction

The Borrego Valley Groundwater Basin is experiencing significant overdraft. Per the RFQ, groundwater production is about 20,000 acre-ft/yr and exceeds the natural recharge by 16,000 acre-ft/yr. Preliminary results from current USGS models project a complete dewatering of the upper aquifer within 50 years. "Presently, there is uncertainty whether economically extractable potable water will be available from the middle and lower aquifers once the upper aquifer is dewatered."[1] The Borrego Water District (BWD) is an appropriative water user pumping about 3,000 acre-ft/yr or about 15 percent of the total current pumping. About 17,000 acre-ft/yr of pumping occurs to supply overlying uses, including golf courses (3,000 acre-ft/yr) and agriculture (14,000 acre-ft/yr).

Based on the results of the 2002 groundwater management plan, the BWD developed and implemented a plan to fallow farm lands to reduce groundwater pumping and to provide "credits" for future increases in groundwater pumping by the BWD. The BWD subsequently determined that fallowing would not be enough to ensure a sustainable supply and initiated other investigations with the USGS and the Bureau of Reclamation (BOR) to identify current and future basin conditions and supplemental water supply alternatives.

[1] Extracted verbatim from the Request for Quotation for Advice to the Borrego Water District, February 1, 2011.

The BWD is currently suffering from cash flow challenges related to its rate structure and past investments. The BWD wants to develop a new rate structure based on best management practices. The BWD wants to include a component in its new rate structure to pay for the development and implementation of a water resources management strategy for the BWD that is technically and financially sustainable.

Objectives of BWD

The purpose of the RFQ is to "identify professionals including legal advisors, auditors, financial advisors, strategy and planning advisors, and management consultants who are capable and willing to provide ongoing advice to the Borrego Water District."[2] Specifically, the BWD asked for advice on the following questions:

- What actions do you recommend that the District consider to improve cash flow to not experience a cash crunch in the near term and to be able to continue with a Proposition 218 process successfully?
- What actions do you recommend that the District consider to improve cash flow to be creditworthy to obtain reasonable cost financing for future capital projects in the near and middle term?
- What amount of cash reserves is reasonable for a District our size for: (a) repair and replacement of physical infrastructure (Borrego lies in the most active earthquake zone in the United States); (b) rate stabilization reserve; and (c) working capital reserve?
- What strategic approaches do you recommend that the District explore, and their potential cost, to more affordably address the overdraft of the basin?

Approach

Our team will provide advice on the last of the BWD's questions: "What strategic approaches do you recommend that the District explore, and their potential cost, to more affordably address the overdraft of the basin?" We anticipate two areas of support to the BWD: (1) the development of a work plan that can be implemented by the BWD and others to develop a sustainable water resources management program and (2) as-needed follow-on support to refine and or implement the work plan. The BWD can include the cost of implementing the work plan in its new rate structure and implement the work plan in a timely manner thereafter.

Work Plan Development and Cost Estimate. WEI has completed similar work plans for other groundwater basins that have been subsequently developed into management programs and successfully implemented, including the Chino and the Beaumont Basins. WEI has two such plans in development today in the Cucamonga and San Juan Basins. The development of a management program includes three parallel processes: institutional, engineering, and financial. The institutional process

[2] Extracted verbatim from the Request for Quotation for Advice to the Borrego Water District, February 1, 2011.

defines the management agenda, directs the engineering and financial processes, and builds the institutional consensus for management plan implementation. The engineering process develops planning data, creates management concepts, and evaluates the technical, environmental, and economic performance of the management concepts. The institutional and engineering processes provide feedback to each other as the management program is developed. The work plan will show these processes and include a list of tasks, deliverables, and cost estimates to complete the work. Stakeholders will be identified and asked to participate in the development of the work plan.

We will conduct a thorough a review of all previous work and engage in discussions with the BWD staff and board.

In preparation of this proposal, we reviewed past reports prepared for the Borrego Valley Basin by the USGS, the DWR, William R. Mills, and others. The USGS and BOR are currently working on new investigations that will inform the BWD and Basin stakeholders on current and projected basin conditions and the feasibility of acquiring supplemental supplies for direct use and recharge. We will meet with the USGS and BOR study teams to get an update on their work. The information from these investigations will set a benchmark for the new work that will be included in the work plan. We will coordinate our work with other consultants retained by the BWD to provide advice on the first three questions.

We will present a draft work plan and cost estimate to the BWD staff and board about four to six weeks after receiving notice to proceed. We will review the comments and suggestions received from the BWD staff and board and prepare a draft report that includes the work plan and cost estimate for use by the BWD in establishing its new rate.

The fee for this task will be about $15,000; we will not exceed this fee without approval from the BWD.

As-Needed Support. As-needed support includes any requested support unrelated to the preparation of the work plan document. This would be done on an as-requested basis and would be billed on a time and material basis. The billing schedule is attached.

Team

Wildermuth Environmental will be the contracting firm to the BWD. We are proposing three professional to complete this assignment. They include:

- Mark Wildermuth, president and principal engineer for Wildermuth Environmental;
- Thomas Bunn, partner in the law firm of Lagerlof, Senecal, Gosney & Kruse LLP; and

- J. Andrew Schlange, engineer and former general manager of several water management agencies and currently in private practice.

The resumes of these individuals are attached to this proposal. Mr. Wildermuth led the scoping effort for the Chino Basin Optimum Basin Management Program (OBMP) development as well as the engineering and institutional processes that developed the OBMP. Mr. Wildermuth worked with Thomas Bunn in the development of the Peace Agreement and its subsequent revisions. The Peace Agreement has many parties, including both appropriator and overlying pumpers, and implements the OBMP. The net present value benefit of the OBMP to the Chino Basin parties is over $900 million. Mr. Bunn is the attorney for the Palmdale Water District in the ongoing groundwater litigation in the Antelope Valley and has extensive experience in water rights and municipal law. Mr. Wildermuth is an expert witness for Mr. Bunn in the Antelope Valley litigation. Mr. Schlange and Mr. Wildermuth have been working together since 1980 and more recently worked together to complete the adjudication of pumping and storage rights in the Beaumont Basin.

The BWD and other pumpers in the Borrego Valley have a daunting task before them. We have the knowledge, experience, and passion to complete this work. We would love participate with you in the development of a sustainable water resources management plan. Please call me if you have any questions.

Sincerely,

Wildermuth Environmental, Inc.

Mark Wildermuth, PE
President

Wildermuth Environmental, Inc.
Time and Material Schedule for 2011

Staff Type	Hourly Rate
Principal Engineer III/Scientist III	$220
Principal Engineer I & II/Scientist I & II	$205
Supervising Engineer/Scientist	$190
Senior Engineer/Scientist	$155
Staff Engineer/Scientist	$130
Database Manager	$180
Engineering Technician	$105
Field Technician	$85
Office Administrator	$105

a Mileage for passenger vehicles will be billed at the IRS rate.
b Other project-related travel costs will be passed through without markup.

Project Professional	Hourly Rate
Mark Wildermuth	$220
Thomas Bunn	$375
J. Andrew Schlange	$220

Assignment

President

Education

M.S., Systems Engineering, University of California, Los Angeles, 1976

B.S., Engineering, University of California, Los Angeles, 1975

Registrations

Professional Civil Engineer, California C32331

Mr. Wildermuth has 35 years of experience in water resources engineering and planning, including surface and groundwater hydrology and hydraulics, water resources planning, surface water and groundwater computer simulation modeling, water rights, surface water and groundwater quality, flood plain management, municipal recycled water discharge impacts in receiving waters, and water supply and flood control facility design. Mr. Wildermuth has extensive expertise in the development of water resource management plans for groundwater basins and watersheds in Southern California, and he has provided expert witness testimonials and opinions for litigation support and mediation in several important cases.

Prior to starting his own company, Mr. Wildermuth held responsible positions at major environmental consulting firms, including James M. Montgomery, Consulting Engineers, Inc., where he was a principal engineer from 1987 to 1990; and Camp Dresser and McKee, Inc. from 1980 to 1987. In 1990, Mr. Wildermuth started his own company to focus specifically on water resources management studies and the application of state-of-the-art technology to water resources projects. The company was incorporated as Wildermuth Environmental, Inc. in 1998 and now employs over 20 professionals.

Mr. Wildermuth received a B.S. in Engineering from the University of California at Los Angeles in 1975 and an M.S. in Water Resources Engineering from the University of California at Los Angeles in 1976. He is a member of the National Ground Water Association, the American Water Resources Association, and the Groundwater Resources Association of California. Mr. Wildermuth is a registered professional civil engineer in the State of California.

Selected Project Experience

Wildermuth Environmental, Inc. – 1990 to Present

2010 Recharge Master Plan Update, Chino Basin Watermaster

Mr. Wildermuth served as the project manager, facilitator, and lead technical analyst for the development of the 2010 Recharge Master Plan Update. This investigation was ordered by the Court and had a Court imposed deadline for completion. Mr. Wildermuth designed the investigation and the report, which were approved by stakeholders and submitted to the Court for approval. The Court subsequently approved Mr. Wildermuth's investigation plan and scope. Mr. Wildermuth managed the overall execution of the investigation, which included three other consultants. Mr. Wildermuth lead nine workshops over a 15-month period and completed the final report one month prior to the Court appointed deadline. The product of this work has been highly praised for its completeness, technical sophistication, and the transparent process in which the work was conducted. Draft sections of the report were posted on the project website, which was developed and maintained by WEI. State-of-the-art surface water models were used to estimate stormwater recharge in spreading basins and in localized recharge facilities that will be constructed to comply with the 2010 MS4 permits. The investigation also determined the existing recharge capacity for imported and recycled waters and the future recharge capacity requirements. The report included conclusions and recommendations for future recharge projects and future supplemental water supply sources, including non-Metropolitan imported water supplies. Currently, Watermaster and the stakeholders are preparing to implement the recommendations of the 2010 Recharge Master Plan Update.

2009 Production Optimization and Evaluation of the Peace II Project Description, Chino Basin Watermaster

In 2007, WEI conducted the Peace II Agreement engineering work for the Watermaster. This work considered future groundwater production projections

through 2060, the effective period of the Peace Agreement. This work concluded that the projected groundwater production patterns of the stakeholders coupled with the existing recharge assets available to Watermaster would lead to unacceptable groundwater depressions in the Chino Basin. Part of the reason for these depressions is the uncoordinated siting and pumping of wells by the stakeholders. WEI examined the projected groundwater production patterns and associated recharge plans to determine if changes could be made in the siting of future wells and if production could be redistributed among wells to reduce the magnitude of changes in groundwater levels. WEI investigated the use of different groundwater recharge schemes to balance groundwater production and recharge in the basin. WEI applied state-of-the-art groundwater models (developed by WEI for Watermaster in 2007) iteratively to optimize groundwater production and recharge patterns in the basin. These revised groundwater production and recharge patterns were then incorporated into an analysis of modifications to the Optimum Basin Management Program, which are required to expand the desalter production facilities and to meet other requirements of the OBMP. Under Mr. Wildermuth's direction, WEI staff used a series of groundwater models to estimate future groundwater elevations across the basin, groundwater elevation time histories at every municipal and many private wells, subsidence potential, impacts on riparian vegetation, impacts to stream flow, and the impact on the transport of several contaminant plumes. The resulting work was accepted by Watermaster and the Inland Empire Utilities Agency and was subsequently incorporated into the *2010 Peace II Subsequent Environmental Impact Report.*

Optimum Basin Management Plan (OBMP), Chino Basin Watermaster

Mr. Wildermuth serves as the project manager and lead technical analyst, providing as-needed engineering services to the Chino Basin Watermaster. Activities include the review of water rights applications, storage losses from over-year groundwater storage accounts, and groundwater monitoring; estimating salt offset credits and the replenishment volumes required for proposed groundwater treatment project(s); coordinating with the San Bernardino County Flood Control District and Conservation District regarding recharge and with the Metropolitan Water District regarding water rates and seasonal storage service.

As the project manager, Mr. Wildermuth architected and implemented the scope of work for the Chino Basin OBMP, which was court-ordered by the San Bernardino Superior Court. Specifically, Mr. Wildermuth developed the process used in developing the OBMP scope of work and authored the engineering and institutional scopes of work. WEI, under the direction of Mr. Wildermuth, completed engineering studies and developed the resulting management plan. The engineering scope of work included the problem definition, the development of goals, developing and analyzing management components, the integration of management components, financial analysis, and the development of an implementation strategy.

Optimum Basin Management Plan Implementation, Chino Basin Watermaster

Mr. Wildermuth is the project manager for WEI's involvement in the implementation of the OBMP. WEI's efforts include large-scale surface water discharge and water quality (20 stations), groundwater level and water quality (600 wells), groundwater recharge, InSAR, and extensometer monitoring programs. WEI also provides oversight on well siting and related impact analyses for new desalter wells.

Chino Basin Dry-Year Yield Program, Chino Basin Watermaster

Mr. Wildermuth serves as the project manager for WEI's involvement in the development of the Chino Basin Dry-Year Yield (DYY) Program. WEI assisted the Watermaster and the Inland Empire Utilities Agency in the development of the 100,000 acre-ft DYY program. WEI completed a thorough reassessment of the hydrogeologic conditions of the Chino Basin and assisted other consultants with facility planning, including well siting, water quality evaluations, and specialized

mapping. WEI developed and applied a sophisticated set of surface and ground water models to evaluate the DYY's impacts on groundwater levels, contaminant plume movement, and surface and ground water interaction in the southern part of the basin. Currently, WEI is expanding this analysis to investigate groundwater storage programs of up to 500,000 acre-ft.

Groundwater Quality Monitoring Program, Chino Basin Watermaster

Mr. Wildermuth conducted a groundwater quality monitoring program for the Chino Basin Watermaster, which involved the collection of about 70 water samples in the field and about 200 samples from cooperating agencies. This project started in 1990 and continued through 1996. Subsequently, WEI expanded this program to about 600 wells as part of the Chino Basin OBMP

Preparation of Problem Statement and Estimate of Recharge, Antelope Valley Groundwater Adjudication Process, Lagerlof and Senecal

Mr. Wildermuth participated with a panel of experts to estimate the natural recharge in the Antelope Valley adjudication area. Mr. Wildermuth's responsibilities were to estimate the change in groundwater storage during the base period and use the change in storage estimates with production estimates and artificial recharge estimates to compute natural recharge. Mr. Wildermuth and WEI staff exhaustively analyzed groundwater level records and well completion reports to develop a comprehensive groundwater storage change model. Mr. Wildermuth's work was reviewed and approved by the panel of experts and included in their report.

Recharge Master Plan, Chino Basin Water Conservation District, Chino Basin Watermaster, and the San Bernardino County Flood Control District

Mr. Wildermuth was the project manager and lead technical analyst for the recharge master plan of the Chino Basin. The objectives of the master plan were to develop a plan of recharge to meet future groundwater replenishment requirements—utilizing storm water, recycled water, and imported water—and to evaluate the change in groundwater recharge caused by the construction of San Sevaine Creek and East Etiwanda Creek flood control improvements. This study utilized a daily runoff model to estimate the magnitude and temporal distribution of storm water recharge.

Under the master plan, recycled water and imported water are recharged during periods that ensure minimum conflict with storm water recharge. New facilities and modifications to existing facilities were recommended. A second phase of the recharge master plan was completed as part of the Chino Basin OBMP, in which WEI collaborated with the Black and Veatch Corporation. Upon completion, the Chino Basin Watermaster, the Inland Empire Utilities Agency, the Chino Basin Water Conservation District began converting 19 flood retention basins to spreading basins and began building two new recharge facilities. The total cost of the recharge improvements was about $45 million.

Analyses of Recharge and Recharge Facilities, Chino Basin Water Conservation District

Mr. Wildermuth conducted studies to determine the annual average recharge at the Chino Basin Water Conservation District's storm water recharge facilities. Daily flow simulation models were developed and applied for a 41-year period. The results of this study are being used to improve operations and maintenance schedules at existing facilities. Mr. Wildermuth also developed a monitoring program to determine changes in percolation rates and subsequent maintenance practices to restore maximum percolation rates. A key component of the monitoring program was the installation of digital water level sensors with integral data loggers to measure basin water levels every ten minutes. WEI developed the analytical methods and software to convert these observations into estimates of basin inflow, outlet discharge, evaporation losses, and basin recharge.

Nitrogen / Total Dissolved Solids (N/TDS) Task Force, Santa Ana Watershed Project Authority

Mr. Wildermuth was the architect and co-project leader for a multiphase comprehensive evaluation of the fate of nitrogen and TDS in the Santa Ana Watershed. In this investigation, the Basin Plan objectives for TDS and nitrogen were reset—based on the best available data and scientific methods—and new procedures were developed to assess the availability of assimilative capacity. Phase one involved the development of procedures for evaluating TDS and nitrogen impacts from recycling projects in the Santa Ana Watershed, a massive data collection and validation effort, watershed characterization, and an initial assessment of TDS and nitrogen loads to surface water and groundwater from municipal recycled water treatment plants and non-point sources.

Phase 2A involved delineating new basin/management zone boundaries, developing groundwater storage estimates for each management unit, estimating TDS and nitrogen statistics at wells, computing volume-weighted TDS and nitrate concentrations for the new basin/management zones, and completing a new wasteload allocation analysis for the Santa Ana River and selected tributaries.

Phase 2B involved the development and implementation of a sophisticated modeling system to evaluate the then current TDS and total inorganic nitrogen (TIN) wasteload allocations for municipal recycled water plants that discharge to the Santa Ana River and its tributaries. A daily stream flow simulation model was used to estimate TDS and TIN concentrations in the Santa Ana River and its tributaries in response to recycled water discharges, storm water runoff, non-tributary discharges, and groundwater interaction.

San Timoteo Watershed Management Program, San Timoteo Watershed Management Authority

Mr. Wildermuth was the project manager and lead technical analyst in the development of a watershed management program for the San Timoteo Watershed. This effort involved designing the investigation; conducting a stakeholder process; a baseline water resource inventory and characterization; establishing the issues, needs, and wants of the stakeholders; articulating the program goals and impediments to those goals; the development of "program elements" for a watershed-scale management program to remove impediments to those goals; and the development of an implementation plan and cost estimates.

The resulting water resources management plan contained a program to expand the water supply from its current level of about 32,000 acre-ft/yr to 99,000 acre-ft/yr. WEI is currently assisting the STWMA in implementing the second phase of the program.

Beaumont Basin Adjudication, San Timoteo Watershed Management Authority:

Mr. Wildermuth provided engineering and hydrogeologic support services to the Cities of Banning and Beaumont, the Beaumont Cherry Valley Water District, the South Mesa Water Company, the Yucaipa Valley Water District, and other groundwater pumpers in the Beaumont Basin adjudication. Mr. Wildermuth developed the groundwater management concepts that were incorporated into the physical solution.

Hot Creek Fish Hatchery Spring Flow, Mammoth Community Water District

Mr. Wildermuth was the project manager and lead technical analyst for an investigation of groundwater pumping impacts on Hot Creek Fish Hatchery spring flow. This investigation, which was completed in 1995, showed that existinggroundwater production had negligible impacts on spring discharge. Subsequently, WEI reviewed newly obtained data for the 1995 through 2001 period,

verifying its 1995 findings and paving the way for increased groundwater production to support new development.

This work was revisited in 2003 due to concerns that increased groundwater production might impact springs in the Valentine reserve. Subsequent analyses by WEI demonstrated that no impacts would occur as a result of production.

Groundwater Management Plan, Eastern Municipal Water District

Mr. Wildermuth developed a groundwater management plan for the West San Jacinto Basin, consistent with the long-term water resource management goals of the Eastern Municipal Water District and agricultural water users. The plan was developed under California enacted groundwater management statutes (AB 3030) and was recently implemented. This plan received the Edmund G. Brown award from the State of California in 1995.

Menifee Basin Desalter, Eastern Municipal Water District

Mr. Wildermuth completed the design of a 3-mgd well field for the Menifee Basin Desalter, providing groundwater management consulting to the Eastern Municipal Water District.

Groundwater Modeling, Montgomery Watson (for the Santa Ana Watershed Project Authority)

Mr. Wildermuth provided hydrologic and groundwater-modeling services for the design of two 8-mgd well fields and a 12-mgd well field in the Chino Basin. These well fields were intended to feed the desalting facilities owned by the Santa Ana Watershed Project Authority. Mr. Wildermuth assisted the Chino Basin Watermaster in the development of replenishment sources for the Chino desalting facilities and in the determination of salt extraction credits for agricultural interests in the basin.

Various Projects, Montgomery Watson

Mr. Wildermuth, as a consultant to Montgomery Watson, provided water resources consulting and modeling services in the Chino, Colton, and Riverside Basins. In addition, Mr. Wildermuth directed and participated in the development of the most sophisticated groundwater model ever developed in the upper Santa Ana Basin.

Groundwater Contamination Superfund Site, Confidential Client

WEI conducted a study to determine the potential source(s) of a groundwater plume that contains volatile organic compounds (VOCs), primarily trichloroethene (TCE) and tetrachloroethene (PCE). Mr. Wildermuth was responsible for the development of groundwater flow and transport models to determine the source(s) of these contaminants and the approximate period of loading.

Surface and Groundwater Studies from Discharge of Recycled Water, City of San Bernardino Municipal Water Department

Mr. Wildermuth conducted numerous studies to evaluate receiving water impacts in surface water and groundwater from the City of San Bernardino's recycled water discharge to the Santa Ana River. These studies involved surface and ground water modeling to determine the nitrogen and TDS impacts of various recycled water discharge alternatives on surface water and the groundwater basins that are recharged by those surface waters.

Surface Water Modeling Studies, City of San Bernardino Municipal Water Department

Mr. Wildermuth conducted surface water modeling studies to estimate the discharge, TDS, and nitrogen impacts of various recycled water marketing alternatives proposed by the City of San Bernardino.

Water Use Audit and Water Resources Development, Rancho Mission Viejo

Mr. Wildermuth conducted a water use audit of Rancho Mission Viejo and developed a phased plan of study for the development of water resources for the Ranch as land is converted from agricultural to urban uses.

Preparation of Application to Divert Water, Rancho Mission Viejo

Mr. Wildermuth prepared an application to divert water by appropriation and the supporting environmental documentation. Impacts to downstream water users were evaluated and mitigation plans are being developed. Mr. Wildermuth is also involved in negotiating the sale of diverted water to local agencies.

Evaluation of Proposals, URS Consultants (for the Santa Ana Watershed Project Authority)

Mr. Wildermuth evaluated the impacts of various waste discharge proposals for the Western Riverside Regional recycled water plant on surface and groundwater resources in the upper Santa Ana Basin.

Saline Plume Management Alternatives, Kaiser Steel Resources

Mr. Wildermuth developed saline plume management alternatives in the Chino Basin for Kaiser Steel Resources. This work involved groundwater modeling and water quality sampling. Solutions included pump and treat alternatives and a salt-offset alternative.

In addition to developing the salt-offset alternative, Mr. Wildermuth assisted Kaiser in moving this solution through the regulatory process, saving Kaiser over $40 million.

Conjunctive Use Plan Study, Western Municipal Water District, San Bernardino Municipal Water District, City of San Bernardino, and Orange County Water District

Mr. Wildermuth is conducting a study to develop conjunctive use plans for the management of local, imported, and recycled water above Riverside Narrows.

Montgomery Watson (aka James M. Montgomery, Consulting Engineers [JMM]) – 1987 to 1990

Mr. Wildermuth served as the manager of Water Resources studies at JMM's Irvine office. Mr. Wildermuth was also the manager and lead-modeling specialist for the *TDS and Nitrogen Studies, Upper Santa Ana Watershed.* Responsibilities included the development of a comprehensive work plan and the modification, calibration, and use of the Santa Ana Basin Planning models to evaluate future TDS and nitrogen management plans. Mr. Wildermuth developed a series of models to simulate the fate of agricultural leachates in the vadose zone and the saturated zone for the 1900 through 2015 period and a software link between the river quality model (QUAL2E) and the Basin Planning models. Mr. Wildermuth participated in the development and evaluation of eight management plans.

Water Quality Management Plan, Western Municipal Water District, San Bernardino Municipal Water District, City of San Bernardino, and Orange County Water District

Mr. Wildermuth was the project manager for the development of a water quality management plan for the Colton and Riverside Groundwater Basins. Mr. Wildermuth developed a detailed work plan that focused on moving various water management entities towards consensus on a basin management plan. The study involved the use of groundwater flow and quality models and public participation.

Groundwater Mining Studies, Southern Nevada Water Management Study

Mr. Wildermuth was the lead-modeling specialist in the evaluation of the groundwater mining studies of the Rail Road Valley and California Wash Basins in Nevada.

Integration of Surface and Groundwater Models, Wyoming Attorney General

Mr. Wildermuth was the lead-modeling specialist for the integration of surface and ground water models of the North Platte River. The purpose of this project was to evaluate the effects of river depletions due to agriculture and to evaluate reservoir management plans.

Conjunctive use Study, City of Santa Barbara

Mr. Wildermuth was project manager and lead-modeling specialist for a conjunctive use study for the City of Santa Barbara. Mr. Wildermuth developed conjunctive use alternatives that involved recharging surface water from the Santa Ynez River (by injection and spreading), the injection of recycled water, and in-lieu recharge concepts. Mr. Wildermuth used groundwater models to evaluate the impacts of conjunctive use operations on groundwater.

Phase IV Groundwater Investigation, Kaiser Steel Resources

Mr. Wildermuth was the project manager of the Phase IV Groundwater Investigation at the Kaiser Steel Facility in Fontana, California. Mr. Wildermuth's role in this study was to develop remediation plans for two large plumes of degraded groundwater emanating from Kaiser. Mr. Wildermuth directed the study team's efforts, which included water quality sampling, drilling monitoring wells, and groundwater modeling and engineering studies.

QUAL2E Modeling Studies, Santa Ana River Dischargers Association

Mr. Wildermuth was involved in the review of the QUAL2E modeling studies performed by the Santa Ana Regional Water Quality Control Board. Mr. Wildermuth's responsibility in this study was to provide an independent review on behalf of the Santa Ana River Dischargers Association.

The key issue of this study was a determination of QUAL2E model reliability for establishing waste load allocations for point discharges with an emphasis on nitrogen species.

Camp Dresser & McKee, Inc. – 1980 to 1987

Metropolitan Water District of Southern California

Mr. Wildermuth was the project manager and lead analyst for the Chino Basin Groundwater Storage Program. Mr. Wildermuth's responsibilities included the development and implementation of state-of-the-art models for non-point source groundwater contamination and regional vadose zone modeling. The goal of this study was to estimate the long-term groundwater quality impacts of large-scale conjunctive use management programs.

TCE/DBCP investigation, Santa Ana Watershed Project Authority

Mr. Wildermuth was the project manager and lead analyst for a TCE/DBCP investigation in the Redlands area. Field studies were designed and implemented to estimate the then current TCE and DBCP conditions in the area, and a three-dimensional model was developed to predict the fate of TCE and DBCP under various management alternatives. Alternative mitigation measures were developed and evaluated.

Safe Yield and Groundwater Management Study, Cucamonga County Water District

Mr. Wildermuth was the project manager and lead analyst for a safe yield and groundwater management study for the Cucamonga Groundwater Basin. Mr. Wildermuth developed and calibrated a three-dimensional groundwater model to evaluate the impacts of artificial recharge, in-lieu recharge, and drought management programs. Mr. Wildermuth developed a detailed monthly hydrology of the Cucamonga Basin for use in safe yield estimates, groundwater model calibration, and water supply management.

Chino Basin Storage Program Feasibility Study, Department of Water Resources

Mr. Wildermuth was a project engineer for the Chino Basin Storage Program feasibility study. Responsibilities included an evaluation of the availability of surplus State Project water for conjunctive use and an evaluation of the correlation between local flood flows and surplus state project water.

Groundwater Modeling Study, Regional Water Quality Control Board

Mr. Wildermuth was a project engineer for the Santa Ana Regional Board groundwater modeling study of the 400,000-acre Upper Santa Ana Groundwater Basin. Responsibilities included a complete rewrite and calibration of the groundwater hydraulic and water quality codes. These models were used to investigate revisions to the Upper Santa Ana Basin Plan.

Water Flow and Demand Projection Study, City of Scottsdale

Mr. Wildermuth was a project engineer for a water demand and recycled water flow projection study for the City of Scottsdale. Various potential land use scenarios were analyzed to develop ultimate water demands and recycled water flows. Potential supplies included Central Arizona Project water, groundwater, and recycled water. Mr. Wildermuth developed a comprehensive and fully interactive computer model to conduct the analysis. The unit factors for indoor and outdoor water demand and the parameters defining waste flow were estimated by calibrating the computer model in a selected area of Scottsdale.

Groundwater Study, Occidental Chemical

Mr. Wildermuth was a project engineer for a detailed groundwater study of a toxic spill site near Lathrop, California for Occidental Chemical. This study involved the use of a two-dimensional, multi-layer groundwater model to predict pollutant movement with and without mitigation plans.

Shallow Groundwater Management Program, The Irvine Company

Mr. Wildermuth was the project manager for a study to develop a shallow groundwater management program for the Irvine Subbasin. This study resulted in a recommendation to control and/or mitigate shallow groundwater in an urbanized area.

Phase II Irvine Subbasin Study, The Irvine Company

Mr. Wildermuth was the project manager for the Phase II Irvine Subbasin study. This study focused on the development and analysis of water use plans for the Irvine Subbasin.

Flood Control Study, The Irvine Company

Mr. Wildermuth was the project manager and lead analyst for a flood control study of San Diego Creek in the City of Irvine. This study analyzed flood plain development and channel improvement alternatives.

Flood Control Planning Study, Army Corps of Engineers

Mr. Wildermuth was a project engineer for the flood control planning studies in support of the Central Arizona Water Control Study. Mr. Wildermuth performed the hydraulic design and cost estimates for reservoir flood outlets and levee systems on the Salt River and selected bridges on the Salt River. The impacts of sand and gravel operations within the Salt River were also evaluated.

Mr. Wildermuth also conducted numerous river-engineering studies in Southern California for the Army Corps of Engineers.

TetraTech – 1976 to 1980

HEC-1, HEC-2, & TR-20, Florida and Texas

Mr. Wildermuth was the project engineer for numerous flood insurance studies in Florida and Texas, specializing in the use of HEC-1, HEC-2, and TR-20. And, Mr. Wildermuth applied special-purpose dam flood wave routing models and the HEC-6 model for the hydrologic evaluation of flood safety for a nuclear power plant.

Los Angeles County Flood Control Department – 1974 to 1976

Studies for the Storm Drain System of the Laguna Regulating Basin

Mr. Wildermuth conducted design hydrology and hydraulic studies for a storm drain system and collaborated in a PMF spillway adequacy study for the Laguna Regulating Basin. This study included the development of runoff model parameters and the conceptual development of a serial reservoir flood routing computer model. Mr. Wildermuth also developed a semi-self-calibrating watershed model.

This conceptual model was used by the Hydraulic and Hydrology section for spillway studies in the late 1970s and early 1980s.

Affiliations / Organizations

American Water Resources Association

National Groundwater Association

Groundwater Resources Association

Vistage (formerly The Executive Committee)

Thomas S. Bunn III

Thomas S. Bunn III has been an attorney with Lagerlof, Senecal, Gosney & Kruse, LLP for over thirty years. He practices business law and business litigation, with emphasis on water and water rights, public agencies, real estate, commercial transactions, and bankruptcy.

In water matters, Mr. Bunn represents both public agencies and private clients, with special expertise in groundwater, water rights and water transfers. He has participated in the negotiation and implementation of groundwater management plans. He represented Western Water Company in a groundbreaking water transfer, marking the first time that the Metropolitan Water District exchanged water with a private company for delivery within its service area. He represents water producers in complex multi-party negotiations, in litigation (including several groundwater basin adjudications), and before the State Water Resources Control Board. He has successfully defended a water district's Urban Water Management Plan against a challenge from environmental groups.

Mr. Bunn represents several public agencies as general counsel, is well-versed in the Brown Act and the Public Records Act, and experienced in working directly with boards of directors.

Mr. Bunn serves on the Groundwater Committee of the Association of California Water Agencies (ACWA). He participated in drafting the Groundwater Management Act (AB 3030) which allows for local control and management of groundwater. He was one of the leaders in ACWA's response to the State Water Resources Control Board's effort to classify underground waters.

Mr. Bunn has written and lectured extensively on water matters.

Mr. Bunn received his undergraduate degree from Princeton University and his law degree from U.S.C., where he was in the top 10% of his class and an editor of the Law Review.

J. Andrew Schlange
4 Crown Court
Rancho Mirage, Ca. 92270
(760) 574 – 6236
Jasa921@aol.com

After retiring in 1994, Mr. Schlange remained actively involved in water and water recycling projects through several water resource management consulting groups, including:

- Beaumont Basin Adjudication
- Contract Manager STWMA
- Salton Sea Mitigation Program
- Private Developers on Projects in the Corona, Manteca, and Atwater areas of California

Mr. Schlange's experience in water supply and wastewater management in Southern California spans more than fifty-five (55) years. During his career he served as the General Manager of the Eastern Municipal Water District (EMWD) for five (5) years, the General Manager of the Santa Ana Watershed Project Authority (SAWPA) for ten (10) years, and as the General Manager of the Chino Basin Municipal Water District (CBMWD; now Inland Empire Utilities Agency) for five (5) years. He was awarded the Citizens Award by the United States Bureau of Reclamation (the highest public award given by the Bureau); the Manager of the Year, Public Sector Category, award by the University of California, Riverside, Graduate School of Management (1993-94); and the Infrastructure Award (1992) by the Valley Action Group, West Riverside County.

During his retirement, Mr. Schlange convened the groundwater pumpers in the Beaumont Basin and led them through a process that resulted in adjudicating groundwater pumping and storage rights in the Basin. After the adjudication was completed in 2004, Mr. Schlange served as Chief of Watermaster Services until May 2010.

Prior to his retirement, the EMWD completed the basic infrastructure needed to utilize recycled water throughout its service area, began the process of groundwater management in the Perris and San Jacinto areas, and funded the expansion of the areas' wastewater treatment facilities through a 128-million dollar bond. He also represented the EMWD as a Commissioner on the Board of the Santa Ana Watershed Project Authority.

Prior to his employment as General Manager at EMWD, he was the General Manager of SAWPA (1980 – 1989)—a Joint Exercise of Power Agency that consists of

Orange County Water District, San Bernardino, Chino Basin, and the Eastern and Western Municipal Water Districts. During this period, he developed SAWPA into a mature and dynamic Agency.

In addition to implementing many planning and watershed studies, SAWPA implemented and constructed many projects. The following describes the projects that were initiated and/or completed while Mr. Schlange served as General Manager:

- Construction of the brine line (SARI) in the upper watershed above Prado Dam—a brine pipeline from the City of San Bernardino along the Santa Ana River through Orange County for ocean disposal of brines.
- Arlington Desalter—a facility designed to recover the Arlington groundwater system, which was contaminated by agricultural return flows.
- Stringfellow Toxic Waste Site—funded by Federal and State Agencies, SAWPA constructed a water treatment plant designed to remove organic and inorganic contamination, thereby facilitating the cleanup of the Stringfellow Site.
- Lake Elsinore Stabilization Project—a program designed to stabilize Lake Elsinore.
- Western Municipal Water District Water Transmission—a major water transmission system to deliver MWD water from the Mill Treatment Plant to the City of Corona area.
- Rapid Infiltration Extraction System—utilizing ground filtration as a means to treat wastewater.

As General Manager of the CBMWD, Mr. Schlange negotiated a contract with the Cities of Ontario, Upland, Montclair, and Fontana, and the Cucamonga County Water District to regionalize waste water treatment and disposal; and he implemented the initiation of groundwater basin adjudication in the Chino Basin.

PROFESSIONAL SERVICES AGREEMENT BETWEEN THE BORREGO WATER DISTRICT AND RAFTELIS FINANCIAL CONSULTANTS, INC.

This Consulting Agreement ("Agreement") is entered into this ___ day of _____, 2011 (hereinafter referred to as the effective date of the agreement) by and between the Borrego Water District P.O. Box 1870, 806 Palm Canyon Drive, Borrego Springs, California 92004 (the "Client") and Raftelis Financial Consultants, Inc., 1031 South Caldwell Street, Suite 100, Charlotte, NC 28203 ("RFC").

Witnesseth

WHEREAS, RFC has substantial skill and experience in water and wastewater finance, management, and pricing, and

WHEREAS, The Client desires to hire RFC and RFC desires to provide services to the Client,

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Parties agree to the terms and conditions set forth herein.

Article 1. Statement of Work

RFC shall provide professional consulting services for the Client related to water and wastewater finance, management, and pricing advice. RFC will perform these services as set forth in more detail in Attachment A hereto.

Article 2. Time for Completion

This agreement will commence upon approval by the Client and remain in effect for a period of one year. Further renewals of this Agreement are at the option of the Parties and shall be in writing.

Article 3. Compensation

Client shall pay to RFC the sum not to exceed the fees as specified in the **Statement of Work/Engagement Letter** attached hereto which includes professional fees and direct expenses incurred in performing the scope of services, as well as an hourly technology expense reimbursement, outlined in Attachment B. The parties understand that this sum is based upon the scope of work contained herein at RFC's current standard hourly rate schedule included in Attachment B. Any expansion of the scope of work by the Client shall involve the discussion of additional fees by both parties.

RFC shall submit invoices to the Client on a monthly basis for services rendered to the date thereof. Such invoices shall be supported by appropriate documentation; at a minimum, the task performed, the individuals working on such task, the level of each such individual, and expenses incurred.

Each invoice will contain all hours and expenses from the RFC for the month. Upon receipt of monthly invoice, the Client will remit payment of same amount to the RFC within 30 days.

Article 4. Additional Services

At the Client's request, RFC may submit proposals for additional professional services. Each proposal submitted shall detail: (1) scope of work for the additional services, (2) period of services to be performed, and (3) method and amount of compensation. The Client shall provide written acceptance and authorization to RFC prior to the commencement of work on any proposed additional services. Each proposal for additional services accepted and approved by the Client shall become part of this Agreement and shall be governed by the terms and conditions contained herein.

Article 5. Place of Performance

RFC shall be responsible for maintaining its own office facilities and will not be provided with either office facilities or support by the Client.

Article 6. Indemnification

RFC hereby agrees to indemnify the Client and to hold the Client harmless against any and all claims, action, or demands against the Client and against any and all damages for injury to or death of any person and for loss of or damage to any and all property arising out of the negligent acts, errors or omissions of RFC under this Agreement. RFC shall not be held responsible for any claims caused by the negligence of the Client.

Article 7. Insurance

Contactor shall maintain the types and levels of insurance during the life of this Agreement as specified below. The Client will be named as additional insured on the RFC's Certificates of Insurance and the RFC will provide the Client with these Certificates of Insurance.

Commercial general liability insurance - $1,000,000 for each occurrence and $2,000,000 in the aggregate

Comprehensive automobile liability insurance - $1,000,000 combined single limit each occurrence

Workers Compensation insurance – Statutory limits

Professional liability insurance - $1,000,000 in the aggregate

Excess or Umbrella Liability - $3,000,000 in the aggregate

Article 8. Confidential Information

RFC acknowledges and agrees that in the course of the performance of the services pursuant to this Agreement, RFC may be given access to, or come into possession of, confidential information of the Client which information contains privileged material or other confidential information. RFC acknowledges and agrees, except if required by judicial or administrative order, trial, or other governmental proceeding pertaining to this matter, that it will not use, duplicate, or divulge to others any such information belonging to or disclosed to RFC by the Client without first obtaining

written permission from the Client. "Confidential information" as used herein, includes information, materials, products, and deliverables developed during, and discoveries and contributions made by RFC in the performance of this Agreement. All tangible embodiments of such information shall be delivered to the Client by RFC upon termination hereof, or upon request by the Client, whichever occurs first. The Client acknowledges RFC has the right to maintain its own set of work papers which may contain confidential information.

Article 9. Independent Contractor Status

It is understood and agreed that RFC will provide the services under this Agreement on a professional basis as an independent contractor and that during the performance of the services under this Agreement, RFC's employees will not be considered employees of the Client within the meaning or the applications of any federal, state, or local laws or regulations including, but not limited to, laws or regulations covering unemployment insurance, old age benefits, worker's compensation, industrial accident, labor, or taxes of any kind. RFC's employees shall not be entitled to benefits that may be afforded from time to time to Client employees, including without limitation, vacation, holidays, sick leave, worker's compensation, and unemployment insurance. Further, the Client shall not be responsible for withholding or paying any taxes or social security on behalf of RFC's employees. RFC shall be fully responsible for any such withholding or paying of taxes or social security.

Article 10. Reliance on Data

In performance of the services, it is understood that the Client and/or others may supply RFC with certain information and/or data, and that RFC will rely on such information. It is agreed that the accuracy of such information is not within RFC's control and RFC shall not be liable for its accuracy, nor for its verification, except to the extent that such verification is expressly a part of RFC's scope of services.

Article 11. Opinions and Estimates

RFC's opinions, estimates, projections, and forecasts of current and future costs, revenues, other levels of any sort, and events shall be made on the basis of available information and RFC's expertise and qualifications as a professional. RFC does not warrant or guarantee that its opinions, estimates, projections or forecasts of current and future levels and events will not vary from the Clients's estimates or forecasts or from actual outcomes. RFC identifies costs, allocates costs to customer classes and provides rate models. It does not establish rates, which is the legislative responsibility of the Client.

Article 12. No Consequential Damages

To the fullest extent permitted by law, neither party shall be liable to the other for any special, indirect, consequential, punitive or exemplary damages resulting from the performance or non-performance of this Agreement notwithstanding the fault, tort (including negligence), strict liability or other basis of legal liability of the party so released or whose liability is so limited and shall extend to the officers, directors, employees, licensors, agents, subcontractors, vendors and related entities of such party.

Article 13. Termination of Agreement

This Agreement may be terminated as follows:

1. **By Client** (a) for its convenience on 5 days' notice to RFC, or (b) for cause, if RFC materially breaches this Agreement through no fault of Client and RFC neither cures such material breach nor makes reasonable progress toward cure within 15 days after Client has given written notice of the alleged breach to RFC.

2. **By RFC** (a) for cause, if Client materially breaches this Agreement through no fault of RFC and Client neither cures such material breach nor makes reasonable progress toward cure within 15 days after RFC has given written notice of the alleged breach to Client, or (b) upon five days' notice if Work under this Agreement has been suspended by either Client or RFC in the aggregate for more than 30 days.

3. **Payment upon Termination**. In the event of termination, RFC shall perform such additional work as is reasonably necessary for the orderly closing of the Work. RFC shall be compensated for all work performed prior to the effective date of termination, plus work required for the orderly closing of the Work.

Article 14. Notices

All notices required or permitted under this Agreement shall be in writing and shall be deemed deliverable when delivered in person or deposited in the United States mail, postage prepaid, addressed as follows:

If for the Client:

General Manager
Borrego Water District
P.O. Box 1870
806 Palm Canyon Drive
Borrego Springs, CA 92004

If for RFC:

_____

Vice President
Raftelis Financial Consultants, Inc.
1031 S. Caldwell St., Suite 100
Charlotte, NC 28203

Article 15. Compliance with Applicable Laws

RFC agrees not to discriminate in its employment practices, and will render services under this Agreement without regard to race, color, religion, sex, national origin, veteran status, political affiliation or disabilities.

Any act of discrimination committed by RFC, or failure to comply with these statutory obligations when applicable, shall be grounds for termination of this Agreement.

Article 16. General Provisions

A. Entire Agreement: This Agreement represents the entire and sole agreement between the Parties with respect to the subject matter hereof.

B. Waiver: The failure of either Party to require performance by the other of any provision hereof shall in no way affect the right to require performance at any time thereafter, nor shall the waiver of a breach of any provision hereof be taken to be a waiver of any succeeding breach of such provision or as a waiver of the provision itself. All remedies afforded in this Agreement shall be taken and construed as cumulative; that is, in addition to every other remedy available at law or in equity.

C. Relationship: Nothing herein contained shall be construed to imply a joint venture, partnership, or principal-agent relationship between RFC and the Client; and neither Party shall have the right, power, or authority to obligate or bind the other in any manner whatsoever, except as otherwise agreed to in writing.

D. Assignment and Delegation: Neither Party shall assign or delegate this Agreement or any rights, duties, or obligations hereunder without the express written consent of the other. Subject to the foregoing, this Agreement shall inure to the benefit of and be binding upon the successors, legal representatives, and assignees of the Parties hereto.

E. Severability: If any provision of this Agreement is declared invalid or unenforceable, such provision shall be deemed modified to the extent necessary and possible to render it valid and enforceable. In any event, the unenforceability or invalidity of any provision shall not affect any other provision of this Agreement, and this Agreement shall continue in force and effect, and be construed and enforced, as if such provision had not been included, or had been modified as above provided, as the case may be.

F. Governing Law: This Agreement shall be governed by, and construed in accordance with, the laws of the State of California.

G. Paragraph Headings: The paragraph headings set forth in this Agreement are for the convenience of the Parties, and in no way define, limit, or describe the scope or intent of this Agreement and are to be given no legal effect.

H. Third Party Rights Nothing in this Agreement shall be construed to create or confer any rights or interest to any third party or third party beneficiary. It is the intent of the parties that no other outside, non-party claimant shall have any legal right to enforce the terms of this Agreement.

IN WITNESS WHEREOF, the Parties have executed this Agreement by their duly authorized representatives.

Borrego Water District

By: _____
Signature

_____
Title

_____
Date

_____
Witness

Raftelis Financial Consultants, Inc.

By: _____
Signature

_____
Title

_____
Date

_____
Witness

This is to certify that an appropriation in the amount of this contract is available therefore and that _____ has been authorized to execute the contract and approve all requisitions and change orders.

By_____

_____
Title

Seal

Attachment A – Statement of Work/Engagement Letter dated March 15, 2011

1. Scope of Work

The scope of work shall be that work as described in the RFC service proposal to Client dated February 11, 2011, attached hereto and as may be amended by written consent by both parties and incorporated herein by this reference.

2. Compensation

RFC shall be compensated consistent with the fee schedule in the RFC service proposal to Client dated February 11, 2011, attached hereto and incorporated herein by this reference; provided that the total compensation shall not exceed $28,335 without the Client's prior written consent.

3. Other Provisions

This STATEMENT OF WORK/ENGAGEMEMENT LETTER dated March 4, 2011 shall be subject to the terms and conditions of the above-referenced Agreement between the Client and RFC which are incorporated herein by this reference.

Borrego Water District

By: _____
Signature

_____
Title

_____
Date

_____
Witness

Raftelis Financial Consultants, Inc.

By: _____
Signature

_____
Title

_____
Date

_____
Witness

Attachment B – RFC's 2011 Standard Billing Rates

Position	Hourly Billing Rate
Chief Executive Officer	$350
President	$300
Chief Operating Officer	$260
Vice President	$240
Senior Manager	$220
Manager	$200
Senior Consultant	$175
Consultant	$150
Associate	$125
Technician	$90
Administration	$60
Technology Expense	$10 *

* Technology/Communications Charge – this is an hourly fee charged monthly for each hour worked on the project to recover telephone, facsimilie, computer, postage/overnight delivery, conference calls, electronic/computer (i.e. WebEx, GoToMeetings), photocopies, etc.

BORREGO WATER DISTRICT

Quotation for Advice to the Borrego Water District

February 11, 2011

RFC
RAFTELIS FINANCIAL CONSULTANTS, INC.

RFC
RAFTELIS FINANCIAL
CONSULTANTS, INC.

February 11, 2011

Borrego Water District
806 Palm Canyon Drive
Borrego Springs, CA 92004

Subject: Proposal for Advice to the Borrego Water District

Raftelis Financial Consultants (RFC) is pleased to present this proposal to the Borrego Water District (District) to perform a water and wastewater financial plan study. RFC personnel have performed over 600 financial and management studies across the United States, including more than 200 in California. We are thoroughly familiar with industry practices and have performed studies for clients such as Western Municipal Water District, Indio Water Authority, Rancho California Water District, Salton Community Service District and cities of Huntington Beach, San Diego, Escondido and as well as others throughout California and the U.S.

RFC offers the District the following advantages:

- **Highly Qualified and Experienced Team.** Our business and engineering qualifications enable us to develop financial plans efficiently and perform sound cost allocations supported by industry standards, lending confidence to decision makers and credibility to project results. Our qualifications will provide credibility of our results and recommendations to the Board of the Directors.
- **Broad Experience.** The District can rely on RFC's history of developing and assisting in the implementation of successful solutions for other agencies. We have assisted hundreds of agencies throughout California and the United States. The District will benefit from our extensive experience with utilities that have experienced similar challenges, and give us the ability to implement the new rate structure smoothly.
- **Regulatory Knowledge.** RFC has a strong regulatory knowledge having assisted many utilities in the state with Proposition 218 requirements and worked closely with many attorneys to draft Proposition 218 notices and make presentations at public hearings.
- **User-Friendly Rate Model.** RFC's rate model is very user-friendly with the capability to conduct scenario analyses and present results graphically for ease of understanding and allowing policy makers to make quick decisions.
- **Knowledge of Conservation Rate Structures.** We have performed more conservation rate structure studies than anyone else in California. We can design rate structures that meet the unique needs of the District efficiently and effectively and the District will benefit from our past experience.

We appreciate the opportunity to submit this proposal and look forward to assisting the District on this important project. If you have any questions or need additional information, please contact Sanjay Gaur, our Project Manager, at (213) 327-4405.

Sincerely,
Raftelis Financial Consultants, Inc.

Sudhir Pardiwala, PE
Vice President

TABLE OF CONTENTS

PROJECT UNDERSTANDING

Borrego Water District (BWD or District) currently serves approximately 2,000 water and wastewater customers in Borrego Springs, California. Its sole water supply source is approximately 3,700 acre feet of groundwater per year from the Borrego Valley Groundwater Basin, which has been in overdraft since 1945. The District also maintains a wastewater reclamation plant, trunk sewer lines, and internal sewer lines to serve the community. Its water rates include a two-tier water rate structure varied with improvement district (ID) and surcharges for power ($0.25 per hcf) and groundwater ($0.08 per hcf).

Tiers	ID #1	ID # 3	ID #4
Tier 1 **Summer: 0 - 55 hcf** **Winter: 0 - 45 hcf**	$1.02 / hcf	$1.23 / hcf	$1.12 / hcf
Tier 2 - above Tier 1 **Summer - above 55 hcf** **Winter - above 45 hcf**	$1.53 / hcf	$1.84 / hcf	$1.68 / hcf

In 2008, a new strategy to address the groundwater overdraft was developed. The new strategy assumed that fallowing agricultural lands was insufficient and recommended building a pipeline to import water to the Valley to ameliorate the overdraft problem. The immediate cost of the strategy has significantly affected the District's finances. Historically, the District has produced operating surpluses with its present rate structure. However, in recent years (fiscal years 2009 and 2010), the District has started to operate under loss. For FY 2011, the District anticipates a $400,000 operating loss. In addition, in the past three years, through December 2010, the District has depleted approximately $6.4 million of its $7.4 million of reserves. The projected year-end cash balance for FY 2011 is less than $400,000. The District's current cash reserve is inadequate to pay for future cash requirements of two capital projects (approximately $3 million). With the current financial situation, the District is unable to raise funds in the private capital markets.

The District is currently seeking a qualified financial consultant to conduct a long-term financial plan study to ensure financial sufficiency for its water and wastewater operational and capital expenditures while evaluating:

- Different capital improvement project (CIP) scenarios;
- Different cost saving mechanisms;
- Different financial policies regarding reserves and debt coverage ratios to ensure the District's long-term financial sustainability;
- Different revenue adjustment alternatives to minimize customer impacts; and
- Evaluate different rate structures that can assist them in allocating the limited water supply the District currently has, while complying with Proposition 218.

The outcome of the financial plan study will be to determine the direction for the rate study, which will follow to ensure compliance with Proposition 218 and other regulatory requirements, and to be consistent with the District's goals, policies, and pricing objectives.

SCOPE OF WORK

The following sections outline the tasks to complete a financial plan study (Study) to ensure financial sufficiency for the operations and capital costs of the water and wastewater enterprises and to ameliorate the District's long-term financial sustainability. While tasks are listed consecutively, elements of tasks may be done concurrently with other tasks.

Task 1: Data Collection

The District will provide RFC with the data required to conduct the financial plan study for both water and wastewater enterprises, as indicated below, in a timely manner, preferably in electronic format (Ms Word, Excel or pdf). Several conference calls may be required to discuss and confirm the received data.

Data request list:

1. Financial statements for the last three to five fiscal years;
2. Debt service schedules for outstanding debt;
3. Detailed operating budgets for the past three years (FY 2009, 2010, and 2011);
4. Historical and current water and wastewater rates;
5. Number of water accounts by customer class and meter size at the end of fiscal years 2009, 2010 and 2011;
6. Number of wastewater accounts by customer class and meter size at the end of fiscal years 2009, 2010 and 2011;
7. Total billed water consumption by tier for the past three years;
8. Total wastewater flows by customer class for the past three years;
9. Monthly water consumption for each customer for the past three years with:
    a. Customer description - Customer unique ID, customer class, meter size, improvement district zone; and
    b. Monthly consumption and associated billing days (or days of service).
10. Monthly total water pumped/produced and wastewater treated for each of the previous three fiscal years;
11. Capital improvement projects for water and wastewater systems including:
    a. Project descriptions;
    b. Annual project cost, including studies, design, and construction costs; and
    c. Any notes related to priority, importance, and timeline of the projects.
12. Master Plan for water and wastewater systems, if available.

Task 2: Financial Plan Model Development

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

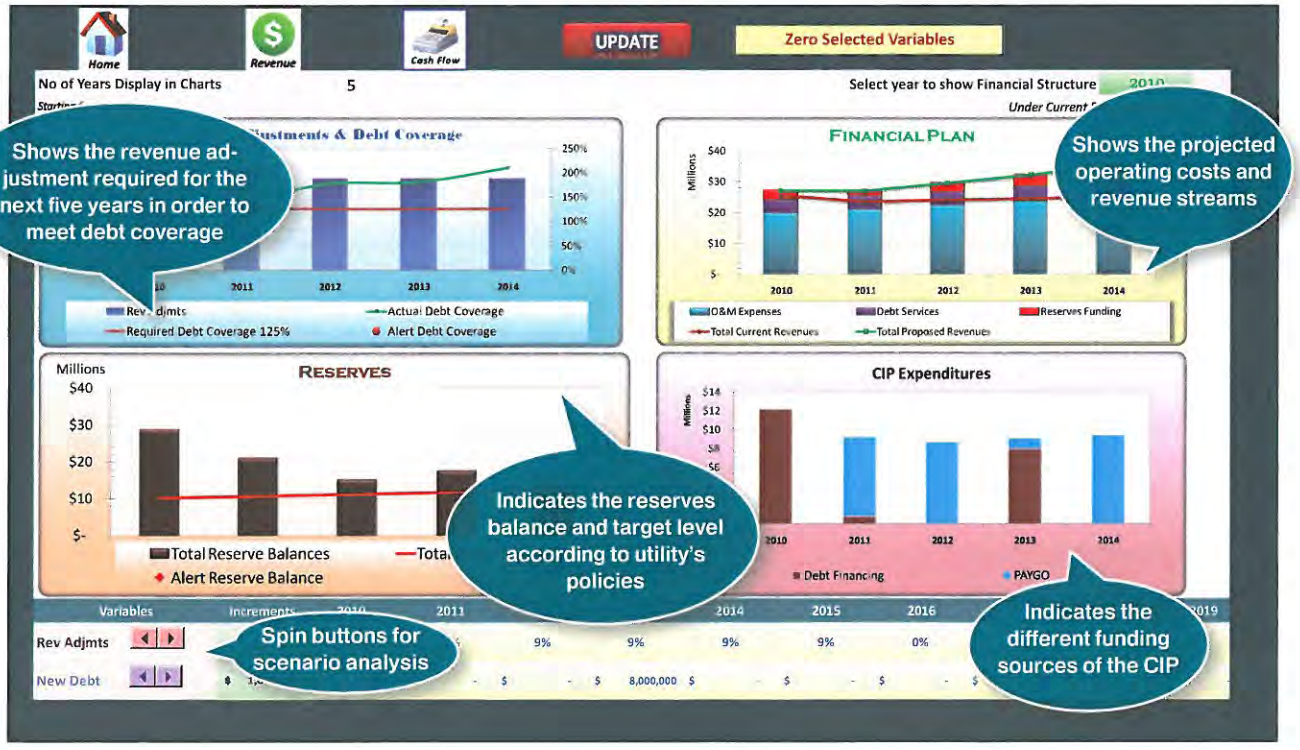
RFC will develop a forecast of revenue requirements for the next 10-year planning period. This will include an estimate of revenues based on current rates, growth in customers and fee levels, as well as other revenues generated from surcharges and other non-operating revenues. Revenue requirements will be projected over the study period considering the current budget, different CIP scenarios, the utilities' existing debt service, other obligations, and current economic trends. RFC will identify funding needs and develop financing options for capital projects over the long planning horizon allowing the District to make timely adjustments to expenses, reserve balances, or the timing of capital projects to smooth rate impacts and maintain financial sustainability and sufficiency. In addition, the financial plan model (Model) will have the ability to examine the financial consequences of different CIP scenarios and cost saving mechanisms in order to help the District make informed decisions.

RFC will conduct a cash flow analysis/summary to determine the revenue adjustments needed to meet projected revenue requirements for each year of the planning period. The cash flow worksheet in the Model incorporates revenues generated from different sources, expenses needed to maintain the utilities' systems, any transfers in and out of the working cash fund, as well as the coverage needed to meet current and proposed debt service requirements. RFC will also review reserves policies to recommend appropriate reserves balances, such as operating, capital, rate stabilization, etc., consistent with the District's risk management practices and industry standards.

The dashboard below is a sample of a recent financial plan model RFC developed.

RFC will conduct a series of web meetings with District Staff to review and validate inputs for the Model. Feedback from District Staff will be incorporated into the Model before presenting to the District Board in the Workshop in Task 3.

Sample Model Dashboard



Task 3: Financial Plan and Rate Structure Policy Workshop

Upon completion of the financial plan model, RFC will conduct a full day workshop with the District to discuss different financial policies, financial plan, and alternative rate structures. The workshop will contain two sections:

1. Financial Plan Policies

In this section of the workshop, different components of the financial plan for both water and wastewater enterprises will be examined, including revenues, expenses, and financial policies related to reserves and debt coverage ratios. Reserves are needed for the District to assist in cash flow requirements and to assist in minimizing risk. There are typically four types of reserves:

- O&M reserves, which is a percentage of the O&M budget. Depending on how often the District issues the bill this could range from 17% to 50% of the budget. This reserve is to assist in the cash flow requirement of the District.
- Working Capital reserve, which is typically a percentage of the average CIP expenditure. This is to assist the District in cash flow requirement of the District.
- Rate stabilization, which is based on the volatility of revenue due to change in water consumption. Factors that will determine the size of this reserve is how much revenue is generated from the commodity component, the type of rate structure, and historical volatility in water consumption. This rate structure helps in minimizing risk of increased rates from changes in the weather and/or economy.
- Repair and replacement reserve, which is a certain amount of money to assist the District in repairing critical assets. This reserve level is based on a criticality assessment, which identifies the most critical assets of the District. Based on this assessment, a percentage of the current value of the asset is used to determine the minimal requirements.

In addition, RFC will conduct the discussion with the District regarding the debt coverage policies. Maintaining high debt coverage ratios will enhance the District's credit ratings and lower the interest rates when the District returns to the bond markets. Utilizing the Model, RFC will examine the financial consequences of different CIP scenarios to the financial health of the District and develop the long-term financial plan that minimizes rate shocks and ensures financial sufficiency and sustainability for the District in the study period.

2. Rate Structure Evaluations

In this section of the workshop, RFC will present different alternative rate structure options that might potentially help the District to address the overdraft problem. Prior to the workshop, RFC will evaluate the water consumption, the water supply capacity, and the availability of the landscape data. Based on the results of the analysis, RFC will provide insight recommendations to the District in regard to which type of conservation rate structures will be best fit for the District.

Task 4: Technical Memorandum Preparation

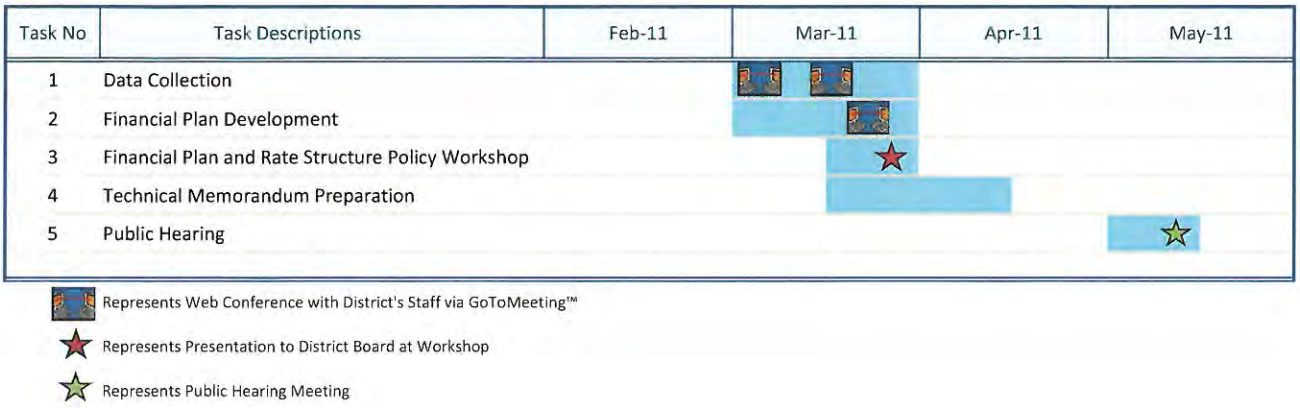
The process for developing the financial plan will be described in a preliminary technical memorandum. This preliminary memo will include an executive summary highlighting the major issues and results of the study. Comments and changes from District staff will be incorporated into the final memo, which will be refined to reflect appropriate issues or concerns raised by stakeholders. The final memo will be submitted to the District.

Task 5: Public Hearing

RFC will attend and present the results of the Study at one (1) public hearing to the District Board. RFC has assisted numerous agencies all over California with the adoption of conservation rate structures. Recent examples include the Cities of Escondido, Redlands, and San Diego.

SCHEDULE

RFC will complete the scope of work outlined in this proposal as shown in the schedule below. This schedule assumes that we receive the notice to proceed on February 20th. It will be necessary to receive the needed data in a timely manner and be able to schedule meetings as necessary.



FEES

RFC will perform the services described in the scope of work outlined in this proposal for a not-to-exceed amount of $28,150, as detailed in the table below. The hourly rates for each consultant are also provided in the table. We welcome the opportunity to meet with District staff to discuss and refine the scope of work and develop a final scope and level of effort that best addresses the needs and objectives for the project, and we will refine our cost estimate based on the finalized scope of work. Included in the expenses is a Technology Charge of $10 per professional hour to recover the costs for computers, telecommunications, postage and other overhead costs. It is our practice to bill monthly for fees and expenses based upon actual time incurred. Additional meetings will be billed on a time and material basis as needed.

Proposed Hours and Fees

Task No	Task Descriptions	No of Meetings	Hours Requirements					Total Fees & Expenses
			SP	SG	FC	Admin	Total	
1	Data Collection		1	4	4	2	11	$ 1,970
2	Financial Plan Development		2	14	50		66	$ 12,690
3	Financial Plan and Rate Structure Policy Workshop	1	2	18	19		39	$ 7,965
4	Technical Memorandum Preparation		1	4	6		11	$ 2,200
5	Public Hearing	1	2	10	4		16	$ 3,510
	TOTAL ESTIMATED MEETINGS / HOURS exclude Task 5	2	8	50	83	2	143	
	HOURLY RATES		$240	$200	$175	$60		
	PROFESSIONAL FEES, exclude Task 5		$1,920	$10,000	$14,525	$120	$26,565	
	SP = Sudhir Pardiwala						Total Professional Fees	$26,565
	SG = Sanjay Gaur						Estimated Expenses	$1,770
	FC = Steve Vuoso / Hannah Phan						TOTAL FEES & EXPENSES	$28,335

WHAT MAKES US UNIQUE

Raftelis Financial Consultants, Inc. (RFC) was established in 1993 to provide financial, pricing, and management consulting services of the highest quality to public and private water and wastewater utilities. Specifically, we focus our services in the areas of utility financial planning and pricing, financial feasibility analysis, strategic planning, and related areas. RFC is currently comprised of 30 staff members in four offices positioned strategically throughout the country to effectively and efficiently serve our clients, including our Pasadena, CA office which will be serving the District for this engagement.

Industry Leadership

Our senior staff is involved in shaping industry standards by chairing various committees within American Water Works Association (AWWA) and Water Environment Federation (WEF). RFC's staff members have authored and co-authored many industry standard books regarding water and wastewater rate setting.

Benefit: Being so actively involved in the industry will allow us to keep the District informed of emerging trends and issues, and to be confident that our recommendations are insightful and founded on sound industry principles.

Depth of Resources

RFC has one of the largest water industry financial planning, cost of service, and rate consulting practices in the nation.

Benefit: Our depth of resources will allow us to sufficiently staff this project with the qualified personnel necessary to efficiently and expeditiously meet the objectives of the District.

Modeling Expertise

RFC has developed some of the most sophisticated yet user-friendly financial/rate models available. Our models are custom-built on a client-by-client basis and are non-proprietary, which ensures that our models fit the specific needs and objectives of each of our clients.

Benefit: The District's model will be a tool that will allow us to examine different policy options and their financial/customer impacts in real time. The model will be developed with the expectation that it will be used by the District as a financial planning tool long after the project is complete.

Focus

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

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

Client Satisfaction

RFC strives to develop strong relationships with each of our clients. We work collaboratively with our clients during the engagement and provide any necessary assistance after the engagement.

Benefit: We recognize that we have a vested interest in the success of each of our clients. The Study will give us the opportunity to further strengthen our relationship with District staff.

EXPERIENCE

Our team has provided assistance to numerous utilities across the country. In 2010 alone, RFC worked on more than 200 projects for over 100 clients in 26 states. The table below shows a partial list of utilities in California that we have assisted in the past three years. In the following pages, we have provided detailed descriptions of a few California projects that are similar in scope to this project. We also selected these projects because many of our proposed project team members worked in similar roles on them. We have provided references for each of these projects and urge you to contact them to better understand our capabilities and the quality of service that we provide.

Utility	Utility Type	Financial Planning	Cost of Service	Rate Study	Water Budget Rate Study	Connection Fee	Valuation Study	Bond Feasibility	SRF Loans	Stormwater
Anaheim, City of	Water	✓	✓	✓						
Arcadia, City of	Water	✓	✓	✓						
Atwater, City of	Water & Wastewater	✓	✓	✓				✓		
Beaumont Cherry Valley Water District	Water & Connection Fee	✓	✓	✓		✓			✓	
Banning, City of	Water, Wastewater, & Recycled Water	✓	✓	✓		✓			✓	
Beverly Hills, City of	Water & Wastewater	✓	✓	✓						
Brea, City of	Water	✓	✓	✓						
Casitas Municipal Water District	Water	✓	✓	✓						
Castroville Water District	Water & Wastewater	✓	✓	✓						
Chowchilla, City of	Water & Wastewater	✓	✓	✓						
Corona, City of	Water & Wastewater	✓	✓	✓						
East Orange County Water District	Water				✓					
El Toro Water District	Water & Wastewater	✓	✓	✓	✓	✓				
Encinitas, City of	Water	✓	✓	✓						
Escondido, City of	Water	✓	✓	✓	✓					
Goleta West Sanitary District	Wastewater	✓	✓	✓		✓		✓		
Huntington Beach, City of	Water				✓					
Indio Water Authority	Solid Waste									✓
La Canada Irrigation District	Water	✓	✓	✓		✓				
Livingston, City of	Water, Wastewater, & Solid Waste	✓	✓	✓						
Metropolitan Water District	Water			✓						
Newport Beach, City of	Water				✓					
Olivenhain Municipal Water District	Water & Recycled Water	✓								
Ontario, City of	Water, Wastewater, & Solid Waste	✓	✓	✓						
Palmdale Water District	Water	✓	✓	✓	✓					
Rancho California Water District	Water	✓	✓	✓	✓					
Redlands, City of	Water & Sewer	✓	✓	✓		✓	✓		✓	
Riverside, City of	Water, Wastewater, & Recycled Water	✓	✓	✓		✓				
Sacramento Regional County Sanitation District	Sewer	✓				✓				
San Bernardino County	Water & Wastewater	✓	✓	✓		✓				
City of San Diego	Water, Wastewater, Recycled Water, Demand Projection, & Transportation	✓	✓	✓	✓	✓	✓	✓		
San Diego County Water Authority	Wheeling Charges, Valuation		✓	✓		✓	✓			
San Francisco Public Utility Commission	Water, Wastewater, & Recycled Water	✓	✓	✓		✓				
Santa Clara Valley Water District	Water	✓	✓	✓		✓				
Santa Fe Irrigation District	Water	✓	✓	✓						
Santa Monica, City of	Wastewater	✓	✓	✓		✓				
Simi Valley, City of	Water	✓	✓	✓						
South Coast Water District	Water				✓					
Torrance, City of	Water & Recycled Water	✓	✓	✓						
Triunfo Sanitation District	Water & Wastewater	✓	✓	✓						
Western Municipal Water District	Water	✓	✓	✓	✓					
Yorba Linda Water District	Water	✓	✓	✓	✓					

Services Provided

> Water budget rate study
> Model development

Client Reference

Jeff Armstrong
Chief Financial Officer
Rancho California Water District
42135 Winchester Road
Temecula, CA 92589-9017
Phone: 951.296.6928
armstrongj@ranchowater.com

Rancho California Water District (CA)

Rancho California Water District (District) recently engaged RFC in a water budget rate study to 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 along with irrigation area for outdoor allocations. The formula for developing allocation budgets considers irrigation efficiency and type of landscape. The whole concept is to encourage the efficient use of water and provide users with adequate water but penalize wasteful practices.

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

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

In December 2009, the District engaged RFC to conduct a New Water Demand Offset Fee Study. The New Water Demand Offset Program is a form of funding of conservation measures that will help to create sustainable, zero water footprint from new development. New developments will pay fees called New Water Demand Offset Fees to create potable water savings in the existing system to support water demand generated by new developments. Water savings can be achieved by converting irrigation accounts to recycled water or installing high efficiency retrofits to replace inefficient fixtures for existing accounts in the District. Implementation of the New Water Demand Offset Program is a key component to support sustainable new development without generating additional net demand on the existing system. RFC researched water savings and costs for each conservation program/fixture at various agencies, calculated the estimated water demand of new account 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.

City of San Diego (CA)

Services Provided

- Water and wastewater rate study
- Recycled water rate study
- Rate structure
- Capacity charges
- Public outreach
- Proposition 218

Client Reference

Jeanne Cole
Program Manager
City of San Diego - Metropolitan Wastewater Department
9192 Topaz Way
San Diego, CA 92123
Phone: 858.292.6313
jcole@sandiego.gov

The City of San Diego (City) engaged RFC to perform a water and wastewater cost of service and rate design study. The study was conducted with extensive stakeholder group involvement. The selected stakeholders represented a variety of commercial businesses and residential communities in the City. Metropolitan Wastewater Department (Metro) provides wastewater services to the City and 14 other participating agencies that are part of a regional wastewater system. The study included a comprehensive review of the City's revenue requirements and allocation methodology, review of the City's user classification, an analysis of cost-of-service and rate design for City users. The rate structure was modified to provide a more equitable sharing of costs consistent with regulatory requirements. Rate design included an evaluation of rate structure alternatives with emphasis on incorporating a uniform monthly base fee in conjunction with volume rates. The study also included a review of the City's capacity charges.

The water rate study involved evaluation of billing data, extensive analysis of the capital improvement program, allocation of CIP capacity between expansion and replacement, and financial modeling to demonstrate City compliance with regulatory requirements. Capacity charge calculations were incorporated into the rate model to determine the effects on the City and ensure adequate revenue collection. Cost of service rates have been developed based on American Water Works Association methodologies using the base-extra capacity method, as well as transition rates, to provide smooth transition to cost-of-service rates. Rates for this engagement were implemented in July 2004 and updated in January 2007. RFC worked with the City's attorneys to develop the Proposition 218 notice.

RFC is currently completing a recycled water cost of service rate study involving various scenarios of cost sharing between the wastewater and water utilities and recovery of sunk costs. The planning period extends over 40 years to determine when the recycled water utility recovers the investments made by the water enterprise.

Salton Community Services District (CA)

Services Provided

- Wastewater rate study

Client Reference

Rosa Mesoraca-Reagles
Assistant General Manager
Salton Community Services District
2098 Thomas R. Cannell Rd.
Salton City, CA 92275
Phone: 760.394.4446
rmr@saltoncsd.ca.gov

Salton Community Services District (District) retained RFC to determine the appropriate wastewater charges for non-single family residential (non-SFR) customers. The District bills its customers on an EDU basis annually on the tax roll. The EDU definition for non-residential customers was developed decades ago; thus the District needed to update the definition in order to ensure fair and equitable rates as well as financial sufficiency in the wastewater enterprise. RFC analyzed the previous year's water usage for all non-SFR customers and estimated the wastewater flow and the EDUs to determine the resultant rates for those customers. RFC also reviewed the charges for mobile homes based on estimated usage. RFC recommended, and the District implemented, a flow-based wastewater rate based on the previous year's water usage for non-SFR customers and retained the fixed charges per EDU for residential customers.

PROJECT TEAM

RFC's staff consists of some of the most experienced and influential people in the water and wastewater industry. Our senior-level personnel are very involved in industry associations, and include the recent Chair of the Management Division of American Water Works Association (AWWA), the vice chairman of the CA-NV AWWA Business Management Division, a member of the AWWA's Rates and Charges Committee, and the Chair of AWWA's Financial Accounting and Management Controls Committee.

We have written one of the leading books on water and wastewater rate setting, Water and Wastewater Finance and Pricing, and co-authored other industry standard books, such as AWWA's M1 Manual, Principle of Water Rates, Fees and Charges, AWWA's Water Rates, Fees and the Legal Environment, and WEF's Financing and Charges for Wastewater Systems. RFC also co-publishes with AWWA the nationally recognized biennial Water and Wastewater Rate Survey, and the CA-NV AWWA Water and Water Rate Survey.

To effectively meet the District's objectives, we have organized a project team with extensive financial and rate consulting experience with municipal water and wastewater utilities. RFC places a high priority on being responsive to our clients and, therefore, actively manages each consultant's project schedule to ensure appropriate availability for addressing client needs. We anticipate providing all of the services for this contract with the project team listed below. In addition to our project team, RFC has the support of 22 additional consultants who specialize in financial, pricing, and management consulting services for water and wastewater utilities.

Roles and Responsibilities

Sudhir Pardiwala, PE: Project Director

Mr. Pardiwala will be responsible for contractual representations with the District as well as overall project accountability.

Sanjay Gaur: Project Manager

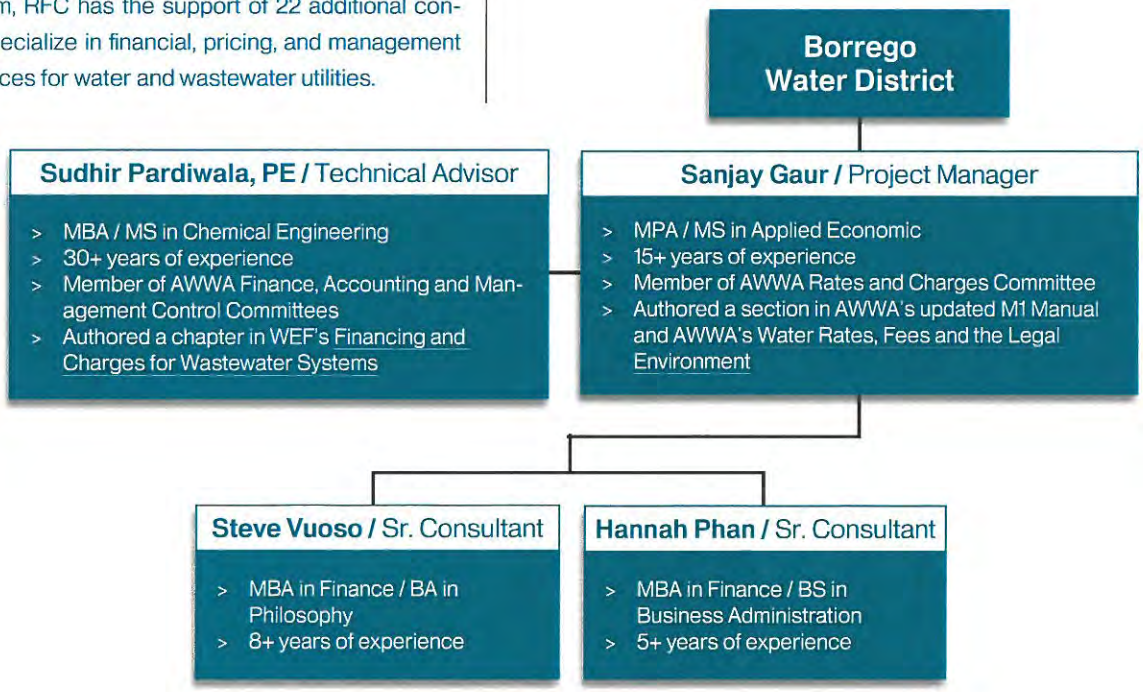
Mr. Gaur will ensure that adequate resources are available to meet the needs and objectives of the District, and will serve as the daily contact to the District.

Hannah Phan: Support Analyst

Ms. Phan will work at the direction of Mr. Gaur to conduct analyses and prepare project deliverables.

Steve Vuoso: Support Analyst

Mr. Vuoso will work at the direction of Mr. Gaur to conduct analyses and prepare project deliverables.



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/ CFD
- Reviewing/obtaining capital improvement funding
- Computer modeling

Professional History

- Raftelis Financial Consultants, Inc.: Vice President (2004-present)
- Black & Veatch (1997-2004)
- MWH (1985-1997)
- CF Braun (1979-1985)
- PFR Eng Systems (1977-1979)

Education

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

Professional Registrations

- Registered Professional Engineer (Chemical and Civil) - California

Professional Memberships

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

Sudhir Pardiwala, PE
Vice President as Project Director

Profile

Mr. Pardiwala has more than 30 years of experience in financial studies and engineering. He has extensive expertise in water and wastewater utility financial and revenue planning, and assessment engineering and communities facilities districts. 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. He authored the chapter on reclaimed water rates in the Manual of Practice on Financing and Charges for Wastewater Systems recently published by the Water Environment Federation (WEF) and presented papers at various conferences.

Relevant Project Experience

- City of Anaheim, California – Water Rate Study
- City of Atwater, California - Water and Wastewater Rate Study
- City of Banning, California - Recycled Water Revenue Program
- City of Beverly Hills, California - Water Rate Study
- City of Burbank, California - Bond Feasibility Study, Reclaimed Water Study, and Water and Wastewater Rate Study
- Casitas Municipal Water District, California - Water Rate Study
- Castroville Water District, California – Water and Wastewater Rate Study
- City of Chino, California - Valuation Study
- City of Chowchilla – Water and Wastewater Rates Study
- Clark County Water Reclamation District, Nevada - Cost of Service Study
- City of Cloverdale, California - Water and Wastewater Connection Fees and Rate Study
- El Toro Water District, California – Water Budget and Wastewater Rate Studies and Connection Fees
- City of Glendora, California - Water and Wastewater Financial Planning and Rate Study
- Goleta Water District, California – Water and Wastewater Rates and Connection Fees Studies, Asset Management, and Financing Plan
- City of Henderson, Nevada - Water and Wastewater Rate Study
- City of Livingston, California – Water, Wastewater and Solid Waste Rates Study and Litigation Support
- City of Los Angeles, California - Wheeling Charge Review
- City of Madera, California - Water and Wastewater Rate Study
- Napa Valley Sanitation District, California - State Revolving Fund Loan Assistance
- Olivenhain Municipal Water District – Water Financial Plan and Recycled Water Rates
- City of Rialto, California – SRF Funding and Water and Wastewater Rate Study
- City of Sacramento, California - Wastewater Rates Study and Water Development Fee and Wholesale Wheeling Charge Study
- City of San Diego, California - Recycled Water Rate Study, Valuation Study, and Water and Wastewater Financial Plan, Rate and Connection Fees Study, Litigation Support
- City of San Francisco, California – Water, Wastewater Rate Study and Stormwater Incentives for Low Impact Development

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

Professional History
> Raftelis Financial Consultants, Inc.: Manager (2009-present)
> Red Oak Consulting, Division of Malcolm Pirnie (2007-2009)
> MuniFinancial (2005-2006)
> A & N Technical Services (1999-2003)
> United States Peace Corps, Bulgaria (1995-1997)

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

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

Professional Recognition
> Who's Who in America 63rd Edition (2009)
> Finalist, National Venture Competition (2003); Goldman Sachs Foundation
> Roy Environmental Fellowship (2002), Kennedy School of Government, Harvard University
> Academic Scholarship (2001-2003), Kennedy School of Government, Harvard University

Sanjay Gaur
Manager as Project Manager

Profile
With more than 15 years of public sector consulting experience, Mr. Gaur has worked extensively providing rate structure design, cost of service studies, financial analysis, cost benefit analysis, connection/development fee studies, conservation studies and demand forecasting. He is considered one of the leading experts in the development of conservation rate structures, which is demonstrated by his experience, publications and speaking engagements. His experience spans the West Coast with the majority of projects in California. These projects include engagements with Metropolitan Water District of Southern California, San Diego County Water Authority, Eastern Municipal Water District, Alameda County Water District and the Santa Clara Valley Water District. Mr. Gaur is active in a number of utility-related associations. He is a member of the American Water Works Association's (AWWA) Rates and Charges Committee. He is also a frequent speaker at National and California conference's, including AWWA, Utility Management Conference, Association of California Water Agencies and California Society of Municipal Finance Officers.

Relevant Project Experience
> Alameda County Water District, California – Conservation Rate Structure Evaluation and Design
> American Water Company, California - Water Rate Study
> City of Calexico, California - Water and Sewer Rate Study
> City of Chowchilla, California – Water and Wastewater Rate Study
> City of Corona, California – Water Budget Rate Study
> Eastern Municipal Water District, California – Water Budget Study
> East Orange County Water District, California - Water Budget Study
> El Toro Water District, California – Water Budget Study
> City of Hollister, California - Sewer Rate and Impact Fee Study
> City of Huntington Beach, California - Sewer Rate Study and Water Budget Study
> Indio Water Authority, California - User Fee Study and Water Rate Study
> Inland Empire Utilities Agency, California – Conservation Rate Structure Workshop
> Irvine Ranch Water District, California - Conservation Study
> City of Livingston, California - Water Rate Study
> City of Lomita, California - Water Rate Workshop
> Los Angeles Department of Water and Power, California - Daily Demand Estimates
> City of Merced, California - Water and Sewer Rate and Impact Fee Study
> Metropolitan Water District of Southern California - Drought Allocation Model, Long Range Financial Plan and Cost of Service Evaluation
> Monterey Peninsula Water Management District, California - Water Budget Study
> Municipal Water District of Orange County, California - Conservation Potential Study
> City of Newport Beach, California – Water Rate Study
> Pasadena Water and Power, California - Water Cost-of-Service and Rate Design Study
> City of Port Hueneme, California - Water and Solid Waste Rate Study
> Rancho California Water District, California – Water Budget Study, New Water Demand Offset Fee
> City of Rio Vista, California - Water and Sewer Rate and Impact Fee Study
> San Diego County Water Authority, California - Indexing Model and Wholesale Water Rate
> Santa Clara Valley Water District, California - Project Evaluation - Water Conservation Project
> South Coast Water District, California – Water Budget Assessment

Technical Specialties

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

Professional History

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

Education

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

Hannah Phan
Senior Consultant as Support Analyst

Profile

Ms. Phan has served as a consultant on several water and wastewater rate studies, cost of service studies, connection fees, and valuation studies. Specific experience includes projects for the following utilities: the cities of San Diego, Santa Monica, Anaheim, Ontario, Escondido, Redlands and Banning, the Goleta West Sanitary District, California and the City of North Las Vegas, Nevada. Ms. Phan has an MBA, is an experienced modeler, and has strong analytical skills.

Relevant Project Experience

> City of Anaheim, California – Water Cost of Service Rate Study
> City of Banning, CA – Water, Wastewater, and Recycled Water Rate and Connection Fees Study
> Beaumont-Cherry Valley Water District, CA – Water Rate Study
> City of Beverly Hills, California - Rate and Financial Planning Model
> Clark County Water Reclamation District, NV – Sewer Cost of Service Study
> City of Escondido, CA – Water and Wastewater Rate and Fees and Connection Fees Study, and Water Budget Study
> Goleta West Sanitary District, California - Financial Planning Model and Miscellaneous Fee Study
> City of North Las Vegas, NV – Water and Wastewater Rate Studies
> Olivenhain Municipal Water District – Recycled Water Rate Study
> City of Ontario, CA – Water, Wastewater, and Solid Waste Rate Studies
> City of Redlands, CA – Water, Wastewater and Connection Fees Cost of Service Study
> City of San Diego, California - Water, Wastewater, and Recycled Water Rate Study
> City of Santa Monica, CA – Wastewater Cost of Service Study
> City of South Pasadena – Water and Wastewater Rate Study
> Tacoma Water Department, WA – Water Financial Plan Study

Technical Specialties

> Utility cost of service
> Rate structure studies
> Conservation rate studies
> Drought management plans
> Economic feasibility studies
> Capital recovery fee studies

Professional History

> Raftelis Financial Consultants, Inc.: Senior Consultant (2008-present); Staff Consultant (2005-2008)
> Showtime Networks Inc.: Business Analyst (2004)

Education

> Master of Business Administration, Finance - San Diego State University (2004)
> Bachelor of Arts, Philosophy - Loyola Marymount University (1998)

Professional Certifications

> Microsoft Office 2000 Specialist - Excel

Steve Vuoso
Senior Consultant as Support Analyst

Profile

Mr. Vuoso has served as a lead consultant on several rate studies in California, including the cities of Los Angeles, San Diego, Ontario and the Beaumont-Cherry Valley Water District. In addition, he has served as lead consultant on several other utilities outside of California on the West Coast, including the Cities of Portland, OR; North Las Vegas, NV; and Henderson, NV. He has extensive experience in financial modeling, financial accounting, and is proficient in VBA programming and application development in Microsoft Access® and Excel®.

Relevant Project Experience

> Alameda County Water District, California - Water Budget Rate Study
> City of Arcadia, California - Water Rate Study
> City of Atwater, California - State Revolving Fund Loan Assistance and Water and Wastewater Rate Study
> Beaumont Cherry Valley Water District, California - Water Rate and Connection Fee Study
> City of Beverly Hills, California - Connection Fee Study, Valuation and Development of Replacement Program and Asset Inventory, and Water Rate Study
> Casitas Municipal Water District, California - Water Rate Study
> Clark County Water Reclamation District, Nevada - Cost of Service Study
> El Toro Water District, California - Water and Wastewater Connection Fee Study
> City of Henderson, Nevada - Water and Wastewater Rate Study
> City of Los Angeles, California - Wheeling Charges Study
> City of Madera, California - Water and Wastewater Rate Study
> City of North Las Vegas, Nevada – Water and Wastewater Rate Study
> City of Ontario, California - Water, Wastewater and Solid Waste Rate Study
> City of Portland, Oregon – Retail and Wholesale Water Rate Study
> City of Redlands, California - Water and Wastewater Rate Study
> San Bernardino County, California - Rate Model
> City of San Diego, California - Recycled Water Study, Water Rate Study, and Water Connection Fee Study
> City of San Francisco, California – Water & Wastewater Rate Study
> Santa Fe Irrigation District, California - Wastewater Treatment Plant Cost Evaluation and Water Cost of Service and Rate Study
> City of Springfield, Oregon - Wastewater Rate Model
> Western Municipal Water District - Water Rate Study, Financial Planning Model Development, and Water Budget Study

LETTERS OF RECOMMENDATION

Santa Fe Irrigation District

September 25, 2009

Mr. George Raftelis
Raftelis Financial Consultants, Inc.
201 S Lake Boulevard, Suite 803
Pasadena, CA 91101

Dear Mr. Raftelis,

I am writing this letter to you to inform you of our experience with Raftelis Financial Consultants, and specifically with Sudhir Pardiwala and Steve Vuoso. Reliability, professionalism, and knowledge are all extremely important aspects of a consulting firm, and the Santa Fe Irrigation District has come to count on those qualities when working with RFC.

Our agency has engaged RFC several times during the past four years. The first project was a complete restructuring of our water rates and fees. This was not an easy undertaking, as a formal rate study had not been performed for several years, and the District's project manager was replaced about 1/3 of the way through the study. Mr. Pardiwala and Mr. Vuoso were very understanding and accommodating during this transition, especially because it involved altering the original schedule to push the end date beyond what had been planned. The final recommendations were implemented, and we moved from a flat to a tiered rate structure. Mr. Pardiwala presented well to our Board, and was able to address any questions or concerns that arose. The excellent rate model developed by Mr. Vuoso (one of the primary deliverables) was something that we were able to maintain and use for several years.

Most recently, we retained RFC to update our rate model, recommend water allocation methods, and develop a series of alternative water rate structures designed to be used to achieve various goals. We are still in the process of finalizing the recommendations.

I enjoy working with both Mr. Pardiwala and Mr. Vuoso. They are extremely flexible and willing to assist us in any way they can. I have come to rely on their expertise regularly. Their recommendations are sound, and their work products are well-written and presented. We will continue to consider RFC for all financial projects we undertake. It is with pleasure that I write this letter to you to express our satisfaction with RFC. Keep up the great work.

Sincerely,

Jeanne L. Deaver
Administrative Manager

Santa Fe Irrigation District ~ PO Box 409 ~ 5920 Linea del Cielo ~ Rancho Santa Fe, CA 92067-0409
Phone 858.756.2424 Fax 858.756.0450
www.sfidwater.org

THE CITY OF SAN DIEGO

March 5, 2007

Mr. George Raftelis
Raftelis Financial Consultants, Inc.
511 East Boulevard
Charlotte, NC 28203

Dear Mr. Raftelis:

Subject: City of San Diego Water Cost of Service Study

I am writing to thank Raftelis Financial Consultants (RFC), and particularly Sudhir Pardiwala and Steve Vuoso, for the work involved in preparing the Water Cost of Service Study, and assisting with presentations to the City's elected officials and community members on the study. The work they accomplished on the study was completed in an unusually short amount of time and received significant amounts of scrutiny from various sources. Sudhir and Steve, in addition to providing great technical expertise, were unswervingly patient and responsive. I know they called on numerous resources within RFC to meet our many requests, and I am grateful to all who contributed to the success of this project.

The Cost of Service Study prepared by RFC provided the foundation on which the Mayor was able to recommend modifying our rates and on which the City Council could rely in approving those recommendations. We appreciate the work performed, and assistance RFC provided to the City.

Sincerely,

J. M. Barrett
Water Department Director

DIVERSITY

Water Department Director
600 B Street, Suite 1300 (MS 913) • San Diego, California 92101-4588
Tel (619) 533-7555 • Fax (619) 533-7593

Rancho Water

January 26, 2010

Mr. George Raftelis
RAFTELIS FINANCIAL CONSULTANTS, INC.
201 S Lake Ave, Ste 301
Pasadena, CA 91101

SUBJECT: LETTER OF RECOMMENDATION

Dear Mr. Raftelis:

I am writing to thank Raftelis Financial Consultants, Inc (RFC), and particularly Sanjay Gaur and Khanh Phan for the high quality, professional consulting services provided in the recent engagements – Water Budget Rate and Water Demand Offset Fee Studies. Both studies involved evaluations of numerous policy options within a short amount of time.

The Water Budget Rate Study involved building a water budget rate model to evaluate customer impacts of different policy options. The project started and completed in August 2009. The Water Demand Offset Fee Study, started in December 2009, focused on researching water savings and costs for each conservation program/fixture at various agencies, calculating the estimated water demand of new accounts using water budget and building a model to calculate the water demand offset fees. Mr. Gaur presented the results to the Board in the same month. The Board approved the water budget rate structure and will review the Demand Offset in the near future.

Even though the schedules for both studies were unusually tight, the work products were well-written and presented. The user-friendly rate models developed by Ms. Phan allowed multiple scenario analyses with instant results in a graphical format to assist in quick decision-making. Water budget rate structure is a relatively new area that has only been recently explored. Nonetheless, Mr. Gaur was able to present the results of the study clearly and articulately to our Executive Management and was able to address all of their questions and concerns. Their recommendations were reasonable and practical. Their creative solutions to the complex problems surrounding water budget rate structures were of tremendous help in implementing water budget rates at the District.

I enjoyed working with both Mr. Gaur and Ms. Phan on these two projects. They were very responsive, reliable, and knowledgeable. We really appreciate their assistance in these engagements and will gladly consider RFC for all our future financial projects.

Sincerely yours,

RANCHO CALIFORNIA WATER DISTRICT

Jeff D. Armstrong
Chief Financial Officer

21.docx/Armstrong/mjr

BRIAN J. BRADY, P.E.

Brian J. Brady has over 35 years of management and engineering experience in both the public and private sectors of western electric and water utilities. He currently maintains an independent management consulting practice, focusing on asset valuation (including water rights) and strategic operations of water and power utilities.

Dr. Brady most recently served as the general manager of the Imperial Irrigation District (IID), a water and power authority spanning 6,500 square miles in interior southern California. With water rights of 3.1 million acre-feet, IID is the largest irrigation district in the United States, and is the third largest public sector electric utility in California (1000 MW peak demand.)

Within IID water operations, Dr. Brady positioned the District to ensure the success of the history's largest agricultural to urban water transfer, and served as the chief negotiator with Metropolitan Water District, California Department of Water Resources and the U.S. Bureau of Reclamation.

Dr. Brady is the past general manager of both the Rancho California Water District and the Water Replenishment District of Southern California. He also served as the assistant general manager of Anaheim's Public Utility Department (responsible for electric utility operations), and the Vice President of subsidiary marketing operations within Southern California Edison. He is past President of the Board of Directors of the Irvine Ranch Water District (IRWD), and is a former board member of the Orange County Sanitation District (OCSD). It was while serving on OCSD's executive steering committee that Dr. Brady lead a successful coalition of the Board to mandate comprehensive waste water treatment before ocean disposal, resulting in a $1.9 billion infrastructure improvement program.

In addition to the foregoing, Dr. Brady brings additional experience in both public agencies and private corporations, providing expert testimony before state and federal agencies on matters of utility operations and valuation in rate proceedings, and appearing before both U.S. House and Senate committees in support of western regional water projects.

A registered Civil Engineer, Dr. Brady earned his BSE degree in Water Resource Management from Loyola University of Los Angeles (now Loyola Marymount University)'s College of Engineering. His MBA, with an emphasis in Finance, is from the University of Southern California (USC)'s Marshall School of Business. He received his Ed.D, with an emphasis in Organizational Leadership, from Pepperdine University's Graduate School of Education and Psychology.

37850 De Portola Road, Temecula, CA 92592
Tel: 951.551.8933; Fax: 951.699.6635
Email: bjbassociates@aol.com

RESUME

Brian J. Brady, P.E.

PROFESSIONAL EXPERIENCE

Principal — **Brian J. Brady & Associates (2000-)**

Provide management consulting services, focusing on asset valuation (including water rights) and strategic operations of both public and private water and power utilities. Clients have included the Water Replenishment District of Southern California (WRD), the Inland Empire Utilities Agency (IEUA), the Horizon Energy Group, Chevron Texaco, California Portland Cement, Vulcan, Exxon Mobil, Municipal Water District of Orange County, the Central and West Basin Municipal Water Districts, Conaway Preservation Group and several private investors.

General Manager — **Imperial Irrigation District (IID) (2008-2011)**

As the appointed CEO by a five-member elected board of directors, provided executive leadership to the IID electric and water operations within southern California's Imperial and Coachella Valleys. Annual operating and capital budgets exceeded $850 million, with a staff of 1,400. Implemented the landmark Qualification Settlement Agreement (QSA) among the IID, Metropolitan Water District and the San Diego Water Authority, and spearheaded major initiatives to develop renewable energy projects.

General Manager — **Rancho California Water District (RCWD) (2003-2007)**

Reporting to a seven-member Board of Directors, was responsible for operations of the Temecula-based district's water, wastewater and reclamation divisions. Continued rapid expansion in the municipal, industrial and agricultural business segments during 2003-2004 fiscal year resulted in a nearly 14 percent increase in overall system demands In the spring of 2004, in conjunction with major new and refunding bond issues, directed the presentations to the key bond rating agencies, with a resulting district upgrade from A- to AA. Lead an aggressive integrated water resources strategy to meet system build out forecasts.

Chairman, CEO — **Dominguez Services Corporation (1995-2000)**

As authorized by the Company's Board of Directors, was responsible for overall corporate policy, strategy and operations of Dominguez Services Corporation's utility and non-utility business units. In the first thirty-six months with the Company, expanded water utility operations into northern California and increased unregulated water brokering and subsidiary operations. In the same period, the Company's market capitalization rose by more than 250%, and annual shareholder returns averaged 33%. In November of 1998, completed merger negotiations with California Water Service, attaining the highest asset valuation of any U.S. investor-owned water or gas utility at that time.

Assistant General Manager — **Public Utilities Department, City of Anaheim (1992-1995)**

Directed the operation of the City's electric utility, gross annual revenues of $250 million. Responsible for electric integrated resource planning, acquisition and scheduling; demand side management; engineering functions; electric field construction; environmental services; commercial and industrial business development; and both electric and water system dispatch operations.

Vice President and General Manager **Energy Services Inc. (1988-1992)**

Chief Operating Officer of a wholly-owned subsidiary of Southern California Edison Company. Developed and positioned the operation to provide utility related services (pump/turbine/motor repair, engineering support, cogeneration operating services, utility R & D technology transfer, fuel oil storage leasing contracts, privatized maintenance services). Client base developed in the first three years of operation included over 200 companies in the U.S., Canada, Mexico and the Pacific Rim.

Manager, Energy Management **Southern California Edison Company (1983-1988)**

Developed and marketed new electric load management programs and electric rate options to industrial and commercial customers. Assisted local governmental agencies in analyzing and economizing energy use. Responsible for developing and marketing end-use electro-technologies (the forerunner to Edison's "CTAC") to assist industrial and commercial customers in becoming more competitive in the marketplace.

Manager of Valuation **Southern California Edison Company (1980-1983)**

Manager of department of engineers, accountants, and other technical staff providing economic, depreciation and cost of service studies; valuations and base data for rate cases. Served as expert rate case witness before federal and state regulatory commissions. As the company's Chief Valuation Engineer, certified to financial institutions the fair value of company operating assets and real estate for trust indenture purposes.

EDUCATION

Ed.D, emphasis: Organizational Leadership
Pepperdine University's Graduate School of Education & Psychology
Doctoral research: Skill development for appointed and elected water officials

MBA, emphasis: Finance
University of Southern California's Marshall School of Business

BSE, emphasis: Water Resource Management
Loyola University of Los Angeles (now Loyola Marymount University)'s College of Engineering

Additional Graduate level studies: Massachusetts Institute of Technology, Stanford University, Western Michigan University, United States International University

ELECTED AND APPOINTED OFFICES

Member, Board of Directors	Irvine Ranch Water District (1998-2004)
Member, Board of Directors	Orange County Sanitation District (2001-2004)
Member, Executive Committee	California Transmission Planning Group (2009-2011)
Member, Board of Governors	California Municipal Utilities Association (2009-2011)
Member, Board of Directors	Large Public Power Council (2008-2011)
Member, Board of Directors	National Public Projects Coalition (2004-2008)
Member, Board of Directors	Association of Groundwater Agencies (2000-2001)
Member, Board of Directors	National Association of Water Companies (1997-2000)

Member, Executive Council	California Water Association (1995-2000)
Member, Board of Directors	Southern California Public Power Authority (1992-1995; 2008-2011)
Member, Board of Directors	Association of California Water Agencies (2010-2011)
Member, Executive Committee	Western Systems Power Pool (1992-1995)
Member, Executive Committee	Western Systems Coordinating Council (1992-1995)
Member, Board of Directors	National Fuel Cell Commercialization Group (1992-1995)
Member, State Legislative Committee	Association of California Water Agencies (2006-2008)

OTHER CREDENTIALS

Registered Civil Engineer, State of California

Member, American Society of Civil Engineers

Member, Phi Delta Kappa (international honor society in education)

Instructor, Economics and Ethics, Graduate Business Program	University of La Verne (1986-1991)
Demand-side Management Planning Advisor	Electric Power Research Institute (1987-1989)
Lecturer	Cal Tech, Industrial Relations Center (1978-1982)

USGS MEETING SUMMARY
Meeting Date: March 4, 2011
Report Date: March 9, 2011

Meeting Attendees
Peter Martin – USGS Project Manager
Claudia Faunt – USGS Project Programmer
Jerry Rolwing – BWD Interim Manager
John Peterson – Community Support Group
Jim Rickard - Community Support Group
Jack Laughlin – Community Support Group

Meeting Objectives
1. Review the status of work on the GIS system
2. Discuss changes to the assumed characteristics of the Borrego Valley Aquifer
3. Review the status and application of the MODFLOW model
4. Review the USGS material to be presented in the March 30 Town Hall Meeting
5. Review the status of the project report and its schedule for completion
6. Have a brief discussion of imported water schemes

1. GIS System
USGS work on the GIS system is essentially complete. The system was developed by USGS with data from various present and historical sources. Without going into detail, the system is comprehensive, up to date and a useful tool in combination with the MODFLOW model to analyze present and future aquifer conditions. The GIS system will be utilized to provide inputs for water use scenarios to be presented in the USGS project report. Although the work is complete, the final product will not be ready until September or October because of a mandatory internal review.

2. Updated Aquifer Characteristics
From an overall standpoint, the aquifer characteristics updated by USGS show only minor differences from the studies conducted in the early to mid 1980's. Differences include a slight reduction in the thickness and volume of the upper aquifer at the north end of the valley, a re-calculated recharge rate of 4,800 af/y and an outflow rate of 900 af/y. No significant changes to the basic assumption of an upper, middle and lower configuration were made.

USGS feels that the existing database for the aquifer is complete except for depth-dependent water quality, specific yield and transmissivity. These factors are important to predict the cost of providing potable water in the future. They tie to the future cost of water treatment as quality declines. They also tie to the cost of new wells mandated by a lowering of the water table and a decline in pumping rate.

Obtaining these data would require new specifically designed monitoring wells placed at selected positions in the aquifer. The cost of developing these monitoring wells has not been estimated. The effects of these factors could be modeled by using a range of values in absence of direct data.

USGS also offered the opinion that drilling through the bottom of the lower aquifer into the basement rock, as suggested by some, would be extremely unlikely to produce a new source of potable water.

3. MODFLOW Model

USGS developed an up-to-date version of the MODFLOW model using information from the 1988 finite analysis model, the graduate studies performed by Steve Netto and Tom Henderson and the GIS database. The model has been calibrated against previous work using data from 1945-2010 and has been used to produce some preliminary water use scenarios, including projected life at present overdraft conditions and one run to look at a basin storage scheme. The model is nearly complete and should provide a solid tool for predictive projections. As part of the modeling work, USGS also developed a Basin Characteristic Model (BCM) that is used to analyze specific parameters for input to the MODFLOW model.

4. Preparations for the March 30 Town Hall Meeting

USGS reviewed some of the graphics to be used in the meeting. The graphics looked good. The aquifer numbers to be used for recharge and outflow are shown above. The present usage rate will be 20,000 af/y, as developed by BWD. We made suggestions that the vertical scale on the slices through the aquifer layers be stretched to improve public understanding of the geology. We also suggested that the technical presentation be geared for a general audience.

The projected aquifer life of 50 years at the present overdraft rate needs explanation, both by USGS and BWD. The apparent change from 500 years supply to 50 years is a persistent question from the public. It impugns the validity of the technical reports in the opinion of many.

First of all, the major difference between the 1980's studies and the present overdraft rate is the change in assumed agricultural water use: assumed to go to zero in the early studies and, instead, rising to today's figures. Secondly, the early projections assumed that the total volume of the upper, middle and lower aquifers would be usable, even if pumping rates declined.

At present, USGS is assuming that economical potable water can be extracted from just the upper aquifer, although some extraction from the middle aquifer is currently taking place. They feel that water extraction and treatment costs for the middle and lower aquifers would be much more expensive and may be unreasonable. We have no reason to doubt this assumption, but it can be examined through future modeling studies, and additional geotechnical work if funds are available.

The projected aquifer life of 50 years is subject to a large number of variables such water quality changes, well depth, well density, fallowing of agricultural land, golf course water conservation, crop prices, etc. Key variables need to be noted in the town hall meeting and addressed in specific future planning tasks. It would be highly desirable to have community involvement in selecting the modeling assumptions for future aquifer life projections so that people have a clear understanding of what we are facing.

Potential impacts on the State Park from declining water table

USGS's believes that there is no impact on the State Park in the Coyote Canyon drainage because the water level in the upper valley is already well below the water level

in Coyote Canyon. They suspect that an underground dyke prevents or retards a drop in water level at Lower Willows and above.

However, they confirmed that the State Park would likely be impacted by a drop in water table at Clark Lake. There is a mesquite bosque on the north side of the Clark Lake playa that would be negatively impacted. The drying and decline of the mesquite bosque in the Borrego valley, across from the airport, is well documented.

Mark Jorgensen has pointed out that a drop in water table at Allegretti Farms was viewed by U.S. Fish and Wildlife as a threat to desert pupfish in the Marsh of San Sebastian, as well as to the encompassing State Park land. A drop in water table at San Felipe Creek would likewise affect State Park land and the wells of local home owners who have expressed concern.

USGS agreed to leave comments on State Park impacts out of the town hall meeting unless asked. If asked, they will answer carefully, understanding our concerns. The same goes for the project report.

Peter Martin asked for additional inputs on water use scenarios for the town hall meeting and for future modeling runs to be included in the project report. Jerry will coordinate with him to provide this information.

5. Project Report

Project work is still underway and the project report is behind schedule. Peter Martin asked if the project schedule could be delayed such that some of the ongoing work and the final report could be prepared in 2012. This may also enable USGS to add more funded work to the project. There would be no additional cost to BWD.

It is the opinion of our team that this would be a definite advantage for BWD. This would give BWD the time to carefully work out the water use scenarios to be included in the final report, ensuring that they are consistent with the overall economic decisions being made by the Board and include well-thought out future planning alternatives. It would save BWD from going back to USGS to run future use scenarios at additional cost and allow more time to ensure that the report's conclusions are in BWD's best interests.

6. Imported Water Schemes

We briefly touched on the imported water schemes of aquifer storage, Clark Lake, San Felipe Creek and Allegretti Farms. USGS has made one run on the MODFLOW model for storing imported water in the aquifer. The model has the capability of running additional importation/extraction schemes if directed by BWD. Without going into detail, USGS is skeptical of the concept. The storage scheme is meaningless unless extra water is available through the storage project to supplement Borrego's use.

In terms of long term planning it is necessary to distinguish between providing potable water for rate-payers, and recharging the aquifer. Since farming is the principal beneficiary of gross recharge the financial burden should fall proportional on farm enterprises. In any planning for future imports, should water become available, water recharged into the aquifer must have an equal or higher quality than water being extracted.

As for Clark Lake, USGS concurs with John Peterson and the team that the evidence of water quality and quantity does not appear to be promising and that the only way to confirm this would be an expensive drilling and geotechnical program to characterize the water source. USGS does not believe the Clark Lake Aquifer is contiguous with Ocotillo Wells, even though the DWR geologic basin boundary is shown as one unit. In a note by Tim Ross of DWR to Clark Shimeall, Dr. Ross confirms that the aquifers are not likely connected.

The San Felipe Creek and Allegretti Farms water sources were not discussed in detail, but the same feelings were shared by the group: the sources are unlikely for a number of apparent reasons.

In conversations in the car we were surprised that the previous BWD board approved and paid for pipeline surveys and engineering costs for both the Clark Lake and Texas Dip future water importation projects—before they were substantiated as likely sources for water. Past evaluations by BWD concluded that they were not.

Conclusions

While the scope of work for the USGS GIS and MODFLOW project initially focused on water storage schemes, the project has been well executed and will be a valuable asset to BWD in future predictive projections and in meeting legal challenges if they occur. This is to the credit of BWD staff, it's consultants and the USGS team. The USGS staff is being responsive to BWD's concerns about conclusions and is looking forward to working with BWD to finish the water use scenarios. All in all, it was a very good meeting.

This report was prepared as a joint summary of the USGS meeting with input from Jerry Rolwing, John Peterson, Jim Rickard and Jack Laughlin.

STRATEGIC PLANNING COMMITTEE NOTES

Committee Meeting: Tuesday, March 8, 2011, 9:00AM - 10:00AM

Attendees: Directors Beth Hart and Lyle Brecht; Interim GM Jerry Rolwing, Dennis Dickinson, Richard Walker, Jim Rickard, Jim Engelke

DISCUSSION ITEMS: Town Hall March 30 planning

- Objective of Town Hall is to begin to restore confidence in District through transparency and accountability of board to the Borrego community and its ratepayers by;
  - honestly revealing where the District's finances presently are that resulted from previous board's strategy to address the overdraft;
  - discussing plans for improving the District's finances and addressing the overdraft with a new strategy
  - discussing a revised technical strategy for addressing the overdraft.
- Recommend all board members and speakers addressing the public be seated on stage;
- Allow Q&A for all presenters at conclusion of program;
- Staff will collect written questions after each presentation;
- Jerry has asked Gary Haldeman if he will be the MC for the Town Hall. He has agreed;
- The board will be asked to approve two handouts at the March 15th Special Meeting/ Workshop: Financial Situation & Overdraft Strategy that will be handed out to all attendees as they enter the hall;
- Proposed Agenda - Wednesday March 30, 2011 4:00 PM - 5:30 PM Performing Arts Center
  - Introduction - Gary Haldeman will review the agenda, how Q&A will be handled, RESPECT guidelines - 5 min.
  - BWD board - where we are now - 10 min.
  - DWR (Tim Ross) - well monitoring program - 15 min
  - BWD (Jerry Rolwing) - BoR, Clark Lake, San Felipe Creek, ABD-IRWM purpose & planning update - 15-20 min
  - USGS (Peter Martin) - summary of study progress - 15 min
  - BWD board - Overdraft strategy and rationale - 10 min
  - Q&A for all speakers - 20 min

Next Meeting: Tuesday, March 22, 2011 9:00 AM - 9:45 AM

ESTIMATED ANNUAL WITHDRAWALS

Category of Withdrawal	Percent Usage	Business-as-Usual Withdrawals (acre-feet/year)
For agricultural purposes	70%	14,000
For recreational purposes	20%	4,000
For residential purposes	10%	2,000
Total annual withdrawals		20,000

What the charts illustrate is that if the overdraft continues at about 16,100 acre-feet/year (total withdrawals beyond the average natural recharge rate), then the present estimate for the dewatering of the upper aquifer of the basin by around 50-years from now may likely reflect a probable reality.

DATA	VALUE	SOURCE
What are the average annual withdrawals from the Borrego Valley Groundwater Basin	20,000 acre-feet/year [af/y] (April 7, 2010 Town Hall meeting USGS presentation of preliminary data).	This will be presented in the final USGS report.
At present annual withdrawal rates, approximately how many years before the upper aquifer is dewatered?	50 years, subject to many variables* (April 7, 2010 Town Hall meeting USGS presentation of preliminary data). The final report will discuss this estimate in detail.	*Variables include: water quality changes, well depth, well density, fallowing of agricultural land, golf course water conservation, crop prices, etc.
What is the average annual recharge rate of the basin?	4,800 af/y (April 7, 2010 Town Hall meeting USGS presentation of preliminary data).	This will be presented in the final USGS report.
What is the groundwater flow out of the basin?	The simulated groundwater underflow out of the basin is 900 acre-ft per year.	This will be presented in the final USGS report.
How long has the basin been in overdraft (rates of ground water extraction exceed rates of recharge)?	The basin has been in overdraft since 1945 and continues to be in overdraft today. The 1982 USGS report indicated an overdraft of, on average, 9,400 af/y between 1945-1980.	January 26, 1993 letter from David Huntley, PhD., San Diego State University Department of Geological Sciences to John Peterson, San Diego County Planning Department

Strategy of Previous General Manager & Board to Address the Overdraft circa 2008-2010:

- The technical water management projects undertaken by the previous General Manager and Board of Directors largely focused on imported water schemes, not on the management of the Borrego Valley Aquifer. These included: (1) focusing the U. S. Geological Survey (USGS) study on storage schemes rather than on the optimization of the existing water source, (2) participating in a U.S. Bureau of Reclamation (BoR) study of imported water and storage opportunities, (3) development of the Clark Lake water source and (4) designing a pipeline to Highway 78 to access potential groundwater sources from the San Felipe Creek drainage system. Some of these projects were funded by grants and some were paid directly from BWD reserves.
- The 2002 Groundwater Management Plan's directive to fallow agricultural lands was implemented by purchasing agricultural lands to fallow to create water credits for resale to developers. $1,000,000 has been spent; $6,500,000 obligated or promised.

Proposed Strategy of Present Board to Address the Overdraft - as of March 2011:

The present Board is currently investigating a new strategy to address the overdraft that is based solidly on California water law and that includes the following objectives:

- Return the District to fiscal stability and creditworthiness by January 30, 2013. This is absolutely necessary to implement any strategy to address the overdraft;
- Determine the various legal options for establishing rights of all pumpers to withdraw water from an overdrafted basin and determine the costs to ratepayers for each practicable option. By April 30, 2014;
- Perform the necessary legal, policy, and economic studies not performed by the previous Board to determine how the District's water credits program may be used to facilitate the County's Groundwater Mitigation requirements for new development in the Valley without placing the District and its ratepayers at undue financial risk. By December 31, 2011;
- Work closely with the USGS and BoR study teams to ensure that the Borrego Valley Groundwater Basin is fully defined and that options for managing the basin and for importing water for storage, recharge, and supplemental supply are evaluated on a timely basis. The Board has chosen to extend the due date of the USGS study so that the District will have time to complete its financial analyses and to select aquifer management alternatives to be applied in the study and documented in the final report. The final USGS report is expected to be available by the first quarter 2012. The BoR study will include economic analyses of the cost for importing water from viable regional sources. The BoR report should be completed by December 2012;
- Determine how the investigations of Clark Lake aquifer and the San Felipe Creek groundwater sources as sustainable and affordable sources of potable water might continue and at what cost to the ratepayers. By December 31, 2011.

Borrego Water District
Schedule of Cash and Investment Activity
For the Period July 1 , 2007 to December 31, 2010

Cash and Investments at July 1, 2007	$ 6,530,581	*
Net cash from operating activities	(606,393)	
Net cash from noncapital financing activities	30,060	
Cash used for capital improvements	(4,194,780)	
Cash used for fallowed water credits	(948,214)	
Cash used for principal and interest on long term debt	(3,776,915)	
Cash received from issuance of long term debt	3,315,123	
Cash received from investment earnings	415,529	
Net cash and invetsments (used)	(5,765,590)	
Cash and Investments at December 31, 2010	$ 764,991	*

*Does not include cash and investments held by the District for custodial purposes.

This Special Report was requested by a Motion approved by the Borrego Water District Board on January 26, 2011.

Unaudited; see Diehl, Evans & Company, LLP accompanying independent accountants' compilation report.

BORREGO WATER DISTRICT FINANCIAL SITUATION

Upon entering office last December, the new BWD board members learned that the previous board and its general manager had:

(a) spent about $5,700,000 of the $6,500,000 in cash that the District had accumulated over the past 20 years;

(b) obligated the District to pay another $660,000 by June 30, 2011;

(c) in the few weeks before the new members took office, promised to obligate an additional $7,500,000 in District revenues from ratepayers' payments for water and sewer services over the next 30-years.

As a result of these actions, the District now faces a cash crunch because its operations do not presently generate enough money to cover these expenditures and potential obligations.

The new board also learned that, because of its financial situation, the District can no longer borrow money for capital improvements. This is a serious situation and must be addressed immediately.

The longer it takes to correct the District's cash flow imbalance, the longer it will take to regain creditworthiness and ability to borrow.

The new board has acted swiftly to assess damage to the District's financial condition, improve the cash flow situation, and retain appropriate financial, legal, accounting, and engineering advisors to develop a comprehensive plan to correct the District's critical financial situation. While this work proceeds, preliminary results from the board's Due Diligence Committee suggest that:

a) The District no longer has adequate reserves for emergencies and unforeseen events. The Committee believes that it is prudent and necessary to accumulate adequate reserves for such contingencies as quickly as possible.

b) The current financial situation is not something that the District can solve by cutting expenses. It is therefore prudent to explore ways of raising revenue to restore essential reserves, and to fund capital projects necessary to prevent frequent, prolonged and unplanned service interruptions. Additional capital is also required to address the basin's overdraft.